INFORMATIONAL APRIL 18, 2024

ТАВ	DESCRIPTION	ACTION
1	BAHR – INTERCOLLEGIATE ATHLETICS – FY 2023 REVENUE AND EXPENSES REPORTS	Information Item
2	BAHR – INTERCOLLEGIATE ATHLETICS – FY 2023- 2024 COMPENSATION REPORTS	Information Item
3	BAHR – INTERCOLLEGIATE ATHLETICS – FY 2024 GENDER EQUITY REPORTS	Information Item
4	BAHR – UNIVERSITY OF IDAHO – ANNUAL UTILITY P3 UPDATE	Information Item
5	IRSA – PROGRAM PROGRESS REPORTS	Information Item
6	PPGA – IDAHO DIGITAL LEARNING ACADEMY ANNUAL REPORT	Information Item
7	PPGA – STRATEGIC PLANS – POSTSECONDAY INSTITUTIONS AND AGENCIES UNDER THE BOARD'S GOVERNANCE	Information Item

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SUBJECT

Intercollegiate Athletics Reports of Revenues and Expenses

REFERENCE

June 2016 Board directed that the universities' National Collegiate Athletics Association (NCAA) "Agreed Upon Procedures Reports" would be provided to the Board and would also serve as the revenues/expenses reporting template for Lewis-Clark State College.

APPLICABLE STATUTE, RULE OR POLICY

Idaho State Board of Education (Board) Governing Policies & Procedures, Section V.X.5.

BACKGROUND/DISCUSSION

Responsibility, management, control, and reporting requirements for athletics are detailed in Board Policy V.X. The college and universities are required to submit regular financial reports as specified by the Board office. For the universities, the revenue and expenses reported must reconcile to the NCAA "Agreed Upon Procedures Reports" that are prepared annually and reviewed by the Board's external auditor.

Board policy V.X. establishes limits on how much state appropriation (including appropriated spending authority for tuition and fees) each institution can expend for intercollegiate athletics. Increases to the limits are generally tied to changes to the appropriated funds (General Funds and tuition and fees), or through Board approval. The policy provides a mechanism for Chief Executive Officers to request Board approval for one-time or ongoing changes to the limits when justified on the basis of adding or expanding programs, investing in facility upgrades or repairs, meeting new federal or state regulatory compliance requirements, and/or meeting intercollegiate athletic association or conference requirements. The current policy allows the ability for institutions to increase the student athletic fees without regard to the general education appropriation.

IMPACT

The reports of Revenues and Expenses are presented for each institution for fiscal year 2023 in Attachments 1 through 4.

ATTACHMENTS

Attachment 1	Boise State University
Attachment 2	Idaho State University
Attachment 3	University of Idaho
Attachment 4	Lewis-Clark State College

STAFF COMMENTS AND RECOMMENDATIONS

The Athletics Reports show results for fiscal year 2023. It should be noted that state funds are critical to support the student athletes and athletic programs at the four institutions. Ticket sales, contributions, and program revenues are insufficient to enable the athletic programs to be fully self-supporting.

It should be noted that Idaho State University and University of Idaho both ended FY 2023 in a deficit position. Representatives from all four (4) institutions will be available to respond to questions from Board members if necessary.

BOARD ACTION

This item is for informational purposes only.

BOISE STATE UNIVERSITY ATHLETIC DEPARTMENT STATEMENT OF REVENUES AND EXPENSES YEAR ENDED JUNE 30, 2023 (UNAUDITED)

	Football		Men's Basketball		ner Men's Sports	E	Women's Basketball	V	Vomen's /olleybail	Othe	er Women's Sports	N	onprogram Specific		Totals
OPERATING REVENUES		.),							<u> </u>			_			
Ticket Sales	\$ 6,112,3	89	\$ 1,488,531	\$		\$	39,551	\$	22,543	\$	53,877	\$	-	\$	7,716,891
Student Fees		-			-		3 4 3				-		4,655,543		4,655,543
Direct Institutional Support		2			5		19 A		÷.		-		8,325,559		8,325,559
Direct Institutional Support (OST Waivers & Work Study)	1,269,1	28	194,689		349,348		248,261		191,268		945,362		1,327		3,199,383
Indirect Institutional Support		+	(Q)		-		5 4 5		:#0		<u> -</u>		2,291,716		2,291,716
Guarantees	600,0	00	-		-						10,000				610,000
Contributions	6,150,7	07	159,984		159,703		2,552		3,281		612,959		5,652,068		12,741,254
In Kind	406,7	'93	114,736		2		2월2		2 2 9		2		19 1 1		521,529
Media Rights	4,202,8	35	932,412				100		17. i		5		5 .		5,135,247
NCAA Distributions	605,5	26	525,650		149,245		92,611		85,487		521,253		2 4 0		1,979,772
Conference Distributions	1,622,3	374	52,056		ŝ		-		÷.		-		-		1,674,430
Program Novelty Parking Concession	180,6	680	49,905		-		603		380		791		5. - 12		232,359
Royalties Licensing Advertisement Sponsorship	5,133,5	46	1,079,101		10,500		16,827		10,601		64,065		28,000		6,342,640
Sport Camp Revenues	404,9	966	76,294		(7,699)		2,282		34,317		184,865		-		695,025
Other Operating Revenue	928,6	515	127,552		37,515		13,196		213		83,939		2,451,118		3,642,148
Bowl Revenues	889,5	513				vi	N&A						· · · · · · · · · · · · · · · · · · ·	-	889,513
Total Operating Revenue	28,507,0	072	4,800,910		698,612		415,883		348,090		2,477,111		23,405,331		60,653,009

BOISE STATE UNIVERSITY ATHLETIC DEPARTMENT STATEMENT OF REVENUES AND EXPENSES (CONTINUED) YEAR ENDED JUNE 30, 2023 (UNAUDITED)

		Football		Men's Basketball	Ot	her Men's Sports	F	Women's Basketball	1	Nomen's /olleyball	Oth	her Women's Sports	N	onprogram Specific	3	Totals
OPERATING EXPENSES			÷			0000	-			onoy ban	-	00010		opcome	-	101010
Athletic Student Aid	\$	2,308,547	\$	419,594	\$	659,437	\$	498,625	\$	370,347	\$	2,196,733	\$	178.691	\$	6.631.974
Athletic Student Aid (OST Waiver)		1,269,128		194,689		349,347		248,261		191,268		945,362		1925		3,198,055
Guarantees		650,000		387,288				78,571		19,422		8,442		-		1,143,723
Coaching Salaries Benefits Bonuses		4,763,268		1,681,286		656,541		808,921		397,782		1,809,462		65.712		10.182.972
Support Staff Admin Compensation Benefits and Bonuses		2,165,722		309,271		35,526		125,876		72,336		200,016		9,146,983		12,055,730
Recruiting		531,205		139,663		43,945		64,922		39,313		147,313				966.361
Team Travel		1,182,388		822,135		538,619		496,856		200,560		1,369,336		76,267		4.686.161
Sports equipment Uniforms supplies		591,740		39,871		61,893		2,253		7,555		163,554		250		866,866
Game Expenses		824,590		273,470		14,321		143,072		62,780		125,520		69,902		1.513.655
Fund Raising Marketing and Promotion		101,716		22,976		269		13,150		4,150		13,745		553,993		709,999
Sport Camp Expenses		208,715		40,415		a		921		5,162		22,705				277,918
Spirit Groups		-		()		-		2		240				310,022		310.022
Athletic Facilities Debt Service Leases and Rental Fees		2,564,379		202,102		99,911		202,102				399,644		266,429		3,734,567
Direct overhead and Admin Expenses		1,769,552		90,378		152,158		53,252		24,384		429,848		1,251,226		3,770,798
Indirect Institutional Support		-		2.62				2		- 1943 1943		· _		2,291,716		2,291,716
Medical Expenses Insurance		33,316		10,946		30,378		4,022				27,854		855,932		962,448
Memberships and Dues		65,283		31,575		7,004		16,744		600		18,995		799,033		939,234
Student-Athlete Meals (non-travel)		873,669		78,332		13,076		32,641		18,566		102,632		56,499		1,175,415
Other Operating Expenses		629,140		170,364		67,358		49,154		24,342		212,085		743.464		1.895.907
Bowl Expenses		808,379		200				÷		140				204		808.379
Bowl Expenses Coaching Compensation Bonus		135,105		1.00		4		÷.		-						135,105
Capital		1,928,894		81,350		40,358		81,350		20,715		54,371		188,981		2,396,019
Total Operating Expenses	3.0000 3	23,404,736		4,995,705		2,770,141	27 2010 - 1	2,920,693		1,459,282		8,247,617	_	16,854,850	_	60,653,024
EXCESS (DEFICIENCY) OF REVENUES OVER																
(UNDER) EXPENSE BEFORE CARRYFORWARD		5 102 336		(194 795)		(2 071 529)		(2 504 810)		(1 111 192)		(5 770 506)		6 550 481		(15)
CARRYFORWARD (SEE NOTE 7)	_	-111			_	-			_	<u>1,11,102</u>	_			15	1	15
EXCESS (DEFICIENCY) OF REVENUES OVER														/6w2.1		the states where
(UNDER) EXPENSE AFTER CARRYFORWARD	\$	5,102,336	\$	(194,795)	\$	(2.071.529)	\$	(2.504.810)	\$	(1.111.192)	\$	(5,770,506)	\$	6.550.496	\$	

IDAHO STATE UNIVERSITY ATHLETICS 6/30/23

		3					1				
		MENIS		OTHER MEN'S	WOMEN'S	WOMEN'S	OTHER WOMEN'S	NON	FINAL		
		BASKETBALL	FOOTBALL	SPORTS	BASKETBALL	VOLLEYBALL	SPORTS	SPECIFIC	FY23	FY22	%CHANGE
ENUE:	Ticket Sales	61 125	245 226	8 632	25 888	8 270	13 383	3 715	366 239	256 596	42 73%
2	Direct State or Other Government Support	340 312	1 166 572	193 250	381 641	163 898	1 821 215	792 996	4 859 885	5 412 356	-10 21%
- 3	Student Fees	-	-		-	-	1,021,210	1 835 362	1 835 362	1 744 850	5 19%
4	Direct Institutional Support	-	-	-	-	-	-	1,234,679	1,234,679	736,400	67.66%
5	Less-Transfers to Institution	-	-	-	-	-	-	-	-	-	0.00%
6	Indirect Institutional Support	-	36,983	5,709	-	-	5,709	165,303	213,703	160,239	33.37%
6A	Indirect Institutional Support - Athletic Facilities Debt Service, Lease and Rental Fees	-	-	-	-	-	-	54,900	54,900	83,375.00	-34.15%
7	Guarantees	355,000	800,000	3,500	40,000	-	5,000	-	1,203,500	1,312,000	-8.27%
8	Contributions	71,868	200,000	49,199	92,139	-	207,873	1,195,410	1,816,489	273,432	564.33%
9	In-Kind	33,592	56,076	2,735	32,022	17,036	35,568	253,013	430,041	475,295	-9.52%
10	Compensation and Benefits Provided by a third party	-	-	-	-	-	-	-	-	-	0.00%
11	Media Rights	-	-	-	-	-	-	77,768	77,768	83,183	-6.51%
12	NCAA Distributions	-	-	-	-	-	-	800,349	800,349	747,515	7.07%
13	Conference Distributions (Non Media or Bowl)	14,119	(150)	209	3,195	3,133	3,521	(506)	23,522	11,163	110.71%
14	Program, Novelty, Parking and Concession Sales	-	238	502	-	-	1,302	19,956	21,998	45,293	-51.43%
15	Royalties, Licensing, Advertisement and Sponsorships	-	-	-	-	-	-	488,154	488,154	456,561	6.92%
16	Sports Camp Revenue	33,886	20,100	14,230	18,342	55,308	110,335	95,183	347,384	220,604	57.47%
17	Athletics Restricted Endowment and Investments Income	-	-	-	-	-	-	-	-	-	0.00%
18	Other Operating Revenue	-	-	1,550	-	-	1,550	200,162	203,262	118,300	71.82%
19	Bowl Revenues	-	-	-	-	-	-	-	-	-	0.00%
	Total Operating Revenue	909,901	2,525,045	279,516	593,226	247,645	2,205,456	7,216,444	13,977,236	12,137,161	15.16%
RATING EX	PENDITURES:										
20	Athletics Student Aid	249,702	1,208,907	217,802	301,375	206,985	981,122	120,822	3,286,716	3,161,537	3.96%
21	Guarantees	13,000	85,000	-	7,000	-	-	-	105,000	23,723	342.61%
22	Coaching Salaries/Benefits/Bonuses pd by the Univ & Related Entitles	341,032	1,222,040	195,430	382,216	200,788	608,748	-	2,950,255	2,749,648	7.30
23	Coaching Salaries, Benefits and Bonuses paid by Third Party	-	-	-	-	-	-	-	-	-	0.00
24	Support Staff/Admin Compensation/Benefits/Bonues pd by Univ & Related Entities	19,139	147,676	484	-	/16	31,389	1,164,952	1,364,355	1,728,850	-21.08
25	Support Stall/Admin Compensation/Benefits/Bonuses paid by Third Party	-	-	-	-	-	-	-	-	-	0.00
20		-	-	-	-	-	-	-	-	-	12.00
27		41,975	159,602	10,704	51,362	32,120	64,362	30,450	399,656	354,072	12.93
20	Sporte Equipment Uniforms and Supplies	209,020	409 909	102,210	220,440	21 012	159 550	210 092	1,904,827	972 205	2.670
29	Came Expenses	27,334	400,090	12 256	63 390	21,912	38 653	210,983	352 786	534 857	-34.049
31	Fund Paising Marketing and Promotion	688	8 068	12,230	1 517	20,045	50,055	33 568	44 781	113 223	-60.459
32	Shorts Camp Expenses	48 640	29	12 249	28 528	44 238	87 356	157 347	378 388	183 019	106 75
33	Spirit Groups	40,040	- 20	12,240	20,020	44,200	-	107,047	010,000	100,010	0.00
34	Athletic Facilities Debt Service Leases and Rental Fees	_	_	-	-	_	-	_	_	_	0.00
35	Direct Overhead and Administrative Expenses	30.668	113 084	7 315	29.372	18 427	33 631	451 902	684 399	619 473	10.489
36	Indirect Institutional Support	-	36 983	5 709		-	5 709	220 203	268 603	243 614	10.26%
37	Medical Expenses and Insurance	-	-	-	1,795	-	-	563,593	565,388	422,161	33.939
38	Memberships and Dues	790	406	1,617	1,242	-	7.150	72,165	83,369	78,911	5,65%
39	Student-Athlete Meals (non-travel)	12.088	158.316	8.933	26.890	7.808	37.682	11.348	263.066	239.704	9.75%
40	Other Operating Expenses	28.138	50,666	12,816	53,164	18,747	18.156	460,057	641,744	461,260	39.139
41	Bowl Expenses	-	-	-	-	-	-	-	-	-	0.00
	Total Onerating Expenses	1 173 010	4 182 203	710.085	1 206 543	678 294	2 597 261	3 650 539	14 198 924	13 442 567	5.63
	Net Increase/Deficit	(264,008)	(1,657,248)	(430,569)	(613,316)	(430,649)	(391,804)	3,565,906	(221,689)	(1,305,406)	83.02%
						·				· · · · ·	
	VALUE OF NONRESIDENT FEE WAIVERS	161,799	762,461	215,731	274,105	167,719	431,463				

University of Idaho Intercollegiate Athletics Schedule of Revenue and Expenses For the Year Ended June 30, 2023 (unaudited)

		Men's	Other Men's	Women's	Women's	Other Women's	Non-Program	Grand
Operating Revenues	Football	Basketball	Sports	Basketball	Volleyball	Sports	Specific	Total
Ticket Sales	\$ 436,627	\$ 86,416	\$ 1,554	\$ 19,671	\$ 3,763	\$ 1,703	\$-	\$ 549,733
Student Fees							1,788,161	1,788,161
Direct Institutional Support								
General Education Funds	1,092,313	344,066	199,353	287,573	175,968	461,627	1,611,931	4,172,831
Institutional Support Funds	791,840	249,420	144,515	208,467	127,562	334,642	1,168,523	3,024,969
Other Institutional Support (includes OST Waivers)	407,189	65,175	135,775	93,040	58,557	307,520	1,058,892	2,126,148
Indirect Institutional Support							487,384	487,384
Indirect Institutional Support - Athletic Facilities Debt Service, Lease & Rental Fees							1,461,456	1,461,456
Guarantees	1,875,000	60,000	104,680	60,000	12,500	11,230		2,123,410
Contributions	1,235,065	175,714	300,051	169,598	104,497	599,302	159,676	2,743,902
In-Kind	8,400	4,200		4,200			8,400	25,200
Compensation & Benefits Provided by 3rd Party	380,000	20,000	6,000	23,000		11,500	15,000	455,500
Media Rights							77,768	77,768
NCAA Distributions	100,798	26,563	69,316	28,001	24,140	133,526	569,466	951,810
Conference Distributions							40,542	40,542
Program, Novelty, Parking & Concessions	62,222	8,509		4,802	287	317		76,137
Royalties, Licensing, Advertising & Sponsorships	50,000	13,400		5,000			802,128	870,528
Sports Camp Revenues	228,970	497						229,468
Athletics Restricted Endowment & Investment Income	215,624	26,733	71,055	17,922	30,633	147,675	75,599	585,241
Other Operating Revenues	14,999						385,671	400,670
Total Operating Revenues	\$ 6,899,047	\$ 1,080,692	\$ 1,032,300	\$ 921,273	\$ 537,907	\$ 2,009,041	\$ 9,710,597	\$ 22,190,856
Operating Expenses								
Athletic Student Aid	2,010,730	352,461	720,057	357,493	270,072	1,555,678	164,702	5,431,194
Guarantees	330,000	67,000	14,275			31,986		443,261
Coaching Salaries, Benefits & Bonuses	1,442,830	499,308	286,421	464,746	246,806	667,642		3,607,752
Coaching Salaries, Benefits & Bonuses Paid by 3rd Party	380,000	20,000	6,000	23,000		11,500		440,500
Support Staff/Admin Compensation Benefits & Bonuses	277,660	9,944	6,936	1,347	599	8,612	3,381,540	3,686,638
Support Staff/Admin Compensation Benefits & Bonuses Paid by 3rd Party							15,000	15,000
Recruiting	232,505	62,093	17,275	68,801	34,008	87,549		502,231
Team Travel	762,660	305,914	426,530	367,551	159,182	705,967	-	2,727,804
Sports Equipment, Uniforms & Supplies	299,707	48,925	67,346	42,123	19,352	124,106	128,128	729,687
Game Expenses	231,579	214,867	47,744	140,321	44,799	92,247		771,557
Fund Raising, Marketing & Promotion							310,317	310,317
Sports Camp Expenses	112,198	-						112,198
Spirit Groups							2,500	2,500
Athletic Facilities, Debt Service, Leases & Rental Fees							1,461,456	1,461,456
Direct Overhead & Administrative Expenses			1,346				37,504	38,851
Indirect Institutional Support							487,384	487,384
Medical Expenses & Insurance		440					356,862	357,302
Memberships & Dues	125	870	2,301			6,045	72,716	82,057
Student-Athlete Meals (non-travel)	123,562	13,279	923	5,250	3,467	4,379	103,709	254,568
Other Operating Expenses	325,046	92,942	60,094	60,203	28,622	50,254	1,061,979	1,679,140
Total Operating Expenses	\$ 6,528,602	\$ 1,688,044	\$ 1,657,248	\$ 1,530,835	\$ 806,906	\$ 3,345,965	\$ 7,583,797	\$ 23,141,396
Excess (Deficiency) of Revenues Over (Under) Expenses	\$ 370,445	\$ (607,352)	\$ (624,948)	\$ (609,562)	\$ (268,999)	\$ (1,336,924)	\$ 2,126,800	\$ (950,540)

Other Reporting Items

Total Athletics Related Debt

Total Institutional Debt

INFORMATIONAL - BAHR

\$ 42,145,000 **\$ 42,145,000**

\$ 129,985,000 \$ 129,985,000 TAB 1 Page 1

Lewis-Clark State College Intercollegiate Athletics Department Statement of Revenues and Expenses For the Year Ended June 30, 2023 (Unaudited)

	Women's							Non-							
		Men's	Men's	Men's		Men's	Women's	Women's	Women's	Women's	Women's	Women's	Dance/Sp	Program	
	Baseball	Basketball	Golf	Tennis	Men's XC	Track	Volleyball	Basketball	Golf	Tennis	XC	Track	irit	Specific	Grand Total
Operating Revenues															
01 Ticket Sales	27,274	12,001					3,273	12,001							54,549
02 Student Fees														347,984	347,984
03 Direct State/Govt Support	257,829	133,622	29,482	18,811	27,324	27,683	125,755	133,835	29,483	18,811	27,324	41,628	0	722,763	1,594,350
04 Direct Institutional Support (excludes Out of State Waivers)														206,900	206,900
05 Direct Institutional Support (Out of State Waivers)	304,888	107,362	65,405	129,470	9,914	29,426	172,328	92,792	53,024	156,459	28,547	22,866	2,914	92,124	1,267,519
06 Indirect Institutional Support														154,708	154,708
07 Guarantees															0
08 Contributions														385,964	385,964
09 In-Kind	16,250	9,250					9,750	7,750							43,000
10 Compensation & Benefits Provided by 3rd Party															0
11 Media Rights														0	0
12 NCAA Distributions															0
13 Conference Distributions (Non-Media or Bowl)														1,111,760	1,111,760
14 Program, Novelty, Parking & Concessions															0
15 Royalties, Licensing, Advertising & Sponsorships															0
16 Sports Camp Revenues	21,417	41,104			2,761		5,302	19,669			2,761				93,014
17 Athletics Restricted Endowment & Investment Income															0
18 Other Operating Revenues															0
Total Operating Revenues	627,658	303,339	94,887	148,281	39,999	57,109	316,408	266,047	82,507	175,270	58,632	64,494	2,914	3,022,203	5,259,748
Operating Expenditures															
19 Athletic Student Aid	442,552	203,245	94,588	147,020	24,964	36,326	275,410	211,911	80,771	180,535	47,490	37,666	3,565	92,124	1,878,167
20 Guarantees	2,349	15,338	0	0	0	0	0	6,308	0	0	0	0	0	0	23,995
21 Coaching Salaries, Benefits & Bonuses	278,096	184,945	29,485	20,976	27,324	41,050	125,774	152,591	29,486	18,811	29,508	42,174	6,558		986,778
22 Coaching Salaries, Benefits & Bonuses Paid by 3rd Party															0
23 Support Staff/Admin Compensation Benefits & Bonuses														521,678	521,678
24 Support Staff/Admin Compensation Benefits & Bonuses Paid by 3rd Party															0
25 Recruiting	28,839	19,818	578	25	1,017	698	6,508	4,662	(804)	26	1,017	699	110	2,429	65,622
26 Team Travel	102,799	68,463	20,353	27,255	25,864	18,549	55,083	46,620	21,604	28,578	25,829	18,721	0	0	459,718
27 Sports Equipment, Uniforms & Supplies	66,457	35,616	6,194	7,979	19,108	24,611	27,463	25,029	8,315	7,678	19,186	24,402	4,980	14,801	291,819
28 Game Expenses	19,637	16,401	9,994	654	3,229	6,399	19,107	18,862	9,988	522	3,276	5,664	500	34,665	148,898
29 Fund Raising, Marketing & Promotion															0
30 Sports Camp Expenses	7,726	10,514			2,279		0	4,997			2,279			0	27,795
31 Spirit Groups															0
32 Athletic Facilities, Debt Service, Leases & Rental Fees															0
33 Direct Overhead & Administrative Expenses															0
34 Indirect Institutional Support	16,250	9,250	0	0	0	0	9,750	7,750	0	0	0	0	0	154,708	197,708
35 Medical Expenses & Insurance														17,070	17,070
36 Memberships & Dues															0
37 Other Operating Expenses	3,327	290	24	0	27	24	2,118	3,397	24	50	27	24	32	557,229	566,593
Total Operating Expenditures	968,032	563,880	161,216	203,909	103,812	127,657	521,213	482,127	149,384	236,200	128,612	129,350	15,745	1,394,704	5,185,841
Excess (Deficiency) of Revenues Over (Under) Expenses	(340,374)	(260,541)	(66,329)	(55,628)	(63,813)	(70,548)	(204,805)	(216,080)	(66,877)	(60,930)	(69,980)	(64,856)	(12,831)	1,627,499	73,907

38 Conference Realignment Expenses

0 0 0 0 3,837,368 3,837,368 2,375,368 2,375,368 12,791,174 12,791,174

Other Reporting Items

39 Total Athletics Related Debt

41 Value of Athletics Dedicated Endowments

42 Value of Institutional Endowments

40 Total Institutional Debt

SUBJECT

Intercollegiate Athletics Employee Compensation Report

REFERENCE

April 2023 Board received FY 2022-23 athletics compensation reports

APPLICABLE STATUTE, RULE OR POLICY

Idaho State Board of Education (Board) Governing Policies & Procedures, Section II.H.

BACKGROUND/ DISCUSSION

The attached reports show actual compensation figures for FY2023 and estimated compensation figures for FY2024. The sources of funding for athletic department positions vary widely. A number of the most highly paid coaching positions are funded entirely from program revenues.

IMPACT

The reports detail the contracted salary received by athletics administrators and coaches, including bonuses, supplemental compensation and perquisites, if applicable.

ATTACHMENTS

Attachment 1 – Boise State University	FY23 Actual
Attachment 2 – Boise State University	FY24 Estimate
Attachment 3 – Idaho State University	FY23 Actual
Attachment 4 – Idaho State University	FY24 Estimate
Attachment 5 – University of Idaho	FY23 Actual
Attachment 6 – University of Idaho	FY24 Estimate
Attachment 7 – Lewis-Clark State College	FY22 Actual
Attachment 8 – Lewis-Clark State College	FY24 Estimate

STAFF COMMENTS AND RECOMMENDATIONS

The Board has delegated, through Board Policy II.B., personnel management authority to the president of each institution, except for those responsibilities specifically retained by the Board. Board policy II.H. authorizes the president of an institution to enter into a contract for the services of a coach or athletic director with that institution for a term of up to three (3) years. A contract with a term (whether fixed or rolling) of more than three (3) years, or with a total annual compensation amount of \$350,000 or higher, is subject to approval by the Board.

BOARD ACTION

This item is for informational purposes only.

Intercollegiate Athletics Compensation Report Boise State University FY23 Budgeted Base Salary and Actual Other Compensation

ATTACHMENT 1

			Compensation			•		Contract Bon		1	Porke				Funding		
			Athletic	Base	Camperis Camps/	auon	Fauin Co	Academic	Winning	Post Season	Club	Feiks		Multi-Yr	State	Program	All
PCN	Depart/Name/Title		FTE	Salary	Clinics	Other	Equip 00	Perform.	Perform.	Other	Memb	Car	Other	Contract	Approp.	Revenue	Other
	thistic Administration														F		
1349	Michael Walsh	Assoc AD Business Development & Innovation	1.00	94.370	-	400	500	-	-		No	No	No	No		94 770	500
1523	Kathryn Chase	NCAA Compliance (Financial Aid)	1.00	57.117	-	-	-	-	-	-	No	No	No	No	57.117	-	-
1700	Heather Berry	Sr. Associate AD, HR Services & Chief of Staff	1.00	115,003	-	600	2,500	-	-	-	No	No	No	No		115,603	2,500
1701	Jeramiah Dickey	Executive Director, Athletics	1.00	429,915	-	-	4,000	32,500	7,500	40,000	Yes	Yes	No	Yes		509,915	4,000
1702	Vacant / Delete PCN	Sr. Assoc AD, Strat Plan & Cap Proj	1.00	115,794	-	-	2,500	-	-	-	No	No	No	No		115,794	2,500
1711	Marc Paul	Assoc AD Sports Performance Health & Wellness	1.00	105,019	-	-	2,000	-	-	-	No	No	No	No		105,019	2,000
1715	Tyler Smith	Director SPHW	1.00	75,733	-	-	750	-	-	-	No	No	No	No	75,733	-	750
1717	Christina Van Tol	Sr Assoc AD, SWA	1.00	143,416	-	-	2,500	-	-	-	No	Yes	No	No	143,416	-	2,500
1724	Keisey Messer	Head Cheer/Dance Coach	1.00	44,387	-	-	1,000	-	-	-	INO No	NO	NO	INO Nio		44,387	1,000
1725	Bradley Kimble	Assistant AD SPHW- Football	1.00	44,429	-	-	1 000	-	-	-	No	No	No	No		44,429	1 000
1720	Doug Link	Associate Director, Athletic Media Relations	1.00	53 872		-	500	-			No	No	No	No		53 872	500
1736	Cameron Howard	Director of Community & Fan Engagement	1.00	51,542	-	400	750	-	-	-	No	No	No	No		51,942	750
1739	Garrett Ton	Assistant AD, Facility Operations	1.00	67,454	-	5,000	1,000	-	-	-	No	No	No	No		72,454	1,000
1740	Craig Lawson	Director, Athletic Media Relations	1.00	67,517	-	371	-	-	-	-	No	No	No	No		67,888	-
1741	Christopher Nichol	Academic Advisor, Director of Tutor Program	1.00	53,789	-	-	500	-	-	-	No	No	No	No	53,789	-	500
1742	Julie Rising	Assistant AD, Events	1.00	69,077	-	8,500	1,000	-	-	-	No	No	No	No		77,577	1,000
1743	Naomi Lam	Assistant Business Manager	1.00	45,906	2,000	105	500	-	-	-	No	No	No	No		46,011	2,500
1749	vacant	Assistant Athletic Trainer	1.00	47,133	-	-	500	-	-	-	No	No	No	No		47,133	500
1752	Jordan Feeney	Assistant Director, Athletic Equipment Operations	1.00	61,006	-	9,000	/50	-	-	-	INO No	NO No	INO No	INO No		70,006	/50
1758		Assistant Director, Anneuc Equipment Operations	1.00	13 690	- 800	900	500	-	-	-	No	No	No	No		21,010	200
1759	Brenda Robinson	Associate AD_CEO	1.00	95 014	2 000	- 1 800	2 000	-	-	-	No	No	No	No	95 014	43,000	4 000
1760	Taylor Harding	Assistant Athletic Trainer	1.00	47,133	2,000	-	2,000	-	-	-	No	No	No	No	33,014	47.133	500
1761	Lauren Sale	Associate Director, Sports Performance Coach	1.00	41,246	-	-	500	-	-	-	No	No	No	No		41,246	500
1763	Nathan Lowery	Associate Sports Info Director	1.00	50,502	-	-	500	-	-	-	No	No	No	No		50,502	500
1764	Justin LaChapelle	Athletic Technical Support Specialist	1.00	54,829	-	-	500	-	-	-	No	No	No	No		54,829	500
1766	Robert Kautz	Assistant Director of Compliance	1.00	42,910	-	-	500	-	-	-	No	No	No	No		42,910	500
1767	Vacant	Assistant AD, Athletic Equipment Operations	1.00	68,016	-	-	500	-	-	-	No	No	No	No		68,016	500
1768	Michael (Alex) Bell	Director, Creative Services	1.00	56,992	-	-	750	-	-	-	No	No	No	No		56,992	750
1769	James Gerfen	Ticket Service Coordinator	1.00	48,214	-	1,700	500	-	-	-	No	No	No	No		49,914	500
1770	Daryn Colledge	Director of Development, Varsity B	1.00	51,542	-	-	500	-	-	-	No	No	No	No		51,542	500
1774	Brandon Volgt	Director, Athletic Training - Football	1.00	73,840	-	-	2 500	-	-	-	NO No	NO	NO	NO No		73,840	2 500
1776	Jordan Britton	Associate AD, Strategic Comm	1.00	56 002	- 3 000	-	2,500	-	-	-	No	No	No	No	56 002	11,001	2,500
1834	Colby Harms	Assistant Director, Graphic Design - Football	1.00	46 010	3,000	-	250	-	-	-	No	No	No	No	50,992	46 010	250
1941	Jarred Nelson	Assistant Director, Sports Performance Coach	1.00	40,010	-		250	-			No	No	No	No		40,010	250
2403	Stephanie Donaldson	Director, Athletic Performance Psychology	1.00	109.637	-	-	1.000	-	-	-	No	No	No	No		109.637	1.000
3005	Vacant	Assistant Director, Development	1.00	50,003	-	-	1,000	-	-	-	No	No	No	No		50,003	1,000
3023	Cody Smith	Associate AD, Facility & Ops	1.00	88,005	-	15,000	2,000	-	-	-	No	No	No	No		103,005	2,000
3064	Dominic Shelden	Assistant AD, Creative Serivces	1.00	74,090	-	-	1,000	-	-	-	No	No	No	No		74,090	1,000
3110	Alissa Lauer	Academic Advisor	1.00	47,424	-	-	500	-	-	-	No	No	No	No		47,424	500
3125	Vacant	Asst AD, Marketing & Community Engagement	1.00	84,027	-	500	1,000	-	-	-	No	No	No	No		84,527	1,000
3132	Jennifer Bellomy	Assistant AD, Compliance	1.00	75,213	-	-	1,000	-	-	-	No	No	No	No	00.750	75,213	1,000
3145	Gabe Rosenvali	Associate AD, Student-Athlete Academic Services	1.00	98,758	-	-	2,000	-	-	-	NO No	NO	NO	INO Nia	98,758	-	2,000
3154	Joshua Bender	Interim Assistant AD (Director, Marketing & Promotio	1.00	51 542		- 1 300	750	-	-	-	No	No	No	No		52 8/2	750
3167	Sara Swanson Whiles	Assistant AD Student-Athlete Development	1.00	70 886	-	1,500	1 000	-			No	No	No	No		70 886	1 000
3188	Jacob Howell	Director, Donor Relations & Events	1.00	50,502	-	250	500	-	-	-	No	No	No	No		50,752	500
3410	Vacant / Delete PCN	Director of Athletic Administration	1.00	26,489	-	-	500	-	-	-	No	No	No	No		26,489	500
3502	Andy Atkinson	Director, Ath Info & Digital Tech	1.00	83,450	-	-	1,000	-	-	-	No	No	No	No		83,450	1,000
3529	Jodie Faulk	Director of Compliance	1.00	51,376	-	-	750	-	-	-	No	No	No	No		51,376	750
3530	Tyler Whitmer	Assistant AD, SPHW - Olympic Sports Perform	1.00	80,288	-	-	1,000	-	-	-	No	No	No	No		80,288	1,000
3545	Chris Apenbrink	Assistant Director, Ticket Operations	1.00	46,010	-	-	250	-	-	-	No	No	No	No		46,010	250
3549	INathan Burk	Sr. Associate AD, Compliance	1.00	115,003	-	-	2,500	-	-	1,000	No	No	No	NO	E7 744	116,003	2,500
3584	Elic Kile Molly Lenty	Assistant AD Bronco Athletic Accessiation	1.00	57,741	-	-	1 000	-	-	-	NO No	NO	NO	INO No	57,741	-	1 000
3805	Keita Shimada	Assistant AD, BIORCO AURIERIC Association	1.00	80.288	-	-	1,000	-	-	-	No	No	No	No		80,002	1,000
3806		Assistant Abletic Trainer	1.00	46 488	- 840	- 600	500	-	-	-	No	No	No	No		47.088	1,000
3950	Rene Barraza	Asst Manager, Athletic Events and Facilities	1.00	46.613	-	1.400	500	-	-	-	No	No	No	No	+	48.013	500
3970	Svringa Larson	Director of Stdnt-Ath Med Supprt Services	1.00	53,435	940	-	750	-	-	-	No	No	No	No		53,435	1.690
4023	Vacant / Delete PCN	Assistant Director, Ticket Operations	1.00	51,002	-	1,500	500	-	-	-	No	No	No	No		52,502	500
4030	Andrew Bondi	Director of Ticket Operations	1.00	55,661	-		-	-	-	-	No	No	No	No		55,661	
4130	Kathy Haumann	Business Operations Manager, BAA	1.00	60,403	-	-	500	-	-	-	No	No	No	No		60,403	500
4149	McKenna Drevno	Assistant Athletic Trainer - FB	1.00	44,429	-	720	500	-	-	-	No	No	No	No		45,149	500
4165	Kacey Huntington	Assistant Business Manager	1.00	48,381	2,000	-	500	-	-	-	No	No	No	No	48,381	-	2,500
4174	Cody Gougler	Sr. Associate AD, External Affairs	1.00	116,043	-	-	2,500	-	-	-	No	Yes	No	No		116,043	2,500
4185	Jake Mankin	Associate AD, TICKET Sales & Operations	1.00	94,370	-	1,000	2,000	-	-	-	NO	No	No	NO No		95,370	2,000
4198	Jacob Isaacson Sarah Hastingo	Assistant Director, Graphic Design	1.00	47,757	-	-	500	-	-	-	INO No	NO No	INO No	INO No		41,151	500
4201	Samantha Wade	Director Sports Nutrition	1.00	47,424	- 250	-	1 000	-	-	-	No	No	No	No		41,424	1 350
4221	Cody St. John	Director of Operations, Boas	1.00	45 115	-	1.500	500	-	-	-	No	No	No	No		46 615	500
4242	Justin Rogers	Assistant Athletic Director, Ticket Sales & Service	1.00	78.354	-	-	1.000	_	-	-	No	No	No	No		78.354	1.000
1216	Cada White	Assistant Director, Development	1.00	46.051	-	_	500		_	_	No	No	No	No		46.051	500

INFORMATIONAL - BAHR

Intercollegiate Athletics Compensation Report Boise State University FY23 Budgeted Base Salary and Actual Other Compensation

ATTACHMENT 1

				Compensation					Contract Bon	ius		Perks				Funding	
			Athletic	Base	Camps/		Equip Co	Academic	Winning	Post Season	Club			Multi-Yr	State	Program	All
PCN	Depart/Name/Title		FTE	Salary	Clinics	Other		Perform.	Perform.	Other	Memb	Car	Other	Contract	Approp.	Revenue	Other
4259	Jeremy Malnes	Assistant Director, Ticket Sales & Service	1.00	44,970	-	17,204	500	-	-	-	No	No	No	No		62,174	500
4260	Daniel Calhoun	Assistant Director, Ticket Sales & Service	1.00	44,970	-	12,211	500	-	-	-	No	No	No	No		57,180	500
4268	Adam Yetter	Associate Athletic Trainer	1.00	56,035	170	-	750	-	-	-	No	No	No	No		56,035	920
4272	Vacant / Delete PCN	Assistant Director, Athletic Personnel Services	1.00	45,906	-	-	500	-	-	-	No	No	No	No		45,906	500
4279	Kelli Nooney	Student-Athlete Development Coordinator	1.00	49,941	-	-	500	-	-	-	No	No	No	No		49,941	500
4280	Alex Semadeni	Assistant Director, Athletic Media Relations	1.00	42,910	-	-	500	-	-	-	No	No	No	No		42,910	500
4281	Amanda DiEnno	Associate Athletic Trainer Soccer	1.00	44,429	600	916	500	-	-	-	No	No	No	No		45,345	1,100
4285	Vacant	Director of Events, SSC	1.00	50,502	-	-	750	-	-	-	No	No	No	No		50,502	750
4302	Myron Domininic Duarte	Assistant Director, Creative Services	1.00	45,906	-	-	500	-	-	-	No	No	No	No		45,906	500
4306	Eric Leitzinger	Asst Director, Ath Counseling & Performance Psycho	1.00	70,013	-	-	500	-	-	-	No	No	No	No		70,013	500
4318	Bailey Carpenter	Assistant Director, Events - SSC	1.00	42,910	-	250	250	-	-	-	No	No	No	No		43,160	250
4319	Lauren Hazel	Assistant Director, Graphic Design	1.00	46,010	-	-	250	-	-	-	No	No	No	No		46,010	250
4321	Suzanne Lavender	Assistant AD, Strategic Communications	1.00	65,000	-	286	500	-	-	-	No	No	No	No		65,286	500
4331	Alyssa Perk	Associate Director Marketing	1.00	45,011	-	-	250	-	-	-	No	No	No	No		45,011	250
4336	Allison Iverson	Assistant Director, Business Dev & Revenue Innovati	1.00	45,906	-	-	250	-	-	-	No	No	No	No		45,906	250
4369	Tyler Haak	Director, Creative Services	1.00	55,661	-	200	500	-	-	-	No	No	No	No		55,861	500
4386	Vacant	Assistant Director, Creative Services	1.00	45,906	-	-	500	-	-	-	No	No	No	No		45,906	500
4396	Garrett Holle	Associate Athletic Trainer - FB	1.00	46,051	-	-	500	-	-		No	No	No	No		46,051	500
4427	Allie Lepori	Special Assistant to the Athletic Director	1.00	50,502	-	-	500	-	-	-	No	No	No	No	50,502	-	500
4440	Morgan Weber	Assistant Director, Compliance	1.00	42,910	-	-	500	-	-	-	No	No	No	No		42,910	500
4903	Matthew Mayer	Assistant AD, Business Operations	1.00	69,077	4,500	400	1,000	-	-	-	No	No	No	No	69,077	400	5,500
4925	Katherine Dores	Director, Athletic Personnel Services	1.00	65,416	-	-	1,000	-	-	-	No	No	No	No		65,416	1,000
4931	* Mike Keller	Associate AD, Major Gifts	1.00	52,738	-	-	2,000	-	-	-	No	No	No	No		52,738	2,000
4935	Laine Brown	Assistant Athletic Trainer	1.00	56,035	-	-	750	-	-	-	No	No	No	No		56,035	750
5323	Morgan Bengtzen	Temp Associate Athletic Trainer	1.00	42,453	-	-	-	-	-	-						42,453	-

* Employee is 50% paid from University Advancement

	Men's Sports															
	Football															
1704	Andy Avalos	Head Coach	1.00	1,550,016	-	-	3,250	50,000	60,000	50,000	No	Yes	No	Yes	1,710,016	3,250
1705	Erik Chinander	Assistant Coach	1.00	220,002	2,000	-	2,000	6,600	-	-	No	Yes	No	Yes	226,602	4,000
1706	Bush Hamdan	Assistant Coach	1.00	400,005	2,000	-	2,250	-	-	-	No	Yes	No	Yes	400,005	4,250
1707	Jabril Frazer	Assistant Coach	1.00	120,016	2,000	-	2,000	15,600	-	-	No	Yes	No	Yes	135,616	4,000
1708	Spencer Danielson	Defensive Coordinator	1.00	425,000	2,000	-	2,250	16,801	5,800	11,601	No	Yes	No	Yes	459,201	4,250
1728	Bradley Minter	Assistant Coach, FB Strength & Conditioning	1.00	90,002	4,500	-	750	-	-	-	No	No	No	No	90,002	5,250
1730	Joel Schneider/Kyle You	Ir Director of Recruiting Football	1.00	60,008	20,000	-	1,000	3,644	-	-	No	No	No	No	63,652	21,000
1752	Dale Holste	Assoc Dir, Athletic Equipment Operations	1.00	67,122	8,000	-	1,000	-	-	2,685	No	No	No	No	69,806	9,000
1757	Steven Schulte	Asst Director Athletic Equipment Operations	1.00	48,006	0	-	500	-	-	1,920	No	No	No	No	49,927	500
1762	Vacant / Delete PCN	Director of Recruiting Operations, Football	1.00	-	3,000	-	750	1,650	-	2,600	No	No	No	No	4,250	3,750
1772	Jaylan Reid	Assistant Coach, Strength & Conditioning/Football	1.00	70,013	4,500	-	500	-	-	-	No	No	No	No	70,013	5,000
1787	Louis Major	Director Football External Relations	1.00	90,002	6,000		1,000		1,800	3,600	No	No	No	No	95,402	7,000
1916	Charlotte Siegel	Assistant AD / Chief of Staff, Football	1.00	120,016	-	-	-		-	-	No	Yes	No	No	120,016	-
3103	James Montgomery	Assistant Coach	1.00	195,000	2,000	-	2,750	3,750	-	-	No	Yes	No	Yes	198,750	4,750
3109	Demario Warren	Assistant Coach	1.00	260,000	2,000	-	2,000	3,600	2,400	4,801	No	Yes	No	Yes	270,801	4,000
3134	Matthew Miller	Assistant Coach	1.00	195,000	2,000	-	2,000	9,601	3,200	6,401	No	Yes	No	No	214,202	4,000
3153	Ben Hilgart	Director, Sports Perf Coach FB	1.00	180,003	4,500	-	2,000	9,601	-	-	No	No	No	Yes	189,604	6,500
3160	Kane loane	Assistant Coach	1.00	225,014	2,000	-	2,000	12,001	4,500	9,001	No	Yes	No	Yes	250,516	4,000
3162	Timothy Keane	Assistant Coach	1.00	235,019	2,000	-	2,000	13,501	4,500	9,001	No	Yes	No	No	262,021	4,000
3186	Nate Potter	Assistant Coach	1.00	235,019	2,000	-	2,000	6,600	4,400	8,800	No	Yes	No	Yes	254,819	4,000
4147	Deontrae Cooper	Coordinator of Recruiting Relations	1.00	55,016	2,000	-	500		-	1,836	No	No	No	No	56,852	2,500
4152	Brooke Pahukoa	Associate Director, Football Administration	1.00	60,008	6,000	-	1,000	2,778	-	2,400	No	No	No	No	65,186	7,000
4159	Tyrell Smith	Asst Dir Sports Performance Coach FB	1.00	35,006	4,500	-	500	-	-	-	No	No	No	No	35,006	5,000
4267	Dirk Koetter	Senior Football Analyst	1.00	24,960	-	-	500	-	1,454	2,908	No	No	No	No	29,322	500
4269	Taylor Kolste	Offensive Coaching Assistant	1.00	35,000	3,000	-	500	-	-	-	No	No	No	No	35,000	3,500
4273	Ron Collins	Senior Football Analyst	1.00	24,960	-	-	500	-	-	-	No	No	No	No	24,960	500
4274	Tyler Rausa	Special Teams Coaching Asst.	1.00	24,960	6,000	-	500	-	-	-	No	No	No	No	24,960	6,500
4275	Patrick Moynahan	Defensive Coaching Assistant	1.00	24,960	3,088	-	500	-	-	-	No	No	No	No	24,960	3,588
4276	Kasey Richardson	Dir. FB Video/Technology	1.00	55,016	-	-	500	-	-	1,954	No	No	No	No	56,970	500
4284	Meredith (Butch) Henry	Athletic Operations Coordinator	1.00	42,910	-	-	-	-	-	-	No	No	No	No	42,910	-
4310	Vacant / Delete PCN	Football Recruiting Assistant	1.00	32,240	-	-	-	-	-	-	No	No	No	No	32,240	-
4316	Vacant / Delete PCN	Recruiting Assistant	1.00	-	-	-	500	-	-	-	No	No	No	No	-	500
				-	-	-	-	-	-	-						
	Basketball										-					
1710	Leon Rice	Head Coach	1.00	950,016	-	-	4,000	-	-	36,001	Yes	Yes	No	Yes	986,017	4,000
1712	Michael Burns	Assistant Coach	1.00	194,542	-	-	2,000	-	-	7,782	No	Yes	No	No	202,324	2,000
1714	Timothy Duryea	Assistant Coach	1.00	180,003	-	-	2,000	-	-	7,200	No	Yes	No	No	187,203	2,000
1745	David Moats	Director of Recruiting, MBB	1.00	84,011	14,058	-	2,000	-	16,000	2,970	No	No	No	No	102,981	16,058
3133	Roberto Bergerson	Assistant Coach	1.00	130,000	-	-	2,000	-	-	5,200	No	Yes	No	Yes	135,200	2,000
4254	Lexus Williams	Coaching Assistant	1.00	45,906	1,500	-	500	-	-	1,836	No	No	No	No	47,742	2,000
4305	Michael Johnson	Director Men's BB Operations	1.00	60,008	550	-	1,000	-	-	1,960	No	No	No	No	61,968	1,550
	Golf															
3566	David Trainor	Head Coach	1.00	80,018	-	-	4,000	-	-	-	Yes	Yes	No	Yes	80,018	4,000
1486	Joe Panzeri	Assistant Coach	1.00	24,960	-	-	2,000	1,200	-	750	No	No	No	No	26,910	2,000

Tennis

Intercollegiate Athletics Compensation Report Boise State University FY23 Budgeted Base Salary and Actual Other Compensation

ATTACHMENT 1

					Compensa	tion			Contract Bonu	IS		Perks		_		Funding	
	Depart/Name/Title		Athletic	Base	Camps/	Other	Equip Co	Academic	Winning	Post Season	Club	Car	Other	Multi-Yr	State	Program	All Other
3151	Paluka Shielde	Head Coach	1.00	80.018	308	Other	4 000	renom.	renom.	Other	No	Vac	No	Voc	Approp.	80.018	4 308
3178		Assistant Coach	1.00	45 011	500		2,000				No	No	No	No		45 011	2,000
5170	Men/Women's Track &	Field	1.00	43,011	-	-	2,000	-	-	-	NO	NO	NO	NO	-	45,011	2,000
1400	Benjamin Wetli	Assoc Head CC & Asst Track and Field Coach	1.00	65.000	-	-	2 000	6 105	-	4 665	No	No	No	No		75.860	2 000
1719	Rachel McFarlane	Asst Coach Track & Field & CC	1.00	44 429	-	-	2,000	2 587	-	3 502	No	No	No	No	44 429	6 089	2,000
1721	Travis Hartke	Assoc Head CC & Asst Track and Field Coach	1.00	65 437	-	-	2,000	7 623	-	5 158	No	No	No	No	65 437	12 781	2,000
2223	Corey Ihmels	Head Coach	1.00	155 002	-	-	4 000	12 000	2 400	7,500	No	Yes	No	Yes	00,101	176 902	4 000
3177	Gavin O'Neal	Assistant Coach Track & Field	1.00	55 349	-	-	2 000	3 224	-	3 224	No	No	No	No	55 349	6 447	2 000
4041	Andrew Green	Assistant Coach, Track & Field	1.00	34,195	-	-	2,000	1,992	-	1,992	No	No	No	No		38,179	2,000
	Nomen's Sports Basketball																
1720	Heather Sower	Assistant Coach	1.00	100 734	- 1	-	2 000	5 868	-	- 1	No	No	No	No	100 734	5 868	2 000
1744	Cori Smith	Director Women's BB Operations	1.00	50 024	-	-	2,000	2,000	-		No	No	No	No	50 024	2 913	2,000
2226	Gordon Presnell	Head Coach	1.00	308 110	-	_	4 000	18,000	-	_	No	No	No	Yes	308 110	18 000	4 000
3129	Michael Petrino	Assistant Coach	1.00	99,923	-	-	2,000	5.821	-	-	No	No	No	No	99,923	5.821	2,000
3181	Cariann Ramirez	Assistant Coach	1.00	100,734	-	-	2.000	5.868	-	-	No	No	No	No	100,734	5,868	2,000
	Soccer		1		1		_,	-,	1							-,	_,
1722	James Thomas	Head Coach	1.00	115.490	30.000	-	4.000	-	-	- 1	No	No	No	Yes	115.490	-	34,000
1723	Elizabeth Ruiz	Assistant Coach	1.00	37,939	25,500	-	2.000	-	-	-	No	No	No	No	37,939	-	27,500
1748	Max Weber	Assistant Coach	1.00	52,790	34,000	-	2,500	-	-	-	No	No	No	No		52,790	36,500
	Volleyball				·											·	
1716	Shawn Garus	Head Coach Volleyball	1.00	147,930	5,977	-	4,000	6,525	-	-	No	Yes	No	Yes	147,930	6,525	9,977
3130	Candy Murphy	Associate Head Coach Volleyball	1.00	75,275	9,000	-	2,500	4,517	-	-	No	No	No	Yes	75,275	4,517	11,500
3176	Hayley Peterson	Assistant Coach Volleyball	1.00	52,000	3,000	-	2,000	2,910	-	-	No	No	No	No	52,000	2,910	5,000
4282	Brindl Langley	Director of Operations, Volleyball	1.00	42,910	-	-	1,000	-	-	-	No	No	No	No	42,910	-	1,000
	Beach Volleyball																
1817	Allison Buck Voigt	Head Coach Beach Volleyball	1.00	55,016	430	-	4,000	2,751	-	-	No	No	No	No		57,767	4,430
4040	Alex Venardos	Assistant Coach Beach Volleyball	1.00	36,504	1,000	-	2,000	1,825	-	-	No	No	No	No		38,329	3,000
	Gymnastics																
3164	Patti Murphy	Assistant Coach	1.00	43,368	5,250	-	2,000	2,168	-	2,168	No	No	No	No	43,368	4,337	7,250
3174	Tina Bird	Head Coach	1.00	91,790	7,900	-	4,000	4,590	-	4,590	No	Yes	No	No	91,790	9,179	11,900
4047	Ivan Alexov	Assistant Coach	1.00	77,397	6,250	-	2,000	3,870	-	3,870	No	No	No	No		85,136	8,250
1573	Lauren Drinane	Director, Gymnastics Operations	1.00	42,910						-	No	No	No	No		42,910	
	Tennis				<u> </u>												
3163	Sherman Beck Roghaa	ar Head Coach Womens Director	1.00	92,331	895	-	4,000	4,481	-	-	No	Yes	No	Yes	92,331	4,481	4,895
3179	Jordan Gobatie	Assistant Coach	1.00	54,080	37	-	2,000	-	-	-	No	No	No	No		54,080	2,037
	Golf				<u> </u>												
3127	Kailin Downs	Head Coach	1.00	67,517	-	-	4,000	3,250	-	-	No	Yes	No	Yes	67,517	3,250	4,000
4334	Vacant	Asst Coach Women's Golf	1.00	24,960	-	-	2,000	-	-	-	No	No	No	No	-	24,960	2,000
	Softball				<u> </u>												
1737	Justin Shults	Head Coach	1.00	95,014	-	-	4,000	4,500	-	-	No	Yes	No	Yes	95,014	4,500	4,000
1738	Francis Strub	Assistant Coach	1.00	47,507	-	-	2,000	2,001	-	-	No	No	No	No	47,507	2,001	2,000
1747	Allison Walljasper	Assistant Coach	1.00	60,008	-	-	2,000	3,000	-	-	No	No	No	No	60,008	3,000	2,000
	Grand Totals		173.00	15,888,581	257,942	84,013	222,100	307,906	113,955	260,875					2,600,341	14,054,988	480,042

Intercollegiate Athletics Compensation Report Boise State University FY24 Est Base Salary and Other Compensation

ATTACHMENT 2

					Compensa	ation			Contract Bon	us	II	Perks		1		Funding		Salary
			Athletic	Base	Camps/		Equip Co	Academic	Winning	Post Season	Club			Multi-Yr	State	Program	All	Annualized
PCN	Depart/Name/Title		FTE	Salary	Clinics	Other		Perform.	Perform.	Other	Memb	Car	Other	Contract	Approp.	Revenue	Other	Change
1349 A	Michael Walsh	Assoc AD Business Development & Innovation	1.00	96 762			2 000	∦		-	No	No	No	No		96 762	2 000	3%
1421	Patrick Walsh	Assistant AD, Athletic Media Relations (FB)	1.00	70,013	-	-	1,000			-	No	No	No	No		70,013	1,000	New
1523	Kathryn Chase	NCAA Compliance (Financial Aid)	1.00	59,717	-	-	-	-	-	-	No	No	No	No	59,717	-	-	5%
1584	Jamie Pepper	Assistant Director, Sports Nutrition	1.00	62,005	-	-	500	-	-	-	No	No	No	No		62,005	500	New
1629	Vacant	Director, Sports Turf Operations	1.00	42,910	-	-	500	-	-	-	INO	INO	INO	INO		42,910	500	INEW
1647	Denilson Suarez	Assistant Director - Event Operations	1.00	46,051	-	-	500	-	-	-	No	No	No	No		46,051	500	New
1686	Kacey Huntington	Budget Analyst	1.00	57,200	-	-	500	-	-	-	No	No	No	No	57,200	-	500	New
1700	Heather Berry	Sr. Associate AD, HR Services & Chief of Staff	1.00	130,000	-	600	2,500	-	-	-	No	No	No	No		130,600	2,500	13%
1701	Marc Paul	Assoc AD Sports Performance Health & Wellness	1.00	107.411	-	-	2,000	- 15,000	-	- 35,000	No	No	No	No		107,411	2,000	2%
1715	Tyler Smith	Director SPHW	1.00	78,125	-		750	-	-	-	No	No	No	No	78,125	-	750	3%
1717	Christina Van Tol	Sr Associate AD, SWA	1.00	148,013	-	-	2,500	-	-	-	No	Yes	No	No	148,013	-	2,500	3%
1724	Kelsey Messer	Head Cheer/Dance Coach	1.00	46,779	-	-	1,000	-	-	-	No	No	No	No		46,779	1,000	5%
1725	Bradlev Kimble	Assistant AD, SPHW- Football	1.00	106.850	1,032	-	1.000	-	-	-	No	No	No	No	-	106.850	1,000	2%
1727	Doug Link	Associate Director, Athletic Media Relations	1.00	56,264	-	300	500	-	-	-	No	No	No	No		56,564	500	4%
1736	Cameron Howard	Director of Community & Fan Engagement	1.00	62,005	-	400	750	-	-	-	No	No	No	No		62,405	750	20%
1739	Garrett Ton	Assistant AD, Facility Operations	1.00	79,643	-	3,000	1,000	-	-	-	No	No	No	No		82,643	1,000	18%
1740	Christopher Nichol	Assistant AD, Academic Services	1.00	65.021	-	-	- 500	-	-	-	No	No	No	NO	65.021	- 09,909	- 500	21%
1743	Naomi Lam	Assistant Business Manager	1.00	53,019	1,500	-	500	-	-	-	No	No	No	No		53,019	2,000	15%
1749	Matthew Schofield	Assistant Athletic Trainer	1.00	46,051	-	-	500	-	-	-	No	No	No	No		46,051	500	-2%
1751	Jordan Feeney	Assistant AD, Operations & Capital Projects	1.00	72,613	-	3,000	750	-	-	-	No	No	No	No		75,613	750	19%
1758	Lucas Johnson	Assistant Director, Athletic Equipment Operations	1.00	46,280	-	- 900	- 500	-	-	-	No	No	No	No		46,280	-	6%
1760	Taylor Harding	Assistant Athletic Trainer	1.00	51,542	-	-	500	-	-	-	No	No	No	No		51,542	500	9%
1761	Lauren Sale	Associate Director, Sports Performance Coach	1.00	43,638	-	-	500	-	-	-	No	No	No	No		43,638	500	6%
1763	Nathan Lowery	Associate Sports Info Director	1.00	52,894	-	-	500	-	-	-	No	No	No	No		52,894	500	5%
1764	Bobert Kautz	Assistant Director, IT Systems	1.00	63,440 46.051	-	-	500	1	-	-	NO No	No	No	NO No		46 051	500	16%
1767	Matthew Sterling	Assistant AD, Athletic Equipment Operations	1.00	69,326	-	-	500	-	-	-	No	No	No	No		69,326	500	2%
1768	Michael (Alex) Bell	Director, Creative Services	1.00	59,592	-	-	750	-	-	-	No	No	No	No		59,592	750	5%
1769	James Gerfen	Assistant Director, Ticket Operations & Data Analytic	c 1.00	52,520	-	700	500	-	-	-	No	No	No	No		53,220	500	9%
1770	Daryn Colledge	Director of Development, Varsity B	1.00	53,934	-	-	500	-	-	-	No	No	No	No		53,934	500	5%
1776	Jordan Britton	Business Manager	1.00	76,440	3 500	- 500	750	-	-	-	No	No	No	NO NO	65 000	76,440	4 250	4%
1797	Hope Bowman	Assistant Director, Guest Services	1.00	46,051	-	-	500	-	-	-	No	No	No	No	00,000	46,051	500	New
1834	Colby Harms	Assistant Director, Graphic Design - Football	1.00	48,402	-	-	500	-	-	-	No	No	No	No		48,402	500	5%
1941	Jarred Nelson	Associate Director, Sports Performance Coach	1.00	49,629	-	-	500	-	-	-	No	No	No	No		49,629	500	6%
2403	Stephanie Donaldson	Director, Athletic Performance Psychology	1.00	112,029	-	-	1,000		-	-	No	No	No	NO No		112,029	1,000	2%
3064	Dominic Shelden	Assistant AD, Creative Serivces	1.00	81,494	-	-	1,000	-	-	-	No	No	No	No		81.494	1,000	10%
3110	Alissa Lauer	Academic Advisor	1.00	49,816	-	-	500	-	-	-	No	No	No	No		49,816	500	5%
3125	Joshua Bender	Assistant AD, Marketing & Community Engagement	1.00	67,392	-	1,300	1,000	-	-	-	No	No	No	No		68,692	1,000	-20%
3132	Jennifer Bellomy	Assistant AD, Compliance	1.00	77,605	-	-	1,000	-	-	-	No	No	No	No	404.450	77,605	1,000	3%
3145	Gabe Rosenvall	Associate AD, Student-Athlete Academic Services	1.00	101,150	-	-	2,000	-	-	-	NO	No	NO	NO No	101,150	-	2,000	2%
3167	Sara Swanson Whiles	Associate AD. Student-Athlete Development	1.00	80.018	-	-	1.000	-	-	-	No	No	No	No		80.018	1.000	13%
3188	Jacob Howell	Director, Donor Relations & Events	1.00	58,053	-	-	500	-	-	-	No	No	No	No		58,053	500	15%
3502	Andy Atkinson	Director, Ath Info & Digital Tech	1.00	85,738	-	-	1,000	-	-	-	No	No	No	No		85,738	1,000	3%
3529	Jodie Faulk	Director of Compliance	1.00	53,768	-	-	750	-	-	-	No	No	No	No		53,768	750	5%
3545	Chris Apenbrink	Assistant AD, SPRW - Olympic Sports Perform Assistant Director, Ticket Operations	1.00	02,000 50,502	-	- 300	500	-	-	-	No	No	No	No		02,000 50,802	1,000	10%
3549	Nathan Burk	Sr. Associate AD, Compliance	1.00	130,000	15,000	-	2,500	1 -	-	-	No	No	No	No		130,000	17,500	13%
3563	Eric Kile	Director, Student Athlete Learning Center	1.00	60,133	-	-	750	-	-	-	No	No	No	No	60,133	-	750	4%
3805	Keita Shimada	Assistant AD, SPHW - Olympic Sports Medicine	1.00	82,888	-	-	1,000	<u>⊩ -</u>	-	-	No	No	No	No		82,888	1,000	3%
3806	ADIGAII Bass	Associate Athletic Trainer	1.00	53,102	600	240	500		-	-	No	No	No	NO No		53,342	1,100	14%
3970	Svringa Larson	Director of Stdnt-Ath Med Supprt Services	1.00	55,827	-	2,000	750	1 -	-	-	No	No	No	No		55.827	750	20%
4030	Andrew Bondi	Director of Ticket Operations	1.00	58,053	-	-	750	-	-	-	No	No	No	No		58,053	750	4%
4149	McKenna Drevno	Assistant Athletic Trainer - FB	1.00	51,834	1,580	-	500	-	-	-	No	No	No	No		51,834	2,080	17%
4165	Dane Clark	Assistant Business Manager	1.00	50,003	500	-	500	-	-	-	No	No	No	No	50,003	-	1,000	3%
4174	Lody Gougier	Sr. Associate AD, External Attairs	1.00	130,000	-	- 750	2,500	-	-	-	NO	Yes	NO	NO No		130,000	2,500	12%
4198	Jacob Isaacson	Assistant Director, Graphic Design	1.00	50,149	-	-	2,000	-	-	-	No	No	No	No		50,149	2,000	5%
4201	Sarah Hastings	Academic Advisor	1.00	49,816	-	-	500	<u> </u>	-	-	No	No	No	No		49,816	500	5%
4202	Samantha Wade	Director, Sports Nutrition	1.00	76,190	-	-	1,000	H -	-	-	No	No	No	No		76,190	1,000	4%
4218	David Slemmer	Assistant Director, Events - SSC	1.00	46,051	-	-	250	#			No No	No No	No	No N-		46,051	250	New
4242	Justin Rogers	Assistant AD. Ticket Sales & Service	1.00	55,723		2,000	1 000	H :		-	NO No	NO	NO No	NO No	-	57,723	1 000	24%
4246	Cade White	Assistant Director, Development	1.00	46,051	-	-	500	1 -	-	-	No	No	No	No		46,051	500	0%
4260	Daniel Calhoun	Assistant Director, Ticket Sales & Service	1.00	47,362	-	15,000	500	<u> </u>	-	-	No	No	No	No		62,362	500	5%
4268	Matty Richardson	Associate Athletic Trainer	1.00	58,427	1,420	-	750		-	-	No	No	No	No		58,427	2,170	4%
4272	Laine Hinson	Assistant Director, Athletic Personnel Services	1.00	55,016	-	-	500	H -	-	-	No No	No No	No	No N-		55,016	500	20%
4279	Alex Semadeni	Assistant Director, Athletic Media Relations	1.00	57,200		-	500	H :		-	NO No	NO	NO	NO No	-	57,200 46,351	500	15%
4281	Amanda DiEnno	Associate Athletic Trainer	1.00	53,102	1,600	600	500	1 -	-	-	No	No	No	No		53,702	2,100	20%
4285	Allison Hevner	Director of Events, SSC	1.00	52,894	-	2,000	750	-	-	-	No	No	No	No		54,894	750	5%
4297	Kasey Richardson	Multimedia Technical Support Specialist	1.00	55,016	-	-	500	<u>∦ -</u>	-	-	No	No	No	No		55,016	500	New
4.307	IVIEIVID PERV	ASSISTATIL LIFECTOF LIFEATIVE SERVICES	1 1 0 0	48 298	- 1	-	500		-			INO	INO	INO INO		48 298	500	5%

INFORMATIONAL - BAHR

TAB 2 Page 1

Intercollegiate Athletics Compensation Report Boise State University FY24 Est Base Salary and Other Compensation

ATTACHMENT 2

			г								n			7				
					Compens	ation			Contract Boni	us		Perks			F	unding		Salary
			Athletic	Base	Camps/		Equip Co	Academic	Winning	Post Season	Club			Multi-Yr	State F	Program	All	Annualized
PCN	Depart/Name/Title		FTF	Salary	Clinics	Other	Eduib ee	Perform	Perform	Other	Memb	Car	Other	Contract	Approp	Rovenue	Other	Change
1000	Depart/Name/Title		1.00	Jaiary	Chines	Other	500	Fenorin.	Fenonii.	Oulei	Wento	Cai	Outer	Contract	Approp. 1	70 405	Other	Change
4306	Eric Leitzinger	Asst Director, Ath Counseling & Performance Psych	1.00	72,405	-	-	500	-	-	-	NO	INO	NO	NO		72,405	500	35
4318	Carlie Cappelen	Assistant Director, Events - SSC	1.00	46,051	-	500	250	-	-	-	No	No	No	No		46,551	250	79
4319	Lauren Hazel	Assistant Director, Graphic Design	1.00	48,402	-	-	250	-	-	•	No	No	No	No		48,402	250	59
4321	Suzanne Lavender	Assistant AD, Strategic Communications	1.00	67,184	-	-	500	-	-	-	No	No	No	No		67,184	500	39
4331	Alvssa Perk	Associate Director Marketing	1.00	47,195	-	-	250	-	-	-	No	No	No	No		47,195	250	59
4336	Allison Iverson	Assistant Director, Business Dev & Revenue Innova	1.00	48,090	-	-	250	-	-	-	No	No	No	No		48,090	250	50
1360	Tyler Haak	Director Creative Services	1.00	57 200		_	500	_	_		No	No	No	No		57 200	500	30
4000		Director, Creative Gervices	1.00	57,200	-	-	500	-	-	-	NU	NU	NU	NU		37,200	500	5
4360	Jonathan Paimer	Assistant Director, Creative Services	1.00	45,906	-	-	500	-	-	-	INO	INO	INO	INO		45,906	500	0.
4396	Garrett Holle	Associate Athletic Trainer - FB	1.00	60,008	-	-	500	-	-		INO	INO	INO	NO		60,008	500	305
4411	Andrew Lillig	Assistant Director Marketing & Promotions	1.00	46,051	-	-	500	-	-	-	No	No	No	No		46,051	500	Ne
4418	Tellier Lundquist	Assistant Director, Ticket Sales & Service	1.00	46,051	-	15,000	500	-	-	-	No	No	No	No		61,051	500	Ne
4121	Jeremy Malnes	Director, Ticket Sales & Service	1.00	51,896	-	15,000	500	-	-	-	No	No	No	No		66,896	500	Ne
4427	Allie Lepori	Special Assistant to the Athletic Director	1.00	52 686	-	-	500	-			No	No	No	No	52 686	-	500	40
4440	Morgan Weber	Assistant Director, Compliance	1.00	46.051			500	_	_		No	No	No	No	02,000	46.051	500	70
4440	Vesent	Photossistant Director, Compilance	1.00	46,001		-	500	_		-	Ne	Ne	Ne	No		45,005	500	Nie
4449	Vacant	Photographer	1.00	45,905	-	-	500	-	-	-	INO	INO	INO	INO	00.011	45,905	500	INE
4903	Matthew Mayer	Sr. Assistant AD, Business Operations	1.00	82,014	1,000	1,000	1,000	-	-	-	NO	No	No	NO	82,014	1,000	2,000	19
4925	Katherine Dores	Assistant AD, Athletic Personnel Services	1.00	75,005	-	500	1,000	-	-	-	No	No	No	No		75,505	1,000	159
4931	* Bryan Beals	Associate AD, Major Gifts	1.00	54,038	-	-	2,000	-	-	-	No	No	No	No		54,038	2,000	20
4935	Danica Tarabanovic	Assistant Athletic Trainer	1.00	58,427	-	-	750	-	-	-	No	No	No	No		58,427	750	49
	* Employee is 50% paid from	I Iniversity Advancement																
	Employee is so to paid iton	Conversity in a concernent																
	Maula Cuante																	1
	vien's Sports																	
	Football																	
1255	Derrick McMahen	Special Teams Quality Control	1.00	30,014	-	-	500	-	-	-	No	No	No	No		30,014	500	Ne
1704	Spencer Danielson	Head Coach	1.00	1,100,008	-	-	3,000	. 1	25.000	-	No	Yes	No	Yes	1	1.125.008	3,000	-299
1705	Stacy Collins	Assistant Coach	1.00	350.002	_	-	2 500	5 500	20,000	_	No	Yee	No	Yee		355 502	2 500	E00
1700	Vecent	Assistant Cooch	1.00	300,00Z	-	-	2,000	0,000	-	-	NU	Vee	No	Vee	1 1	405.042	2,000	59
1706	vacant	Assistant Coach	1.00	460,013	-	-	2,500	10,000	25,000	-	NO	Yes	INO	Yes		495,013	2,500	15
1707	Jabril Frazer	Assistant Coach	1.00	140,005	-	-	2,000	3,000	9,600	-	No	Yes	No	Yes		152,605	2,000	179
1708	Erik Chinander	Defensive Coordinator	1.00	440,003	-	-	2,000	2,599	17,600	-	No	Yes	No	Yes		460,202	2,000	40
1728	Jonah Booth	Assistant Coach, FB Strength & Conditioning	1.00	35,006	-	-	500	-	-	-	No	No	No	No		35,006	500	-61
1730	Kyle Young	Director of Recruiting Football	1 00	60,008		-	1 000	1 500	3 600	-	No	No	No	No		65 109	1 000	00
1752	Dale Holste	Assoc Dir, Athletic Equipment Operations	1.00	60,000	-	_	1,000	1,000	0,000		No	No	No	No		69,100	1,000	30
1752	Ctaylor Cabulta	Assoc Dir, Aulieuc Equipment Operations	1.00	50,200	-	-	1,000	-	-	-	No	Ne	Ne	No		50,200	1,000	5
1757	Steven Schulte	Assi Director Athletic Equipment Operations	1.00	50,396	-	-	500	-	-	-	INO	INO	INO	INO		50,396	500	5
1772	Jaylan Reid	Assistant Coach, Strength & Conditioning/Football	1.00	90,002	-	-	500	-	-	-	No	No	No	No		90,002	500	29
1787	Louis Major	Director Football External Relations	1.00	90,002	-	-	1,000	4,500	7,200	-	No	No	No	No		101,702	1,000	00
1886	Lance Anderson	Offensive SR Analyst Football	1.00	24,960	-	-	500	-	-	-	No	No	No	No		24,960	500	Ne
1916	Charlotte Siegel	Assistant AD / Chief of Staff, Football	1.00	120 016	-		1 500	-			No	Yes	No	No		120 016	1 500	00
2102	Inman Mantager	Assistant Caseb	1.00	225,010	_		2,000	4.075	15 600	_	Ne	Vee	Ne	Vee		255,010	1,000	240
3103	James Montgomery	Assistant Querk	1.00	235,019	-	-	2,000	4,075	15,000	-	INU	res	INU NL:	Tes		200,494	2,000	21
3109	Demario vvarren	Assistant Coach	1.00	240,011	-	-	2,000	6,000	20,800	-	NO	Yes	INO	Yes		266,811	2,000	-8
3134	Matthew Miller	Assistant Coach	1.00	215,010	-	-	2,000	8,250	15,600	-	No	Yes	No	Yes		238,860	2,000	109
3153	Ben Hilgart	Director, Sports Perf Coach FB	1.00	185,016	-	-	2,000	4,500	14,400	-	No	No	No	Yes		203,916	2,000	39
3160	Tyler Stockton	Assistant Coach	1.00	260.000	-	-	2.000	6.499	-	-	No	Yes	No	Yes		266,499	2.000	169
3162	Timothy Keane	Assistant Coach	1.00	260,000	-	-	2,000	6 4 9 9	18 802	-	No	Ves	No	Ves		285 301	2,000	119
3186	Nate Potter	Assistant Coach	1.00	260,000		_	2,000	6,400	18 802		No	Vec	No	Vec		285 602	2,000	110
3100	Nate i ottei		1.00	200,000	-	-	2,000	0,000	10,002	-	NU	163	NU	165		203,002	2,000	10.00
4147	vacant	General Manager	1.00	110,000	-	-	-	2,295	3,301	-	NO	INO	NO	NO		115,596	-	1005
4152	Vacant	Associate Director, Football Administration	1.00	60,008	-	-	1,000	-	-	-	No	No	No	No		60,008	1,000	04
4159	Marques White	Asst Dir Sports Performance Coach FB	1.00	70,013	-	-	500	-	-	-	No	No	No	No		70,013	500	1009
4211	Keaton Davis	Football Operations Coordinator	1.00	46,051	-	-	500	-	-	-	No	No	No	No		46,051	500	Ne
4267	Dirk Koetter	Senior Football Analyst	1.00	24,960	-	-	500	-	-	-	No	No	No	No		24,960	500	00
4269	Steven Cooper	Offensive Analyst	1.00	40.019	-	-	500	-	-	-	No	No	No	No		40.019	500	140
4273	Ron Collins	Senior Football Analyst	1.00	2/ 060	-	-	500		-	-	No	No	No	No		24 060	500	14
4273	Tylor Pouce	Special Teams Coophing Acet	1.00	24,000	-		500	H - I	-	-	No.	N-	N-	No.	1 1	24,000	500	
42/4	i yier kausa	Special Teams Coaching Asst.	1.00	35,006	-	-	500	H -	-	-	INO	INO	NO	NO		35,006	500	40
4275	Brian Mullin	Derensive Coaching Assistant	1.00	24,960	-	-	500	- 1	-	-	No	No	No	No	I	24,960	500	0
4276	Parker Weber	Dir. FB Video/Technology	1.00	50,003	-	-	1,000	-	-	-	No	No	No	No		50,003	1,000	-9
4284	Meredith (Butch) Henry	Athletic Operations Coordinator	1.00	46,051	-	-	-	- 1	-	-	No	No	No	No		46,051	-	70
5381	Andrew Avalos	Head Football Coach	1.00	717,517	-	-	-	-	-	-	No	No	No	Yes		717,517	-	Ne
	Basketball			,										u I	•	1.5	1	1
1710	Leon Rice	Head Coach	1.00	1 000 010			4 000	n – – – – – – – – – – – – – – – – – – –	100.000	00.000	Vaa	Vaa	No	Vaa	1	1 200 022	4 000	E (
1710		A seletest Os sele	1.00	1,000,019	-	-	4,000	-	120,002	00,002	res	res	NO	res	l	1,200,023	4,000	5
1/12	Michael Burns	Assistant Coach	1.00	194,542	-	-	2,000		23,345	15,563	NO	Yes	NO	NO		233,451	2,000	0
1714	Timothy Duryea	Assistant Coach	1.00	180,003	-	-	2,000	-	21,600	14,400	No	Yes	No	No		216,004	2,000	09
1745	David Moats	Director of Recruiting, MBB	1.00	84,011	2,971	-	2,000	- 1	10,081	6,721	No	No	No	No		100,813	4,971	00
3133	Roberto Bergerson	Assistant Coach	1.00	140.005	_	-	2.000	-	16.801	11.200	No	Yes	No	Yes	1	168.006	2.000	80
4254	Lexus Williams	Coaching Assistant	1.00	55 016	3 529	-	500	i _	6 602	4 401	No	No	No	No	i I	66 019	4 029	200
4305	Matthew Charles	Director Men's BB Operations	1.00	50,003	0,020	-	1 000		6,002	4,401	No	No	No	No	1 1	60,004	1,020	_170
4000		Director mena DD Operations	1.00	00,003	-	-	1,000	μ -	0,000	4,000	INU	110	110	140	μ	00,004	1,000	-17
0.5.5.5	GOIL					1		n							1	05.5.5		
3566	David Trainor	Head Coach	1.00	85,010	-	-	4,000	-	-	-	Yes	Yes	No	Yes		85,010	4,000	6
1486	Joe Panzeri	Assistant Coach	1.00	24,960	-	-	2,000	- 1	-	-	No	No	No	No	I	24,960	2,000	0
	Tennis														-			
3151	Paluka Shields	Head Coach	1.00	90.005	-	-	4 000	4 001	5 601	-	No	Yes	No	Yes		99 604	4 000	12
3179	Daniel Hangstefer	Associate Head Coach Men's Tennis	1.00	45 011	-	-	2,000	4,001	0,001	-	No	No	No	No	1 1	45 011	2,000	12
51/0	Man Mamania Tracit 2 5	Associate Fread Ovach, WEITS TEHLIS	1.00	40,011	-	-	2,000	u <u>-</u>	-	-	110	110	110	140	1	40,011	2,000	
	wen/women's Track & F	ieiu						n			n .							L
1400	Benjamin Wetli	Assoc Head CC & Asst Track and Field Coach	1.00	65,000	-	-	2,000	4,225	-	2,600	No	No	No	No		71,825	2,000	0
1719	Rachel McFarlane	Asst Coach Track & Field & CC	1.00	44,429	-	-	2,000	2,888	-	1,777	No	No	No	No	44,429	4,665	2,000	00
1721	Travis Hartke	Assoc Head CC & Asst Track and Field Coach	1.00	65,437	-	-	2,500	4,253	-	2,617	No	No	No	No	65,437	6,871	2,500	00
2223	Corey Ihmels	Head Coach	1.00	165.002	-	-	4,000	6,500	600	2,500	No	Yes	No	Yes		174,602	4,000	6
3177	Gavin O'Neal	Assistant Coach Track & Field	1.00	55 3/0	-	-	2,000	1 037	000	2,000	No	No	No	No	55 349	1 937	2 000	0
4044	Andrew Crean	Assistant Coach Track & Field	1.00	00,049	-	-	2,000	1,937	-	-	NU Ne	No	NIe	NU	00,049	1,937	2,000	0.
4041	Andrew Green	ASSISTATIL COACH, LLACK & FIEID	1.00	34,195	-	-	2,000	1,197	-	-	INO	INO	INO	INO	1	30,39Z	2,000	05

Intercollegiate Athletics Compensation Report Boise State University FY24 Est Base Salary and Other Compensation

ATTACHMENT 2

									71							
			Compensa	ation			Contract Bonu	JS		Perks				Funding		Salary
	Athletic	Base	Camps/		Equip Co	Academic	Winning	Post Season	Club			Multi-Yr	State	Program	All	Annualized
Title	FTE	Salary	Clinics	Other		Perform.	Perform.	Other	Memb	Car	Other	Contract	Approp.	Revenue	Other	Change
Assistant Coach	1.00	100,734	-	-	2,000	6,044	6,044	4,029	No	No	No	No	100,734	16,118	2,000	0%
ng Director Women's BB Operations	1.00	50,024	-	-	600	-	3,001	2,001	No	No	No	No	50,024	5,002	600	0%
ell Head Coach	1.00	308,110	-	-	4,000	18,000	18,487	12,324	No	No	No	Yes	308,110	48,811	4,000	0%
Assistant Coach	1.00	99,923	-	-	2,000	5,995	5,995	3,997	No	No	No	No	99,923	15,988	2,000	0%
ez Assistant Coach	1.00	100,734	-	-	2,000	6,044	6,044	4,029	No	No	No	No	100,734	16,118	2,000	0%
s Head Coach	1.00	109,990	42,500	-	4,000	-	-	-	No	No	No	Yes	109,990	-	46,500	-5%
Assistant Coach	1.00	37,939	27,771	-	2,000	-	-	-	No	No	No	No	37,939	-	29,771	0%
Associate Head Coach, Soccer	1.00	52,790	35,000	-	2,500	-	-	-	No	No	No	No		52,790	37,500	0%
Head Coach Volleyball	1.00	140,878	6,000	-	4,000	8,453	-	-	No	Yes	No	Yes	140,878	8,453	10,000	-5%
Associate Head Coach Volleyball	1.00	75,275	7,506	-	2,500	4,517	-	-	No	No	No	Yes	75,275	4,517	10,006	0%
on Assistant Coach Volleyball	1.00	52,000	4,000	-	2,000	2,910	-	-	No	No	No	No	52,000	2,910	6,000	0%
Director of Operations, Volleyball	1.00	46,051	2,000	-	1,000	-	-	-	No	No	No	No	46,051	-	3,000	7%
1																
oigt Head Coach Beach Volleyball	1.00	65,000	-	-	4,000	2,751	-	-	No	No	No	Yes		67,751	4,000	18%
Assistant Coach Beach Volleyball	1.00	46,509	295	-	2,000	1,825	-	-	No	No	No	No		48,334	2,295	27%
Assistant Coach	1.00	43,368	3,750	-	2,000	2,168	-	2,168	No	No	No	No	43,368	4,337	5,750	0%
Head Coach	1.00	96,013	6,450	-	4,000	4,590	-	4,590	No	Yes	No	Yes	96,013	9,179	10,450	5%
Associate Head Coach, Gymnastics	1.00	82,410	5,200	-	2,000	3,870	-	3,870	No	No	No	Yes		90,149	7,200	6%
e Director, Gymnastics Operations	1.00	46,051						-	No	No	No	No		46,051		7%
Roghaar Head Coach Womens Director	1.00	95,118	-	-	4,000	4,617	-	2,308	No	Yes	No	Yes	95,118	6,925	4,000	3%
e Assistant Coach	1.00	54,080	-	-	2,000	-	-	-	No	No	No	No		54,080	2,000	0%
Head Coach	1.00	75,005	-	-	4,000	3,376	-	-	No	Yes	No	Yes	75,005	3,376	4,000	11%
e Asst Coach Women's Golf	1.00	40,019	-	-	2,000	-	-	-	No	No	No	No	40,019	-	2,000	60%
Assistant Coach Softball	1.00	40,019	-	-	-	-	-	-	No	No	No	Yes	40,019	-	-	Nev
Head Coach	1.00	110,011	-	-	4,000	4,751	-	6,651	No	Yes	No	No	110,011	11,402	4,000	16%
Assistant Coach	1.00	54,517	-	-	2,000	2,375	-	2,375	No	No	No	No	54,517	4,751	2,000	15%
per Assistant Coach	1.00	65,000	-	-	2,000	3,000	-	3,000	No	No	No	No	65,000	6,001	2,000	8%
	176.00	17,179,184	174,704	65,890	219,100	198,106	445,510	232,126	Ĩ				2,725,007	15,395,810	393,804	
per	Assistant Coach	Assistant Coach 1.00 Assistant Coach 1.00	Assistant Coach 1.00 54,017 Assistant Coach 1.00 65,000 176.00 17,179,184	Assistant Coach 1.00 54,017 - Assistant Coach 1.00 65,000 - 176.00 17,179,184 174,704	Assistant Coach 1.00 34,017 Assistant Coach 1.00 65,000	Assistant Coach 1.00 34,317 2,000 Assistant Coach 1.00 65,000 2,000 176.00 17,179,184 174,704 65,890 219,100	Assistant Coach 1.00 34,017 - - 2,000 2,773 Assistant Coach 1.00 65,000 - - 2,000 3,000 176.00 17,179,184 174,704 65,890 219,100 198,106	Assistant Coach 1.00 34,317 - - 2,000 2,373 - Assistant Coach 1.00 65,000 - - 2,000 3,000 - 176.00 17,179,184 174,704 65,890 219,100 198,106 445,510	Assistant Coach 1.00 54,017 - 2,000 2,073 - 2,073 Assistant Coach 1.00 65,000 - 2,000 3,000 - 3,000 176.00 17,179,184 174,704 65,890 219,100 198,106 445,510 232,126	Assistant Coach 1.00 34,017 - - 2,000 2,373 - 2,373 No Assistant Coach 1.00 65,000 - - 2,000 3,000 - 3,000 No 176.00 17,179,184 174,704 65,890 219,100 198,106 445,510 232,126	Assistant Coach 1.00 54,07 - 2,000 2,073 - 2,073 NO NO Assistant Coach 1.00 65,000 - - 2,000 3,000 - 3,000 No No No 176.00 17,179,184 174,704 65,890 219,100 198,106 445,510 232,126	Assistant Coach 1.00 54,017 - 2,000 2,013 - 2,013 NO <	Assistant Coach 1.00 04,017 - - 2,000 2,373 - 2,373 NO NO NO Assistant Coach 1.00 65,000 - 2,000 3,000 - 3,000 No No No No 176.00 17,179,184 174,704 65,890 219,100 198,106 445,510 232,126	Assistant Coach 1.00 54,017 - 2,000 2,073 - 2,073 NO NO NO S4,017 Assistant Coach 1.00 65,000 - 2,000 3,000 - 3,000 No No No 65,000 176.00 17,179,184 174,704 65,890 219,100 198,106 445,510 232,126 2,725,007	Assistant Coach 1.00 34,317 - - 2,000 2,373 - 2,373 No No No 34,317 4,731 Assistant Coach 1.00 65,000 - 2,000 3,000 - 3,000 No No No 65,000 6,001 176.00 17,179,184 174,704 65,890 219,100 198,106 445,510 232,126 2,725,007 15,395,810	Assistant Coach 1.00 54,517 - 2,000 2,075 - 2,075 NO NO NO 34,517 4,751 2,000 Assistant Coach 1.00 65,000 - 2,000 3,000 - 3,000 No No No 66,000 6,001 2,000 176.00 17,779,184 174,704 65,890 219,100 198,106 445,510 232,126 2,725,007 15,395,810 393,804

Intercollegiate Athletics Compensation Report Idaho State University

FY 2023 Actual Compensation

						Compens	sation		Cor	ntract Bonus	es	F	Perks			Funding	
				Athletic	Base	Camps/		Equip Co	Academic	Winning		Club		Multi-Yr	State	Program	All
Dep	part/Name/Title			FTE	Salary**	Clinics	Media	& Other	Perform.	Perform	Other	Mbership	Car Other	Contract	Approp.	Revenue	Other
Ath	letic Administration:																
х	Pauline Thiros		Athletic Director	0.70	163,929					5,000		Yes	Yes	Yes	163,929		5,000
х	Robyn Sharp		Sr Assc AD Int Op&Sprt Prf/SWA	1.00	93,947									No	93,947		
х	Nikole Cook		Academic Advisor	1.00	44,532									No		44,532	
х	Steven Schaack	Α	Asst AD for Media Relations	0.50	38,060									No	38,060		
х	Jonathan Match	В	Assoc AD Sports Info, Media Relations and Ga	a 0.50	37,908									No			
х	Jonathan Match	Α	Asst Director Media Relations	0.41	17,196									No	17,196		
х	Ryan Cheney	В	Asst Director for Sports & Game Ops	0.59	24,857									No	24,857		
х	Natalie Christensen		Registered Dietician	0.25	15,195									No		15,195	
х	Marilyn Anderton		Insurance Coordinator	0.50	18,089									No		18,089	
х	Brandon Stephens		Dir of Strength & Conditioning	1.00	69,623									No	52,392	17,231	
х	Brandon Rodewald		Asst Dir of Strength and Conditioning	1.00	57,894									No	3,383	54,511	
х	Caroline Lipka		Director of Sports Marketing	1.00	45,567									No	3,383	54,511	
х	Thomas Renner		Athletic Equipment Manager	0.93	48,258									No	48,258		
х	Spencer Salvesen		Senior Maint. Craftsman/Game Ops	0.50	16,525									No		16,525	
х	Melissa Dixon		Admin Assistant	1.00	31,044									No	31,044		
х	Becky Naber		Mgmt Assistant	1.00	44,158									No	44,158		
Mei	n's Sports																
	Football																
х	Cody Hawkins	В	Hd Coach	0.54	106,575								Yes	Yes	106,575		0
х	Charles Ragle	A	Hd Coach	0.40	84,987									N/A	84,987		
х	Jacob Thomas	В	Asst. Coach	0.55	37,693									No	28,631	9,062	0
х	Ryan Payne	A	Asst Coach	0.45	30,654									No	20,921	9,733	
х	Paea Moala	A	Video Coordinator	0.75	26,584									No		26,584	
х	Jarrett Meeker	В	Video Coordinator	0.25	7,154									No		7,154	
х	Devin Holiday		Asst Coach	1.00	40,538									No	40,538		0
х	Jeffrey Pitman	В	Asst. Coach	0.34	27,076								Yes	No	14,949	12,127	
х	Timothy Schaffner	A	Asst. Coach	0.66	53,211									No	44,053	9,158	
х	Jesse Thompson	В	Dir of Football Operations	0.51	33,173									No	33,173		0
х	Byron Hout	A	Dir of Football Operations	0.49	31,650									No	31,650		
х	Kody Hensley		Asst Coach	1.00	32,393									No	32,393		
х	Dominique Steward	A	Asst Coach	0.60	27,762									No	27,762		0
х	Joshua Mondt	В	Asst Coach	0.40	18,173									No	18,173		
х	Scott Thierssen	В	Asst Coach	0.27	26,538									No	26,538		0
х	Taylor Mazzone	A	Asst Coach	0.73	70,737									No	70,737		
х	Vincent Amey	A	Asst Coach/Defensive Ends	0.47	22,042									No	22,042		
х	Mark Weber	В	Asst. Coach	0.53	39,807									No	39,807		
х	Edgar Weiser	A	Asst. Coach	0.46	35,860									No	35,860		
х	Joshua Runda	В	Asst. Coach	0.54	41,846									No	41,846		
х	Korey Rush	В	Asst. Coach	0.59	18,306									No	4,576	13,730	
х	Pierre Cormier	A	Asst Coach	0.41	12,576									No		12,576	0
х	Keith Price		Asst Coach	0.08	3,076									No	1,717	1,359	0
х	Nicholas Alaimalo		Asst. Coach	1.00	52,148									No	48,157	3,991	
	Basketball																
х	Ryan Looney		Hd Coach	0.96	118,786	9,750)						Yes	Yes	118,786	0	9,750
х	Rosbie Mutcherson	A	Asst Coach	0.88	39,049	3,500)							No	39,049		3,500
х	George Eustachy	В	Asst Coach	0.12	5,538									No			0
х	Davis Furman		Asst Coach	0.80	32,417	6,750)							No	32,417		6,750
х	Jose White		Asst Coach	1.00	56,345	6,000)							No	56,345		6,000

Intercollegiate Athletics Compensation Report Idaho State University

FY 2023 Actual Compensation

						Compens	ation		Co	ntract Bonuse	es	F	Perks				Funding	
			Athletic	-	Base	Camps/		Equip Co	Academic	Winning		Club			Multi-Yr	State	Program	All
Depart/Name/Title			F	TE	Salary**	Clinics	Media	& Other	Perform.	Perform	Other	Mbership	Car	Other	Contract	Approp.	Revenue	Other
Tennis																		0
x Oliver Good		Hd Coach		0.75	34,387										Yes	34,387		0
(A) = indicates previous c	oach/en	nployee																
(B) = indicates current coa	ach / emp	loyee																
Track & Field																		
x Hillary L. Merkley		Hd Coach		0.46	33,621	1,300							Yes		Yes	33,621		1,300
x Drew Jones		Asst Coach		0.46	22,073	1,125									No	22,073		1,125
x Joseph Silvers		Asst Coach		0.50	22,393	1,300									No	22,393		1,300
Cross Country																		
x Nathan Houle		Hd Coach		0.50	31,071	1,125									No	31,071		1,125
Women's Sports																		
Basketball																		
x Seton Sobolewski		Hd Coach		0.96	133,570								Yes		Yes	133,570	0	0
x Maiya Michel		Asst Coach		1.00	64,300	4,045									No	64,300		4,045
x Dora Goles		Asst Coach		1.00	40,213	6,295									No	40,213		6,295
x Courtnie Smith	А	Asst Coach		0.91	40,846	5,200									No	40,846		5,200
x Olivia Luu	В	Asst Coach		0.08	4.232	1.625									No	3.808	424	1.625
Vollovboll					, -											- ,		0
Volleyball		Ud Caash		1 00	71 205	0.000									Vee	71 205	0.000	0 000
x Sean Carter		Hd Coach		1.00	71,305	9,000									Yes	71,305	9,000	9,000
x Chelsea Scott		Asst Coach		1.00	41,716	7,165									NO	41,716	10.000	7,165
x Haylie Keck	A	Asst Coach		0.65	19,263	8,000									No		19,263	8,000
x Andri Dewey	В	Asst Coach		0.35	10,540	1,440									No No	1,817	8,723	1,440
Tennis																		
x Gretchen Maloney		Hd Coach		0.92	51,709										Yes	51,709	0	0
																		0
Track & Field																		0
x Hillary L. Merkley		Hd Coach		0.46	33,621	1,300							Yes		Yes	33,621	700	1,300
x Drew Jones		Asst Coach		0.50	22,073	1,125									No	22,073	0	1,125
x Joseph Silvers		Asst Coach		0.50	22,393	1,300									No	22,393		1,300
Golf																		
x Todd Loveland		Hd Coach		0.68	30,388										Yes	30,388		0
																		0
Cross Country																		0
x Nathan Houle		Hd Coach		0.50	31,071	1,125									No	31,071		1,125
																		0
Soccer																		0
x Dustin Downey	В	Hd Coach		1.00	67,778	4,033									Yes	67,778	4,033	4,033
x Jack Curtin	В	Hd Coach		1.00	43,483	6,800									No	43,483	6,800	6,800
Softball															INO			
x Andrew Rich		Hd Coach		1.00	69,118	5,000							Yes		Yes	69,118		5,000
x Kelsey Broadus		Asst Coach		1.00	32,690	4,500									No	32,690	4,500	4,500
x Rebekah Cervantes		Asst Coach		1.00	45,231	6,500									No	44,667	6,500	6,500
Totals				46.83	2,918,560	105,303	0	0		0 5.000	0	-				2,532,400	386,011	110,303

Intercollegiate Athletics Compensation Report Idaho State University

FY 2023 Actual Compensation

			Compensa	ation		Contract Bonu	ses	Perks			Funding	
	Athletic	Base	Camps/	Ec	quip Co	Academic Winning		Club	Multi-Yr	State	Program	All
Depart/Name/Title	FTE	Salary**	Clinics	Media &	& Other	Perform. Perform.	Other	Mbership Car Other	Contract	Approp.	Revenue	Other
(A) = indicates previous coach / employee												

(A) = indicates previous coach / employee(B) = indicates current coach / employee

(*) These coaches receive pay for their participation in off-campus clinics or events. These earnings are not reflected in the Regular Salary payroll costs for Idaho State University.

If a coach has an agreement with an apparel company, cash payments (payroll) should be reported as compensation. Report the value of of clothes and equipment that you know coaches receive in the Perks–Other column. Payments from the foundation should be reported in the other column. Indicate "Yes" or "No" if department employees have an assigned car. If there has been turnover in a position, the FTE should reflect the percent of time employed.

Intercollegiate Athletics Compensation Report Idaho State University FY 2024 Estimated Compensation

										•										Base
					_		Comper	nsation		Co	ontract Bonu	S	F	Perks				Funding		Salary
D					Athletic	Base	Camps/		Equip Co	Academic	Winning	011	Club	0	0	Multi-Yr	State	Program	All	Annualized
Dep	the tip Administration				FIE	Salary	Clinics	Media	& Other	Perform.	Perform.	Other	Mbership	Car	Other	Contract	Approp.	Revenue	Other	Change
, A	Anieuc Administration:			Athlatia Director	0.72	101 000								Vaa		Vaa	101 000			1.40/
x	Pauline Iniros			Athletic Director	1.00	191,999								res		res	191,999			14%
×	Robyn Sharp			Si Asse AD Int Op&Spit Fil/SWA	1.00	90,137										NO	90,137			2 /0 Now
×	Byon Chonoy			Associations and Sports Into, Media Relations and Ga	a 1.00 1.00	46,703										No	46.050			New 0%
×	Natalia Christenson			Assi Director Media Relations	0.25	40,030										No	40,050	16 6 2 9		9 /0
×	Marilun Andorton				0.25	23 025										No		23 025		970 27%
~	Brandan Stanhana			Dir of Strongth & Conditioning	1.00	23,023										No	70 710	23,023		21 /0
Ŷ	Carolino Linka			Director of Sports Marketing	1.00	12,110										No	72,710	48 333		4 /0
Ŷ	Thomas Bonnor			Athletic Equipment Manager	1.00	40,000										No	55 016	40,000		6%
Ŷ	Sponger Salveson			Sonior Maint Craftsman/Game Ops	0.50	17 544										No	55,010	17 544		6%
Ŷ	Molissa Dixon				1.00	39 934										No	39 934	17,544		25%
~	Rocky Nabor			Mamt Assistant	1.00	55,004										No	55,004			25%
Ŷ	Brandon Bodowald			Asst Dir Strongth & Conditioning	1.00	60 684										No	60 684			2078 Now
x	Brandon Rodewald			Assi. Dir. Strength & Conditioning	1.00	00,004										NO	00,004			new
Μ	Ien's Sports Football																			
x	Cody Hawkins			Hd Coach	0.91	195.678								Yes		Yes	195.678			9%
x	Korev Rush			Asst Coach	1.00	40.000										No	40.000	4.576		30%
x	Keith Price			Asst Coach	1.00	40.000										No	22,332	17.668		4%
x	Jacob Thomas			Asst Coach	1.00	70.000										No	53,172	16.828		2%
x	James Blevins			Asst Coach	0.43	21.346										No	11.740	9.606		New
x	Devin Holiday			Asst Coach	1.00	41.005										No	41.005	-,		1%
x	Josh Runda			Asst Coach	1.00	85.000								Yes		No	85.000			New
x	Jesse Thompson			Asst FB Coach/Director FB Ops	1.00	50,865										No	50,865			-22%
x	Daniel Kuhn			Director of Football Oper.	0.43	12.808										No	,	12.808		New
x	Kody Hensley			Asst Coach	1.00	38 445								Yes		No	38 445	1 500		19%
x	Mark Weber		А	Asst Coach	0.49	37 212										No	37 212	1,000		1%
x	John Hughes		в	Asst Coach	0.45	31,769										No	31,769			New
x	Scott Theissen		-	Asst Coach	1.00	60.000										No	60.000			New
x	Kolney Cassel		в	Asst Coach	0.40	16,356										No	16,356			New
x	Josh Mondt		A	Asst Coach	0.56	19,519										No	19,519			New
x	Nicholas Alaimalo			Asst Coach	1.00	58 051										No	53 929	4 122		11%
x	Jeff Pitman			Asst Coach	0.84	63 231										No	30,002	33 229		New
x	Jarrett Meeker			Video Coordinator	1.00	30,000										No	00,002	30,000		5%
	Basketball																			
х	Ryan Looney			Hd Coach	0.96	120,863								Yes		Yes	120,863			2%
х	Cameron Clark			AsstCoach	1.00	39,557										No	38,370	1,207		New
х	George Eustachy			Asst Coach	1.00	48,000										No	48,000		-	8%
х	Jose White			Asst Coach	1.00	61,944										No	61,944		0	10%
	Tennis																			
х	Oliver Good			Hd Coach	1.00	45,652										Yeas	45,652			0%
	(A) = indicates previous	coach	/em	ployee																
	(B) = indicates current co Track & Field	oach /	emp	loyee																
х	Hillary L. Merkley			Hd Coach	0.45	34,706								Yes		Yes	34,706			3%
х	Joseph Silvers			Asst Track & Field Coach	0.50	23,765										No	23,765			6%
x	Marcia Mecklenberg			Asst Track & Field Coach	0.40	24,422										No	24,422			New
	5																			

Intercollegiate Athletics Compensation Report Idaho State University FY 2024 Estimated Compensation

			_		Comper	nsation		Co	ontract Bonu	s	Perk	6	_		Funding		Base Salary
			Athletic	Base	Camps/		Equip Co	Academic	Winning		Club		Multi-Yr	State	Program	All	Annualized
De	part/Name/Title		FTE	Salary	Clinics	Media	& Other	Perform.	Perform.	Other	Mbership C	ar Other	Contract	Approp.	Revenue	Other	Change**
	Cross Country																
х	Nathan Houle	Hd Coach	0.50	32.455	;								No	32.455			4%
,	Women's Sports Basketball																
х	Seton Sobolewski	Hd Coach	0.96	135,075	5						Ye	es	Yes	135,075			1%
х	Maiya Michel	Asst Coach	1.00	66,784	Ļ								No	66,784			4%
х	Dora Goles	Asst Coach	1.00	43,104	ļ								No	43,104			7%
х	Olivia Luu	Asst Coach	1.00	50,000)								No	45,000	5,000		0%
	Volleyball																
х	Sean Carter	Hd Coach	1.00	73,701							Ye	es	Yes	73,701			3%
х	Chelsea Scott	Asst Coach	1.00	44,450)								No	44,450			7%
	Andri Dewey	Asst Coach	1.00	31,500)								No	31,500			6%
	Tennis										N	0					
х	Gretchen Maloney	Hd Coach	0.92	54,300)								Yes	54,300			5%
	Track & Field																
x	Hillary L. Merkley	Hd Coach	0.45	34,706							Ye	s	Yes	34,706			3%
x	Joseph Silvers	Asst Track & Field Coach	0.50	23.765								-	No	23,765			6%
x	Marcia Mecklenberg	Asst Track & Field Coach	0.40	24,422	2									24,422			New
	Golf																
x	Todd Loveland	Hd Coach	1.00	44,658	;								Yes	25,826	18,832		0%
	Cross Country																
x	Nathan Houle	Hd Coach	0.50	32,455	i								No	32,455			4%
	Soccer																
x	Dustin Downey	Hd Coach	1.00	70.265							Ye	s	Yes	70,265			4%
x	Jack Curtin	Asst Coach	0.52	24,182								-	No	24,182			6%
x	Mark Nerio	Asst Coach	1.00	31,500)								No	31,500			- / •
	Softball																
х	Andrew Rich	Hd Coach	1.00	78,000)						Ye	es	Yes	78,000			13%
х	Rebekah Cervantes	Asst Coach	1.00	47,986	;								No	47,986			6%
х	Kelsey Broadus	Asst Coach	1.00	35,880)								No	35,880			10%
	Grand Total		48.54	3,076,113	6 0	(0 0	() 0	0				2,821,303	260,906	0	-

(A) = indicates previous coach / employee(B) = indicates current coach / employee

(*) These coaches receive pay for their participation in off-campus clinics or events.

These earnings are not reflected in the Regular Salary payroll costs for Idaho State University.

If a coach has an agreement with an apparel company, cash payments (payroll) should be reported as compensation. Report the value of of clothes and equipment that you know coaches receive in the Perks-Other column. Payments from the foundation should be reported in the other column. Indicate "Yes" or "No" if department employees have an assigned car. If there has been turnover in a position, the FTE should reflect the percent

Intercollegiate Athletics Compensation Report Idaho State University FY 2024 Estimated Compensation

														Base
	_		Comper	nsation		Co	ntract Bonus	6	Perks			Funding		Salary
	Athletic	Base	Camps/		Equip Co	Academic	Winning		Club	Multi-Yr	State	Program	All	Annualized
_Depart/Name/Title	FTE	Salary	Clinics	Media	& Other	Perform.	Perform.	Other	Mbership Car Other	Contract	Approp.	Revenue	Other	Change**

of time employed.

Intercollegiate Athletics Compensation Report University of Idaho FY2023 Actual Compensation

					Compens	sation		Co	ontract Bonu	JS			Other			Funding		
			Athletic	Base	Camps/		Equip Co	Academic	Winning		Club			Multi-Yr	State	Program	All	
Depart/P	CN/Name/Title		FTE	Salary	Clinics	Media	& Other	Perform	Perform.	Other	Memb.	Car	Other	Contract	Approp.	Revenue	Other	Comments
Athletic	Administration																	
8475	Gawlik, Terry	Athletic Director	1.00	210,227		15,000		10,000						yes	220,227	15,000		
8480	Haldeman, Garrett	Assoc AD, Business	1.00	91,742												91,742		
8651	Vacant	Asst Business Mgr	0.00	0												-		vacant
8482	McIlraith, Sean	Administrative Coordinator	1.00	53,485												53,485		
8691	Vacant	Administrative Coordinator	0.00	0												-		vacant
8490	Grove, John	Asst AD, Equipment	0.50	56,014	2,000		5,600 /	~								61,614	2,000	
8491	Peeler, Jarrett	Asst Equip Mgr	0.50	51,983												51,983		
8492	Layman, Rickey	Director of Video & Technology	0.50	5,796												5,796		Resigned
8492	Lee, Janel	Director of Video & Technology	0.50	30,317												30,317		New Hire
8636	Kellogg, Zachary	Asst Video Svcs Coord	1.00	46,910												46,910		
8484	Pathomsiri, Nawanont	Multimedia Content Coord	1.00	44,839												44,839		
8495	Parrott, Casey	Dir Athletic Communications	0.50	11,032												11,032		Resigned
8495	Rolli, Jordyn	Asst Dir Communications	0.50	19,141			2,306 /	~								21,447		New Hire
8494	Cutting, Kyle	Asst Dir Marketing	1.00	42,488												42,488		
8493	McCrea, Colton	Asst Dir Communications	1.00	44,272												44,272		
8504	Walsh, Christopher	Hd Trainer	1.00	76,270	1,082										11,520	64,750	1,082	
8500	Kuribayashi, Natsumi	Asst Trainer	1.00	43,948	1,514										43,948	-	1,514	
8650	Malinich, Clayton	Asst Trainer	1.00	49,426	1,645										49,426	-	1,645	
8660	Johnson, Kassandra	Asst Trainer	1.00	48,861	210											48,861	210	
8483	Asplund, Stacy	Student Insurance Coord	1.00	38,714											38,714	-	0	
8689	Heim, Caleb	Head Strength Coach	1.00	70,013	2,000		6,495 /	~								76,508	2,000	
8687	Rinzel, Jack	Asst Strength	1.00	42,536			2,657	~								45,193	0	New Hire
8688	Mikulecky, Brandon	Assoc Strength	1.00	40,900			3,653 /	~								44,553	0	New Hire
8630	Mooney, Timothy	Assoc AD/External Ops	1.00	129,042								yes				129,042	0	
6534	Martin, Matthew	Assoc AD/Revenue Gen	1.00	96,854											96,854			
8644	Anderson, Eric	Admin Coor, Fundraising	1.00	39,070												39,070		
8692	Wolcott, Jerek	Asst AD, Mrktg & Fan Engagmt	1.00	71,373												71,373		
6379	Metzger, Lyn	Director of Ticket Ops	1.00	41,597			5,100 1	~								46,697		New Hire
6376	Graham, Ty	Asst Dir Ticket Ops	1.00	42,086												42,086		
8690	Silflow, Shelby	Director of Trademark & Licensin	1.00	37,699												37,699		New Position
6179	Grove, Sara	Learning Spec	0.05	2,093	*											2,093		
Men's S	ports																	
Men's F	ootball																	
8550	Petrino, Paul	Hd Coach	1.00	79,539										yes	79,539	-		Contract ended

Intercollegiate Athletics Compensation Report University of Idaho FY2023 Actual Compensation

	-		Compen	sation		Co	ontract Bonu	IS		C	Other			Funding		
	Athletic	Base	Camps/		Equip Co	Academic	Winning		Club			Multi-Yr	State	Program	All	
Depart/PCN/Name/Title	FTE	Salary	Clinics	Media	& Other	Perform	Perform.	Other	Memb.	Car	Other	Contract	Approp.	Revenue	Other	Comments
8592 James (JD) Johnson Asst AD, Football O	ps 1.00	47,834	3,100							yes			47,834	-	3,100	
5632 Eck, Jason Hd Coach	1.00	175,011		125,000	17,500 ^⁄	20,000		4,109					199,120	142,500	0	
3682 Asuega, Kapono Assistant	1.00	45,184	6,000										45,184	-	6,000	
3121 Aurich, Robert Assistant	1.00	115,349	4,600										115,349	-	4,600	
2979 Booth, Cody Assistant	1.00	80,363	4,600										80,363	-	4,600	
3000 Ford, Thomas Assistant	1.00	72,778	9,200										72,778	-	9,200	
3182 Franks, Stanley Assistant	1.00	57,013	4,600										57,013	-	4,600	
3126 Linehan, Matthew Assistant	1.00	45,184	4,600										45,184	-	4,600	
3700 Lose, David Assistant	1.00	75,178	4,600										75,178	-	4,600	
2995 Schleusner, Luke Assistant	1.00	116,738	4,600		11,500 🗸	^							116,738	11,500	4,600	
2946 Sutton, Tyler Assistant	1.00	62,677	6,500		6,500 ^/	^							62,677	6,500	6,500	
3702 Jay, Robert Assistant	1.00	8,654											8,654	-	0	New Hire
3702 Yelk, Tyler Assistant	1.00	70,963	4,600										70,963	-	4,600	Resigned
Men's Basketball																
8571 Claus, Zachary Head Coach	1.00	119,553		20,000		2,000)	yes			121,553	20,000		Non-renewed
8571 Pribble, Alexander Head Coach	0.00	30,000			12,058 ^/	\							30,000	12,058		New Hire
8560 Harden, Jeremy Assistant	1.00	42,467			2,377 ~	\							42,467			Non-renewed
8560 Dunham, David Assistant	0.00	5,250							_				5,250			New Hire
8570 Tripp, Kenneth Assistant	1.00	49,610											49,610			Non-renewed
8570 Jones, Matthew Assistant	0.00	9,661											9,661			New Hire
8572 Marrion, Tim Assistant	1.00	71,373							_				71,373	-		Non-renewed
8572 Laird, Brandon Associate Head Coa	ach 0.00	12,310											12,310	-		New Hire
Men's Track & XC																
8580 Cawley, Tim Dir. of T&F	0.50	35,915		4,000									35,915	4,000		
8530 Floeck, Travis Assistant	0.50	25,658											25,658	-		
8581 Fiebelkorn, Jeffrey Assistant	0.50	21,244											21,244			
8635 Betthauser, Kelsey Assistant	0.50	17,966			1,647 ^/	N							17,966	1,647		New Hire
Men's Golf																
8591 Nuhn, David Hd Coach	1.00	46,645				1,000							47,645	-		
Men's Tennis																
8515 Hangstefer, Daniel Hd Coach	1.00	49,668				2,750							52,418	-		
Women's Sports																
Women's Basketball																
8520 Newlee, Jon Hd Coach	1.00	131,510		18,000		1,500		41,114	& _)	/es		yes	174,124	18,000		Non-renewed C

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Intercollegiate Athletics Compensation Report University of Idaho FY2023 Actual Compensation

		_		Compen	sation		Co	ntract Bonu	JS		(Other			Funding		
		Athletic	Base	Camps/		Equip Co	Academic	Winning		Club			Multi-Yr	State	Program	All	
Depart/PCN/Name/Title		FTE	Salary	Clinics	Media	& Other	Perform	Perform.	Other	Memb.	Car	Other	Contract	Approp.	Revenue	Other	Comments
8557 Eighmey, Carrie	Head Coach	0.00	14,310								yes		yes	14,310	-		New Hire
8521 Spence, Darin	Assistant	1.00	54,000		5,000	2,082	~							54,000	7,082		Resigned
8521 Eighmey, Devin	Assistant	1.00	4,962											4,962	-		New Hire
8523 Muscatell, Drew	Assistant	1.00	55,064											55,064	-	0	
8522 Pierce, Taylor	Assistant	1.00	36,212											36,212	-		Resigned
8522 Brenke Diniz Moreira,	A Associate Head Coach	1.00	3,501											3,501	-		New Hire
Women's Track & XC																	
8580 Cawley, Tim	Dir. of T&F	0.50	35,915		4,000		1,980							37,895	4,000		
8530 Floeck, Travis	Assistant	0.50	25,658											25,658	-		
8581 Fiebelkorn, Jeffrey	Assistant	0.50	21,244											21,244			
8635 Betthauser, Kelsey	Assistant	0.50	17,966			516	~ <u> </u>							17,966	516		New Hire
Women's Volleyball																	
8540 Gonzalez, Andre	Hd Coach	1.00	90,002										yes	90,002	-		
5811 Bastuba, Bryan	Assistant	1.00	41,702											41,702			Resigned
5828 Logan, Maria	Assistant	1.00	5,848											5,848			New Hire
5828 Goree, Kalisha	Assistant	1.00	36,451											36,451			Resigned
Women's Soccer																	
8517 Clevenger, Jeremy	Hd Coach	1.00	55,168				1,500						yes	56,668	-		
8518 Ozmun, Neal	Assistant	0.50	15,368			4,582	~							15,368	4,582		New Hire
8518 Mapson, Sean	Assistant	0.50	24,001											24,001	-		Resigned
Women's Golf																	
8590 Young, Stephanie	Hd Coach	1.00	60,008				1,000						Yes	61,008	-		
Women's Tennis																	
8673 Louwers, Sanne	Hd Coach	1.00	46,010				750							46,760	-		
Women's Swimming																	
8671 Mark Sowa	Hd Coach	1.00	70,283		7,500		1,000						yes	71,283	7,500		
8672 McCafferty, Morgan	Assistant	1.00	42,488											42,488	3,812		
8531 Southerland, James	Assistant	1.00	32,361											32,361	3,812		
Grand Totals		66.05	4,088,545	65,451	198,500	84,573	43,480	0	45,223					3,049,209	1,416,359	65,451	

* other portion of full FTE paid by Academic support

other portion of full FTE paid by Advancement

M employee moving reimbursement (now runs through payroll)

& share of game guarantee/gate per contract 2 years of payout, as there was contractual conversations

yes+ receive a car stipend between \$200-\$400/month rather than a car; this amount not included in base salary

yes* had a car for part of year only

Intercollegiate Athletics Compensation Report University of Idaho FY2023 Actual Compensation

	_		Compensation		Contract Bonus		Other			Funding		
	Athletic	Base	Camps/	Equip Co	Academic Winning	Club		Multi-Yr	State	Program	All	
Depart/PCN/Name/Title	FTE	Salary	Clinics Media	& Other	Perform Perform. Other	Memb. Car	Other	Contract	Approp.	Revenue	Other	Comments

Intercollegiate Athletics Compensation Report University of Idaho

FY2024 Estimated Compensation

			_		Compens	sation		Co	ntract Bonu	S			Other			Funding		Base Salary	
			Athletic	Base	Camps/		Equip Co	Academic	Winning		Club			Multi-Yr	State	Program	All	Annualized	
Depart/P	CN/Name/Title		FTE	Salary	Clinics	Media	& Other	Perform	Perform.	Other	Memb	. Car	Other	Contract	Approp.	Revenue	Other	Change	Comments
Athletic	Administration																		
8475	Gawlik, Terry	Athletic Director	1.00	213,595		15,000		10,000		4,632		yes+		yes	223,595	15,000		1%	
8480	Haldeman, Garrett	Assoc AD, Business	1.00	97,531												97,531		6%	
8651	Vacant	Asst Business Mgr	0.00	0															
8482	McIlraith, Sean	Administrative Coordinator	1.00	53,477												53,477		4%	
8691	Vacant	Administrative Coordinator	0.00	0															
8490	Grove, John	Asst AD, Equipment	1.00	56,618												56,618		1%	
8491	Peeler, Jarrett	Asst Equip Mgr	1.00	40,622												40,622		11%	
8492	Winchell, Dakota	Director of Video & Technology	1.00	45,760												45,760		-3%	
8636	Kellogg, Zachary	Asst Video Svcs Coord	1.00	54,018												54,018		15%	
8484	Pathomsiri, Nawanon	t Multimedia Content Coord	1.00	43,243												43,243		8%	
8494	Cutting, Kyle	Asst Dir Marketing	1.00	46,072												46,072		8%	
8493	McCrea, Colton	Dir Communications	1.00	49,504												49,504		10%	
8495	Rolli, Jordyn	Asst Dir Communications	1.00	49,504												49,504			New Hire
8504	Hewlett, Carmen	Hd Trainer	1.00	70,013												70,013			New Hire
8693	Walsh, Christopher	Director of Sports Performance	1.00	90,002												90,002	0	18%	
8500	Kuribayashi, Natsumi	Asst Trainer	1.00	46,072											46,072	-		5%	
8650	Malinich, Clayton	Asst Trainer	1.00	54,184											54,184	-	0	9%	
8660	Johnson, Kassandra	Asst Trainer	1.00	49,566												49,566	0	1%	
8483	Asplund, Stacy	Student Insurance Coord	1.00	39,499											39,499	-		2%	
8689	Heim, Caleb	Head Strength Coach	1.00	70,616												70,616		1%	
8687	Rinzel, Jack	Asst Strength	1.00	46,072												46,072		8%	
8688	Mikulecky, Brandon	Assoc Strength	1.00	49,608												49,608		1%	
8630	Mooney, Timothy	Assoc AD/External Ops	1.00	129,875								yes				129,875		0%	
6534	Martin, Matthew	Assoc AD/Revenue Gen	1.00	15,000											15,000			-85%	Resigned, Position not filled cur
8644	Anderson, Eric	Admin Coor, Fundraising	1.00	41,995												41,995		7%	
8692	Wolcott, Jerek	Asst AD, Mrktg & Fan Engagmt	1.00	72,030												72,030		1%	
6379	Metzger, Lyn	Director of Ticket Ops	1.00	52,104												52,104		1%	
6376	Floyd, Logan	Asst Dir Ticket Ops	1.00	41,018												41,018		-4%	
8690	Silflow, Shelby	Director of Trademark & Licensi	ir 1.00	70,616												70,616			New Hire
6179	Grove, Sara	Learning Spec	0.05	2,093	*											2,093		0%	
Men's S	ports																		
Men's Fo	ootball																		
8550	Petrino, Paul	Hd Coach	1.00	3,059								yes+		yes	3,059	-		-96%	Contract ended
8592	James (JD) Johnson	Asst AD, Football Ops	1.00	51,646								yes			51,646	-	0	8%	
5632	Eck, Jason	Hd Coach	1.00	175,011		125,000		10,000	15,000						185,011	125,000		0%	
3682	Asuega, Kapono	Assistant	1.00	46,114											46,114	-		2%	
3121	Aurich, Robert	Assistant	1.00	116,113											116,113	-		1%	
2979	Booth, Cody	Assistant	1.00	81,016											81,016	-		1%	
3000	Ford, Thomas	Assistant	1.00	71,501											71,501	-		2%	
3182	Franks, Stanley	Assistant	1.00	73,008											73,008	-		28%	
																		_	

INFORMATIONAL - BAHR

TAB 2 Page 1

Intercollegiate Athletics Compensation Report University of Idaho

FY2024 Estimated Compensation

		_		Compens	sation		Co	ontract Bonu	ıs		(Other			Funding		Base Salary	
		Athletic	Base	Camps/		Equip Co	Academic	Winning		Club			Multi-Yr	State	Program	All	Annualized	
Depart/PCN/Name/Title		FTE	Salary	Clinics	Media	& Other	Perform	Perform.	Other	Memb.	Car	Other	Contract	Approp.	Revenue	Other	Change	Comments
3126 Linehan, Matthew	Assistant	1.00	46,114											46,114	-		2%	
3700 Lose, David	Assistant	1.00	75,504											75,504	-		1%	
2995 Schleusner, Luke	Assistant	1.00	120,016											120,016	-		4%	
2946 Sutton, Tyler	Assistant	1.00	63,003											63,003	-		1%	
3702 Jay, Robert	Assistant	1.00	75,005											75,005	-		-17%	
Men's Basketball																		
8571 Pribble, Alex	Head Coach	1.00	130,000		60,000		2,000				yes			132,000	60,000		-4%	
8560 Dunham, David	Assistant	1.00	65,000											65,000			35%	
8570 Jones, Matthew	Assistant	1.00	55,016											55,016			6%	
8572 Laird, Brandon	Assistant	1.00	80,018											80,018	-		12%	
8553 Eliss, Adam	Assistant	1.00	46,072											46,072				
Men's Track & XC																		
8580 Cawley, Tim	Dir. of T&F	0.50	36,244		4,000		1,020							37,264	4,000		1%	
8530 Floeck, Travis	Assistant	0.50	25,979											25,979	-		1%	
8581 Fiebelkorn, Jeffrey	Assistant	0.50	23,036											23,036			8%	
8635 Betthauser, Kelsey	Assistant	0.50	23,036											23,036	-		8%	
Men's Golf																		
8591 Nuhn, David	Hd Coach	1.00	47,341		2,000		750							48,091	2,000		1%	
Men's Tennis																		
8515 Grossbaum, Raleigh	Hd Coach	1.00	48,006											48,006	-		1%	
<u>Women's Sports</u> Women's Basketball																		
8520 Newlee, Jon	Hd Coach	1.00	131.696										ves	131.696	-		0%	
8557 Eighmey, Carrie	Hd Coach	1.00	120.016		30.000								ves	120.016	30.000		-9%	
8521 Eighmey, Devin	Assistant	1.00	46.072											46.072	-		-29%	
8523 Muscatell, Drew	Assistant	1.00	60,008				-							60,008	-	0	9%	
8522 Moreira, Arthur	Assistant	1.00	70,013				-							70,013	-		56%	New Classification for PCN
Morris, Bailey	Assistant	1.00	46,072				-							46,072	-			New Hire
Women's Track & XC							-											
8580 Cawley, Tim	Dir. of T&F	0.50	36,244		4,000		1,980							38,224	4,000		1%	
8530 Floeck, Travis	Assistant	0.50	25,979				-							25,979	-		1%	
8581 Fiebelkorn, Jeffrey	Assistant	0.50	23,036				-							23,036			8%	
8635 Betthauser, Kelsey	Assistant	0.50	23,036				-							23,036	-		8%	
Women's Volleyball																		
8540 Gonzalez, Andre	Hd Coach	1.00	90,002										yes	90,002	-		0%	
5811 Kriskova, Romana	Assistant	1.00	46,072											46,072			2%	
5828 Logan, Maria	Assistant	1.00	46,072											46,072			2%	
Women's Soccer																	•	
8517 Clevenger, Jeremy	Hd Coach	1.00	67,018										yes	67,018	-		23%	
8518 Ozmun, Neal	Assistant	1.00	47,008											47,008	-		-14%	
														-				

Intercollegiate Athletics Compensation Report University of Idaho FY2024 Estimated Compensation

		_		Compensation			Co	ontract Bonu	nus			Other			Funding			
		Athletic	Base	Camps/		Equip Co	Academic	Winning		Club			Multi-Yr	State	Program	All	Annualized	
Depart/PCN/Name/Title		FTE	Salary	Clinics	Media	& Other	Perform	Perform.	Other	Memb	Car	Other	Contract	Approp.	Revenue	Other	Change	Comments
5020 Heidelberger, Ashley	Assistant	1.00	46,072											46,072	-			New Hire
Women's Golf																		
8590 Young, Stephanie	Hd Coach	1.00	63,003											63,003	-		3%	
Women's Tennis																		
8673 Louwers, Sanne	Hd Coach	1.00	46,010											46,010	-		0%	
Women's Swimming																		
8671 Mark Sowa	Hd Coach	1.00	70,283		7,500		1,000						yes	71,283	7,500		0%	
8672 McCafferty, Morgan	Assistant	1.00	46,072						3,812					46,072	3,812		8%	
8531 Southerland, James	Assistant	1.00	38,002						3,812					38,002	3,812		17%	
Grand Totals		68.05	4,454,950	0	247,500	0	26,750	15,000	12,256					3,159,742	1,577,081	0		

Intercollegiate Athletics Compensation Report Lewis-Clark State College FY2023 Actual Compensation

				Compen	sation		C	Contract Bor	nus	Other			All C	omnensati	on	Base Salary
		-	Base	Camps/	outon	Fauin Co	Grad	Winning		Club		Multi-Yr	State	Program	All	Annualized
Depart/Name/Title		FTE	Salarv	Clinics	Media	& Other	Rate	Perform.	Other	Memb.	Car	Contract	Approp.	Revenue	Other	Change
Athletic Administration			,													0
Brooke Henze	Director, Athletics	1.00	97,225						3,000	No	No	No	99,895		330	11.22%
George Laughlin	Director, Facilities & Operations	1.00	43,783			890			,	No	No	No	43,783	;	890	5.50%
Tracy Collins	Trainer	1.00	58,403						600	No	No	No	58,403		600	6.50%
Taryn Cadez-Schmidt	Asst. Athletic Trainer	1.00	46,060			600				No	No	No	46,060)	600	6.50%
Austin Crain (New)	Asst. Athletic Trainer	1.00	34,176			600				No	No	No	34,176	;	600	New
Katie Palmer (Old)	Assistant Athletic Director	1.00	49,154			855				No	No	No	49,154		855	New
Kristina Keener	Business Manager	1.00	50,007			855				No	No	No	50,007	,	855	6.50%
	Assistant Director,		,										,			
	Communications & Marketing															
Alisha Alexander	and Director, Sports Information	1.00	47,873			280				No	No	No	47,873	1	280	6.50%
Samantha Malinich	Administrative Coordinator	1.00	38,428			750				No	No	No	38,428		750	New
Men's Sports																
Basketball																
Austin Johnson	Head Coach	1 00	68 113						1 000	No	Yes	No	69 113			6 54%
Calab Johnson	Asst Coach	0.58	24 631						1,000	No	No	No	00,110		24 631	-40.90%
Evan Jenkins (Old)	Asst Coach	1 00	47 960							No	No	No	26 858		21 103	6.50%
Andrew Stein	Asst Coach	0.27	11,000							No	No	No	20,000	,	11 000	New
Tobin Karlberg (New)	Asst Coach	0.21	2 000							No	No	No			2 000	New
	7.651. 000011	0.20	2,000							110	110	110			2,000	
Baseball																
Jake Tavlor	Head Coach	1.00	79.014					500	2.000	No	Yes	No	81.514			5.50%
William Silvestri	Asst. Coach	1.00	45,401						,	No	No	No	45.401			5.50%
Allen Balmer	Asst. Coach	1.00	57.611	3.420						No	No	No	57.611	3.420		6.50%
Raymond Pedrina	Asst. Coach	0.12	4,995	-, -						No	No	No	- /-	-, -	4.995	0.00%
Brandon Vial (New)	Asst. Coach	0.09	4.000	100						No	No	No		100	4.000	New
Anthony Balderas (New)	Asst. Coach	0.14	.,	5.946						No	No	No		5.946	.,	New
<u>· · · · · · · · · · · · · · · · · · · </u>				-,										-,		
Cross-Country																
Mike Collins	Head Coach	0.25	16,314						750	No	No	No	17,064			6.50%
Cyrus Hall (Old)	Asst. Coach	0.25	2,592							No	No	No	2,592			6.50%
<u>·</u>																
Track																
Mike Collins	Head Coach	0.25	16,314					500	1,375	No	No	No	17,314		875	6.50%
Mathew Kelley	Asst. Coach	0.04	1,725							No	No	No		1,725		New
Cyrus Hall (Old)	Asst. Coach	0.25	2,592							No	No	No	2,592			6.50%
Jacob Whittaker	Asst. Coach	0.07	3,000							No	No	No		3,000		New
Sam Atkin	Asst. Coach	0.01	450							No	No	No		450		0.00%
Kurtis Bonner	Asst. Coach	0.07	3,000							No	No	No		3,000		New
Tennis			.										<u> </u>			0 -001
Kai Fong	Head Coach	0.50	33,455						250	No	No	No	33,705)		6.50%
Ryan LaPlante	Asst. Coach	0.50	21,953							No	No	No	21,953			New
Colf																
Braeden Campboll (Old)	Head Coach	0 50	1 0.20							No	No	No	1 000	1		Now
Zach Anderson (Now)	Hood Cooch	0.50	10 244							No	No	No	10 244			Now
Zach Anderson (New)		0.50	19,241							INO	INO	INO	19,241			INEW

Intercollegiate Athletics Compensation Report Lewis-Clark State College FY2023 Actual Compensation Page 2

					i uge	2										Base
		_		Compen	sation		C	ontract Bor	nus	Per	ks		AII C	Compensati	on	Salary
			Base	Camps/		Equip Co	Grad	Winning		Club		Multi-Yr	State	Program	All	Annualize
part/Name/Title		FTE	Salary	Clinics	Media	& Other	Rate	Perform.	Other	Memb.	Car	Contract	Approp.	Revenue	Other	Change
Nomen's Sports																
Basketball																
Brian Orr	Head Coach	1.00	67,579	14,000						No	Yes	No	67,579)	14,000	5.50%
Caelyn Orlandi	Asst. Coach	1.00	44,560	865		2,282				No	No	No	45,060	865	1,782	6.50%
Cross-Country																
Mike Collins	Head Coach	0.25	16,314						750	No	No	No	17,064			6.50%
Cyrus Hall (Old)	Asst. Coach	0.25	2,592							No	No	No	2,592	2		4.60%
Dance																
Christa Davis (New)	Interim Head Coa	ich 0.12	5,000							No	No	No		5,000		New
Track																
Mike Collins	Head Coach	0.25	16,314						1,875	No	No	No	17,314	Ļ	875	6.50%
Cyrus Hall (Old)	Asst. Coach	0.25	2,592							No	No	No	2,592	2		6.50%
Jacob Whittaker	Asst. Coach	0.07	3,000							No	No	No	3,000)		75.00%
Mathew Kelley	Asst. Coach	0.04	1,725							No	No	No		1,725		New
Sam Atkin	Asst. Coach	0.01	450							No	No	No		450		0.00%
Kurtis Bonner	Asst. Coach	0.28	12,000							No	No	No	9,000	3,000		New
Volleyball																
Shaun Pohlman (Old)	Head Coach	1.00	56,342						500	No	Yes	No	56,842	2		5.50%
Katie Palmer (New)	Head Coach	1.00	1,154							No	Yes	No	1,154			New
Dante Frattini (New)	Asst. Coach	1.00	20,651							No	No	No	20,651			New
Drew Choules (Old)	Asst. Coach	1.00	8,752							No	No	No	8,752	2		0.00%
Tennis																
Kai Fong	Head Coach	0.50	33,455						250	No	No	No	33,705	;		6.50%
Ryan LaPlante	Asst. Coach	0.50	21,953							No	No	No	21,953	5		New
Golf																
Braeden Campbell (Old)	Head Coach	0.50	1,980							No	No	No	1,980			New
Zach Anderson (New)	Head Coach	0.50	19,241							No	No	No	19,241			New
	G	GRAND TOTAL 28.19	1,268,104	24,331	0	7,112	0	1,000	12,350				1,193,196	28,681	91,020	

Intercollegiate Athletics Compensation Report Lewis-Clark State College FY2024 Estimated Compensation

				Compen	sation		C	ontract Bon	us	Other			All C	ompensati	on	Base Salary
		-	Base	Camps/		Equip Co	Grad	Winning		Club		Multi-Yr	State	Program	All	Annualized
epart/Name/Title		FTE	Salary	Clinics	Media	& Other	Rate	Perform.	Other	Memb.	Car	Contract	Approp.	Revenue	Other	Change
Athletic Administration																
Brooke Henze	Director, Athletics	1.00	101,114						2,000	No	No	No	102,894		220	4.00%
George Laughlin	Director, Facilities & Operations	1.00	46,052							No	No	No	46,052		-	5.18%
Tracy Collins	Trainer	1.00	61,032							No	No	No	61,032			4.50%
Taryn Cadez-Schmidt	Asst. Athletic Trainer	1.00	48,133							No	No	No	48,133			4.50%
Kristina Keener	Business Manager	1.00	52,008							No	No	No	52,008			4.00%
	Asst. Athletic Director - Sports															-
Alisha Alexander	Information & Media	1.00	54,000							No	No	No	54,000			12.80%
Samantha Malinich	Administrative Coordinator	1.00	46,052							No	No	No	46,052			8.36%
Austin Crain (New)	Asst. Athletic Trainer	1.00	46,052							No	No	No	46,052			Nev
Ty Graham (New)	Assistant Athletic Director	1.00	48,409							No	No	No	48,409			Nev
Men's Sports																
Basketball	Used Osesh	4 00	74 470						500	NI-		N	74 070			4 500
Austin Johnson	Head Coach	1.00	11,179						500	INO	Yes	NO No	71,679		10 110	4.50%
	Asst. Coach	1.00	46,052							INO	NO No	NO No	29,934		10,118	
Volloss Upgwiluk (Now)	Asst. Coach	0.22	10,000							NO No	NO	No			12,000	0.00%
	Assi. Coach	0.20	12,000							INU	INU	NU			12,000	0.007
Baseball																
Jake Taylor	Head Coach	1.00	82,570						1,000	No	Yes	No	83,570			4.50%
William Silvestri	Asst. Coach	1.00	47,218							No	No	No	47,218			4.00%
Allen Balmer	Asst. Coach	1.00	59,916	950						No	No	No	59,916	950		4.00%
Anthony Balderas	Asst. Coach	0.10		4,500						No	No	No		4,500		-0.24%
Cross-Country																
Mike Collins	Head Coach	0.25	17,048						500	No	No	No	17,548			4.50%
Kurtis Bonner	Interim Asst. Coach	0.25	9,963							No	No	No	9,963			Nev
Track																
Mike Collins	Head Coach	0.25	17 048					250	750	No	No	No	18 0/18			4 50%
Kurtis Bonner	Interim Asst. Coach	0.25	9,963					200	100	No	No	No	9,963			Nev
- :																
I ennis Kei Feng	Lload Cooch	0.50	24.004						500	Na	Na	No	25 404			4 500
	Head Coach	0.50	34,961						500	INO	INO	INO	35,461			4.50%
Kyan LaPlante	Assi. Coach	0.50	23,026							NO	NO	NO	23,026			4.88%
Golf																
Zach Anderson (New)	Head Coach	0.50	23,026							No	No	No	23,026			Nev
Gordon Greg (New)	Asst. Coach	0.02	1.250							No	No	No	1.250			Nev

Intercollegiate Athletics Compensation Report Lewis-Clark State College FY2024 Estimated Compensation Page 2

				Compen	sation	Ū	C	ontract Bon	211	Perk	s		All C	omnensati	on	Base Salary
		-	Base	Camps/	oution	Equip Co	Grad	Winning		Club	.0	Multi-Yr	State	Program	All	Annualized
part/Name/Title		FTE	Salary	Clinics	Media	& Other	Rate	Perform.	Other	Memb.	Car	Contract	Approp.	Revenue	Other	Change
Vomen's Sports																
Basketball																
Caelyn Orlandi (New)	Head Coach	1.00	60,000							No	Yes	No	60,000			6.50%
Brian Orr (Old)	Head Coach	1.00	10,633	2,340						No	No	No	10,633		2,340	0.00%
Cali Moscrip (New)	Asst. Coach	1.00	43,882							No	No	No	43,882			Nev
Cross-Country																
Mike Collins	Head Coach	0.25	17,048						500	No	No	No	17,548			4.50%
Kurtis Bonner	Interim Asst. Coach	0.25	9,963							No	No	No	9,963			New
Dance																
Christa Davis (New)	Interim Head Coach	0.22	10,000							No	No	No		10,000		50.00%
Track																
Mike Collins	Head Coach	0.25	17,048					250	750	No	No	No	18,048			4.50%
Kurtis Bonner	Interim Asst. Coach	0.25	9,963							No	No	No	9,963			New
Jacob Whittaker	Asst. Coach	0.19	9,000							No	No	No	0	9,000		50.00%
Matthew Kelley	Pole Vault Asst.	0.07	3,285							No	No	No		3,285		-4.70%
Vollevball																
Katie Palmer (New)	Head Coach	1.00	62,400							No	Yes	No	62,400			4.00%
Shaun Pohlman (Old)	Head Coach	1.00	8,668							No	No	No	8,668			0.00%
Shann Mack (New)	Asst. Coach	1.00	46,052	10,000						No	No	No	46,052	10,000		New
Tennis																
Kai Fong	Head Coach	0.50	34,961							No	No	No	34,961			4.50%
Ryan LaPlante	Asst. Coach	0.50	23,026							No	No	No	23,026			4.88%
Golf																
Zach Anderson (New)	Head Coach	0.50	23,026							No	No	No	23,026			New
Gordon Greg (New)	Asst. Coach	0.02	1,250							No	No	No	1,250			New
	GRAND T	OTAL 25.06	1 358 276	17 790	0	0	0	500	6 500				1 304 653	37 735	40 678	

SUBJECT

Athletics Gender Equity Reports

REFERENCE

June 2016 Board adopted the reports required by the institutions' federal regulatory body regarding compliance with Title IX in athletics programs, along with summaries of such reports, as the method to report to the Board on gender equity.

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section V.X.

BACKGROUND/DISCUSSION

Title IX of the Education Amendments of 1972 is the federal legislation that bans gender discrimination in schools, whether in academics or athletics. Title IX states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance" (20 U.S.C. § 1681(a)). Relative to intercollegiate athletics, the Office for Civil Rights considers three broad areas in determining whether or not an institution is meeting its Title IX obligations. The three areas address equity in athletic participation opportunities, athletically-related financial aid and other program benefits, supports and services.

In 1996 the US Department of Education's Office for Civil Rights (OCR) issued a "Clarification of Intercollegiate Athletics Policy Guidance" This guidance addressed the three broad areas of Title IX compliance and made clear that relative to area 1 regarding participation opportunities, any of the 3 prongs may be used to demonstrate compliance.¹

First, the selection of sports and the level of competition must accommodate the students' interests and abilities, using one of the three prongs listed below. Institutions may demonstrate they are meeting Title IX obligations using any of the three prongs.

- 1. Participation opportunities for male and female students are provided in numbers **substantially proportionate** to their respective enrollments.
- 2. Where the members of one gender have been and are underrepresented among intercollegiate athletes, whether the institution can show a **history** and **continuing practice of program expansion**, which is demonstrably responsive to the developing interests, and abilities of that gender.
- 3. Where the members of one gender are underrepresented among intercollegiate athletes and the institution cannot show a continuing practice of program expansion, whether it can be demonstrated that the interests

¹ See: <u>https://www2.ed.gov/about/offices/list/ocr/docs/title9-ga-20100420.html</u>

and abilities of the members of that gender have been **fully and effectively accommodated** by the present program.

Second, athletic-related financial assistance must be substantially proportionate to the ratio of male and female athletes. Institutions within 1% variance are considered compliant.

Third, benefits, opportunities, and treatments afforded sports participants are to be equivalent, but not necessarily identical, including equipment and supplies, scheduling of games and practices, travel expenses, availability and compensation of coaches, quality of facilities, medical services, housing, dining, and recruitment.

Overall, compliance is determined based on a program-wide consideration, and, not on a sport-by-sport comparison.

Idaho State Board of Education (Board) Policy V.X.4.c. requires the four-year institutions to provide gender equity reports for review by the Board. The reports include a narrative discussion of gender equity-related issues along with a summary table, which distills data from the detailed gender equity report provided annually by each institution to the U.S. Department of Education.

IMPACT

The attached summary worksheets show the institutions' enrollment, financial aid, and participants by gender. The worksheets also show the actual revenues and expenses for the most current completed fiscal year by sport, as well as overall operating (Game Day) expenses, number of participants, and operating expenses per participant. Finally, the worksheets provide information on average salaries of coaches and the count of coaches per sport by gender.

ATTACHMENTS

Attachment 1: BSU Gender Equity Narrative Attachment 2: BSU Gender Equity Worksheet Attachment 3: ISU Gender Equity Narrative Attachment 4: ISU Gender Equity Worksheet Attachment 5: UI Gender Equity Narrative Attachment 6: UI Gender Equity Worksheet Attachment 7: LCSC Gender Equity Narrative Attachment 8: LCSC Gender Equity Worksheet

STAFF COMMENTS AND RECOMMENDATIONS

Significant information on gender equity aspects of athletic operations at the individual institutions is included in the attached narrative documents. The actual detailed "Equity in Athletics Data Analysis (EADA)" reports are also available for review and analysis by the public on the U.S. Department of Education website at <u>https://ope.ed.gov/athletics/</u>. This site also provides tools to download EADA

reports for any NCAA or NAIA institution and to compare groups of institutions and review trends.

In their narratives, the institutions reported the status of compliance across the areas of Title IX.

Representatives from the four affected institutions will be available in the event that Board members have questions on specific areas related to Gender Equity reports or on the institutions' efforts related to achieving/maintaining equity.

BOARD ACTION

This item is for informational purposes only.

BOISE STATE UNIVERSITY GENDER EQUITY NARRATIVE

Boise State University is committed to supporting its student-athletes both academically and athletically and to complying with Title IX of the Education Amendments of 1972 (Title IX). Boise State monitors compliance with Title IX internally and through periodic external reviews from qualified consultants. These reviews provide recommendations that are intended to help achieve compliance in areas where gender differences may currently exist and help maintain compliance in areas where gender differences may be developing.

Last year, Boise State University utilized the comprehensive review of the intercollegiate athletic program completed in the 2021-2022 school year to strategize, develop policy, and guide budget decisions affecting rates of participation, financial aid awarded, and enhancement of program areas in 2022-2023 and beyond where gender discrepancies exist or could be developing.

Accommodation of Interests and Abilities (Participation)

Prong 1: Proportionality

Factors: Participation Opportunities

Summary: In 2022-2023, women made up 56.7 percent of undergraduate enrollment (an increase of 2.4 percent since the 2019-2020 school year) and 51.1 percent of the athletic participants (a decrease of 1.3 percentage points over FY22), meaning Boise State did not meet the proportionality test in FY23.

Prong 2: History and Continuing Practice of Program Expansion

Factors: Additional Opportunities

Summary: Boise State does not meet test two (program expansion for the underrepresented sex). A net of four women's teams have been added since the 1970s.

Prong 3: Underrepresented gender is fully and effectively accommodated by present program

Factors: Sufficient Interest

Summary: Boise State does not meet test three (full accommodation of the underrepresented sex), as sufficient interest, ability and competition appear likely for women's lacrosse, swimming, and water polo, which Boise State does not currently offer.

Action: The university is in the process of making changes to meet test one (proportionality), as it has done for nine out of the last thirteen academic years. Over the next year, Boise State will evaluate the best way to have a net addition of a minimum of 38 opportunities for women, which will allow the program to match current undergraduate enrollment rates with athletic participation. This can be achieved through continued monitoring of existing participation, responsible department-wide roster management to
ensure equitable participation opportunities on existing teams for female student-athletes, and the evaluation of the addition of another women's sport program. The university will create a committee to help guide these decisions including reviewing existing data, determining what additional data is needed, and creating surveys to guide the decision-making process.

Athletic Financial Assistance

Summary: An analysis of athletic financial aid in FY23 shows that women were awarded scholarships at a rate 4.6% less than their rate of participation, exceeding the 1% variance for presumed compliance. This is an improvement over the FY22 variance of 5.4 percentage points.

Action: Absent extenuating circumstances, Athletics will fully award female athletic scholarships during the academic school year. Emphasis will be placed on providing adequate resources for all women's equivalency sports to be able to recruit and fully award allowable scholarships.

Other Athletic Benefits and Opportunities

Summary: Boise State has engaged in a comprehensive analysis and prioritization plan to address areas where gender disparities exist in the 11 other areas of athletic benefits and opportunities.

In the area of practice, competition and locker room facilities, many of the previously identified disparities have been addressed. The university installed stadium lights at both the soccer and softball facilities, improving each of those team's competition and practice facilities as well as improving scheduling for games and practices. At soccer, new goal standards were installed at their practice and competition facility to improve field conditions for the goalkeeper's box. The volleyball practice and competition court was resurfaced.

Additionally, as part of a multi-phase renovation, phase one improvements and furniture upgrades were made in the following locker rooms: women's indoor volleyball, beach volleyball, women's golf, and women's cross country and track. Phase two locker room improvements for these programs are underway and will provide new lockers, furniture, privacy walls, and carpeting once completed.

To improve concerns in the areas of coaching and support staff, the department created two new positions by hiring Directors of Operations for both gymnastics and softball. Additionally, new multi-year contracts or contract extensions were approved for the head coaches of beach volleyball, gymnastics, women's golf, and softball, as well as a multi-year contract for the associate head gymnastics coach. To improve discrepancies in recruitment, the soccer head coach was assigned a courtesy car for FY23.

Boise State University Equity in Athletics Disclosure Act (EADA) Report Report on Athletic Program Participation Rates and Financial Support Data July 1, 2022 through June 30, 2023

University Enrollment									
Gender	Gender Full-Time Undergraduates								
	Number Percent								
Male Students	5,808	43%							
Female Students	7,594	57%							
Totals	13,402	100%							

Athletic Student Aid & Recruiting								
Team Gender	Ati	hletically Relate	d Student Aid	Recruiting Expenses				
		Amount	Percent		Amount			
Men's Teams	\$	5,200,742	54%	\$	714,812			
Women's Teams	\$	4,438,224	46%	\$	251,548			
Totals for All Teams	\$	9,638,966	100%	\$	966,360			

Athletic Participation

	Number	of Participants	Number o Participating c	f Participants on a Second Team	Number of F Participating o	Participants n a Third Team
Sport	Teams	Women's Teams	Men's Teams	Women's Teams	Men's Teams	Teams
Basketball	16	24	0	0	0	0
Beach Volleyball	C	15	0	3	0	0
Cross Country	23	23	1	3	22	18
Football	112	0	0	0	0	0
Golf	9	9	0	0	0	0
Gymnastics	C	19	0	0	0	0
Soccer	C	38	0	0	0	0
Softball	0	26	0	0	0	0
Tennis	10	9	0	0	0	0
Track, Indoor	27	31	4	14	23	18
Track, Outdoor	27	30	4	14	22	18
Volleyball	0	16	0	3	0	0
Total Participants	224	240	9	37	67	54
Participant Proportion	48.28%	51.72%				
Unduplicated Count of						
Participants	175	185				

Varsity Toams		T	otal Revenues			Tota	al Expenses		Rev	enu	es minus Expe	nses	5
valsity reallis	Men's		Women's	Totals	Men's		Women's	Totals	Men's		Women's		Totals
Basketball	\$ 4,719,560	\$	2,786,092	\$ 7,505,652	\$ 4,823,977	\$	2,786,092	\$ 7,610,069	\$ (104,417)	\$	-	\$	(104,417)
Beach Volleyball	\$ -	\$	657,805	\$ 657,805	\$ -	\$	657,805	\$ 657,805	\$ -	\$	-	\$	-
Football	\$ 24,013,799	\$	-	\$ 24,013,799	\$ 17,141,911	\$	-	\$ 17,141,911	\$ 6,871,888	\$	-	\$	6,871,888
Golf	\$ 130,112	\$	479,326	\$ 609,438	\$ 533,625	\$	479,326	\$ 1,012,951	\$ (403,513)	\$	-	\$	(403,513)
Gymnastics	\$ -	\$	1,302,887	\$ 1,302,887	\$ -	\$	1,302,887	\$ 1,302,887	\$ -	\$	-	\$	-
Soccer	\$ -	\$	1,338,883	\$ 1,338,883	\$ -	\$	1,338,883	\$ 1,338,883	\$ -	\$	-	\$	-
Softball	\$ -	\$	1,294,615	\$ 1,294,615	\$ -	\$	1,294,615	\$ 1,294,615	\$ -	\$	-	\$	-
Tennis	\$ 131,416	\$	803,777	\$ 935,193	\$ 583,530	\$	803,777	\$ 1,387,307	\$ (452,114)	\$	-	\$	(452,114)
Track	\$ 297,371	\$	1,474,090	\$ 1,771,461	\$ 1,360,560	\$	1,474,090	\$ 2,834,650	\$ (1,063,189)	\$	-	\$	(1,063,189)
Volleyball	\$ -	\$	1,414,183	\$ 1,414,183	\$ -	\$	1,414,183	\$ 1,414,183	\$ -	\$	-	\$	-
Totals for All Teams	\$ 29,292,258	\$	11,551,658	\$ 40,843,916	\$ 24,443,603	\$	11,551,658	\$ 35,995,261	\$ 4,848,655	\$	-	\$	4,848,655
Not Allocated by Gender/Sport				\$ 11,790,996				\$ 16,639,646				\$	(4,848,650)
Grand Totals for Athletics				\$ 52,634,912				\$ 52,634,907				\$	5
Totals for All Sports Except Football & Basketball	\$ 558,899	\$	8,765,566	\$ 9,324,465	\$ 2,477,715	\$	8,765,566	\$ 11,243,281	\$ (1,918,816)	\$	-	\$	(1,918,816)

Total Revenues & Expenses

Operating (Game Day) Expenses

Varsity Teams	Opera	ting	(Game Day) I	xper	nses	Num	ber of Participan	ts	Operati	ng E	Expenses per Pa	rticij	pant
valsity realls	Men's		Women's		Totals	Men's	Women's	Totals	Men's		Women's		Totals
Basketball	\$ 1,030,089	\$	618,093	\$	1,648,182	16	24	40	\$ 64,381	\$	25,754	\$	90,134
Beach Volleyball	\$ -	\$	179,194	\$	179,194	0	15	15	\$ -	\$	11,946	\$	11,946
Football	\$ 1,977,123	\$	-	\$	1,977,123	112	0	112	\$ 17,653	\$	-	\$	17,653
Golf	\$ 134,183	\$	109,960	\$	244,143	9	9	18	\$ 14,909	\$	12,218	\$	27,127
Gymnastics	\$ -	\$	232,117	\$	232,117	0	19	19	\$ -	\$	12,217	\$	12,217
Soccer	\$ -	\$	195,863	\$	195,863	0	38	38	\$ -	\$	5,154	\$	5,154
Softball	\$ -	\$	392,148	\$	392,148	0	26	26	\$ -	\$	15,083	\$	15,083
Tennis	\$ 132,057	\$	130,291	\$	262,348	10	9	19	\$ 13,206	\$	14,477	\$	27,682
Track	\$ 347,573	\$	376,537	\$	724,110	77	84	161	\$ 4,514	\$	4,483	\$	8,997
Volleyball	\$ -	\$	247,413	\$	247,413	0	16	16	\$ -	\$	15,463	\$	15,463
Totals for All Teams	\$ 3,621,025	\$	2,481,616	\$	6,102,641	224	240	464	\$ 16,165	\$	10,340	\$	13,152
Totals for All Sports Except Football &													
Basketball	\$ 613,813	\$	1,863,523	\$	2,477,336	96	216	312	\$ 32,629	\$	91,040	\$	123,669

Average Coaching Salaries

		Head C	oach	nes		Assistant	Coaches
Description/Explanation							Women's
	Me	en's Teams	Wo	men's Teams	M	en's Teams	Teams
Average Annual Institutonal Salary per Coach	\$	568,824	\$	126,786		\$162,669	\$62,586
Number of Coaches Used to Calculate Average		5		9		20	18
Average Annual Insitutional Salary per Full-Time Equivalent (FTE)	\$	634,848		\$133,929	\$	186,976	\$72,215
Full-Time Equivalents (FTEs) Used to Calculate Average		4.48		8.52		17.40	15.60

Counts of Head Coaches

		Male Hea	d Coaches			Female He	ad Coaches		Total Head
Varsity Teams	Assigned Full-	Assigned Part	Full-Time	Part-Time/	Assigned Full-	Assigned Part	Full-Time	Part-Time/	Total Head
	Time	Time	Employee	Volunteer	Time	Time	Employee	Volunteer	Coaches
Men's Varsity Teams									
Basketball	1		1						1
Football	1		1						1
Golf	1		1						1
Tennis	1		1						1
Track & Field & Cross Country		1	1						1
Totals for Men's Teams	4	1	5	0	0	0	0	0	5
Women's Varsity Teams									
Basketball	1		1						1
Beach Volleyball					1		1		1
Golf					1		1		1
Gymnastics					1		1		1
Soccer	1		1						1
Softball	1		1						1
Tennis	1		1						1
Track & Field & Cross Country		1	1						1
Volleyball	1		1						1
Totals for Women's Teams	5	1	6	0	3	0	3	0	9

		Male Assist	ant Coaches			Female Ass	istant Coaches		
Marsity Tanana						Total Assistant			
varsity learns	Assigned to	Assigned to a	Full-Time	Part-Time/	Assigned to	team Part	Full-Time	Part-Time/	Coaches
	Team Full-Time	team Part Time	Employee	Volunteer	Team Full-Time	Time	Employee	Volunteer	
Men's Varsity Teams									
Basketball	3		3						3
Football	10	4	10	4					14
Golf	1		1						1
Tennis	1	1	1	1					2
Track & Field & Cross Country		5	4	1		1	1		6
Totals for Men's Teams	15	10	19	6	0	1	1	0	26
Women's Varsity Teams									
Basketball	1		1		2		2		3
Beach Volleyball	1		1			1		1	2
Golf						1		1	1
Gymnastics	1		1		1		1		2
Soccer	1		1		1		1		2
Softball					2		2		2
Tennis	1		1			1		1	2
Track & Field & Cross Country		4	4			2	1	1	6
Volleyball					2		2		2
Totals for Women's Teams	5	4	9	0	8	5	9	4	22

Counts of Assistant Coaches



Idaho State University Gender Equity Narrative February 2024

Idaho State University and the Department of Athletics are committed to providing quality opportunities and experiences to all student-athletes, and complying with Title IX of the Education Amendments of 1972.

In order to inform its long and short term efforts, Idaho State University executed an internal review of Title IX compliance relative to gender equity. In 2018 we commissioned a comprehensive external gender equity review, the results of which were delivered early in 2019. This review was followed by 9 months of work by a Gender Equity Committee, with representation from across campus, to develop a Five Year Gender Equity Plan. The resulting plan continues to guide our efforts. Implementation of many facets of that plan were interrupted by COVID 19, and robust efforts toward implementation were embarked upon beginning in 2021. Currently, ISU is undergoing a 3 year review of progress. This review is being conducted by a Gender Equity Review Committee with oversight of the FAR. A full report is expected late spring 2024..

This narrative will outline steps taken to address recommendations of the original external review, demonstrate progress on the Five Year Gender Equity Plan, and provide a snapshot of the current status of compliance.

Prong I of Title IX - Participation Proportionate to Enrollment

The 2021-22 Idaho State University Enrollment ratio of males to females was 41% : 59%, which became our target for proportionality for 2022-23. The ratio of males to females participating in ISU Athletics, however, was 49% : 51%. This is due to 2 factors: (1) The expansion of the football roster to a limit of 110, which is within the NCAA allowable number, and is in the middle of the range of roster sizes to be competitive in the Big Sky Conference. We found that the smaller roster limit not only impacted team performance in this high injury sport, but we observed a negative effect on student-athlete health and wellness due to depleted rosters. (2) Women's rosters experienced some natural attrition due to the exit of the extra "COVID seniors" previously carried on rosters, as well as normal fluctuations in roster size.

The 49%:51% based on raw EADA data fails to meet the exact proportion of women to men represented in enrollment by 8%, the actual evaluation by OCR would differ from this raw data.

Guidelines presented at ATIXA Gender Equity Compliance Training suggested that an OCR evaluation of compliance on campus would involve a significant number of factors, including the removal of students on the roster who did not have the opportunity to participate in any competition due to injury, hardship, redshirt, or other circumstance. Further, the OCR takes into consideration the other prongs of compliance, performance against a plan, non-discriminatory reasons for differences in ratios, and other factors considered in a case by case evaluation. Idaho State Athletics continues to make good faith efforts to become "substantially proportionate" and we are actively incorporating Title IX at the institutional level in the spirit the law expects.

While annual participation ratios remain relatively constant, the ever-growing proportion of women to men in Idaho State University's enrollment continues to make achieving precise compliance with the proportionality prong of Title IX challenging. The most current enrollment figures, 2022-23, have once again moved the target, now 40% : 60% for the coming year. Efforts will be made to expand the rosters of womens' teams, however, ISU Athletics is mindful of how that may impact the experience of student athletes. Ultimately, the University will need to add a womens' sport to fully comply according to proportionality. Doing so will require Idaho State Board of Education support, and would be best served through a collaborative effort among Idaho institutions and Big Sky Conference member institutions. Further, a sustainable budget would most certainly require some level of appropriated and legislative support.

For 2022-2023, ISU Athletics imposed unchanged roster limits in the sports of Men's Basketball (17), Football (110), Men's Indoor Track & Field, Men's Outdoor Track & Field/Cross Country (79), and Men's Tennis (10), to which men's teams successfully adhered. Simultaneously, women's rosters experienced natural fluctuations in size and this year resulted in smaller numbers for reasons noted above. The department will continue to work to offer increased female participation by adding a modest number of opportunities to rosters of existing women's teams as feasible, and at the discretion of the respective head coach. While Idaho State University has instituted the roster limits noted above in an effort to move closer to proportionality, it is not a sustainable practice due to continual increase in female students enrolled at ISU.

It is evident that to achieve full proportionality, Idaho State University will have to add a women's sport. This will become possible at such times as institutional funding and the State Athletics Funding Cap are sufficient to include a base personnel and operating budget for an additional sport. Such future funding will need to be accompanied by significant private philanthropic support.

Prong II of Title IX - History and Continuing Practice of Program Expansion for the Underrepresented Sex

Idaho State University currently offers 15 NCAA Division I teams, six teams for men and nine teams for women. Aside from expanding rosters of current women's teams, ISU has not added a women's sport in more than 5 years. In order to demonstrate a significant expansion of opportunities, Idaho State University will need to explore adding a women's sport in the future.

Two sports which represent opportunities because of interest and proximity to competition, are beach volleyball (12 opportunities) and women's wrestling (25 opportunities).

Prong III of Title IX - Full and Effective Accommodation of the Interests/Abilities of Underrepresented Sex

The determination of whether women are fully and effectively accommodated by the present program includes determining whether there is sufficient interest and ability among women for a viable team not currently offered in the intercollegiate program. The Director of Athletics has been approached by some constituents who advocate for the addition of wrestling, which is now offered at Idaho High Schools, including a State Championship in Women's Wrestling.

A survey was conducted by the previous FAR and the Athletics Advisory Board (AAB) in 2019 to gather data regarding the level of interest and ability with regard to potential women's sport additions. The most recent survey targeted all current full-time students at Idaho State University, and identified (1) swimming, (2) rugby and (3) beach volleyball as having the most significant interest. No steps were taken to begin long term planning for the addition of a women's sport due to the need for more statistically valid data, and a lack of operating funds.

Financial Aid

Idaho State University fully funds the NCAA maximum level of scholarships in each sport it sponsors. In 2022-23, \$2,816,402 or 54% of financial aid was distributed to male student-athletes and \$2,362,768 or 46% of financial aid was distributed to female student athletes. As demonstrated on the chart below, this difference is attributed to the fact that ISU is meeting NCAA maximums for all sports, which limits the total number of scholarships which can be provided to women to 85.

NCAA Scholarship Limits for Big Sky Conference Core Sports									
	MEN			WOMEN					
SPORT	NCAA LIMIT	ISU FUNDING	SPORT	NCAA LIMIT	ISU FUNDING				
Football	63	63	Softball	12	12				
TF/Cross	12.6	12.6	TF/Cross	18	18				
Basketball	13	13	Basketball	15	15				

Tennis	4.5	4.5	Tennis	8	8
			Volleyball	12	12
			Golf	6	6
			Soccer	14	14
TOTAL	93.1	93.1	TOTAL	85	85

Efforts are made to ensure the NCAA maximums are awarded in all women's sports, but fluctuations occur in rosters with early graduations, transfers, and recruiting gaps. The practice of allowing unutilized scholarship funds within a program to be spent to fund other areas of that program was discontinued in 2018, eliminating an unintended incentive to "save" scholarship funds in order to supplement other budgetary needs in women's programs.

Equitable Treatment and Quality of Experience Within Programs

Providing a quality experience and appropriate support to all student athletes is a priority for the Department of Athletics. While the long term goal is to achieve proportionality, the short term goal is to provide an equal and quality experience for Bengal student-athletes across genders. We feel strongly that we must invest properly in existing opportunities prior to creating additional opportunities as this could diminish the overall quality of all programs. Ensuring equitable, high quality experiences for all student athletes, and addressing specifically identified deficiencies in women's programs, has been the focus of program reallocations and investments over a period of years.

A zero-based and collaborative budgeting process has guided the department in the appropriate allocation of resources to address areas of inequity. Improvements have been funded through (1) reallocations of existing funding (2) student fee revenue and (3) fundraising and sponsorship increases.

This year, under the direction of the FAR, a Committee including these professionals and many others from across campus, has conducted a comprehensive review of progress against the Five Year Gender Equity Plan and will deliver a report prior to the end of Fiscal Year 2024.

The following are initiatives and elements which have been added to positively impact the equitable experience of all student athletes since the last report.

INITIATIVE		FUNDING VEHICLE
Added a graduate assistant to the sports performance (strength and conditioning) staff to better serve all sports.	\$25,000	Fundraising
Completed construction on a new student success center to locate all academic advisors under one roof next to the study hall and meeting spaces for equitable access. Expanded study hall hours to accommodate all team schedules equitably.	\$130,000	Fundraising
Added a second Learning Specialist, as the first addition was able to accommodate primarily football needs (90% of her time). The additional specialist is accommodating the remaining needs across sports and funding is available to add more hours to meet needs.	\$20,800	Fundraising
Upgrades are underway to the Softball venue to update backstops, fencing, pressbox, and address safety concerns and maintenance across the facility.	\$240,000	Deferred Maintenance Funds
Addition of a football strength and conditioning coach to oversee and address the needs of that program and allow the existing strength staff to devote additional time to other programs.	\$75,000	Reallocation (50%) Fundraising (50%)
Increased the previously part-time Head Women's Golf Coach position to a full time position with benefits and incentives.	\$28,200	Reallocation (25%) Fundraising (75%)
Expanded golf team tournament schedule in 2023.	\$20,000	Fundraising
Last year ISU added a full-time assistant coach to Women's Volleyball to reach NCAA maximum. The maximum has now increased by an	\$22,500	Fundraising

additional coach, which is intended to be added in FY25.		
Increased to 6, from 4.5, the number of scholarships awarded to the Women's Golf Team.	\$35,000	Indirect Institutional Support
Completed construction of a new fueling station located adjacent to the Strength and Conditioning Center and the Athletic Training Room. The facility provides equal access to all student athletes for nutrition and recovery. The station distributes whole grains, fruits, proteins as well as supplements.	\$100,000	Fundraising
Added nutrition CPIs and an additional RDN to provide a higher level of consultation and care for all student-athletes. Focus on recovery and rehabilitation nutrition, anemia, disordered eating.	\$10,000	CPI Program PMC Partnership
Implemented distribution of NCAA approved supplements to support athletic performance and recovery. Distribution is available to provide every student athlete with their choice of Black Label products daily.	\$250,000	Partnership with Black Label Supplements
Expanded TFX travel budget to ensure adequate competition opportunities and appropriate accommodations.	\$80,000	Fundraising
In 2023, partial Cost of Attendance was awarded on a limited basis for recruiting purposes for Football and Men's and Women's Basketball. This year that opportunity was expanded to Women's Volleyball, followed by Softball to be awarded for the first time. Further expansion of the COA program will follow as funding continues to grow.	\$200,000	Fundraising
We have doubled our investment in nutrition from \$25,000 to \$50,000, to better serve programs beyond football.	\$25,000	Fundraising
Added 1 FTE as a women's soccer assistant coach in the fall of 2023 to provide equity in the access to coaching and instruction.	\$45,000	Reallocation (50%) Fundraising (50%)
In an effort to afford equal scheduling and competition opportunities to all sports, as well as reduce travel, we have committed to host tournaments in Softball and Women's Volleyball. This required investments in rooms and game guarantees at a high level.	\$40,000	Reallocation (35%) Fundraising (30%) Sponsorships (30%)
Secured space for equipment operations in Reed Gymnasium to better serve the needs of student-athletes (primarily women) who have daily practice in that facility. Convenient storage and laundering of apparel is provided with a drop off location for VB/ WBB / MBB / W Tennis / M Tennis / W Golf	Cost Neutral	
Updated Davis Fieldhouse facilities to provide ready access to ice and the recovery cold whirlpool for soccer, TFX athletes in their practice location.	\$15,000	Fundraising
Implemented an NIL Marketplace, Bengal Exchange, to provide equal access to potential NIL Partners to all student athletes	\$17,000	Reallocation
MBB has had the opportunity to go on a foreign tour. This summer we will be able to send WSOC and WBB on foreign tours.	\$120,000	Fundraising
A charitable gift has been secured to provide new flooring and equipment for a full renovation of the Strength and Conditioning Center. The upgrade is intended to allow multiple teams to utilize the space at one time, therefore increasing access and scheduling opportunities across all sports.	\$375,000	Fundraising
Implemented a robust mental health and sports performance program	\$37,000	Fundraising

to include a counseling platform called MindFlow, 2 days monthly of services from a sports psychologist, and the addition of 1 FTE counselor which will be available to student athletes. Services are distributed equitably across all programs.		FTE is funded by Division of Health Sciences through patient billings
Added to WBB travel budget to allow flights out of Pocatello instead of SLC.	\$20,000	Fundraising
Sent Associate AD for Compliance and FAR to ATIXA Gender Equity Compliance Conference to continue to learn how ISU can be a model for excellence in Gender Equity.	\$5,000	Institutional Support

Idaho State University Five Year Gender Equity Plan

We have advanced through three years of the five year plan drafted by the Gender Equity Committee under the oversight of the FAR. At this time, we are again collaborating with the FAR to evaluate progress against the plan, and to accept formal recommendations for adjustments and additions. We continue to monitor progress and work toward full compliance.

Idaho State University Equity in Athletics Disclosure Act (EADA) Report Report on Athletic Program Participation Rates and Financial Support Data July 1, 2022 through June 30, 2023

Un	iversity Enrollmen	ıt	Athletic S	Stuc	lent Aid & R	ecruiting		
				At	hletically Rel	lated Student	R	e
Gender	Full-Time Un	dergraduates	Team Gender		Aid	d	E	X
	Number	Percent			Amount	Percent		Aı
Male Students	2,125	39.8%	Men's Teams	\$	2,816,402	54%	\$	
Female Students	3,208	60.2%	Women's Teams		2,362,768	46%		1
Totals	5,333	100%	Totals for All Teams	\$	5,179,171	100%	\$	1

Athletic Participation													
Varsity Teams	Numbe	r of Participants		Number P on a Sec	articipating ond Team	Number Participating on a Third Team							
	Men's	Women's	Total	Men's	Women's	Men's	Women's						
Basketball	17	29	46										
Football	108		108	1									
Golf		7	7										
Soccer		29	29										
Softball		24	24										
Tennis	9	8	17										
Track & Field (Indoor)	33	47	80	32	46	9	11						
Track & Field (Outdoor)	33	46	79	32	46	9	11						
Cross Country	9	11	20	9	11	9	11						
Volleyball		16	16										
Total Participants	209	217	426	74	103	27	33						
Percentage of Total	49%	51%	100%										
Unduplicated Count	167	160											

Total Revenues & Expenses													
Varsity Teams		Total Revenues			Total Expense	s	Rev	enues minus l	xpenses				
varsity realits	Men's	Women's	Totals	Men's	Women's	Totals	Men's	Women's	Totals				
Basketball	\$1,335,708	\$1,480,647	\$ 2,816,355	\$1,335,708	\$1,480,647	\$ 2,816,355	\$ -	\$ -	\$-				
Football	\$4,944,754		\$ 4,944,754	\$4,944,754		\$ 4,944,754	0		\$-				
Golf		\$229,111	\$ 229,111		\$229,111	\$ 229,111		0	\$-				
Soccer		\$675,719	\$ 675,719		\$675,719	\$ 675,719		0	\$-				
Softball		\$776,923	\$ 776,923		\$776,923	\$ 776,923		0	\$-				
Tennis	\$204,809	\$273,645	\$ 478,455	\$204,809	\$273,645	\$ 478,455	0	0	\$-				
Track & Field & Cross Country	\$502,904	\$639,491	\$ 1,142,394	\$502,904	\$639,491	\$ 1,142,394	0	0	\$-				
Volleyball		\$846,013	\$ 846,013		\$846,013	\$ 846,013		0	\$-				
Totals for All Teams	\$6,988,175	\$ 4,921,548	\$ 11,909,723	\$6,988,175	\$4,921,548	\$ 11,909,723	\$-	\$-	\$-				
Not Allocated by Gender/Sport			3,650,539			3,650,539			\$-				
Grand Totals for Athletics			\$ 15,560,262			\$ 15,560,262			\$-				
Totals for All Sports Except			¢ 7 700 152			¢ 7 700 152			ć				
Football & Basketball			\$ 7,799,193			\$ 7,755,155			Ş -				

Operating (Game Day) Expenses

(includes lodging, meals, transportation, uniforms, equipment, event costs & officials)

						,								
Varsity Teams	Oper	atir	g (Game Day) Exp	en	ses	Nu	mber of Partici	pants	Operating Expenses per Participant					
valsity reallis	Men's		Women's		Totals	Men's	Women's	Totals		Men's	Wo	omen's		Totals
Basketball	\$ 388,049	\$	322,061	\$	710,110	17	29	46	\$	22,826	\$	11,106	\$	15,437.18
Football	\$ 991,515			\$	991,515	108		108	\$	9,180.70			\$	9,180.70
Golf		\$	98,980	\$	98,980		7	7				14,140	\$	14,140.03
Soccer		\$	158,475	\$	158,475		29	29				5,465	\$	5,464.64
Softball		\$	269,890	\$	269,890		24	24				11,245	\$	11,245.41
Tennis	\$ 97,438	\$	56,706	\$	154,144	9	8	17		10,826		7,088	\$	9,067.31
Track & Field & Cross Country	\$ 136,523	\$	137,012	\$	273,535	75	104	179				1,317	\$	1,528.13
Volleyball		\$	148,225	\$	148,225		16	16				9,264	\$	9,264.06
Totals for All Teams	\$ 1,613,525	\$	1,191,348	\$	2,804,874	209	217	426		\$7,720		\$5,490		\$6,584
Totals for All Sports Except				ć	1 102 240			272					ć	4.05.0
Football & Basketball				Ş	1,103,249			272					Ş	4,056

Average Coaching Salaries	5								
		Head	Соа	ches	Assistant Coaches				
Description/Explanation				Women's		Men's	W	/omen's	
	Me	n's Teams		Teams		Teams	Teams		
Average Annual Institutional Salary per Coach	\$	85,186	\$	61,844	\$	50,030	\$	33,386	
Number of Head Coaches Used to Calculate Average		5		8		18		12	
Average Annual Institutional Salary per Full-Time Equivalent (FTE)	\$	106,482	\$	72,226	\$	54,578	\$	42,395	
Full-Time Equivalents (FTEs) Used to Calculate Average		4.00		6.85		16.50		9.45	

Counts of Head Coaches													
		Male Head Co	aches			Female Head	Coaches		Total Head				
Varsity Teams	Assigned Full-		Full-Time	Part-Time/	Assigned Full-	Assigned Part	Full-Time	Part-Time/	Coachos				
	Time	Assigned Part Time	Employee	Volunteer	Time	Time	Employee	Volunteer	coaches				
Men's Varsity Teams													
Basketball	1		1						1				
Football	1		1						1				
Tennis	1		1						1				
Track & Field & Cross Country		1	1			1	1		2				
Totals for Men's Teams	3	1	4	0	0	1	1	0	5				
Women's Varsity Teams													
Basketball	1		1						1				
Golf	1		1						1				
Soccer	1		1						1				
Softball	1		1						1				
Tennis					1		1		1				
Track & Field & Cross Country		1	1			1	1		2				
Volleyball	1		1						1				
Totals for Women's Teams	5	1	6	0	1	1	2	0	8				

Counts of Assistant Coaches													
		Male Assistant (Coaches			Female Assista	nt Coaches		Total Assistant				
Varsity Teams	Assigned Full-		Full-Time	Part-Time/	Assigned Full-	Assigned Part	Full-Time	Part-Time/	Conchos				
	Time	Assigned Part Time	Employee	Volunteer	Time	Time	Employee	Volunteer	coaches				
Men's Varsity Teams													
Basketball	3	1	3	1					4				
Football	12		12						12				
Tennis									0				
Track & Field & Cross Country		2	2						2				
Totals for Men's Teams	15	3	17	1	0	0	0	0	18				
Women's Varsity Teams													
Basketball					3		3		3				
Golf						1		1	1				
Soccer	1		1						1				
Softball					2		2		2				
Tennis						1		1	1				
Track & Field & Cross Country		2	2						2				
Volleyball					2	1	2	1	3				
Totals for Women's Teams	1	2	3	0	7	3	7	3	13				

University of Idaho Gender Equity Narrative

3/05/2024

The University of Idaho Athletic Department is committed to gender equity in all facets as directed by the Title IX Statute of 1972. Further, Title IX protocol is followed simply because we believe in its fundamental principle. The Office of Civil Rights issued an Intercollegiate Athletics Policy Interpretation in 1979 which is the major source for specific requirements of all NCAA athletic programs and identifies three program components that are listed below. As a civil rights law, two basic provisions are to be followed: equal access to programs and equal treatment once in the program. We incorporate these principles and policies into our daily routine to strive to meet the requirements.

Equal access will be addressed by the accommodation of interest and abilities in Section 1 *Participation Opportunities*. Section II will outline *Financial Aid*. The last section, *Athletic Benefits and Opportunities*, will include, but is not limited to, the areas of equipment, travel, scheduling of contests and practices, salaries, facilities, medical and training facilities and services, recovery options, and academic support.

Athletics' Senior Leadership staff members are designated as specific sport administrators. They continually monitor each of the sections mentioned above and implement policy or procedural changes when needed. All the program component areas-participation, financial aid, and athletic benefits are also monitored by staff. Beginning this year a student-athlete will be involved in the process per NCAA rules. A systematic approach of utilizing a three-year snapshot was implemented in Spring of 2020 and will continue to be utilized going forward for comparable data.

I. Participation Opportunities

2018-19	undergraduate enrollment percentages:	Male-51.9%	Female-48.1%
	Athletic participation:	Male-53.9%	Female-46.1%
2019-2020	Oundergraduate enrollment percentages:	Male-51.1%	Female-48.9%
	Athletic participation:	Male-53.9%	Female-46.1%
2020-2022	Lundergraduate enrollment percentages:	Male-48.9%	Female-51.1%
	Athletic participation:	Male-53.1%	Female-46.9%
2021-22 u	ndergraduate enrollment percentages:	Male-49.0%	Female-51.0 %
	Athletic participation:	Male-52.3%	Female-47.7%
2022-23 u	ndergraduate enrollment percentages:	Male-49.9%	Female-50.1%
	Athletic participation:	Male- 53.2%	Female- 46.8%
2023-24 u	ndergraduate Fall enrollment percentages:	Male-49%	Female-51%
	Athletic participation:	Male -TBA	Female-TBA

To begin addressing the proportionality gap, roster management was implemented beginning in Fall of 2021. After the implementation process started, student-athletes were granted additional seasons of eligibility by the NCAA due to COVID-19 and male student-athletes took advantage of this opportunity more than their female counterparts. This has continued to skew the numbers slightly, but the gap is starting to close. A committee was formed in Fall of 2021 to evaluate roster numbers, scholarship dollars, and average NCAA squad sizes. The roster management process is ongoing and assigns our men's teams a maximum roster target number to hit and assigns the women's programs a minimum number to meet or exceed. In the roster management implementation planning meetings with the current coaching staffs, these target numbers were deemed attainable. While the numbers are attainable, not all programs hit their assigned numbers. Of course, campus enrollment numbers and percentages fluctuate and thus it is challenging to hit upon the exact percentage number year in and year out. Athletics will adjust the numbers as best as possible, however, it is not feasible to hit a "moving" target of enrollment without denying promised participation opportunities to student-athletes. We would prefer not to limit anyone's opportunity to participate in order to hit the targeted percentages of campus enrollment.

II. Financial Aid

All coaches and sport programs at the University of Idaho are given the opportunity to offer the NCAA maximum scholarship limits of their respective sport. The actual scholarship dollars vary due to in-state and out-of-state tuition rates. There are no limits placed upon the sport regarding the location of where the student comes from and what they can offer up to a full scholarship. This allows our coaches to recruit across the state, nation, and internationally, which is critical to bringing diversity into our programs and to campus. With this philosophy in place and the campus gender percentage fluctuation in enrollment, it is difficult, if not impossible, to be compliant with financial aid awards exactly matching campus enrollment participation percentages. Another challenge is that not all coaches award the full number of allotted scholarships, even though they are allowed the opportunity to do so. This occurs for various reasons, most frequently due to balancing out the number of incoming recruiting classes. However, coaches are strongly encouraged to use all available scholarship allotments, particularly for our female sport programs.

A summer school aid policy has been implemented to ensure equitable gender access to designated female and male sports and to correct eligibility issues. Certain sports, such as Football, Men's and Women's Basketball, and to some extent Volleyball and Women's Soccer, can utilize the summer period to train their teams with coaching staff or strength coaches present. The other sports offered at Idaho have NCAA restrictions that do not allow this practice opportunity with staff members present, unless there is a safety exemption. This opportunity skews the amount of summer aid offered as football has the largest NCAA scholarship limit of 63 and no other female sport has such a high number of scholarship opportunities. Our two largest roster count women's sports do not have summer access opportunities, which in theory could help offset the cost of funding football scholarship awards if the access to workouts were granted.

As noted in the EADA report, the Student Aid dollars awarded were: 2019-2020 57% males and 43% females 2020-2021 56% males and 44% females 2021-2022 57% males and 43% females 2022-2023 57% males and 43% females

III. Athletic Benefits and Opportunities

Processes have been implemented to develop budgets and to regularly review the incurred spending. This has led to ensure sport sponsorship support and equitable support of programs. Reviews of spending, contract evaluation, and benchmarking with conference members are continually being analyzed. Reviewing these processes and evaluating their implementation will continue to allow that equitable policies and procedures are in place.

The Athletic Department continues to hold a weekly scheduling meeting to ensure all sports have equal access to facilities for practice and competition. Sports medicine, academic services, strength and conditioning, access to an athletic department nutritionist, and access to a mental health counselor. The fueling center is open to all athletes equally as well as our recovery services.

IV. Conclusion

As stated earlier, a three-year rolling report was created to monitor all areas of Title IX and track not only overall progress, but also specific nuances. This report will also track trends and keep record of substantial differences between genders. Our Gender Equity review committee is in place to monitor these trends and accomplishments.

University of Idaho Equity in Athletics Disclosure Act (EADA) Report Report on Athletic Program Participation Rates and Financial Support Data July 1, 2022 through June 30, 2023

Unive	rsity Enrollment	:	Athletic Stude	Athletic Student Aid & Recruiting									
Gender	Full-Time Und	ergraduates	Team Gender	Athletically Student	Related Aid	Recruiting Expenses							
	Number Percent			Amount	Percent	Amount							
Male Students	3,309	49.9%	Men's Teams	\$3,083,249	57%	\$311,874							
Female Students	3,321	50.1%	Women's Teams	\$2,347,945	43%	\$190,358							
Totals	6,630	100.0%	Totals for All Teams	\$5,431,194	100%	\$502,232							

Athletic Participation

		Number of Partic	inante	Number P	articipating	Number Participating					
Varsity Teams			ipants	on a Seco	ond Team	on a Third Team					
	Men's	Women's	Total	Men's	Women's	Men's	Women's				
Basketball	15	13	28								
Football	109		109								
Golf	8	7	15								
Soccer		32	32								
Swimming & Diving		36	36								
Tennis	10	8	18								
Track & Field (Indoor)	33	32	65	32	31	11	14				
Track & Field (Outdoor)	32	31	63	31	31	11	14				
Cross Country	11	15	26	11	14	11	14				
Volleyball		18	18								
Total Participants	218	192	410	74	76	33	42				
Percentage of Total	53.2%	46.8%	100%								
Unduplicated Count	175	146	321								

University of Idaho Equity in Athletics Disclosure Act (EADA) Report

Total Revenues & Expenses																			
Varsity Teams		-	Tota	l Revenue	s			Tota	al Expenses					R	evenue	s min	us Expei	nses	
valsity leallis		Men's	W	/omen's		Totals		Men's	Women's		Totals	r	Men's		Womer	ı's		Totals	
Basketball	\$	1,688,044	\$ 1	L,530,835	\$	3,218,879	\$	1,688,044	\$ 1,530,835	\$	3,218,879	\$	-	\$		-	\$		-
Football	\$	6,528,602				6,528,602		6,528,602			6,528,602		-						-
Golf	\$	459,175	\$	377,885		837,060		459,175	377,885		837,060		-			-			-
Soccer			\$	822,953		822,953			822,953		822,953					-			-
Swimming & Diving			\$	808,891		808,891			808,891		808,891					-			-
Tennis	\$	436,106	\$	471,238		907,344		436,106	471,238		907,344		-			-			-
Track & Field & Cross Country	\$	761,967	\$	864,998		1,626,965		761,967	864,998		1,626,965		-			-			-
Volleyball			\$	806,906		806,906			806,906		806,906					-			-
Totals for All Teams	\$	9,873,894	\$ 5	5,683,706	\$1	5,557,600	\$	9,873,894	\$ 5,683,706	\$	15,557,600	\$	-	\$		-	\$		-
Not Allocated by Gender/Sport						7,583,797					7,583,797								-
Grand Totals for Athletics					\$2	3,141,397				\$	23,141,397						\$		-
Totals for All Sports Except	ć	1 657 249	ć	1 1 5 2 0 7 1	ć	E 910 110	ć	1 657 249	¢ / 152 971	ć	E 910 110	ć		ć			ć		
Football & Basketball	Ş	1,037,240	ے د	+,132,071	ې	3,010,119	Ş	1,057,240	ş 4,132,071	Ş	5,610,119	Ş	-	Ş		-	Ş		-

	(includes lodging, meals, transportation, uniforms, equipment, event costs & officials)																
Vereity Teeree		Operatin	ıg (Gaı	me Day) l	Exp	penses		Number of Participants					Operating Expenses per Participant				
varsity reams	N	Vien's	Wo	omen's		Totals		Men's	Wo	men's	Tota	ls	I	Men's	١	Women's	Totals
Basketball	\$	569,706	\$ 5	549,995	\$	1,119,701		15		13		28	\$	37,980	\$	42,307	\$ 39,989
Football	1	,623,946				1,623,946		109				109		14,899			14,899
Golf		167,019	-	120,126		287,145		8		7		15		20,877		17,161	19,143
Soccer			2	273,247		273,247				32		32				8,539	8,539
Swimming & Diving			-	195,346		195,346				36		36				5,426	5,426
Tennis		189,049	-	163 <i>,</i> 845		352,894		10		8		18		18,905		20,481	19,605
Track & Field & Cross Country		199,826	2	201,323		401,149		76		78		154		2,629		2,581	2,605
Volleyball			2	223,333		223,333				18		18				12,407	12,407
Totals for All Teams	\$ 2,	,749,546	\$ 1,7	727,215	\$	4,476,761		218		192		410	\$	12,613	\$	8,996	\$ 10,919
Totals for All Sports Except Football & Basketball	ç	\$555,894	\$1,2	177,220		\$1,733,114		94		179		273		\$5,914		\$6,577	\$6,348

Operating (Game Day) Expenses

University of Idaho Equity in Athletics Disclosure Act (EADA) Report

Average Coaching Salaries

	Head C	oaches	Assistant Coaches		
Description/Explanation		Women's	Men's	Women's	
	Men's Teams	Teams	Teams	Teams	
Average Annual Institutional Salary per Coach	\$98,052	\$75,938	\$64,875	\$35,542	
Number of Head Coaches Used to Calculate Average	5	7	16	12	
Average Annual Institutional Salary per Full-Time Equivalent (FTE)	\$108,947	\$81,779	\$71,586	\$44,505	
Full-Time Equivalents (FTEs) Used to Calculate Average	4.50	6.50	14.50	10.00	

Counts of Head Coaches

Male Head Coaches						Female Hea	d Coaches		
Varsity Teams	Assigned Full-	Assigned	Full-Time		Assigned Full	- Assigned Part	Full-Time	Part-Time/	Total Head Coaches
	Time	Part Time	Employee	Part-Time/ Volunteer	Time	Time	Employee	Volunteer	
Men's Varsity Teams									
Basketball	1		1						1
Football	1		1						1
Golf	1		1						1
Tennis	1		1						1
Track & Field & Cross Country		1	1						1
Totals for Men's Teams	4	1	5	0	0	0	0	0	5
Women's Varsity Teams									
Basketball	1		1						1
Golf					1		1		1
Soccer	1		1						1
Swimming & Diving	1		1						1
Tennis					1		1		1
Track & Field & Cross Country		1	1						1
Volleyball	1		1						1
Totals for Women's Teams	4	1	5	0	2	0	2	0	7

University of Idaho Equity in Athletics Disclosure Act (EADA) Report

Male Assistant Coaches						Female Assist			
Varsity Teams	Assigned Full-	Assigned	Full-Time		Assigned Full-	Assigned Part	Full-Time	Part-Time/	Total Assistant Coaches
	Time	Part Time	Employee	Part-Time/ Volunteer	Time	Time	Employee	Volunteer	
Men's Varsity Teams									
Basketball	3	1	3	1					4
Football	10	4	10	4					14
Golf									0
Tennis		1		1					1
Track & Field & Cross Country		3	2	1		2	1	1	5
Totals for Men's Teams	13	9	15	7	0	2	1	1	24
Women's Varsity Teams									
Basketball	2		2		1	1	1	1	4
Golf									0
Soccer	1		1		1		1		2
Swimming & Diving	1		1		1		1		2
Tennis		1		1		1		1	2
Track & Field & Cross Country		3	2	1		2	1	1	5
Volleyball	1		1		1		1		2
Totals for Women's Teams	5	4	7	2	4	4	5	3	17

Counts of Assistant Coaches

Gender Equity – Narrative Lewis-Clark State College

I. Participation Opportunities: Compliance for this component means meeting one test of the three-part test for participation opportunities. LCSC does not currently meet these criteria.

A. Proportionate to enrollment

Title IX compliance is assessed relative to interest and abilities, athletic financial aid and other program areas. Relative to interest and abilities and prong #1 of the 3-prong test, substantial proportionality, in FY23, athletic participation was 56% male to 44% female. LC State's fulltime undergraduate enrollment in FY23 was 38% male and 62% female. This results in a 18% overrepresentation of male student-athletes. Prongs 2 and 3 look at the history and continuing practice of program expansion for the under-represented sex and full and effective accommodation of expressed interest and abilities of the under-represented sex. With these aspects of compliance in mind, LC State's 2-part Title IX Compliance Plan was accepted and approved by the SBOE in the spring of 2019. Part 1 of the Plan involved maximizing women's sport roster capacities with expansion which started in the fall of 2019. Part 2 involved the addition of a women's intercollegiate sport, dance, effective fall 2023. Additionally, LC State will add another women's intercollegiate sport, cheer, effective fall 2024.

In order to achieve the roster goals in Part 1, coaching personnel, operating budgets and student-athlete scholarship dollars needed to be increased. In FY 2020, a total of 2.62 FTE was spread across three coaching positions, in essence moving the head women's and men's golf coach to full-time, and the assistant volleyball and assistant women's basketball coach from part-time to full-time, inclusive of fringe and benefits. In addition, a concerted effort to increase scholarship funding (through the Warrior Athletic Association and LC State Foundation) for athlete recruitment is continuing. In response to these efforts LC State's overall women's sport roster increased from a total of 123 20/21 to 140 in 21/22. There was a slight decrease to 134 for 22/23. Currently, the women's sport roster is at 136 for 23/24. This is especially noteworthy given the general negative impact on higher education enrollments associated with the pandemic and the overall nationwide enrollment declines. Finally, it is relevant that LC State's 20/21 coaching contracts were uniformly modified with language making roster growth and management a condition of supplemental compensation considerations.

LC State's continued fiscal conservatism in FY2023 allowed for funding streams to support continued Plan progress to move forward. Specifically, (a) Warrior Athletic Association fundraising, in essence, taxed themselves 5% on dollars raised. These dollars are to be allocated, under the direction of the Director of Athletics, to support operating expenses (OE) associated with expanded sport rosters; (b) proceeds from the Hospitality area (sales and sponsorship) during the NAIA World Series, will go towards the Title IX plan; and (c) revenue captured in response to reduced travel expenses with the move from the Frontier to Cascade conference have been directed toward Plan OE (e.g., increased travel costs to accommodate expanded rosters).

B. Demonstrate continuing program expansion

Part 1 of the Plan is the cornerstone of ongoing demonstration of a continuing practice of program expansion. The timeline for this part of the plan has been extended and will be ongoing. Part 2 of the LC State's Title IX Compliance Plan involved the addition of a

women's sport. Dance was added effective fall 2023. Considerations for adding women's soccer are being put on hold; and the near-term focus shifting to adding an additional women's sport, cheer, in fall 2024. The NAIA recognizes competitive dance and competitive cheer as a collegiate sports. While the Cascade Collegiate Conference (CCC) does not yet sponsor competitive dance or cheer as a sport, we are able to find competitive competitions in the Midwest which allows us to have multiple competitions in a weekend. LC State has demonstrated interest in spirt-squad/dance performance, existing facilities that can accommodate practice and performances, and a coach currently employed as a faculty member teaching physical, life, movement and sport science courses. A hiring process will start this spring of 2024 to hire a full-time head coach for Cheer and Dance.

C. Fully accommodate the interest and abilities of the underrepresented gender Relative to Title IX compliance, given its athletics history and tradition, LC State's compliance efforts are focused on growing women's sport participation, while holding men's sport participation relatively constant. Part 1 of the Plan has resulted in a net gain of 11 women's sport participants since FY2021, which translates to 47% women's sport participation. Part 2 included the addition of a women's sport. LC State officially implemented Dance beginning with the Fall 2023 semester. The initial roster size is 9 participants, with a potential to grow to 20 participants within 3 years of sport launch. This sport addition would translate to 51% - 49% women's sport participation with a roster size of 20. Re-evaluation of substantial proportionality, which is a moving target pending enrollment trends, will need to be ongoing and will dictate next steps (e.g., plan part 3?). Note, in an effort to further guide assessment of this aspect of Title IX compliance, as of Fall 2020, LC State added sport participation specific questions to its annual student survey. These questions and the sport participation interest and abilities information the survey reflects are used to help guide LC State's Title IX considerations and obligations.

II. Financial Aid: The Financial Assistance requirement of Title IX, requiring assistance to be substantially proportionate to the ratio of male and female athletes, is currently tilted toward females. Athletic student aid totals (allocation of actual resources in FY23) were 53.4% to males and 46.6% to females in comparison to the unduplicated participation rate of 57.9% males to 42.1% females. This results in a 4.5% proportional advantage for females. The recruitment efforts identified in the previous section will assist in progressing towards compliance by increasing female participation.

III. Equal Treatment of Programs: The benefits, opportunities, and treatments afforded sports participants are equivalent. LC State is compliant with the Equal Treatment of Programs requirement of Title IX. The LC State Athletics Department has adopted an intercollegiate athletics manual, with standardized policies and procedures that helps ensure ongoing compliance in this area.

2,145

\$8,206

Lewis-Clark State College Equity in Athletics Disclosure Act (EADA) Report July 1, 2022 through June 30, 2023

University Enrollment

Gender	Full-Time Undergraduates						
	Number	Percent					
Male Students	710	38%					
Female Students	1,136	62%					
Totals	1,846	100%					

Athletic Student Aid & RecruitingAthletically RelatedRecruitingTeam GenderStudent AidExpensesAmountPercentAmountMen's Teams\$1,003,17653.41%\$6,061

874,991

\$1,878,167

46.59%

100%

Athletic Participation

Women's Teams

Totals for All Teams

Varsity Teams	Num	ber of Participa	ants	Number P on a Sec	articipating ond Team	Number Participating on a Third Team		
	Men's	Women's	Total	Men's	Women's	Men's	Women's	
Baseball	44		44					
Basketball	17	12	29					
Golf	9	8	17					
Tennis	16	13	29					
Track & Field (Indoor)	37	29	66	34	29	16	15	
Track & Field (Outdoor)	33	30	63	33	29	16	15	
Cross Country	18	14	32	17	14	16	14	
Volleyball		19	19		1		1	
Dance/Spirit		9	9					
Total Participants	174	134	308	84	73	48	45	
Percentage of Total	56%	44%	100%					
Unduplicated Count	124	90	214					

Lewis-Clark State College Equity in Athletics Disclosure Act (EADA) Report Total Revenues & Expenses

ATTACHMENT 8

Varsity Toams		Total Revenue	s		Total Expense	s	Revenues minus Expenses			
	Men's	Women's	Totals	Men's	Women's	Totals	Men's	Women's	Totals	
Baseball	\$923,826		\$923,826	\$923,826		\$923,826	\$0		\$0	
Basketball	492,888	450,833	943,721	492,888	450,833	943,721	0	0	0	
Golf	161,215	149,383	310,598	161,215	149,383	310,598	0	0	0	
Tennis	201,726	236,199	437,925	201,726	236,199	437,925	0	0	0	
Track & Field (Indoor)	51,063	55,724	106,787	51,063	55,724	106,787	0	0	0	
Track & Field (Outdoor)	76,595	83,586	160,181	76,595	83,586	160,181	0	0	0	
Cross Country	101,533	124,149	225,682	101,533	124,149	225,682	0	0	0	
Volleyball		511,463	511,463		511,463	511,463		0	0	
Dance/Spirit		15,745	15,745		15,745	15,745		0	0	
Totals for All Teams	\$2,008,846	\$1,627,082	\$3,635,928	\$2,008,846	\$1,627,082	\$3,635,928	\$0	\$0	\$0	
Not Allocated by Gender/Sport			741,943			726,091			15,852	
Grand Totals for Athletics	\$2,008,846	\$1,627,082	\$4,377,871	\$2,008,846	\$1,627,082	\$4,362,019	\$0	\$0	\$15,852	
Totals for All Sports Except Baseball & Basketball	\$592,132	\$1,176,249	\$1,768,381	\$592,132	\$1,176,249	\$1,768,381	\$0	\$0	\$0	

Operating (Game Day) Expenses

(includes lodging, meals, transportation, uniforms, equipment, event costs & officials)

Varsity Tooms	Operatin	g (Game Day)	Expenses	Nun	nber of Particip	ants	Operating Expenses per Participant			
varsity reallis	Men's	Women's	Totals	Men's	Women's	Totals	Men's	Women's	Totals	
Baseball	\$139,674		\$139,674	44		44	\$3,174		\$3,174	
Basketball	92,918	73,988	166,906	17	12	29	5,466	\$6,166	5,755	
Golf	23,803	24,576	48,379	9	8	17	2,645	3,072	2,846	
Tennis	30,049	30,853	60,902	16	13	29	1,878	2,373	2,100	
Track & Field (Indoor)	10,806	10,670	21,476	37	29	66	292	368	325	
Track & Field (Outdoor)	16,209	16,006	32,215	33	30	63	491	534	511	
Cross Country	35,269	35,052	70,321	18	14	32	1,959	2,504	2,198	
Volleyball		79,387	79,387		19	19		4,178	4,178	
Dance/Spirit		4,419	4,419		9	9		491	491	
Totals for All Teams	\$348,728	\$274,951	\$623,679	174	134	308	\$2,004	\$2,052	\$2,025	
Totals for All Sports Except	\$116.136	\$200.963	\$317.099	113	122	235	\$1.028	\$1.647	\$1.349	
Baseball & Basketball	+==0)200	+======================================	+==/,000	110		200	+1,020	÷ =)0 17	÷ ±)0 10	

Lewis-Clark State College Equity in Athletics Disclosure Act (EADA) Report Average Coaching Salaries

	Head C	oaches	Assistant Coaches		
Description/Explanation	Men's	Women's	Men's	Women's	
	Teams	Teams	Teams	Teams	
Average Annual Institutional Salary per Coach	\$30,656	\$24,326	\$10,712	\$6,384	
Number of Head Coaches Used to Calculate Average	7	8	18	14	
Number of Volunteer Coaching Positions	0	0	6	5	
Average Annual Insitutional Salary per Full-Time Equivalent (FTE)	\$68,341	\$59,696	\$39,190	\$32,266	
Full-Time Equivalents (FTEs) Used to Calculate Average	3.14	3.26	4.92	2.77	

Counts of Head Coaches

		Male Hea	ad Coaches						
Varsity Teams	Assigned	Assigned	Full-Time	Part-Time/	Assigned	Assigned	Full-Time	Part-Time/	
	Full-Time	Part Time	Employee	Volunteer	Full-Time	Part Time	Employee	Volunteer	coaches
Men's Varsity Teams									
Baseball	1		1						1
Basketball	1		1						1
Golf		1	1						1
Tennis		1	1						1
Track & Field (Indoor)		1	1						1
Track & Field (Outdoor)		1	1						1
Cross Country		1	1						1
Totals for Men's Teams	2	5	7	0	0	0	0	0	7
Women's Varsity Teams									
Basketball	1		1						1
Golf		1	1						1
Tennis		1	1						1
Track & Field (Indoor)		1	1						1
Track & Field (Outdoor)		1	1						1
Cross Country		1	1						1
Volleyball	1		1						1
Dance/Spirit						1	1		1
Totals for Women's Teams	2	5	7	0	0	1	1	0	8

Lewis-Clark State College Equity in Athletics Disclosure Act (EADA) Report Counts of Assistant Coaches

		Male Assist	tant Coaches			Female Assis	tant Coaches		Total
Varsity Teams	Assigned	Assigned	Full-Time	Part-Time/	Assigned	Assigned	Full-Time	Part-Time/	Assistant
	Full-Time	Part Time	Employee	Volunteer	Full-Time	Part Time	Employee	Volunteer	Coaches
Men's Varsity Teams									
Baseball	2	2	2	2					4
Basketball		3	1	2					3
Golf		1		1					1
Tennis		2	1	1		1		1	3
Track & Field (Indoor)		6	1	5					6
Track & Field (Outdoor)		6	1	5					6
Cross Country		1	1						1
Totals for Men's Teams	2	21	7	16	0	1	0	1	24
Women's Varsity Teams									
Basketball						1	1		1
Golf		1		1					1
Tennis		2	1	1		1		1	3
Track & Field (Indoor)		6	1	5					6
Track & Field (Outdoor)		6	1	5					6
Cross Country		1	1						1
Volleyball		1	1						1
Dance/Spirit									0
Totals for Women's Teams	0	17	5	12	0	2	1	1	19

UNIVERSITY OF IDAHO

SUBJECT

University of Idaho (U of I) Utility Public Private Partnership Update 2024

REFERENCE

November 2020	Public-Private	Partnership	Transaction	for	Utility
	Systems and Ir	nfrastructure			
February 2023	University of I Update	daho Utility	Public Private	Partr	nership

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section V.I.3 Acquisition of Personal Property and Services

BACKGROUND/DISCUSSION

On November 2, 2020, the U of I's Board of Regents approved a 50-year publicprivate partnership (P3), to lease the University's utility system to Sacyr/Plenary (Concessionaire) and grant it the exclusive right to operate the utility system and provide utility services to the University of Idaho campus. On December 30, 2020, the University received an upfront payment of \$225,000,000 in connection with the partnership. As discussed with the Board in November, numerous benefits accrue to U of I as a result of this transaction. The \$225,000,000 upfront consideration has been invested in a separate single-purpose entity, aptly named the Strategic Initiatives Fund (SIF), that will distribute at least \$6,000,000 annually (depending on market performance of SIF investment assets) from the corpus and earnings of the upfront consideration to fund the university's strategic initiatives to drive enrollment growth, provide scholarship opportunities to students, and grow the research enterprise as we march towards R1 status. Additionally, U of I benefits from having a world-class operator, McKinstry (Sub-Operator), that leverages its expertise and experience in energy infrastructure to operate and maintain the utility system. Finally, the Concessionaire is required to submit an annual Five Year Plan, proposing capital improvements that U of I can approve at its sole discretion that will be financed over 20 years.

During the lifetime of the contract, U of I pays an annual Utility Fee to the Concessionaire, consisting of:

- (1) a Fixed Fee which is set at \$7.6M and increases by 1.5% annually starting in 2026;
- (2) an Operation and Maintenance (O&M) fee, which is based initially on the U of I's historic costs, with future increases based on a rolling 3-year average of costs, adjusted pursuant to changes in CPI;
- (3) and a Capital Expenditure Fee to provide cost recovery and return on utilityrelated capital expenditures made by the Concessionaire ("CapEx").

After three years operating under the Concession Agreement, U of I seeks to update Idaho State Board of Education on the Concession Agreement, utility system operations and capital improvements, financial outcomes, the SIF, and student outcomes from SIF investment in student success, marketing, and the pursuit of R1.

IMPACT

Operations and Capital Improvements

Since operational transition to the Concessionaire in January 2021, the Concessionaire and Sub-Operator have increased safety processes and procedures and implemented an annual operations plan (Attachment 1). The Concessionaire and Sub-Operator developed a routine maintenance schedule for our critical utility infrastructure and in 2023 completed inspection and condition testing of all distribution level electrical transformers on campus. Additionally, through the annual Five Year Plans (Attachments 2 - 5) and emergent needs, U of I has approved and/or completed 20 capital improvements to the utility system to date.

These capital improvements include:

- (1) Reclaimed Water Hypochlorite Generator Replacement
- (2) South Kibbie Dome Transformer Replacement
- (3) Utility Tunnel Improvements 7th and Line Streets
- (4) Utility Tunnel Improvements Renfrew Hall
- (5) SCCP Cooling Tower Improvements
- (6) McClure Chiller Improvements
- (7) Thermal Energy Storage Tank Sensor Upgrades
- (8) Energy Plant Catwalk Ladder and Safety Upgrades
- (9) Domestic Waterline Replacement Campus Drive
- (10) SCCP Chiller Replacement and Upgrade
- (11) Water Treatment Improvements
- (12) Wood Fuel Handling System Upgrades
- (13) Kibbie Dome Electrical System Replacement
- (14) CAT Loader Replacement
- (15) Ash Handling System Replacement
- (16) Boiler Controls Modernization
- (17) Electrical Transformer Reserve
- (18) Electrical Distribution Study
- (19) Sanitary Sewer Repairs at Library and Memorial Gym
- (20) East Kibbie Dome Catch Basin

Finances

The Concession Agreement is supported by a financial model which estimates the annual net cash flow resulting from the costs to the University for the Utility Fee described above and the return on the strategic initiative investments in the form of additional tuition, fees, auxiliary revenues, and research grant indirect cost recovery (F&A). The financial model estimates a positive net cash flow over the 50-year agreement. Over the first three years of the agreement, the actual Utility Fee has exceeded the estimate due to acceleration in the need for capital renewal of our aging utility system infrastructure and high inflation rates which have impacted operating, maintenance, and capital costs. The additional costs are funded by the Utility Subsidy Fund (described under Strategic Initiatives Fund section below), which was established specifically for this purpose.

Concession Agreement

The Concession Agreement describes a 50-year relationship between U of I and Sacyr/Plenary, attempting to account for every conceivable 'what if' in nearly 900 pages of contract language. Over the initial three years of the agreement, both partners have collaborated closely to develop shared understanding and adhere to the spirit of the agreement to fulfill its intended purpose. Through those dealings, the Concessionaire and U of I have determined that a number of changes to the agreement are necessary to account for unforeseen conditions, better align with day-to-day operations, and ensure the longevity of the agreement.

- (1) Procurement of property insurance coverage is the sole responsibility of the Concessionaire. However, the hard insurance market, characterized by high premiums/deductibles and lack of available coverage, has made it impossible for the Concessionaire to attain some of the required property coverage. In the second pre-closing amendment, U of I (with the support of State Risk) has agreed to retain property coverage under the state's plan. U of I will seek to amend the concession agreement to memorialize the rights and responsibilities of each party should property continue to be covered under the state's plan, and outline a process of self-insurance for any utility system assets not covered under the state's plan or a commercially available plan. The university will receive compensation for any retained risk (not recoverable through the Utility Fee) and will retain full discretion as to the retention of any risk.
- (2) Some of the key performance indicators outlined in the Concession Agreement are not consistent with the actual operations of the utility system, disproportionately advantage or disadvantage one party over the other, or require additional clarity to implement and track. U of I will propose a series of changes to this section of the Concession Agreement to better align with actual operations and ensure ongoing and consistent utility service to the Moscow campus.

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- (3) Despite the best efforts of the drafting parties, some of the technical descriptions, roles and responsibilities, and language used to describe the utility system and the agreement between the parties are not accurate or require revision. U of I will propose an amendment that better aligns the agreement with the work on the ground.
- (4) The Concession Agreement, as written, anticipates that all capital improvements to the utility system will be financed through the agreement, performed solely by the Concessionaire and its contractors, and funded through existing university resources. U of I will propose an amendment that allows U of I to use other state, federal, and private funding sources (and adhere to state competitive bidding process in those instances) in specific instances.

Strategic Initiatives Fund

Upon receipt of the upfront consideration, U of I established the Strategic Initiatives Fund (SIF), a single purpose 501(c)(3), to invest, manage, and distribute the net closing proceeds of the P3 transaction to U of I for investment in our core mission. Distributions from the fund will provide ongoing resources throughout the 50-year life of the concession to advance the University's three primary strategic initiatives:

- 1. Student success and increased enrollment through undergraduate scholarships and investment in online education;
- 2. Elevate the research enterprise through increased graduate student scholarships and stipends and strategic research support;
- 3. University marketing, communications and outreach promoting U of I brand in support of enrollment and revenue-generating activities

A portion of the net upfront proceeds was also set aside by the SIF to fund two other purposes: (1) A Utility Subsidy Fund for the purpose of paying the Utility Fee in the early years of the agreement before strategic initiative investments result in revenue growth; and (2) a Terminal CapEx fund to pay off the estimated balance of capital improvements at the end of the 50-year term.

Distributions to strategic initiatives are governed by the SIF board of directors, who have adopted a spending policy that reflects the fundamental objective of providing the maximum, yet equitable, value to current and future beneficiaries over the next 50 years, considering the effects of inflation. The annual spending amount is computed using a two-part spending formula to ensure all funds are spent down by the end of the 50-year term. \$6 million was distributed in FY2022, \$7.357 million in FY2023, and \$6.403 million will be distributed during FY2024. Over the past three years, these funds have been invested in the three primary strategic initiatives as follows: approximately 35% in student success, 53% in research, and 12% in marketing and related activities.

Outcomes

Investment in the university's strategic initiative through the SIF has yielded significant returns in the form of increased enrollment, increased revenues, and increased research activity.

Over the last three years, FY2022 through FY2024, student enrollment has increased by 1,058 students (599 FTEs), generating tuition and fee growth (net of scholarship allowance) of \$11.3M (12% growth). This student growth has also resulted in a 33% increase in on-campus housing occupancy and \$10.3M in auxiliary revenue. Research expenditures grew by 30% over these three years as research awards grew by \$37.1 million (30%). This data is as of the second quarter of 2024 ending December 31, 2023.

ATTACHMENTS

Attachment 1 – FY2024 Annual Operations Plan Attachment 2 – FY2022 Five Year Plan Attachment 3 – FY2023 Five Year Plan Attachment 4 – FY2024 Five Year Plan Attachment 5 – Slide Presentation

BOARD STAFF COMMENTS AND RECOMMENDATIONS

The Board requested at its April 2023 meeting for UI to provide an informational update to the Board in one calendar year (2024) regarding the University of Idaho's Utility Public Private Partnership.

BOARD ACTION

This item is for informational purposes only.

INFORMATIONAL APRIL 17-18, 2024

ATTACHMENT 1

Moscow Idaho Eco District I, LLC



Moscow ID Eco District I, LLC

Bringing the value of experience to the future of education for the University of Idaho

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Moscow ID Eco District I, LLC

Bringing the value of experience to the future of education for the University of Idaho

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INTRODUCTION

The purpose of the Operation Manual for the Operations and Maintenance Plan for the Utility and Energy Systems is to communicate and provide access to basic standardized information across all our programs. This manual is also prepared in accordance with the Sub-Agreement for The University of Idaho Utility System (Sub-OMCA) as the "Operations Plan" as defined in the Sub-OMCA. This Operations Plan follows the Performance Standards section of the agreement and is offered to satisfy the requirements and components of the Performance Standards and Prudent Industry Practices.

This manual includes baseline information required for all positions and best practices. Since this manual is addressed to all programs, it does not describe in detail site specific information. Site specific information shall be housed in appendices, computerized maintenance software, and other locations as required by the site.

This manual will evolve in accordance with changing industry best practices, Moscow Idaho Eco District I, LLC (MIEDI) program needs, and OEM recommendations.

EXECUTIVE SUMMARY

MIEDI is contracted as the Sub-Operator of the utility functions as an integral part of the University of Idaho (U of I) by providing quality operations and maintenance functions in support of the buildings and outdoor spaces that enhance learning opportunities for students. MIEDI supports the provision of critical utility and essential life support services to the campus. These services include maintaining and operating the District Energy Plant, Water Systems, Electrical System, and Compressed Air Systems.

We are thoroughly engaged in the practice of implementing proactive solutions, which helps us address problems before they become critical. An important component of this philosophy is to employ journeyman level trades, professional people, and front-line staff, who are empowered to solve issues on site while supporting a variety of activities on campus. By empowering our staff with the ability to make decisions on the front line, we can respond to the requests of individual customers quickly, while serving the larger needs of the University effectively.

Our organization is fervent about safety, employee well-being, regulatory compliance, record keeping, transparency, and cooperation with campus and state level entities. We host a high expectation of quality work within our organization to ensure an exceptional educational environment, that is accessible, functional, and beautiful.

As we fulfill our vision, MIEDI is expanding its role as a critical component of the U of I. Our commitment to the University and students extends beyond simply caring for the Utility Systems serving campus buildings; instead, we serve as a vital part of recruitment through maintaining and operating the utility systems on campus that enhance and provide quality facilities. The future of the U of I campus demands a partner that understands that a traditional service delivery model is not enough for a campus that is as visionary the U of I. Our operation is predicated by the following service delivery values:

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Experiential Service Delivery: Going beyond the core utility management, and facilities operational services, we deliver multi-faceted service focused on customer experience.

World-class Leadership: Enabling our team with the best on-site leadership, their knowledge, expertise, and service delivery benefits from the continued direct access to support resources across all disciplines with training that continually improves and reinforces a culture of operational and service excellence.

Service Delivery Driven by our Asset Preservation Management Structure: Our program is a solid framework of technical processes ensuring that the state of good repair is applied to the facilities and equipment resulting in performance to its fullest lifecycle.

Energy and Sustainability: To pursue these goals, MIEDI and its energy services partner McKinstry Essention, have significantly invested in applied innovation programs at various locations successfully reducing the energy baseline, enhancing sustainability, and have engaged and served our clients through the development and deployment of industry-leading building performance solutions. Moving forward as partners the UES team will introduce programs to U of I that drive savings and enable sustainability roadmaps.

Continuous Innovation and Quality Assurance with Technology tools: Furthering our ability to deliver with the latest in equipment technology, our tools not only enable communication, but they allow our team to make critical decisions that improve facility performance and reduce unnecessary cost overruns.

ASSET MANAGEMENT PROGRAM

PLAN FOR REPLACEMENT OF THE UTILITY FACILITIES AND UTILITY SYSTEM ASSETS

Please refer to the Five-Year Plan FY24 submitted by the Concessionaire.

ANTICIPATED CHANGES TO ENVIRONMENTAL PERMITTING REQUIREMENTS

- Potential change in wood boiler emissions permitting requirements:
 - The current particulate matter (PM) size allowed is 10 microns in Idaho, however some nearby states are transitioning to no more than 2.5 microns. If similar standards are adopted by Idaho, an upgrade may be required to meet regulations. MIEDI is tracking this and will propose a Capital Improvement to meet regulations as needed.
 - Idaho does not have a NOx emissions standard; however its neighboring states do. If adopted by Idaho, MIEDI may need to start reporting NOx emissions and upgrade the wood boiler emissions equipment. MIEDI is tracking this and will propose a Capital Improvement to meet regulations as needed.

ANTICIPATED CHANGES TO REGULATORY REQUIREMENTS

• Fire hydrant flow testing requirements are increasing in frequency from 10 years to 5 years.

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• MS4 stormwater permit – new dry weather testing requirement expected.

MAINTENANCE MANAGEMENT PROGRAM

OVERVIEW

The Maintenance Management Plan (MMP) assures the reliability and continuous operation of the Utility Systems on the U of I campus. This plan includes OEM recommendations, building environment experience, and industry best practices. Comprehensive, smart utility operations allows operators to trend and track performance resulting in continuous improvement in staffing plans, materials, PM schedules, and spare parts recommendations. The main purpose of the Preventative Maintenance Program is to:

- Protect and preserve assets
- Provide an organized, planned, and scheduled program
- Ensure safety and code compliance
- Support reliability of systems
- Minimize risk

Through the use of a maintenance program, MIEDI ensures that all preventive, predictive, and corrective maintenance measures are scheduled and performed on all systems. The following pages outline the approach to a unified program that meets the goals of the Operations Plan.

MIEDI is responsible for the utility production facilities and the Utility System assets including the preservation of these assets and ensuring they are optimized for the maximum lifespan possible. Preventative maintenance is a key aspect of this process, a practice that is part of our proactive approach to solving issues in their infancy.

The execution of a successful preventative maintenance program results in many benefits. Some of those benefits include improved systems reliability, reduced impact to campus end-user groups, enhanced safety, energy conservation, extended product and equipment life, extension of building life, and improved student satisfaction as a result of higher quality learning environments.

At times, measures are necessary to repair or replace campus elements that have failed unexpectedly. Defined as corrective maintenance, this portion of the Facilities Management workload is minimized as a result of preventative measures and planned system replacement that help ensure a reduction in downtime and a virtually seamless user experience.

BEST PRACTICES

The MIEDI team utilizes industry best practices and methods while conducting the preventative maintenance services on the MEP, FLS, and control systems of the utility system. Most of the PM program is executed by the onsite team, however the program is also augmented by qualified vendor-partners who share the same commitment to excellence and perform all maintenance activities in

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accordance with industry and OEM best practices and requirements. The PM Plan is continuously evaluated for improvements and will be updated as appropriate.

PROCEDURES

MIEDI ensures that all maintenance and repair activities associated with the Utility Systems are performed with an approved procedure. These procedures include in-depth detail, safety and regulatory guidelines, and Activity Hazard Analysis (AHA) information. These procedures document the exact steps to take when responding to emergency and routine situations with the critical systems.

SAFETY

A core belief of MIEDI is safety, providing a safe and clean work environment for our employees and customers. Every employee is required to meet the requirements for their site and encouraged to expand knowledge at every opportunity.

INSPECTIONS

Daily, monthly, quarterly, semi-annual, and annual inspections are identified and performed to assist in trending the operational integrity of mechanical, electrical, and control system equipment. This provides predictive analyses to assist in the prevention of failure from fatigued components. The operations team site staff self performs the vast majority of these inspections and uses subcontractors when needed for their expertise with associated systems. The delivery of these select services is contracted and approved by the MIEDI Manager in coordination with the University Facilities management team. All service activities use a specified and approved procedure.

STAFFING

McKinstry's technical teams supporting this program are highly trained and experienced in supporting district energy systems and other facilities. Subject matter experts are available to assist in site training, procedure development, troubleshooting, and emergency response, and in determining root cause analysis of a failure event. The support staff for the scheduled and corrective maintenance activities include the MIEDI site operations team and subcontractors.

Some of the services are complete through vendor-partnerships. MIEDI typically elects to subcontract services that are proprietary to infrastructure, code compliant, or when the client prefers OEM support. This ensures that the client benefits from our strengths and those of our partners, increasing our collective effectiveness. We measure and hold our vendor-partners accountable to the same high standards of integrity, professionalism, business performance, and cost control/delivery quality as we do of ourselves.

ATTACHMENT 1

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TRAINING AND DRILLS

MIEDI's standard for training includes establishing a training curriculum for onsite staff to increase preparedness during scheduled and non-scheduled events.

CMMS PROGRAM

MIEDI utilizes a Computerized Maintenance Management System (CMMS), InfoCentre, in conjunction with a local call center to manage all maintenance and corrective work orders associated with the Utility System. InfoCentre generates all PM work orders with task lists as well as any repair or corrective work orders. Each piece of equipment has a QR code affixed to it. Through the use of an InfoCentre enabled tablet and/or smartphone, QR codes placed on the equipment provide instantaneous access to nameplate information, open work orders associated with the equipment, historical data, maintenance checklist, relevant maps, common use components, operational manuals, and warranty dates.

Benefits of InfoCentre include:

- Work Order Management
 - o Ensures all issues are seen and addressed
 - Ensures a timely resolution for work orders
 - o Allows staff to organize and focus their workload to priorities
- Workflow and Operations
 - o Single point of ownership via CMMS Planner Scheduler
 - Predicts, builds, and standardize procedures
- Data Analytics and Reporting
 - Ensures data is accurate, actionable, and available
 - o Analysis of the utility systems data
 - o Data driven operations and maintenance
 - Measurable KPI reporting of service tickets
- Coordinator Support
 - o CMMS Planner Scheduler and support team owns the processing and triaging of issues
 - Streamlines the issue response and follow-up process
 - o Minimizes management and staff administrative time

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INFORMATIONAL APRIL 17-18, 2024

Figure 1. Example of a QR code for a transformer.

CRITICAL SPARE PARTS

The facility management team manages and maintains critical spare parts in a safe and clean environment. An initial identification of critical spare parts per system is being generated. This list will be evaluated periodically and updated as appropriate to support the critical systems and risk associated with the failure of certain parts. A Critical Spare Parts Log (CSPL) will be used to track the use and inventory of these parts. When a part is removed from inventory for use, a new part will be ordered and replaced in the spare parts inventory. The CSPL will be updated with the appropriate inventory count when the replacement part arrives.

REPAIRS AND CORRECTIVE MAINTENANCE

Repairs and corrective maintenance occurs using the same processes and staff used to support the scheduled maintenance defined in the PM Program. Although MIEDI makes every effort to ensure every system is reliable as possible by completing the required preventative maintenance, the systems still fail at times. Thus, repair and corrective maintenance is an important component of maintenance activities. The MIEDI team self performs repairs and corrective maintenance services on the electrical, mechanical, and control systems, as required, maintaining uninterrupted utility services to critical loads. If a

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subcontractor is required to make a repair, management will be notified and will provide approval before the team calls out the subcontractor and incurs costs.

These services include work, for example, that is identified from on-site staff observation during daily rounds, through preventative maintenance inspections, call outs/reports to the InfoCentre call center, and unforeseen work on equipment or systems because the critical infrastructure of the facility is impaired. Corrective maintenance activities supersede all other categories of maintenance.



The process of response is composed of five major steps, as shown below:

PROCEDURE DEVELOPMENT AND APPROVAL

The following flowchart outlines the process to create, approve, and make available for use any facility procedure used by MIEDI. Included is the review and update policy that is completed annually, or when a user suggests a need for changes.

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PREVENTATIVE AND PREDICTIVE MAINTENANCE

When performing any form of maintenance or repair on the Utility Systems, an approval process must be followed to ensure all responsible groups are aware of the activity and its scope/risk. The flowchart below outlines the workflow for activities used in performing PM and Corrective Maintenance activities.

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A written procedure is normally required prior to performing any type of preventative or corrective maintenance activity. In cases where a written procedure is not available, and there isn't sufficient time to develop and approve a method of procedure, special coordination is required with U of I Facility management and EHS personnel. This ensures that all hazards associated with the maintenance activity are evaluated and mitigated to acceptable levels prior to work being performed. As each case is different, parties involved need to determine appropriate timelines and methods for accomplishing the task.

Upon completion of a task that does not have a method of procedure, MIEDI begins the process of procedure development based on the approved interim process and the lessons learned from the work performed. This procedure development process will follow the same steps outlined earlier.

RISK LEVEL CLASSIFICATIONS

All maintenance activities carry an inherent risk when performed on systems. These are characterized using one of three levels of risk defined below:

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Level 1 – High Risk

This type of maintenance presents a high level of risk and has a partial anticipated impact to operations. It generally involves pre-planned maintenance during normal business hours which would remove or take offline any redundant infrastructure support.

Level 2 – Medium Risk

This type of maintenance presents a medium risk and minimal anticipated impact to the operations. It generally involves routine planned maintenance occurring outside of normal business which would remove or take offline any primary or redundant infrastructure support.

Level 3 – Low Risk

This type of maintenance presents a low level of risk and has no anticipated impact to operations. It generally involves routine planned maintenance on a system component that can be taken offline without impact to the production environment.

Risk Mitigation

In all cases, risk is mitigated by observing the following requirements prior to the performance of any work:

- The method of procedure must be followed without deviation and always be available for those performing the work.
- Methods of procedure must be reviewed, updated and approved by MIEDI management prior to any work being performed.
- The manager must be involved to coordinate necessary functions (e.g., lockout/tagout procedures) at least two weeks prior to the work being performed.
- The Change Management request must be fully approved prior to any work being performed.

PM PROGRAM EQUIPMENT TYPES AND FREQUENCY

The following information is intended to be a comprehensive guide but may not be all-inclusive. The allinclusive list of equipment, tasking, and frequencies is available in the CMMS database and will be updated from time to time as appropriate for the facility.

FREQUENCY KEY

Preventative Maintenance (PM) Task Orders are based on the following frequency schedule. The scheduled dates and maintenance task plans for performing maintenance are available in the CMMS. W – Weekly; M – Monthly; Q – Quarterly; SA – Semi-Annually; A – Annually; SST – Seasonal Start-Up; SSH – Seasonal Shut Down.

The below image represents an example of a single utility system asset and the option of PM Frequency to select service type and upload into the CMMS tool.

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PM PROGRAM STRATEGY

During the first year of operation, the historic 'run to fail' maintenance approach continued while assets were loaded into InfoCentre and PM and PdM maintenance programs were developed. As assets are loaded, InfoCentre autogenerates work orders associated with the asset's associated maintenance program. Maintenance in MIEDI's second year of operation continued the transition to preventative maintenance with the goal of reducing the number of corrective work orders. As the program continues to grow maintenance will transition from time based to predictive maintenance.



Every piece of equipment has its own maintenance Scope of Work requirement. Example Scopes of Work with schedules and tasks are provided below.

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Example PM Checklists

Transformers

- Daily/weekly/monthly
 - o Check for excessive heat, vibration, noise, and odors (electrical etc.)
 - o General checks for cleanliness of environment and cabinet
- Verify proper ventilation
- Annual
 - Complete daily/weekly/monthly
 - Check main foundation and mounting pads
 - Check all fuses (if applicable)
 - Perform thermal imaging, correcting any discrepancies
 - Perform verification of all critical alarming to the BMS
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed
- 3-year
 - o Oil sampling

Distribution Switchgear/Utility Switchgear

- Daily/weekly/monthly
 - o Check for excessive heat, vibration, noise, and odors (electrical etc.)
 - o General checks for cleanliness of environment and cabinet
 - o Verify proper ventilation
- Annual
 - o Inspection of panel instrumentation verifying operational status
 - o Clean the switchgear by vacuuming interior and wiping down exterior
 - Perform thermal imaging, correcting any discrepancies
 - Circuit breaker injection testing
 - o Perform verification of all critical alarming to the BMS
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed
- 5-year
 - Inspect physical, electrical and mechanical condition including evidence of moisture or corona
 - Inspect anchorage, alignment, grounding, and required area clearances
 - o Inspect bolted electrical connections for high resistance, torque as required
 - Confirm correct operation and sequencing of electrical and mechanical interlock systems
 - o Lubricate all moving current-carrying parts and on moving and sliding surfaces
 - o Verify correct barrier and shutter installation and operation
 - o Exercise all active components

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- o Inspect mechanical indicating devices for correct operation
- Verify that filters are in place and/or vents are clear
- o Perform visual and mechanical inspection of instrument transformers
- Inspect control power transformers for physical damage, cracked insulation, broken leads, and tightness of connections, defective wiring, and overall general condition.
- Verify that primary and secondary fuse ratings or circuit breakers match drawings.
- Verify correct functionality of draw-out disconnecting and grounding contacts and interlocks
- Resistance measurements
- o Insulation-resistance tests on each bus section, phase-to-phase, and phase-to-ground
- Over potential test on each bus section and each phase-to-ground
- o Insulation-resistance tests on control wiring with respect to ground
- Electrical tests on instrument transformers
- o Ground-resistance tests
- o Insulation-resistance test on control power transformers
- Verify correct function of control transfer relays

Chiller Plants

- Daily/weekly/monthly
 - o Check for excessive heat, vibration, noise, odors (electrical etc.), and leaks
 - General checks for cleanliness of environment, proper ventilation, and ambient temperature
- Quarterly
 - Complete daily/weekly/monthly inspections
 - o Check unit for proper operation
 - Check oil level and add as necessary
 - Check oil temperature
 - o Check dehydrator or purge system; remove water if observed in sight glass
 - Run system control tests
 - Check refrigerant charge/level add as necessary
 - Check compressor for excessive noise or vibration
 - o Check sensor and mechanical safety limits, replace as needed
 - Clean area around equipment
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed
- Annual
 - o Complete quarterly inspections
 - Clean dehydrator float valve
 - o Perform spectrochemical analysis of compressor oil, replace oil as necessary
 - o Replace oil filters and add oil as needed
 - o Inspect cooler and condenser tubes for leaks, clean screens as necessary

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- Inspect utility vessel vent piping and safety relief valve; replace as necessary
- o Inspect//clean the economizer(vane) gas line damper valve and actuator arm
- Run an insulation test on the centrifugal motor
- Perform verification of all critical alarming to the BMS
- Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed

Cooling Towers

- Daily/weekly/monthly
 - Check for excessive heat, vibration, noise, odors (electrical etc.), and leaks
 - General checks for cleanliness of environment, proper ventilation, and ambient temperature
 - Verify BMS status information
- Quarterly
 - Complete daily/weekly/monthly inspections
 - Check unit for proper operation
 - Remove any mineral and algae deposits
 - o Flush sump and remove all debris
 - o Check conditions and mounting of all valves
 - Exercise all valves
 - o Check spray eliminators
 - Check distributer pans for blockage
 - Verify fan blades are free of debris and move freely.
 - Check belt for condition and proper tension.
 - Verify that the bearings are in good condition. Lubricate as directed by OEM.
 - o Check the pulleys and motor mounts for tightness and proper alignment
 - o Inspect motor
 - Inspect disconnect switch
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed
- Annual
 - o Complete quarterly inspections
 - o Clean and wash down outside of cooling tower cell
 - Wash down interior walls and surfaces of cooling tower cell
 - Change oil in gear box (if applicable)
 - o Run cell fan in manual mode checking for vibrations and noises
 - Inspect all pipe hangers
 - Inspect all flanges and groove type connections for leaks
 - o Exercise all valving in condenser piping (use caution -do not shutdown plant)
 - Inspect all piping for signs of external corrosion
 - Perform verification of all critical alarming to the BMS

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Thermal Energy Storage Tank

- Daily/weekly/monthly
 - o Check for excessive vibration, noise, and leaks
 - General checks for cleanliness of environment, proper ventilation, and ambient temperature
- Semi-annual
 - Complete daily/weekly/monthly inspections
 - Check unit for proper operation
 - Verify temperature probe and float operations
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed
- Annual
 - o Complete semi-annual inspections
 - Verify fill operations from city water and local well.
 - Perform verification of all critical alarming to the BMS
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed

Pumping Systems

- Daily/weekly/monthly
 - o Check for excessive heat, vibration, noise, and odors (electrical etc.) And leaks.
 - General checks for cleanliness of environment, proper ventilation, and ambient temperature
 - Verify BMS status information
- Quarterly
 - Complete daily/weekly/monthly inspections
 - Check unit for proper operation
 - o Check for leaks on suction and discharge piping, seals, packing glands, etc.
 - Check pump and motor operation for vibration, noise, overheating etc.
 - Check alignment of pump and motor
 - Lubricate pump and motor
 - o Check operation of pressure gauges and run pressure testing
 - o Clean exterior of pump, motor and surrounding area
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed
- Annual
 - Complete quarterly inspections
 - Check alignment of pump and motor, adjust as necessary
 - Perform verification of all critical alarming to the BMS

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• Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed

Variable Frequency Drives

- Daily/weekly/monthly
 - Check for excessive heat, vibration, noise, and odors (electrical etc.).
 - General checks for cleanliness of environment, proper ventilation, and ambient temperature
 - Verify BMS status information
- Semi-annual
 - o Complete daily/weekly/monthly inspections
 - Component inspection
 - Perform a complete visual inspection of the equipment including wiring and major components.
 - Inspect all wiring for insulation breakdown or damage.
 - Inspect all terminal connections for tightness.
 - o Electrical inspection
 - o Rectifier tests and dc bus capacitor tests when applicable.
 - Check all voltages and motor amperages.
 - Calibrate frequencies
 - Document all parameter readings.
 - Check dc link inductor.
 - Measure motor control card resistors.
 - General maintenance
 - o Change filter when applicable
 - o Verify the operation of alarm circuits and specific restart capabilities.
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed
- Annual
 - Complete semi-annual inspections
 - Perform verification of all critical alarming to the BMS
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed

Air Compressors

- Daily/weekly/monthly/quarterly
 - Check for excessive heat, vibration, noise, and odors (electrical etc.)

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- General checks for cleanliness of environment, proper ventilation, and ambient temperature
- Check oil level
- o Drain condensation
- o Check filters
- General checks for cleanliness of environment, proper ventilation, and ambient temperature
- Annual
 - o Complete daily/weekly/monthly/quarterly inspections
 - Check filters/replace if needed
 - o Inspect all connections and lines for damage or air leaks
 - Change compressor oil
 - Inspect/replace drive belt
 - o Grease all points
 - o Calibrate gauges
 - Perform functional test of high and low cutoff/cut on
 - Provide written report and list any recommendations including discrepancies and corrective actions scheduled/performed

GOALS FOR THE UTILITY SYSTEM

1 YEAR SHORT TERM LIST OF GOALS AND EXPECTATIONS

Steam System

- Start base loading the new absorption chiller to support campus chilled water needs and generate additional power via the steam turbines
- Develop operator training program for steam turbines
- Continue uploading assets to the CMMS and build maintenance programs
- Complete the following Capital Improvement Projects:
 - o 23/1-001 Energy Plant Catwalk, Ladder, and Safety Upgrades
 - o 23/1-006 Water Treatment Improvements, Project I
 - o 23/1-007 Wood Fuel Handling System Upgrades

Chilled Water System

- Start base loading the new absorption chiller to support campus chilled water needs and generate additional power via the steam turbines
- Repair the damage to the exterior of the TES tank
- Complete the following Capital Improvement Projects:
 - o 2022-15 SCCP Chiller Replacement and Improvements
- Continue uploading assets to the CMMS and build maintenance programs

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Electricity System

- Complete the following preventative maintenance items:
 - Continue and expand thermography program
 - o Start transformer oil sampling
- Establish plan to complete the following maintenance:
 - Dissipation factor (Tan Delta) testing on underground distribution
 - o Partial discharge testing on underground distribution
 - Switch exercising
- Complete the following Capital Improvement Projects:
 - o 23/3-027 Kibbie Dome Building Electrical Service Replacement
- Continue uploading assets to the CMMS and build maintenance programs

Domestic Water System

- Replace the Water Systems SCADA through Idaho DPW Project 21-257 SCADA Systems Upgrades and Improvements
- Establish the water loss control program to include:
 - o Coordinating Planned Outages with the University
 - o Level of current losses in the system
 - o Develop Capital Improvements to address losses where feasible
- Complete the following Capital Improvement Projects:
 - o 2022-12 Domestic Waterline Replacement Campus Dr. to Blake Ave.
- Continue uploading assets to the CMMS and build maintenance programs

Sanitary Sewer System

• Continue uploading assets to the CMMS and build maintenance programs

Stormwater System

• Continue uploading assets to the CMMS and build maintenance programs

Reclaimed Water System

- Replace the Water Systems SCADA through Idaho DPW Project 21-257 SCADA Systems Upgrades and Improvements
- Establish the water loss control program to include:
 - o Coordinating Planned Outages with the University
 - Level of current losses in the system
 - o Develop Capital Improvements to address losses where feasible
- Continue uploading assets to the CMMS and build maintenance programs

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Compressed Air System

- Continue uploading assets to the CMMS
- Expand predictive maintenance program

5 YEAR LIST OF STRATEGIC GOALS

Steam System

- Fully implement the preventative maintenance program for all equipment in the system.
- Completely build out the metering of steam and condensate for each of the end users on the system.
- Steam and condensate flow models to support distribution upgrades and pipe replacements.

Chilled Water System

- Fully implement the preventative maintenance program for all equipment in the system.
- Chilled water flow model to support capacity and distribution upgrades.
- Completely build out the metering of temperature and flows for each of the end users on the system.

Electricity System

- Fully implement the preventative maintenance program for all components in the system.
- Completely build out electrical metering for each of the end users on the system.
- Secure backup electric generator(s) to support Unplanned Outages.

Domestic Water System

- Fully implement the preventative maintenance program for all machines in the system.
- Completely build out the metering of domestic water for each of the end users on the system.
- Implement the water loss control program.

Sanitary Sewer System

- Fully implement the preventative maintenance program for all components in the system.
- Update maps.

Stormwater System

- Fully implement the preventative maintenance program for all components in the system.
- Update maps.

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Reclaimed Water System

- Fully implement the preventative maintenance program for all components in the system.
- Implement the water loss control program.

Compressed Air System

- Fully implement the preventative maintenance program for all equipment in the system.
- Identify all end users of the system.

PLAN TO KEEP SCADA NETWORK COMPONENTS UP TO DATE

The Domestic Water SCADA network is obsolete and needs to be replaced. It is scheduled to be replaced in an Idaho DPW project DPW21-257. This project is in the later stages of design and is expected to be completed by the end of the year.

TREATMENT AND CHEMICAL PLAN

WATER SYSTEMS

Water Systems are monitored and sampled frequently to ensure drinking water standards are being met. Test results for water systems are submitted to Idaho DEQ and are typically available online and as part of the annual Consumer Confidence Report (CCR). CCRs are available on the university's website at https://www.uidaho.edu/dfa/division-operations/utilities.

The below tests are conducted for each of the water systems:

Domestic Water

- Annual
 - Well 3: DBP2 Stage 2 samples twice a year
 - o Well 3: Nitrate sample
 - Well 4: DBP2 Stage 2 samples twice a year
 - o Well 4: Nitrate sample
 - o Twenty lead and copper samples at predetermined locations
- Monthly
 - o Minimum of 10 coliform bacteria samples
- Weekly
 - o None
- Daily/Continuous
 - o Total chlorine residuals

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Reclaimed Water

- Annual
 - o None
- Monthly
 - o Nitrate sample
 - o Nitrite sample
 - Total nitrogen sample
 - o Total phosphorous sample
- Weekly
 - Three coliform bacteria samples
 - o E-Coli bacteria sample
- Daily/Continuous
 - o Total chlorine residuals

Sewer

- Annual
 - o None
- Monthly
 - o None
- Weekly
 - o None
- Daily/Continuous
 - o None

STEAM AND CHILLED WATER

Feedwater and condensate is monitored and tested frequently at the Energy Plant as any deviation needs to be corrected quickly to prevent damage to the boilers. The chilled water loop is tested twice a year for contaminants as it is a closed loop system. Make-up water to cooling towers is tested by Kurita continuously and a chemical treatment program is in place to prevent corrosion, scaling, fouling, and biological contamination.

The steam system is protected from excessive corrosion using a triple acting amine. To provide chemistry consistently to the steam and condensate systems, there is a porta-feed tank that stores several months' worth of amine. The tank is equipped with a chemical injection pump, plastic tubing and an injection quill to deliver the amine to the boiler feedwater. If there is a failure of the injection pump, tubing, or quills; there are spare parts on hand at the Energy Plant. If amine is unable to be ordered or delivered from the current chemical supplier, there are other chemical suppliers that could be used in the interim.

The make-up water, boiler feed water, and chilled water systems require chemicals to purify water, prevent scaling, inhibit corrosion, and control biological growth. To provide chemistry consistently to these systems, there are porta-feed tanks that store large quantities of chemical to be used for long

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time periods. These porta-feed tanks range in size from 100 gallons to 400 gallons depending on the chemical used. The tanks are equipped with chemical injection pumps, that use plastic tubing and injection quills to deliver the chemical to the desired location. If there is a failure of the injection pumps, tubing, or quills; there are spare parts for each system on hand at the Energy Plant. If chemicals were unable to be ordered or delivered from the current chemical treatment company, there are other chemical companies that could be used in the interim.

The below tests are conducted for the Steam and Chilled Water systems:

Steam and condensate

- Annual
 - o None
- Monthly
 - o None
- Weekly
 - o None
- Daily
 - Water softener testing six times per day
 - o Boiler feedwater and condensate testing

Chilled Water

- Annual
 - o Chilled water loop testing twice per year
- Monthly
 - o None
- Weekly
 - o None
- Daily
 - o Continuous monitoring for cooling tower make-up water

CRITICAL SPARES

ELECTRIC SYSTEM

Transformers	Size (kVA)	High Side (V)	Low Side (V)	Qty
Square D	1500	13200/7620	4160/2400	1
Square D	225	13200/7620	208/120	1
Square D	75	13200/7620	208/120	1
Westinghouse	225	13200/7620	208/120	1
Square D	500	13200/7620	4160/2400	1
Square D	300	13200/7620	208/120	1
Square D	112.5	13200/7620	208/120	1
Westinghouse	500	13200/7620	480/277	1
ABB	750	13200/7620	480/277	1
Square D	150	13200/7620	208/120	1

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Federal Pacific	112.5	480	208/120	1
General Electric	75	4160/2400	240/120	1
General Electric	75	4160/2400	240/120	1
General Electric	75	4160/2400	240/120	1
Spokane Transformer	50	4160/2400	240/120	1
General Electric	50	4160/2400	240/120	1
Square D	75	13200/7620	240/120	1
Square D	75	13200/7620	240/120	1
Square D	75	13200/7620	240/120	1
Square D	50	13200/7620	240/120	1
Square D	50	13200/7620	240/120	1
T&R Electric Supply Co	167	4160/2400	480/277	1
General Electric	50	4160/2400	480/277	1
Prolec	100	4160/2400	240/120	1
General Electric	250	24940/14400	4160/2400	1
Square D	50	13200/7620	240/120	1
McGraw-Edison Power Systems	37.5	4160/2400	240/120	1
General Electric	15	14400/24940	240/120	1
Westinghouse	10	unknown	unknown	1
McGraw-Edison Power Systems	25	4160/2400	240/120	1
McGraw-Edison Power Systems	15	4160/240	240/120	1
General Electric	25	13200/7620	240/120	1
Spokane Trans. Co.	500	13200/7620	208/120	1
Switches	Model	Operation Type		Quantity
S&C	PMH-9	Power operated		1
S&C	PMH-9	Manual		0
GS Hevi-duty/Nelson				1

WATER SYSTEMS

Description	Qty
450 HP well motor	1
Sodium hypochlorite dosage pump for the wells	1
12" repair coupler	2
10" repair coupler	3
8 " repair coupler	3
6 " repair coupler	3
6 " repair coupler	2
12" C-900 water pipe	20'

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10" C-900 water pipe	40'
18" C-900 water pipe	40'
12" C-900 water pipe	40'
12" C-900 water pipe	60'
Blower motor for sodium hypochlorite generator	1
Levelite #GLL100-501F Prob Assembly w/ Polysulfon	1
SENSOR TEMP 4-20 MA 3/4 in MPT	1
SWITCH TEMP 131 DEG. SET POINT CPVC TYPE 1, 1/2	1
VALVE SOLENOID BRS 2-WAY 1/2 in 120 VAC, ASCO #82	1
VALVE SOLENOID, 3 WAY, 120 VAC, 1/4 COMPRESSION	1
6" air relief cla-val for well	1
6" domestic fill valve Cla-Val and 1/4" pilot valve	1
8" reclaimed valve Cla-Val and pilot valve	1
5ft burial fire hydrant	1

ENERGY PLANT

The following table includes examples of major spare parts, but minor components such as seals, pipe, fittings, gaskets, etc. are not included for brevity.

Description	Qty
Wood Boiler	
Hydraulic Motor (Walking Floor Replacement)	1
Keith Walking Floor Bearings	91
Keith Walking Floor Gaskets	200
Snuggler Gearbox/Motor Assembly for Spike Roller	1
Lincoln 30 HP Motor for Tipper Hydraulic Pump	1
Baldor 10 HP Motor/Gearbox for Walking Floor or Primary Bucket Elevator	1
Century 20 HP Motor for Truck Dump Exit Auger	1
Lincoln 30 HP (Plant Tipper Hydraulic Pump)	1
Hydraulic Oil Filter Unit	1
Truck Dump Exit Auger Motor	2
Truck Dump Exit Auger Pump	2
Boiler Bucket Bolts	50
Durabucket 10-11X6 SS	11
Durabucket 12-14X8 SS	16
WEG 7.5 HP Motor (Boiler Bucket)	1
Baldor 10 HP Motor (Walking Floor/Primary Bucket Elevator)	1
Terrell 90' Gearbox Assembly for Silo Sweep Auger (used)	1
Small Silo Sweep Auger Gearbox	2
Federal Gear Sweep Auger Gearbox	1
Linkbelt 100 Rivet Chain 10'	1

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Flexco Skirting Assembly	4
5"X11" Conveyor Insert (Silo Entry)	5
4"X10 1/2" Conveyor Insert	0
4" Insert Pedestal (Conveyor)	10
4"X32" Conveyor Insert	12
5" Spiral Conveyor Insert	1
Grate Drive Push Rod	3
Grate Cross Bar Push Rod with Nut	11
3/16"X5" Weld on Steer Horn	15
Magnatrol Level Control	1
Cleveland Vibrator/Control Box	1
2B250 Sheave with Q1X3/4" Bushing	1
Grate Drive Pump	1
Overs Belt Replacement	1
Adjustable Bearing Shaft for Cross Conveyor	1
Flexco Belt Connectors	5
Half Link 50 Size Chain	3
Half Link 60 Size Chain	4
Half Link 100 Size Chain	13
Master Link 50 Size Chain	5
Master Link 60 Size Chain	7
Master Link 80 Size Chain	2
Master Link 100 Size Chain Double Heavy	1
Master Link 100 Size Chain	1
Dodge TXT525 Gearbox	2
Dodge HXT415BS Gearbox	1
Dodge HXT415CS Gearbox (Truck Dump Exit)	1
Dodge TXT425AT Gearbox	1
Falk 4115J25C Gearbox	1
Falk 2107J25 Gearbox	1
Falk 5203J25A Gearbox	1
Falk Gearbox (Unknown Model)	1
Doerr 200421EH861 Gearbox	1
Falk Gearbox Bracket	0
Browning Series 3000 Leveling Screw Motor and Gearbox	2
Browning Series 3000 Leveling Screw Motor and Gearbox	1
Magnatrol Level Control	1
Corrugated Trough Cover	2
Belt Pulling Bracket (in house fabrication)	3
1/2" Shoulder Nut (Sweep Auger Track)	40
1/2" Shoulder Nut (Sweep Auger Track Bagged)	100

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Sweep Auger Hack 13 Track Sprocket 1 Track Sprocket Shaft 1 Track Sprocket Drive Shaft Coupler 1 B71 Classifier/Primary Bucket Elevator Screw 8 B81 Boiler Feed Bucket Elevator 4 B105 Primary Bucket Elevator 4	Sweep Auger Track		15
Track Sprocket 1 Track Sprocket Shaft 1 Track Sprocket Drive Shaft Coupler 1 B71 Classifier/Primary Bucket Elevator Screw 8 B81 Boiler Feed Bucket Elevator 4 B105 Primary Bucket Elevator 4	Treak Corealist		1
Track Sprocket Shaft 1 Track Sprocket Drive Shaft Coupler 1 B71 Classifier/Primary Bucket Elevator Screw 8 B81 Boiler Feed Bucket Elevator 4 B105 Primary Bucket Elevator 4	Track Sprocket		1
Irack Sprocket Drive Shart Coupler 1 B71 Classifier/Primary Bucket Elevator Screw 8 B81 Boiler Feed Bucket Elevator 4 B105 Primary Bucket Elevator 4	Track Sprocket Shart		1
B/1 Classifier/Primary Bucket Elevator Screw 8 B81 Boiler Feed Bucket Elevator 4 B105 Primary Bucket Elevator 4	Track Sprocket Drive Shaft Coupler		1
B&I Boller Feed Bucket Elevator 4	B/1 Classifier/Primary Bucket Elevat	or screw	8
I BILLS Primary Bucket Flevator	B81 Boller Feed Bucket Elevator		4
Brost Finnary Bucket Elevator 4	BIOS Primary Bucket Elevator		4
BX120 Old OVers Belt 0	BX120 Old Overs Belt		0
5VX 900 Sweep Auger 6	SVX 900 Sweep Auger		6
SVX860 Leveling Screw 2	5VX860 Leveling Screw		2
30VX630 Unclassified/Classified Belt 4	30VX630 Unclassified/Classified Belt		4
Bolt on Conveyor Belt Cleat 3	Bolt on Conveyor Belt Cleat		3
Sweep Auger Hydraulic Pump Hose 2	Sweep Auger Hydraulic Pump Hose		2
Sweep Auger Hydraulic Pump Gearbox Hose 2	Sweep Auger Hydraulic Pump Gearb	ox Hose	2
Make-A-Belt (Links and Pins) 20'	Make-A-Belt (Links and Pins) 20'		1
B53 Metering Bin Screw 3	B53 Metering Bin Screw		3
8"X1/2" Skirtboard 50' 1	8"X1/2" Skirtboard 50'		1
17" Boiler Bucket Elevator Belt 27'	17" Boiler Bucket Elevator Belt 27'		1
16" Conveyor Belt (used) 20' 1	16" Conveyor Belt (used) 20'		1
6' Weld on Lagging Bracket 15	6' Weld on Lagging Bracket		15
6'X5" Lagging Insert 5	6'X5" Lagging Insert		5
WD 110 Chain Links 76	WD 110 Chain Links		76
WD 110 Rivet 13	WD 110 Rivet		13
2B 136 Sheave 1	2B 136 Sheave		1
2TB 184 Sheave 1	2TB 184 Sheave		1
Century 20 HP Motor (Truck Dump Exit Auger) 1	Century 20 HP Motor (Truck Dump E	xit Auger)	1
Track Sprocket Motor 0	Track Sprocket Motor		0
Dorris 107TR25 Gearbox Assembly 1	Dorris 107TR25 Gearbox Assembly		1
Silo Exit Auger Part 1 1	Silo Exit Auger Part 1		1
Silo Exit Auger Part 2 1	Silo Exit Auger Part 2		1
Metering Bin Augers 1	Metering Bin Augers		1
Ash Augers 1,2,3 1	Ash Augers 1,2,3		1
Ash Auger 4 1	Ash Auger 4		1
PMV 8 Rotary Valve and Sprocket (Ash Hopper #1) 1	PMV 8 Rotary Valve and Sprocket (A	sh Hopper #1)	1
Electrim 5 HP Motor (Ash Hopper #4) 2	Electrim 5 HP Motor (Ash Hopper #4)	2
BX63 Auger 4	BX63 Auger		4
B64 Ash Hoppers 9	B64 Ash Hoppers		9
B67 Silo Exit/Ash Conveyor 3	B67 Silo Exit/Ash Conveyor		3
B76 Ash Elevation Conveyor 4	B76 Ash Elevation Conveyor		4
Energy Plant	Energy Plant		
Feedwater Pumps	Feedwater Pumps		

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SKF 6206 JEM Feedwater Pump	6
13510 SKF Feedwater Pump	6
12118 SKF Feedwater Pump	4
6205 ZZC3 Kovo Feedwater Pump	3
B33723 John Crane Feedwater Pump	3
Loaders	-
Set of 950 CAT Loader Tire Chains	1
Hydraulic Oil Filter #144-0832	1
Hi Efficiency Hydraulic Oil Filter #225-4118	1
Advanced HE Hydraulic Oil Filter #1G8878	1
Fuel Filter #1R0762	2
Fuel Water Separator #326-1644	1
Motor Oil Filter #1R1807	3
Cab Air Filter #7X-6041	6
Engine Air Filter Outer #245-6375	4
Engine Air Filter Inner #245-6376	3
Oil Filter #1749 (Hough)	0
Oil Filter #1970 (Hough)	0
Fuel Filter #3405 (Hough)	0
Coolant Filter/Conditioner #4071 (Hough)	0
Electric Motors	
Electric Motors Baldor 7 1/2 HP	1
Electric Motors Baldor 7 1/2 HP Century 1.3 HP Pool & Spa Motor	1 2
Electric Motors Baldor 7 1/2 HP Century 1.3 HP Pool & Spa Motor Century 3 HP	1 2 2
Electric Motors Baldor 7 1/2 HP Century 1.3 HP Pool & Spa Motor Century 3 HP Dayton 1 HP	1 2 2 1
Electric Motors Baldor 7 1/2 HP Century 1.3 HP Pool & Spa Motor Century 3 HP Dayton 1 HP Dayton 3 HP (old UF Fan)	1 2 2 1 1
Electric Motors Baldor 7 1/2 HP Century 1.3 HP Pool & Spa Motor Century 3 HP Dayton 1 HP Dayton 3 HP (old UF Fan) Dayton 3 HP	1 2 2 1 1 1 1
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HP	1 2 2 1 1 1 1 1
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102	1 2 2 1 1 1 1 1 1 1
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HP	1 2 2 1 1 1 1 1 1 1 1 1 1
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HP	1 2 2 1 1 1 1 1 1 1 2
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HPGE 1/2 HP	1 2 2 1 1 1 1 1 1 1 2 0
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HPGE 1/2 HPGE 1/2 HPGE 1/3 HP	1 2 2 1 1 1 1 1 1 1 2 0 0 0
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HPGE 1/2 HPGE 1/3 HPLeeson 3/4 HP	1 2 2 1 1 1 1 1 1 1 1 2 0 0 0 1
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HPGE 1/2 HPGE 1/3 HPLeeson 3/4 HPLeeson 1 1/2 HP	1 2 2 1 1 1 1 1 1 1 2 0 0 0 1 1 0
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HPGE 1/2 HPGE 1/3 HPLeeson 3/4 HPLeeson 1 1/2 HPLincoln 1/3 HP	1 2 2 1 1 1 1 1 1 1 2 0 0 0 1 0 1 0 1 1 0
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HPGE 1/2 HPGE 1/3 HPLeeson 3/4 HPLeeson 1 1/2 HPLincoln 1/3 HPLeroy Somer 1 HP	1 2 2 1 1 1 1 1 1 1 2 0 0 0 1 0 1 0 1 1 0 1 1 1
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HPGE 1/2 HPGE 1/3 HPLeeson 3/4 HPLeeson 1 1/2 HPLincoln 1/3 HPLeroy Somer 1 HPMagnatek 10 HP	1 2 2 1 1 1 1 1 1 1 1 2 0 0 0 1 0 1 0 1
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HPGE 1/2 HPGE 1/3 HPLeeson 3/4 HPLeeson 1 1/2 HPLincoln 1/3 HPLeroy Somer 1 HPMagnatek 10 HPSeries 2000	1 2 2 1 1 1 1 1 1 1 1 2 0 0 0 1 1 0 1 1 1 1
Electric MotorsBaldor 7 1/2 HPCentury 1.3 HP Pool & Spa MotorCentury 3 HPDayton 1 HPDayton 3 HP (old UF Fan)Dayton 3 HPDelta 0.5 HPDFT 100 L4-102Dorris 107TR25 1/2 HPElektrim 5 HPGE 1/2 HPGE 1/3 HPLeeson 3/4 HPLeroy Somer 1 HPMagnatek 10 HPSeries 2000Taco 1/3 HP Motor/Pump Assembly	1 2 2 1 1 1 1 1 1 1 1 1 2 0 0 0 1 1 0 1 1 0 1 1 1 1

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Vangaurd 2 HP	1
Magnatek 7.5 HP	1
Elektrim 30 HP (FD Fan)	1
Magnatek 1/2 HP	1
40 HP 3000rpm	0

STAFFING PLAN



SHIFT STRUCTURE

A standard workday shall be on the basis of eight (8) hours per day for the management team and maintenance team, with twelve (12) hours per day for the operators.

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Employees Shift Start / Stop times

Management	8:00 am – 5:00 pm
Engineering	8:00 am – 5:00 pm
Non District Energy Plant	8:00 am – 5:00 pm
District Energy Plant	
Day Shift (1)	9:00 am – 9:00 pm
Night Shift (2)	9:00 pm – 9:00 am

- 8-hour will be the standard Monday through Friday, 8am to 5pm
- 12-hour will consist of 4 shifts (Operators only)
 - D1 (days 1) primary days Sunday, Monday, Tuesday
 - N1 (nights 1) primary nights Sunday, Monday, Tuesday
 - D2 (days 2) primary days Thursday, Friday, Saturday
 - N2 (nights 2) primary nights Wednesday, Thursday, Friday
 - o With days swing day on Wednesdays
 - With nights swing day on Saturday

For shift tie in purposes, employees will be required to participate in a brief pass down at the end of shift.

Overtime shall be paid for non-exempt employees for all hours worked over 40 per work week and over 8 hours per day at 1.5 times the rate of pay.

When Daylight Savings and Standard Time Changes occur, during a shift, employees will be paid for actual hours worked.

ON CALL POLICY

Staff who are on-call will be identified, selected, and added to the UES department on-call list based on their ability to provide technical, emergency, and critical support to the UES site. A minimum of one UES staff will be identified and scheduled on a weekly rotating schedule.

EXPECTATIONS AND PRACTICES

- On-call staff are expected to response and cover all assigned shifts, perform task in a highly productive, efficient and professional manner.
- On-call weekly schedule:
 - o Weekdays (Mon-Fri): 5:00 pm to 8:00 am, daily

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- o Weekends (Sat-Sun): 12:00 am to 11:59 pm, daily
- Response & Access: The on-call staff must have access to a phone and be available during the shift to respond to the emergency/alarms. Failure to respond within the required response times will not be a basis for disciplinary action but may affect future on-call scheduling.
 - Response Requirement: On-call staff must respond within 60 minutes.
 - Weekly Performance Bonus: A weekly performance bonus will be paid if the on-call person regularly responds to requests within 60 minutes.
- Trading Shifts: The on-call staff must coordinate with his or her lead/supervisor to trade on-call shifts.
- Drug and Alcohol Use: The on-call staff should refrain from the use of drugs and alcohol while on-call.

COMPENSATION

- Staff participating in the on-call rotation will receive compensation for time worked and are eligible for a weekly performance bonus as follows:
 - Time Worked: The employee will be paid for shall receive a minimum of two hours of pay if called to work or shall receive pay for actual hours worked, whichever amount is greater.
 - Holiday Pay: Holiday pay plus time worked (New Year's Day, Martin Luther King Jr Day, Memorial Day, 4th of July, Labor Day, Thanksgiving & Day After, and Christmas)
 - Weekly Performance Bonus: \$200 for each on-call week
 - Eligibility: The weekly performance bonus will be paid if the on-call person regularly responds to requests within 60 minutes.

Time Worked policy only applies to only non-exempt employees.

POSITION JOB DUTIES AND RESPONSIBILITIES

Job duties and responsibilities are available upon request.

EMPLOYEE DEVELOPMENT PLAN

McKinstry is committed to providing opportunities and support to employees as they build a career with the company and has established programs to foster growth and development. Although McKinstry is committed to providing both the opportunities and the tools, employees are ultimately responsible for managing their careers.

Employee Orientation – Ensuring new hires experience a smooth transition personally and professionally into the company is very important to McKinstry. New Hires participate in comprehensive Activation and Initiation sessions to further their knowledge of McKinstry's mission, vision, and values, and are provided with an introduction to the company's systems and tools.

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MCKINSTRY UNIVERSITY

McKinstry University, or McKU, provides access to numerous training and development programs with topics ranging from safety to leadership, from technical to soft skills.

McKinstry University courses are broken down into five "Colleges": Business, Leadership, McKinstry Tools, Professional Development, and Technical Training. These courses provide pathway for employees to improve performance in their current role and an opportunity for personal and professional development that supports overall career growth.

CREDENTIALS, CERTIFICATIONS, AND LICENSES

This section is under development.

DIVERSITY AND INCLUSION

Our focus on diversity and inclusion at McKinstry is longstanding, and McKinstry is deeply committed to advancing equity and inclusion in our company and in the industry overall. Addressing the equity crisis is a top-line aspiration – one of only three – in our guiding 2025 plan. As part of this effort, we have developed a comprehensive five-year plan focused around advancing racial equity, strengthening inclusive jobsite culture, upskilling our people, building personal ownership, driving equity outcomes in local communities, and demonstrating durability and commitment. In December, we became a leading signatory to the Washington Employers for Racial Equity commitment to advance racial equity across Washington and beyond.

To complement and build upon our existing efforts, we have organized our efforts into three focus areas:

Inclusive culture: We will foster a culture of inclusion and belonging at McKinstry that represents the mosaic of diversity in the communities where we live and work. Our culture of inclusion will ensure that our people are treated fairly and respectfully, have equal access to opportunities and resources, are empowered to bring their full authentic selves to work each day and experience a sense of belonging within the McKinstry family. We will demonstrate authenticity and durability of this commitment to our people. This includes employee engagement, talent development and acquisition, internal culture building, goal setting and accountability and values alignment.

Industry influence: We will influence our industry, including within the trades, to diversify jobsites and the skilled labor pipeline. We will leverage our relationships with associations, clients and partners to drive meaningful and durable actions and demand that jobsites provide safe, inviting, respectful and equitable work environments for all. Our enhanced partnerships with disadvantaged businesses will help nurture an increase in diverse organizations to lead and thrive in our industry. This includes industry and trade association partnerships, union collaboration, procurement and supply chain, brand building and client engagement.
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Community impact: We will make a substantial impact in our communities by more strategically aligning our community engagement and philanthropy to drive equity. We will leverage our time, talent and resources to evaluate and advance equity work within our existing community priorities of education, the environment and nurturing children. We will leverage equity as a critical lens to evaluate how and where we engage. This includes philanthropy, community service, educational outreach and community partnerships.

We must do more to achieve our dream of a fair, just and equitable society for all. As a company, we will do our part and contribute to a legacy of which we can all be proud.

RATES OF PAY

Premium/shift differential pay is based on standard workday schedules and the date of start time of the shift. For the twelve (12) hour workdays, day shift (1) will be paid at the regular rate, and night shift (2) at your regular rate plus 5% shift differential.

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UNIVERSITY OF IDAHO - UTILITY SYSTEM - UNCAPPED O&M

MOSCOW ID ECO DISTRICT I, LLC

Technical Team		
POSITIONS	Hourly Billable Rate	Overtime Billable Rate
Facilities Director	\$ 144.09	\$ 216.14
Project Manager	\$ 120.44	\$ 180.66
Project Engineer	\$ 106.18	\$ 159.28
Energy Plant Manager	\$ 120.44	\$ 180.66
Energy Plant Supervisor	\$ 95.85	\$ 143.78
Energy Plant Boilermaker	\$ 84.50	\$ 126.74
Energy Plant Operator	\$ 66.35	\$ 99.52
Operator Apprentice	\$ 53.09	\$ 79.63
Water Systems Manager	\$ 120.44	\$ 180.66
Water Systems Operator	\$ 66.35	\$ 99.52

MIEDI

General Support Positions

POSITIONS	Hourly Billable Rate	Hourly Billable Rate
Purchasing Manager	\$ 140.78	\$ 211.16
Senior Purchasing Agent	\$ 112.60	\$ 168.90
Purchasing Agent	\$ 79.92	\$ 119.88
Safety Program Director	\$ 161.36	\$ 242.04
Safety Program Manager	\$ 135.58	\$ 203.37
Senior Admin Support	\$ 128.58	\$ 192.80
Admin Support	\$ 108.95	\$ 163.43
Senior Project Accountant / Financial Analyst	\$ 159.69	\$ 239.53
Project Accountant / Financial Analyst	\$ 103.94	\$ 155.91

NOTES:

* Rates include labor burden for items such as: FICA, FUTA, SUTA, workers comp, medical, 401k, life insurance & PTO
 * Rates are adjusted at the start of each year to reflect raises and cost of living (CPI-W, Mountain).
 * Rates do not include travel, subsistence, or other travel expenses.
 SUBCONTRACTORS / MATERIALS
 Subcontractors and materials will be marked up at a rate of 13.5% for overhead and profit on these costs.
 Effective 01/01/23 - 12/31/23

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ONE AND FIVE YEAR STAFFING PLANS

Continuing to maintain the current number of resources to deliver Operations and Maintenance is key to stabilization efforts and will result in no changes to the staffing level plan in one year.

- Operations team (working 12-hour shifts) of the district energy plant
- Maintenance team of the district energy plant, chilled water system, and other utility systems
- Water system team for the four water utility systems
- Project manager for capital projects
- CMMS Planner/Scheduler
- Local management team overseeing the program delivery

As capital projects get approved that brings new technology in utility system/equipment infrastructure and control systems that provide data analytics, an opportunity to adjust our staffing level plan in year 5 will present itself.

INCIDENT RESPONSE

SUMMARY

A set of policies and procedures to help guide facility personnel responding to incidents of varying severity that, if not properly managed, could significantly impact the facility operations, their people, or their ability to function productively. Used both in preparation for and in response to major incidents and should be closely reviewed by major facility stakeholders and team members who would participate in the response to an incident. The plan is designed to provide guidance on how to react to a variety of crisis or disaster scenarios with the intent of providing a safe, timely, and sound resolution that minimizes business impact.

DEFINITIONS

- Incident A situation of extreme difficulty, which is outside the scope of prepared responses.
- **Disaster** An event that results in severe damage or injury.
- Incident Response Plan This is the detailed plan of action on what to do during an incident.
- Plan Implementation Procedures These are the procedures (EOPs, MOPs, SOPs, and APs) that are used to put the plan into effect.
- **Response Testing and Training** These procedures apply to the continued maintenance, testing and training requirements of the plan.
- **Task Force Leader** is the operational leader for the level of business leadership represented by the task force. The Task Force (TF) leader is responsible for initiating the task force, conducting the meetings, and communicating TF status, findings, and actions to senior leadership. The TF leader is responsible for ensuring the TF members are prepared, to include being trained and proficient with their responsibilities.

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- **Facility Representative** is the TF member responsible for information regarding facility status, to include utility and structural status following a catastrophic physical event.
- **Operations Representative** is the TF member(s) responsible for determining the near and long-term impacts of the critical event on normal operations, information regarding their area of operations, and the employees performing them.
- **Safety Representative** is the TF member responsible for information regarding the overall work environment safety, medical response events or investigations into those type of events.
- **HR Representative** is the TF member responsible for information regarding the broader situation, actions of other organizations, and the impact on our employees.
- Legal Representative is the TF member responsible for consuming the local, state, and federal response guidance and distilling into actionable intelligence for the development of response plans.
- Finance & Accounting Representative is the TF member responsible for information regarding the broader financial picture, to include impacts on the financial markets affecting McKinstry businesses, customers, vendors, and subcontractors.
- Information Technology Representative is the TF member responsible for information regarding the health and security of McKinstry's communications infrastructure and critical software platform performance.
- **Communications Representative** is the TF member responsible for capturing TF meeting minutes, drafting TF communications for approval, and coordinating timing of communications release with other internal and external teams.
- **Supply Chain Representative** is the TF member responsible for information regarding the health of the overall supply chain, to include any short- or long-term forecasted supply chain disruptions of critical personal protective equipment, transportation of goods, or job site tools and equipment.
- Additional Subject Matter Experts are specialized TF members added to the TF to raise the general awareness of the other TF members on a subject or aspect of the crisis event. Their participation will be at the pleasure of the Task Force Leader and will be assigned specific responsibilities to best serve the TF.

PREPARATION AND PREVENTION

This set of activities can help prevent a crisis, reduce the chance of a crisis happening, or reduce the damaging effects of a crisis.

- <u>Frequency of Testing</u> The Incident Response Plan will be tested no less than once every year. The objectives of the tests are as follows:
 - o To determine the effectiveness of the Plan procedures
 - To determine the state of readiness and ability of designated personnel to perform their assigned responsibilities; and to validate and update the contact information for the Facility support personnel (as necessary).
 - o To test and determine Communication Plan (Contingency Communications Equip.)

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- <u>Frequency of Training</u> Training will occur on a quarterly basis on the following topics:
 - Notification Procedures
 - o Emergency Response
 - o Incident Reporting
 - o First Response

DRILLS

The UES team will perform drills every quarter to evaluate the training of the emergency procedures, team skills and communication, and the overall effectiveness of the facility team. The focus is to identify areas of improvement from training, documentation, actions required, and predictive failure points. These drills will be orchestrated and overseen by the UES facility management team (Drills POC) and may be implemented in the following manner:

- **Tabletop:** The UES Team will meet together with the drill POC and discuss failure scenarios. During this exercise all team members will be encouraged and expected to participate. This drill session could include:
 - White boarding the sequence of operations
 - Identifying the communication structure with escalations as identified by the overseeing drill POC
 - o A written test of scenarios and equipment knowledge
 - Expected Results:
 - All members participate
 - The team can draw/explain the sequence of operation (SOO) with the understanding of why the equipment reacts the way it does
 - The team can explain how they should respond in the given scenario
- **Mock Drill:** The drill POC will coordinate a failure scenario to simulate what a team member may see during an actual failure. Once everything is staged and all required managers are in place a mock email will be sent out to trigger the team's response. The team will then respond as if it were an actual alarm/event and perform the following:
 - o Investigate and Assess
 - o Communicate and Escalate
 - Simulate any required or instructed actions
 - There will be no actual changing of state of any equipment during this exercise. The team will identify what actions are required and discuss what they would do and expect to see as results
 - Expected Results:
 - The team responds in a rapid, safe, and organized manner
 - Identification of abnormalities that are being simulated
 - The team understands the SOO of the equipment and why it is in that simulated state and if that simulated state is correct.
 - Communication is being correctly escalated

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- Process sequence is correct and there is confidence in the team to speak up:
 - o If instructed to perform an action that is out of sequence
 - If the individual is not comfortable performing the action
- **Live Drill:** The drill POC will coordinate a failure scenario and identify the impact to the Facility. This exercise involves actually changing state of equipment and is hands on. Activities include:
 - This scenario will be documented and shared with the client for approval prior to initiating the live drill and will be scheduled for a time where this activity could take place without any outage. This document will also include a back out plan.
 - Upon approval, and with the participation of the client, notifications will be sent out to the appropriate teams and business units to notify them of any possible alarms and what they should expect to see. This notification will include a date and time frame.
 - Once confirmed that all participants are ready, the drill POC will get permission to initiate the live drill from the client. The drill will then be initiated as identified in the Procedure and the UES team will be ready to react and evaluate.
 - Expected Results:
 - The team responds in a rapid, safe, and organized manner
 - The team is able to assess the abnormalities resulting from the live drill
 - The Facility system(s) react to the initiated event and the SOO of the effected equipment performs as expected.
 - Notifications, alarms, and BMS reflect the new state
 - Actions performed are in accordance with the approved processes
 - Equipment and systems should react as designed
 - The team should communicate if the expected results differ from the actual results
 - A meeting with the UES team and the University will occur to discuss lessons learned and overall success of the live drill.

We aim to get the whole team involved in these drills each quarter but scenarios may be too sensitive to capture the whole team. In order to balance the training the McKinstry UES Management will schedule the different types of drills to allow the best cross exposure. In addition, the McKinstry UES Management will share and discuss the drills during pass down and team meetings. The drill POC will also document the drill, the results, and any lessons learned for continuous improvement.

DETECTION AND INCIDENT CLASSIFICATION

How do you recognize a crisis when it occurs? Quite often a manageable situation will transform into an incident over time, possibly catching the observer off guard. It is important to be able to recognize the early warning signs and threshold qualities.

One of the defining characteristics of an incident is a loss of control. If a situation passes outside the boundaries of what can be reliably managed and becomes, or threatens to become, out of control an

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incident may ensue. Another characteristic of an incident would be a high level of severity. For example, even though there may be an incident response plan in place for an unplanned outage, the severity of the event may dictate that incident management take place immediately.

INCIDENT TYPES

- Unanticipated System Failure Failure of known, but unanticipated origin. No standard response procedures exist.
- Undefined System Failure Failure of unknown origin. Response not yet defined.
- Extended or Compound Failure Emergency response procedures may exist for the failure and/or its components, but the extent, duration or complexity of the failure is outside the limits of established procedures.
- Severe Failure A system failure or situation of extreme severity. A procedure exists.
- Unresponsive Failure Known failure type that does not respond to established procedures in the prescribed time frame.

DISASTER TYPES

Disasters are easier to identify. When serious damage has occurred to property, personnel, or business continuity a disaster has occurred or is in progress.

- Man-made
 - Attack on facility or personnel
 - o Equipment fire/explosion
 - Hazardous material release
 - Catastrophic Mechanical, Electrical, Data, or Plumbing (MEDP) failure
- Natural
 - o Severe weather
 - o Earthquake
 - o Flood
 - o Fire

In the event of an incident or disaster the ability to quickly identify and classify the event is the crucial first step in the process. This is necessary for an effective response and communication strategy.

DEFINITIONS OF INCIDENT (EVENT)

- Class 1: Life Safety
 - This class overrides all other classes. A threat to human life is more important than a threat to business operations. This class covers fire, natural disasters, threat to human life, and security.
- Class 2: Critical
 - Defined as an event that interrupts business functions, Utility System has been or will be lost.
- Class 3: Significant

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- Defined as an event that interrupts business functions, or if "Normal" or "N" status is lost in any critical building system, Mechanical or Electrical. A Class 2 event can be determined by asking one of two questions: Have we lost "N" redundancy in a Utility System has it been compromised.
- Class 4: Advisory
 - This class is intended to notify the team of an informational event. Examples include 30+mph wind warning, lightning warning. This class is mainly for notification of situations that could have a possibility of escalating to a higher class.

ALL CLEAR EMAIL

An "All Clear Email" is to notify a return to normal from a previous event notification.

FAULT EVENT RESPONSE DIAGRAM

The following flowchart outlines the standard actions taken on each class of events.

RESPONSE AND MITIGATION

The proper response and mitigation actions will ensure the timely stabilization of the facility and business operations.

FIRST RESPONSE

If there is an immediate threat to human safety or the facility that can be safely mitigated, immediate action should be taken. If someone is, or is about to be, injured the need for action outweighs the need for deliberation - provided that the consequences of such actions do not endanger anyone. Similarly, if there is a containable fire and the safe means to extinguish it, such an action would take precedence over any other activity. These are just two possible examples where a first response would be justifiable and prudent if the responder is appropriately trained. Extreme caution should be used in any situation where the need for an immediate first response is determined. Only when the stakes are high, the consequences predictable, and appropriate training previously completed should such actions be considered.

EVALUATION

After, or in lieu of, any first response activities the primary task is to assess the situation. Basic information must be gathered about the scope and severity of the incident, as well as the state of what was affected. This data must be quickly established and continuously updated in order to ensure good decision making and accurate communications.

The following is a list of data points that should be part of the evaluation process:

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- Scope What are the event boundaries, in terms of the physical and functional extents?
 - Source of the incident and possible root causes:
 - Human error
 - Equipment failure
 - Natural disaster
 - Other
 - Area(s) affected.
 - Utility Buildings, MEDP areas, rooms, etc.
 - Business processes affected.
 - What properties are affected?
 - Severity How severe is the damage or risk?
 - Human impact were there any injuries?
 - o Structural damage
 - Mechanical, Electrical, Data or Plumbing (MEDP) damage
 - Risk classification Class 1, 2, 3, 4
- Status What is the current state of the situation?
 - Safety of occupants
 - o Damage assessment
 - o Current system redundancy level
 - Systems currently on/offline
 - Applications currently on/offline
 - Emergency personnel on the scene
 - Available personnel (are there sufficient resources available to respond?)
 - o Estimated time to restore business operations
- Stability Is the situation getting better or worse, or is it stable?
 - Conditions improving
 - Conditions deteriorating
 - Not able to determine

NOTIFICATION

When an event has occurred or is in progress, timely and accurate communications must take place to all stakeholders.

- Initial Notification This may precede a full evaluation (as defined in the previous step) if that process will cause a significant delay in getting notification out about the incident. In many cases, a quick notice containing the event location, type and status is preferable to waiting for a full report.
 - Send a message per the Incident Notification Administrative Procedure for the facility
 - Notify all applicable parties on the site Escalation List. This can either be done directly by site personnel, or by calling Security and invoking an Emergency Escalation Plan.

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- Establishing a Phone Bridge As an event occurs; McKinstry will classify and evaluate the alarm while following the escalation process. Concurrently, the client will be following their escalation processes. McKinstry will be responsible for establishing a phone bridge within the first 30 minutes for all Class 1 and Class 2 events and distribute the login information per the Escalation Appendices below. McKinstry Facility management will determine if a phone bridge is required for any Class 3 events. If the client determines an internal phone Bridge is required, the client will establish that bridge and distribute the login information. At this time, all personnel on the McKinstry Phone Bridge will migrate to the internal Phone Bridge.
- **Periodic Status Updates** At set intervals, changes of state (including problem resolution), or when significant new information becomes available status updates shall be sent to all stakeholders via email or communicated via the Phone Bridge.
- Abnormal Incident Report Within 24 hours of an event or as soon as possible, an Abnormal Incident Report (AIR) will be provided by McKinstry.

RESPONSE LOGISTICS

- Identify the members of the Emergency Response Team (ERT)
 - o UES Team
 - o Concessionaire Team
 - o University EHS Team
 - University Public Safety and Security
 - o Other
- Establish team roles
 - o ERT Leader (final decision maker)
 - o Communication manager
 - Event Documentation Manager
 - Safety Manager
- UES team role
 - On-call staff are expected to cover all assigned shifts, perform tasks in a highly productive, efficient and professional manner. The responsibilities include (but are not limited to) the following:
 - Responding to all emergency calls related to campus utility systems:
 - Domestic, Reclaimed, Waste and Stormwater Water systems, Electrical Systems Water Tech on-call technician
 - Chilled Water, Compressed Air & Steam Steam & Chilled Water on-call technician
 - Evaluating, investigating, and shut down systems if necessary, to mitigate adverse impacts of both planned and unforeseen shutdowns to all situations

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including weather events. Coordinate with a manager for shutdowns as necessary.

- Staff scheduling for on-call weeks will vary based on the business need and UES staff availability. The schedule for each week will be as follows:
 - Weekdays, 5pm 8am
 - Weekends, 5pm Friday 8am Monday
- The on-call staff must have access to a cell phone and be available during the shift to respond to the emergency/alarms or phone calls.
- Response Requirement:
 - On-call staff must answer the emergency call and if necessary be on site within 60 minutes.
 - Failure to respond within the required response times will not be a basis for disciplinary action but may affect future on-call scheduling.
- Trading Shifts: The on-call staff must coordinate with his or her lead/supervisor to trade on-call shifts.
- Drug and Alcohol Use: The on-call staff should refrain from the use of drugs and alcohol while on-call.
- Conduct event briefing containing:
 - The current situation assessment
 - A round-table discussion between all teams responding to the event to review the following:
 - Life safety
 - Team member availability
 - Business Operations Impact
 - Root cause
 - Problem resolution and strategies
 - Impact of implementing work without established procedures
- Establish objectives
 - o Stabilize System
 - Isolate Problem(s)
 - o Restore Redundancy
 - Return to Normal Operations

Deliberation: Take the time to make good decisions. Hasty actions may worsen the situation. Utilize the ERT and its extended members to establish action items.

Delegation: Assign tasks to team members

Mitigation: Perform agreed upon actions to mitigate and/or reverse the effects of the event

Iteration: Repeat steps as needed

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RECOVERY AND ANALYSIS

POST-INCIDENT ANALYSIS AND REPORTING

The following must be completed within 24 hours after an event occurs:

• Complete the first sections of the Abnormal Incident Report (AIR) prior to the Root Cause Analysis sections (RCA).

The following must take priority and be completed in a prompt and timely fashion:

- A Root Cause Analysis (RCA) must be performed, documented, and submitted on the same AIR form created for the event occurrence. The RCA should include the below examples:
 - o Detailed Sequence of Events
 - o Associated Work Order Tickets
 - o Pictures
 - Any Procedures that were used
 - o Any other information/detail relevant to the root cause of the event
- Lessons Learned Report must be completed for distribution of relevant knowledge about the event to stakeholders to prevent future occurrences.
 - After Action Plan with recommendations for improving future response to events. The Action Plan should include but not excluded to:
 - Item Number
 - Date/Time Assigned
 - Description
 - Point of Contact (POC) of Item
 - POC Number
 - Status
 - Due Date/Time
 - Resolved Date/Time
- Remedial Training as needed to implement After Action Plan findings.
- Formal incident report including the above details will be provided to the Concessionaire and University. The Formal Incident Format Guide should include but not excluded to:
 - Incident Provide a summary of the event and current status of critical infrastructure.
 - Incident Descriptions Provide a detailed account of the event and remedial actions taken.
 - **Root Cause** Provide a suggested root cause to the event and provide justification for the root cause.
 - **Records of Events** Captures significant activities during the course of the event.
 - Action Item List List all actions required to prevent recurrence.
 - **Appendices** Place any additional items used in the investigation into the appendices. Add as many as needed to support the root cause conclusions.

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- **Summary** Provide a summary of your analysis and conclusions in this area. Also, detail out the actions required to prevent recurrence.
- Post-incident will be tracked as follows:
 - CMMS work order ticket will be created for each action item.
 - All reports will be posted in an accessible location for review.

INCIDENT COMMAND CENTER (ICC) CONFIGURATION

RECOMMENDATION FOR ICC CONFIGURATION

Best practice is to have an Incident Command Center (ICC) available. An alternate, off-site option should be available (could be a hotel) if access to the primary facility is denied. The designated room must be available for quick conversion to an ICC although it may have alternate uses at other times. Equipment shall be stored nearby to ensure that it remains dedicated for use in an incident. A room or rooms shall be identified which can be made available for work groups to use.

The ERT should have access to a personal computer and a printer. This should be a printer that is directly connected and not networked. Basic office supplies and equipment should include the following: White boards with erasable pens and erasers, flip charts, bulletin boards, and push pins. Arrangements for meals and accommodations should be anticipated so that a team can be sustained for long periods if needed.

A recommended configuration includes:

- A dedicated PC with directly connected printer/scanner/copier
- Access to video teleconference room (VTC)
- Conference Call bridge access in both rooms with secured access to bridge
- At least four telephone lines, these can be cell phones
- Ability to record telephone conversations
- An internet connection and wireless router
- TV with access to national and international news media
- Projector for use with PCs.
- Two way radio communications (VHF) capability.

The following additional equipment for an ICC should be considered:

- Rolling containers for supplies
- Access to kitchenette area with vending machines /beverages /coffeemaker /microwave
- Emergency Food and Water Supplies
- Digital camera with extra memory and batteries
- 2 Battery powered Radios and additional batteries
- Electrical adapters (110v) and surge protectors

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- Multiple Time Zone Clocks
- Sleeping area and supplies available for longer term events
- Shredder if one is not available locally
- Satellite telephone
- Maps of asset areas.
- Building MEP drawings, schematics, etc.
- Any other item that would be of value to the Facility team

Good management of the ICC is vital to the successful running of an incident. The Information above should serve as an example checklist is not all inclusive. A balance should be achieved between having a dedicated, permanently equipped facility and having a room that requires fitting at the last moment (which is undesirable). It is likely the first bridge call and initial discussions are likely to take place from a convenient office and remote locations; the team is likely to move to the ICC if and when members physically meet together.

SAFETY AND HEALTH POLICY

SUMMARY

It is the priority of MIEDI to provide a safe and healthful working environment for all our employees, client employees, partner-vendors, and visitors in our area of operation. In our approach to safety, we consider compliance with State and Federal regulations as our base line and strive to exceed this base by using best practices and continual review.

We believe we have a responsibility for the safety of employees, vendor-partners, customers, and site visitors to maintain a workplace free from injury and accidental damage and which creates a minimal environmental impact. We expect all employees to participate in our safety efforts. These efforts help make MIEDI one of the best places to work.

Employees are expected to follow the safe work practices they learn about in new employee orientation and ongoing training; be watchful for the identification and reporting of hazards; and to participate in employee programs improving and promoting safety. In turn, MIEDI is committed to providing the financial and personnel resources to safety, holding our front-line management accountable, providing training and equipment for safe job performance, and responding to employee suggestions and identification of hazards.

Achieving voluntary compliance with State and Federal regulations relating to employee health and safety can only be met through cooperation of all employees and vendor-partners on our programs. This cooperation is imperative if we are to have an effective Facility Safety Plan. This Safety Plan is available to all facility personnel. It is the responsibility of each employee to read, understand, implement, and always maintain the Safety Plan.

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PURPOSE

This Safety Plan has been developed to serve as a guide in achieving the following:

- The standardized coordination of safety practices with our clients and vendor-partners, who will be following established industry practices, State/Federal requirements, and OSHA standards.
- Establish clear lines of communication, responsibility, and accountability for safety at all the facilities that we manage.
- Elimination of personal injury and property damage, thus reducing our losses as well as those to clients, vendor-partners, and their employees.

SAFETY RULES

This Safety Plan includes policies for the safe operation of equipment, handling of materials, and conduct of employees. The procedures, duties, and responsibilities outlined in this program will be in effect throughout the duration of MIEDI programs at the campus. Acts or conduct, including but not limited to the following, are prohibited, and can result in disciplinary action up to and including termination. These rules apply to the facility and its property, adjacent owner's property, and parking areas.

- Fighting, horseplay, or creating a disturbance
- The presence of alcoholic beverages, marijuana, illegal drugs, narcotics or controlled substances by employees while on duty and/or at locations under the employer's control, is prohibited and is cause for disciplinary action up to and including termination.
- Possession of firearms or other deadly weapons
- Falsification of records/reports involving claims of injury or damage
- Unauthorized building of fires
- Violation of published safety rules, misuse of safety or fire prevention equipment
- Failure to report any accidents or injury immediately to your immediate supervisor
- Running on any site is strictly prohibited except in extreme emergencies
- Wear uniform clothing suitable for the weather and your work. Torn, loose clothing, cuffs, sleeves, etc. are hazardous and could cause accidents.
- Hardhats must be worn in all required areas where indicated
- Proper eye protection must be worn when you are exposed to flying objects, dust, harmful rays, chemicals, flying particles, etc. No exceptions. All eyewear, including prescription eyewear must be ANSI Z87 rated and have side shields.
- Proper footwear must be worn on all work sites. Sturdy work boots. The wearing of sport shoes, tennis type shoes, sandals, dress shoes, and similar footwear is strictly prohibited.
- Always use gloves, aprons or other protective clothing when handling rough materials, chemicals and hot or cold objects.
- When spray painting, finish spraying, burning, exposed to large quantities of dust or to other toxic hazards, always wear a respirator. Check with the Critical Facility Manager for respirator training and fit testing.

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- No work shall be performed in proximity to electrical conductors closer than ten (10) feet unless the conductors have been effectively guarded.
- Compressed gas cylinders shall be chained or secured in the upright position at all times. Cylinders shall be placed in cylinder carts whenever they are being transported to different locations on the client site.
- Always store materials in a safe manner. Tie down or support piles as necessary to prevent falling, rolling or shifting.
- Shavings, dust, scraps, oil or grease should not be allowed to accumulate. Good housekeeping is a part of the job.
- Refuse piles must be removed as soon as possible. Refuse is a safety and fire hazard.
- Immediately remove all loose materials from stairs, walkways, ramps, platforms, etc.
- Do not block aisles, traffic lanes, fire exits, gangways or stairs
- Avoid shortcuts use ramps, stairs walkways, and ladders
- Standard guardrails must be erected around all floor openings and excavations must be barricaded
- Get help with heavy or bulky materials to avoid injury to yourself or damage to material
- Keep all tools and materials away from the edges of scaffolding, platforms, shaft openings, etc.
- Know the correct use of hand and power tools. Use the right tool for the job
- All electric power tools (unless double insulated), extension cords, and equipment shall be properly insulated and grounded. Damaged cords shall be replaced. All extension cords must have GFCI.
- Know the location and use of fire extinguishing equipment and the procedure for sounding a fire alarm
- Flammable liquids shall be used only in small amounts at the job location and in approved safety cans
- Proper guards or shields must be installed on all power tools before use. Do not use any tools without the guards in their proper working condition.
- Do not operate any power tool or equipment unless you are trained in its operation and authorized by your supervisor
- Use tools only for their designed purpose
- Do not remove, deface or destroy any warning, danger sign or barricade. Do not interfere with any form of accident prevention device that is being used by other workers. Correct signage will be used to indicate the hazard or work area.

SAFETY RESPONSIBILITIES

It is the desire of MIEDI to protect employees from accidental injury and damage to health while working for our organization. This matter must receive top priority attention from all levels.

Safety is the functional responsibility of each individual who has the right to demand safe operations. It is everyone's obligation to teach each other to work safely and to understand the rules and procedures

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of this manual. The facility Supervisors and each level of our organization are accountable for safe performance.

Duties and responsibilities of all personnel under MIEDI 's Safety Plan are as follows:

ALL EMPLOYEES

- Be familiar with and comply with proper safety and health practices
- Use the required safety devices and proper personal protective safety equipment, as instructed, at all appropriate times
- Notify supervisor immediately of unsafe conditions and acts. All employees are empowered to correct unsafe conditions as necessary and to stop all unsafe acts.
- Report all accidents and near misses to supervisor immediately
- Abide by the rules and regulations of the MIEDI Safety Policies
- Abide by applicable State regulations and United States CFR 29 1926.20, employee's responsibilities
- The MIEDI Facility Manager and the Safety Manager are to be promptly notified when an OSHA/State Inspector visits the site

FACILITY DIRECTOR

- Develop technical guidance and interim programs to identify and remove physical hazards from sites
- Formulate, recommend, and administer approved changes to the Facility Safety Plan
- Prepare and distribute to management, regular reports on the status of safety at the facility
- Advise all levels of management on matters pertaining to safety, to include establishing a "chain of command" and a network to communicate safety matters within the organization
- Maintain an adequate accident report system, personally investigating serious accidents and taking corrective action to eliminate accident causes
- Cooperate with program management personnel in the safety training of employees
- Maintain working relationship with MIEDI Safety Manager's
- Insure there is full compliance with applicable Federal, State, and local regulations, and client requirements
- Recommend programs and activities that will develop and maintain incentives for the motivation of employees working safety
- Recommend disciplinary procedures for repeat violators of safety rules
- Review all accident reports with site lead and the injured employee

OPERATORS, MAINTENANCE AND WATER TECHNICIANS

• Is familiar with and enforces safety regulations applicable to company operations within area of responsibility

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- Correct and coordinate safety activities within his/her area of responsibility, to include motivation of employees for safe work practices
- Assure that safety devices and proper individual protective equipment are used by persons under his/her supervision
- Instruct all employees within area of responsibility in job safety and health requirements and insist on compliance
- Assure that injuries are treated promptly and reported properly
- Assist in the investigation of all accidents, obtain all pertinent data, and file a complete report with the Safety Manager and site FM. Recommend corrective action
- Assure that no unsafe conditions exist in area of responsibility and report to the Facility Manager or the Safety Manager on any corrective actions needed which are beyond his/her control
- Hold daily safety briefings with employees to:
 - Discuss how to safely perform current assignments for the day
 - o Discuss topics provided by Safety Manager
 - Encourage open discussion and safety suggestions from employees
- See that prompt first aid is administered to an injured employee
- Conduct safety inspections of work area, direct corrective action for unsafe conditions noted, and inform the Safety Manager of inspection results
- Maintain a valid First Aid Card
- Assure that all vendor-partners are abiding by the safety practices of the facility when on site

APPRENTICES, CMMS PLANNER SCHEDULER

- Is familiar with safety regulations related to his/her area of responsibility
- Direct and coordinate safety activities within area of responsibility
- Require all employees under his/her supervision to utilize the proper individual protective equipment and job safety device
- Assure that safety equipment is available and that storage locations are clearly designated
- Conduct safety inspections of work area, direct corrective action for unsafe conditions noted, and inform the Safety Manager, FM, AFM, or LFE of inspection results
- Assure that front line Supervisors are aware of and comply with requirements for safe practices and conditions to be maintained at the facility
- Review all accidents with front line supervisors. Submit full report to the Safety Manager, FM, AFM, or LFE and assure that corrective action is taken immediately to alleviate the cause.
- Require all vendor-partners and vendor-partner personnel to comply with applicable safety regulations
- Provide information and recommendations (feedback) to Safety Manager, FM, AFM, or LFE concerning safety matters

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SUBCONTRACTORS (VENDOR-PARTNERS)

Each vendor-partner is responsible for the safety of their own personnel, and will:

- Provide and execute all work so as to comply with Federal, State, and local codes as well as MIEDI Facility Safety Plan. Where conflict occurs, the most stringent shall apply.
- The vendor-partner uses the required safety devices and proper personal protective safety equipment, as instructed, at all appropriate times.
- Provide and enforce the use at all times of the personal protective equipment specified by State regulations, OSHA requirements and the Facility Safety Plan.
- Comply with procedures and practices in addition to those outlined above, which the Facility Manager may, at his/her discretion, institute to ensure safety. The AFM, LCFE, and FE may also be assigned as the designee by the FM.
- Provide supervisory investigation reports on all accidents.
- Attend site meetings addressing safety.
- Schedule daily safety briefings for all employees and maintain records of these briefings.
 - It may be possible for the vendor-partner to attend the MIEDI safety briefings.
- Take immediate action to correct unsafe practices or conditions when discovered.
- Maintain a file of Safety Data Sheets (SDS) for all hazardous materials that are brought onsite, conduct the necessary training, and provide personal protective equipment as required.
- Report to the MIEDI Facility Manager any observed unsafe conditions, or practices, of violations of job security which are not within vendor-partner's jurisdiction.
- Tools and equipment will be inspected by each vendor-partner as required by the Facility Safety Plan.
- Provide a copy of vendor's written Safety Program to the MIEDI Facility Manager
- Conduct a thorough safety indoctrination of all new hires and maintain records of same

PERSONAL PROTECTIVE EQUIPMENT

The following guidelines will be used for Personal Protective Equipment (PPE) selection and use.

PPE - 29 CFR 1910.132

Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices and protective shields and barriers, will be provided, used, and maintained in a sanitary and reliable condition. This protective equipment must be used wherever there is a reasonable possibility of worker exposure to hazards associated with processes or environment, biological, chemical and radiological agents, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

PPE must meet the following minimum requirements:

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- Adequately protect against the particular hazards for which they were designed
- Be reasonably comfortable when worn under designed conditions
- Fit properly without interfering with the movements or vision of the wearer
- Be durable
- Be capable of being cleaned and/or disinfected
- Be kept clean and in good repair

Provide special protective equipment and clothing whenever these conditions capable of causing injury or impairment are present:

- Hazards of process or environment
- Biological, chemical or radiological hazards
- Mechanical irritants
- Welding, cutting or working molten metal

All PPE equipment and clothing are to be maintained in a sanitary and reliable condition.

Supervisors must provide a type of protection suitable for the work to be performed and employees must use the protection. To properly evaluate the workplace, the supervisor must perform a job hazard assessment (JHA) and select the types of PPE which will protect the employee.

EYE AND FACE PROTECTION - 29 CFR 1910.133

Employees working in agricultural and laboratory research and maintenance environments, including but not limited to laboratories, greenhouses, fields, and shops will wear eye protection at all times.

The supervisor will ensure employees use appropriate eye or face protection when exposed to eye or face hazards from flying particles and projectiles; biologicals, chemicals, pesticides, and radiological agents; acid or caustic liquids; and hazardous dusts, gases, mists or vapors.

Eye and face protective equipment is required by OSHA where there is a reasonable probability of preventing injury. Suitable safety glasses, goggles or face shields are required where a hazard exists that could cause injury to unprotected eyes. Examples of conditions where suitable eye protection must be provided include:

- Biological, chemical or radiological hazards
- Machines
- Flying objects
- Welding, cutting or working molten metal
- Operating construction equipment such as a drill, saw, lathe, grinding wheel
- Extreme light, glare, UV or laser exposure

Suitable eye protection must comply with American National Standards Institute (ANSI) Z87.1-1989. Eye and face PPE must be distinctly marked to facilitate and document compliance.

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RESPIRATORY PROTECTION - 29 CFR 1910.134

Respirators will be provided when required to protect the health of the employee. The supervisor will provide respirators which are applicable and suitable for the purpose intended. The supervisor will be responsible for enforcing and maintaining a respiratory protection program which will include the requirements outlined in 29 CFR 1910.134(c), Respiratory Protection Program.

Respiratory protection requires constant vigilance to protect workers. Employee participation in the Respiratory Protection Program is required for both cartridge masks and dust masks. Program requirements include but are not limited to:

- Performance of hazard assessments
- Determination of airborne contaminant levels. Employee exposures to contaminates may not exceed the OSHA Permissible Exposure Levels (PEL) nor the Threshold Limit Values (TLVs) of the American Conference of Governmental Industrial Hygienists (ACGIH) [whichever limit is more stringent].
- Implementation of a written Respiratory Protection Program including training on the selection, fitting, use, maintenance, cleaning, disposal, recordkeeping, and supervision.
- Whenever respirators are used in areas with atmospheres immediately harmful to life, at least one other person with backup equipment and rescue capability must be provided.
- Performance of a physical examination to ensure employee is fit to wear respiratory protection.

Selection and use criteria for respirators, cartridges, and dust masks must meet the standards in 42 CFR 84, Respiratory Protection, published by the Public Health under National Institute for Occupational Safety & Health (NIOSH). Selection of respiratory PPE will be based upon hazard assessments and manufacturers' performance recommendations.

HEAD PROTECTION - 29 CFR 1910.135

The supervisor will ensure that each employee wears a protective helmet or hard hat when working in any area where falling debris, low objects, or electrical conductors may create a hazard. Selection and use criteria for suitable helmets and hard hats must comply with ANSI Z89.1-1986 headwear standards.

FOOT PROTECTION - 29 CFR 1910.136

The supervisor will ensure that each employee wears foot protection when working in areas where a hazard exists that could cause injury to feet or toes due to falling or rolling objects, objects piercing the sole, and exposure to electricity. Selection and use criteria for suitable foot PPE must be based upon a hazard assessment and must comply with ANSI Z41.1-1991 foot and toe protection standards.

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ELECTRICAL PROTECTION - 29 CFR 1910.137 AND SUBPART S

The supervisor will ensure that each employee working in areas where an electrical hazard exists are provided and use PPE such as insulating blankets, matting, covers, line hose, gloves and sleeves made of rubber, and insulated tools. Selection and use criteria for electrical PPE must be based upon a hazard assessment and must comply with the guidelines found in OSHA 29 CFR 1910.137(a) (1).

HAND PROTECTION - 29 CFR 1910.138

The supervisor will ensure that each employee wears hand protection when working in areas where a hazard exists that could cause injury to hands and fingers due to skin absorption of hazardous substances, severe cuts, lacerations, abrasions, punctures or burns, and temperature extremes.

Hand protection must meet the following minimum requirements:

- Adequately protect against the particular hazards for which they were designed
- Be reasonably comfortable when worn under designed conditions
- Fit properly without interfering with the movements of the wearer
- Be durable
- Be capable of being cleaned and/or disinfected and/or disposed of upon completion of intended use
- Be kept clean and in good repair

Selection and use criteria for suitable hand protection will be based upon a hazard assessment and must comply with the PPE manufacturers' performance recommendations.

NOISE (HEARING CONSERVATION PROGRAM) - 29 CFR 1910.95

The supervisor will ensure that each employee working in areas where the sound level is at, or exceeds 85 dBA, measured on the A scale of a standard sound level meter at the slow response. When employees are subjected to sound at or exceeding 85 dBA, feasible administrative or engineering controls will be utilized. If such controls fail to reduce sound level below 85 dBA, personal protective equipment will be provided and used to reduce sound levels. The supervisor will be responsible for enforcing and maintaining a hearing conservation program which will include the requirements outlined in 29 CFR 1910.95(c), Hearing Conservation Program.

Noise is a constant hazard in many daily working environments and operations. In responding to the need to protect workers, supervisors will protect their employees by:

Implementing a written Hearing Conservation Program including training for:

- Monitoring of work environments
- Notification of employee exposure levels
- Establishing the need for hearing protection
- Providing workers with baseline and subsequent annual audiograms

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- Training of employees in hearing conservation and PPE selection, fitting, use, maintenance, cleaning, disposal, recordkeeping and supervision
- Record keeping of employee exposures
- Monitoring noise levels using approved meters
- Hearing protection based upon dBA

Selection and use criteria for suitable hearing protection will be based upon a hazard assessment and must comply with the PPE manufacturers' performance recommendations.

FALL PROTECTION - 29 CFR 1926.501 - 503

The supervisor will ensure personal fall protection is provided for employees working on roofs, in trees, on ladders, man lifts, powered working platforms, cages, and other lifting devices where personnel are elevated 6 feet or more above ground level surfaces. Safety belts^{*}, harnesses, and lines are required when there is a danger of falling. A second person to tend the lifeline is required whenever entry into a bin, tank, or other potentially dangerous area is made.

Selection and use criteria for suitable personal fall arrest systems must meet the requirements of 29 CFR 1910.28, Appendix C.

*Note: MIEDI does not allow the use of safety belts on any sites by MIEDI employees or contractors.

FIRE PREVENTION AND RESPONSE

The MIEDI Facility Manager is responsible for implementation and enforcement of the fire response program. This program is aimed at protecting life and property while minimizing losses. Fire protection activities are emphasized at all times. Procedures have been created for response should a fire occur in the facility.

Employees are not allowed to attempt to put out a fire unless they have had proper training that includes the use of fire extinguishers. Always evacuate when instructed. Do not attempt to re-enter the building until the "All Clear" is given.

HOUSEKEEPING

- Avoid accumulation of flammable rubbish and waste materials.
- Remove trash from inside buildings and away from buildings daily or whenever an accumulation of material may constitute a fire hazard. Do not, under any circumstances, use wood sawdust or shavings as an absorbent for spilled flammable liquids or petroleum lubricants.
- Burning of rubbish is prohibited.

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REFUELING OF EQUIPMENT

- Refuel all gasoline powered equipment outside and clear of structures, with engines shut off.
- Locate gasoline equipment, such as pressure washers, so exhausts are well away from combustible material.

HEATING DEVICES

Use of open flame devices, sources of heat, and spark producing equipment is prohibited in areas containing flammable materials.

Remove all empty propane, acetylene, oxygen, and butane gas cylinders from buildings, marked as empty (MT), and store and secure in an upright position in an approved area.

WELDING

- The Facility Manager, AFM, LFE, or Program Manager coordinates and approves all welding operations through use of a Hot Work Permit.
- No welding or open flame devices may operate within 50 feet of any spray painting or any substance that produces flammable vapors.
- Cover all combustible materials that cannot be moved a safe distance from welding operations with approved non-combustible blankets or non-combustible rigid barriers for protection from sparks.
- Minimum of a 20 pound, B or C rated fire extinguisher must be present within 10 feet from the source being welded.
- Follow MIEDI's Hot Work Permit system requirements as outlined in the MIEDI Safety Policies.

FLAMMABLE LIQUIDS

- Segregate all flammable liquids, chemical fuels, resins, lubricants, and solvents by labels and store in an approved location. DO NOT store non compatible materials in the same storage area.
- Keep flammable liquid containers covered at all times when not in use.
- Do not store flammable liquids in the work area, except in a quantity needed to accomplish the job.
- Dispose of flammable paint or solvent rags and any materials subject to spontaneous combustion in covered metal containers. Containers are to be emptied at the end of each day.
- Store all flammable liquids in safety cans or approved containers.

ELECTRICAL EQUIPMENT

• The use of frayed and worn extension cords is not permitted.

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- The overloading of extension cords and electrical receptacles is not permitted.
- Protect temporary wiring from damage and creating a trip hazard.

SPRAY PAINTING, FLAMMABLE RESINS, AND CHEMICALS

- No spray painting or application of chemicals that give off flammable vapors is permitted within 50 feet of a possible ignition source.
- Use approved exhaust fans and blowers in areas where conditions hinder the dissipation of hazardous vapors.

ACCESS AND EGRESS

- Maintain access to the site at all times, day or night for fire apparatus or ambulance. Keep all storage areas clean and organized.
- Maintain exit routes for personnel at all times.

COMBUSTIBLE BUILDING MATERIALS

- Store combustible materials separate from buildings.
- Segregate storage of various materials by type with approved separation provided for noncompatible materials.

SMOKING

- Smoking is not permitted inside buildings.
- The University of Idaho has a tobacco-free campus policy. Smoking is not permitted on campus grounds and use of the following products is prohibited:
 - o Cigarettes
 - o E-cigarettes
 - o Cigars
 - o Snuff
 - o Snus
 - o Water pipes
 - o Pipes
 - o Hookahs
 - o Chew
 - Any other non-combustible tobacco products

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FIRST AID & INJURY MANAGEMENT

MIEDI and facility Security provides basic first aid and arranges for emergency transportation for employees with on-the-job injuries or illnesses.

FIRST AID TRAINING, KITS AND SIGNS

- All MIEDI employees on site must be trained in first aid/CPR/AED.
- First Aid/CPR/AED certification is good for 2 years.
- First aid kits will be kept in accordance with the requirements of the General Safety and Health Standards and located in all departments. These units will be properly maintained and stocked.
- Signs listing emergency numbers, procedures, etc., will be strategically located, such as near the first aid kit, beside the telephone, etc.

TRANSPORTATION OF INJURED OR ILL EMPLOYEES

NON-EMERGENCY

MIEDI will transport employees with non-emergency injuries to and from the medical facility.

EMERGENCY

Call 911 and they will arrange for transportation to a medical facility as appropriate.

INJURY MANAGEMENT

An employee who has sustained an on-the-job injury or illness may return to work if a release from the attending physician has been obtained (use "Release for Work Authorization" Form). An employee who is restricted to specific tasks due to casts, braces, or other medical devices, such as crutches, may return to work following the case being reviewed by:

- The MIEDI Safety Manager
- The MIEDI Facility Manager
- The employee's physician

Workers' compensation cases will be reviewed by the McKinstry workers compensation claims counsel.

Note: Employees will be returned to work as soon as is medically possible.

TREATMENT AT A NON-REFERRED MEDICAL FACILITY

Any employee who obtains outside medical treatment for an alleged on the job injury or illness must report to the MIEDI FM or AFM the injury or illness and the name of the attending physician no later than the first weekday following treatment. Failure to report this information may result in the denial of workers compensation benefits.

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MEDICAL RECORDS KEEPING

The MIEDI Facility Manger and/or Safety Manager is responsible for ensuring that the appropriate safety related reports concerning occupational injuries and illnesses are filled out, filed, and maintained.

REPORTS AND OSHA

- The following reports and records must be filled out, filed, and maintained:
- Supervisor's Incident Report (SIR) is to be completed for all injuries sustained by facility personnel requiring a physician's attention. A copy of the completed report is sent to the MIEDI Safety Manager.
- OSHA 300 Log will be maintained by the Safety Manager and not by site management.
- MIEDI Safety Manager must report to OSHA
 - Within 8 hours all work-related fatalities
 - o Within 24 Hours
 - Inpatient hospitalization
 - Amputations
 - Losses of an eye
- How to report an incident

Refer to the Error! Reference source not found. Response section in this Plan.

ACCIDENT REPORTING AND INVESTIGATION

Each occupational injury or illness that results in treatment by a physician must be thoroughly investigated and monitored. In addition, certain first aid cases as well as non-injury and near miss incidents with a potential for serious injury must also be investigated.

The purpose of accident investigation is to identify contributing causes so future incidents of a similar nature can be prevented. These contributing factors also have a bearing on legal liability issues. Investigations should be directed toward fact finding, not fault finding.

The investigation should begin as soon as possible after the necessary notifications (i.e. OSHA, MIEDI Safety Manager) have been accomplished. All accident investigation reports are submitted to the Facility Manager or site management and forwarded to the MIEDI Safety Manager.

CONCLUDING THE INVESTIGATION

At the conclusion of a major accident investigation, a meeting is held to assure that the causes of the accident have been determined and that proper corrective actions have been initiated. Personnel who must attend this meeting include:

- The MIEDI Facility Manager
- The vendor-partner's Safety Representative (as required for any incidents involving vendorpartner's)

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• The MIEDI Safety Manager

If all the facts involved in an accident are known, it should not be difficult to determine what actions are necessary to prevent injury to other employees with similar duties or exposure to similar conditions.

CHEMICAL HAZARD COMMUNICATION PROGRAM

State and Federal chemical hazard communication (HAZCOM) standards require that we provide information to our employees concerning hazardous chemicals used in the workplace to which employees may be exposed. This program addresses container labeling, Safety Data Sheets (SDS) employee training, and other information on chemicals found in this workplace. The goal of our program is to reduce the possibility of illnesses and injuries caused by exposure to chemicals. We intend to do that by providing employees with as much information as needed concerning the hazards of chemicals they come into contact with, and to present that information in a usable, readily accessible form.

All chemicals, this includes any samples, must be approved by McKinstry facility management prior to being brought on site. Approval forms may be found on the facilities SharePoint website. You can contact the Safety Manager for assistance in locating and filling out the request.

Each facility has its own HAZCOM program because of the different activities and chemicals used. For some facilities, special HAZCOM training is required before an employee may enter the facility.

The Safety Manager is responsible for reviewing the Hazard Communication Program, including the chemical inventory, at least annually, to ensure that it is up to date.



CONTAINER LABELING

Chemical manufacturers, importers, and distributors must properly label shipments of hazardous chemicals with the identity of the chemical, clearly noted hazard warnings, and the name and address of the manufacturer or other responsible party.

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Facility personnel will verify that chemical containers are properly labeled at the time they are received from the manufacturer or distributor. All containers will be labeled, tagged or marked with the identity of the chemical contained therein, and will show hazard warnings appropriate for employee protection. The hazard warning must be legible, and prominently displayed. Should employees discover any unlabeled containers at the facility, they shall immediately notify their supervisor or a MIEDI Safety Manager.

Containers into which chemicals will be transferred, and which can be expected to be used by several employees or over a period longer than one shift, will be labeled to show contents and an appropriate hazard warning using the HMIS (Hazardous Material Identification System) labels. Labels that become torn, corroded, or defaced such that content and hazard information cannot be determined will be replaced. For replacement purposes, we will use pre-printed HMIS labels that provide all required information.

The higher the number for hazard rating on the HMIS label, the greater the hazard.

If and when the chemical supplier informs us of new or significant hazards, labels for these portable containers will be changed accordingly.

SDS

Chemical manufacturers and importers are required to develop a Safety Data Sheet (SDS) for each hazardous chemical they produce or import. The SDS contains information on the chemicals, such as physical properties, health and safety data, and first aid information.

SDS's for each chemical in use at the facility will be kept on a current basis at the location of use, the facilities office, and on the facility SharePoint site.

Employees have the right to review all SDS's on file for hazardous chemicals used at the facility.

ATTACHMENT 1

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It is our policy not to accept any chemicals, even on a trial basis, without an accompanying SDS. SDS's will be expected to either accompany the actual shipment of the chemical or be emailed in a timely fashion to the individual responsible for ensuring that SDS's are obtained for all potentially hazardous chemicals used at the facility. In the event an SDS is not received with the first shipment of a chemical, the responsible person at the facility will contact that supplier, in writing, via email to request the appropriate SDS.

Revised or updated SDS's received from our suppliers will replace the existing SDS covering that chemical and the revised SDS will be brought to the attention of our facility employees.

CHEMICAL IDENTITY: MANUFACTURER: SDS#: DATE:			
HEALTH			
FLAMMABILITY			
PPE			
CHECK ALL PPE THAT APPLY			
SAFETY GLASSES			
SAFETY GOGGLES			
	FULL BODY SUIT		
	AIRLINE MASK		

SAFETY TRAINING

All employees will be trained in this safety program including requirements of the HAZCOM standard, the location of the hazardous chemical inventory, where to find and how to read SDS, the HMIS labeling system, and the hazards of chemicals they are likely to be exposed to. This will include how they can protect themselves.

Employees will receive training on this program at new employee orientation, upon assignment from their supervisor about specific hazards in their work area, and whenever there is a new chemical or use of a chemical.

All employees will be trained how to access the on-line MIEDI SDS program in case they should need information about a chemical being used on site.

Training and information will be provided for all employees prior to exposure to hazardous chemicals and when new chemicals are introduced to the work area. This will cover:

• The existence and requirements of the OSHA Standard Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.)

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• The physical and health hazards of the chemicals in the work area (this may discuss classes of chemicals, not necessarily each and every individual chemical)

Training documentation will be maintained by the Facility Manager or facility designee.

SUBCONTRACTORS (VENDOR-PARTNERS)

Vendor-partners, who will include temporary employment service employees performing work at the facility, will have access to our Chemical Hazard Communication Program, and will be advised of the presence of hazardous chemicals to which their employees may be exposed.

All outside vendor-partners are required to follow the Chemical Hazard Communication Program for all work at the facility without exception.

ASBESTOS AND LEAD MANAGEMENT

All MIEDI employees and vendor-partners will participate in, and enforce the facility safety program, which will include employee training and special task controls. All potentially exposed personnel will be trained in this program and all such training will be documented.

ASBESTOS

- Intact and undisturbed asbestos materials do not pose a health risk. When asbestos containing
 material is properly managed, release of asbestos fibers into the air is prevented or minimized.
 Do not disturb any material that could possibly contain asbestos (insulation, floor coverings,
 ceiling tile, etc.) unless you are properly trained and qualified.
- If the insulation or other material is not marked or identified, you must treat it as if it contains asbestos until it is determined by a qualified person that it is asbestos free.
- Once a material has been identified as containing asbestos, it should be labeled immediately.
- Positive identification of asbestos requires laboratory analysis.
- If you suspect that a material could possibly contain asbestos, stay away until it has been properly tested by qualified personnel.

LEAD PAINT

- Never grind, cut, or weld on any structure that could possibly contain lead paint.
- Paint must be tested by a qualified person, prior to beginning work, to determine the existence of lead. If it is shown to contain lead, it must be properly abated by trained and qualified personnel.

INDOOR AIR QUALITY

Indoor Air Quality (IAQ) refers to the air quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants.

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Managing indoor air quality problems, particularly transient odors, can be a significant challenge. Experience has shown that effective response to these concerns is based on a working partnership between the building occupants, who best understand the problem, and on-site staff with knowledge of mechanical systems specific to the facility. Information from all of these groups is necessary to identify and prioritize potential solutions.

RESPONSE ROLES

PRIMARY RESPONDERS

- Facilities technicians from the facility operations group who respond to building service calls
- A Certified Industrial Hygienist for health and safety evaluation of IAQ situations and to arrange for cleanup of hazardous materials spills.

The role of primary responders is to:

- Evaluate whether there is an emergency situation at the facility using an appropriate meter or tools. This testing equipment, combined with the facility engineer's knowledge and awareness of the setting and any symptoms they notice in the setting, will provide the best evaluation. An "emergency" is a situation in which there is an imminent threat to human health or property. Such a situation is managed, as described above, by calling for an emergency response.
- If the situation is not an emergency, the responder's role is to determine if any quick fixes are available to resolve the issue.
- "Quick fixes" are situations in which there is a clear source of an odor which can be quickly resolved. This resolution involves either stopping the source that is creating the odor, or contacting the person managing the source of the odor to determine how long the odor is likely to continue.
- In either case, the primary responder's responsibility is to explain what they know of the situation to the occupants so the occupants can make an informed decision as to whether to continue occupancy. If a "quick fix" is not available, and the situation is not an emergency, it will be referred to a secondary responder for follow-up within 48 hours.
- Written documentation is required for all complaints and investigations. Document the incident and follow-up with the Safety Manager and/or the Facility Manager.

SECONDARY RESPONDERS

Secondary Responders provide longer term investigation of IAQ concerns. Secondary responders include:

- MIEDI site operations staff with building resources and expertise
- Safety Manager or Facility Manager to manage the investigation

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AIR SAMPLING

When the source of the odor is clear, direct reading equipment may be available at the facility that can be used to determine the airborne concentrations of certain specific chemicals. Otherwise, air sampling to determine the source of the odor or the concentration of the chemicals involved is limited in usefulness and is likely to take a week or more to produce results. On-site review of such situations by a qualified industrial hygienist is necessary to make the most effective use of any sampling done.

AIR QUALITY STANDARDS

MIEDI is committed to keeping chemical exposures as low as reasonably achievable. Keeping specific exposures within OSHA/State Permitted Exposure Limits (PEL) will be considered the minimum requirement for building performance. Supervisors of workers with concerns about exposures below OSHA PELs will decide how to accommodate these individuals in consultation with Risk Management staff.

LADDER SAFETY

Guidelines are as follows:

- No aluminum ladders are allowed at the facility.
- Inspect ladders prior to use. All defective ladders must be tagged and removed from service immediately. All ladders must be inspected by a competent person monthly and tagged with the appropriate monthly inspection tag.
- Extension ladders must have nonskid feet and be set on a solid, level surface.
- Extension ladders must be set at a proper angle of 4:1.
- Step ladders must be set on a solid, level surface, fully opened with spreaders locked in place. Do not use step ladders in a folded position.
- Secure ladders as needed to prevent the ladder from shifting. This applies to A-frame and extension ladders.
- Do not use the top two steps or rungs of a step ladder.
- All ladders must be secured by tying off or other acceptable means.
- Ladders shall be extended 36 inches above a landing.
- Do not carry tools, materials, etc., while climbing ladders. Both hands must remain free to assist in climbing.
- Always face ladder while climbing ladder and/or working from ladder.
- Job-built ladders shall not be allowed on site.

ELECTRICAL SAFETY PROGRAM

Electrical work shall be conducted, and electrical circuits, equipment, and components shall be installed and maintained, in accordance with the following requirements:

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- 29 CFR 1910, subpart S (OSHA electrical standards for general industry).
- State electrical standards for construction.
- State Electrical Construction Code.
- State Electrical Work Safety Rules.
- National Fire Protection Association, current National Electrical Code (NEC)
- Current NFPA-70E codes and standards.

When deemed appropriate, MIEDI Safety Manager, after careful evaluation, may grant exemption in writing from special requirements or this procedure for specific electrical work on an individual basis. Justification for granting such exemptions shall be documented on the Energized Electrical Work Permit or on an attachment thereto.

Each employee shall receive electrical safety training based on his or her exposure. Only qualified persons are allowed to work on or near exposed electrical parts.

Live parts to which an employee may be exposed shall be de-energized and locked and/or tagged before work is performed on or near them. However, in certain situations, de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations. In these situations, written justification for conducting work on energized electrical parts and a detailed description of the safety-related work practices to be used to protect employees shall be completed.

Live parts that operate at less than 50 volts to ground need not be de-energized if there will be no increased exposure to electrical burns or to explosion due to electric arcs.

Examples of increased or additional hazards include the following:

- Interruption of life support equipment.
- Deactivation of emergency alarm systems.
- Shutdown of hazardous location ventilation equipment.
- Removal of illumination for an area.
- Shut down of critical communication devices.

Examples of work that may be performed on or near energized circuit parts due to equipment design or operational limitations include the following:

- Testing/troubleshooting of electric circuits that can only be performed with the circuit energized.
- Work on circuits that form an integral part of a critical continuous process that would otherwise need to be completely shut down in order to permit work on one circuit or piece of equipment.

When exposed live parts are not de-energized (for reasons of increased hazards or infeasibility), appropriate safety measures shall be documented on the "Energized Electrical Work Permit" and fully implemented to protect employees who may be exposed to the electrical hazards involved.

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- Safety-related work practices shall be designed to protect employees against direct contact of energized circuit parts with any part of the body or indirect contact through some other conductive object.
- Work practices used shall be suitable for the conditions under which the work is to be performed, and for the voltage level of the exposed electric conductors or circuit parts.
- Employees working in areas where there are potential electrical hazards shall be provided with, and shall use, the appropriate electrical protective equipment for the work to be performed.

If work will be performed within 20 ft. of overhead utility or electric lines, local electrical utilities should be notified.

Workers shall take special care when handling material in the vicinity of exposed electrical circuits to prevent contact with electrical parts.

Signs, barricades and/or attendants shall be used to isolate the work area and warn others of the exposed energized electrical circuits.

Exposed non-current-carrying metal parts of fixed equipment shall be grounded except when specifically excluded by 29 CFR 1910, Subpart S.

Exposed non-current-carrying metal parts of cord-and-plug connected equipment shall be grounded.

Portable power tools shall be either grounded or of a double insulated type. Double insulated tools must bear a permanent label identifying them as such.

Extension cords shall be grounded, designed for hard or extra-hard usage, and maintained in good repair. Damaged electrical cords will be cut up and disposed of.

Ground Fault Circuit Interrupter (GFCI) devices are required on all 15 and 20 amperes 120 volt temporary wiring. Extension cords are considered temporary wiring.

Cords shall be protected against damage from traffic, pinch points, and sharp corners. Examples include doorways, roadways, roof edges, etc.

ASSURED GROUNDING PROGRAM

- Employees shall be instructed that each cord set and any equipment connected by cord and plug, except cord sets and receptacles that are fixed and not exposed to damage, shall be visually inspected by the user before each use for damage and defects, such as deformed or missing pins, insulation damage and indication of possible internal damage. Equipment found to be damaged or defective may not be used until repaired.
- All 120-volt, single phase, 15- and 20-ampere receptacles, 120-volt flexible cord sets, and 120volt equipment connected by cord and plug that are not a part of the permanent wiring of the building or structures shall be tested to assure that electrical continuity is maintained through all required equipment grounding conductors and their connectors. These tests shall be conducted as follows:

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- All equipment grounding conductors shall be tested for continuity.
- Receptacles of cord sets shall be tested for correct attachment of the equipment grounding conductor. The equipment grounding conductor shall be connected to its proper terminal.
- A test log will be maintained on all equipment tested.
- All required tests shall be performed:
- Before the first use
- Before equipment is returned to service following any repairs
- Before equipment is used after any incident that can be reasonably suspected to have caused damage (e.g., when a cord set is run over)
- At intervals not to exceed once per month, except cord sets and receptacles that are fixed and not exposed to damage, which shall be tested at intervals not exceeding three months
- All receptacles, attachment caps and plugs, and receptacle of cord sets shall be tested in the following manner:
- While in service with receptacle circuit tester
- When not in service with a continuity tester
- NOTE: All equipment connected by cord and plug shall be tested for ground wire continuity with a volt-ohm meter or a continuity tester.
- Tests shall be documented by means of color coding. The following color coding system is suggested to verify that testing is current and that all receptacles, portable cords, and tools have been inspected and tested as required:

Color Code System				
Jan/Jun	Green			
Feb/Aug	Brown			
Mar/Sep	Gray			
Apr/Oct	Yellow			
May/Nov	Blue			
Jul/Dec	Red			

• All receptacles, cords, and tools shall be marked with the tape used to designate the period for which the inspections and tests were conducted. The tape will be placed on the receptacle cover of any electrical equipment installed as a permanent fixture in a temporary electrical system. The tape will be placed within 4 inches of the male end of any electrical cord.

ENERGIZED ELECTRICAL WORK (250 VOLTS OR MORE)

- Prior to work commencing on or near energized electrical parts of 50 volts or more (nominal voltage between any two conductors), the following activities shall be completed:
- All measures are taken to de-energize all electrical sources(s) and ensure that there is no feasible alternative of completing the work in the vicinity of energized parts.
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- An Energized Electrical Work Permit is completed and approved by facility manager. Standardized permits which are developed and implemented for routine tasks are reviewed periodically and are kept on file in the respective departments.
- Employee representatives actively participate in establishing protective measures and completing the permit.
- On all energized circuits or equipment carrying 440 volts or over, as a safety measure, two (2) or more electrical trained competent persons must work together, one (1) standing by wearing rubber protective gloves (does not apply to testing and troubleshooting).
- The permit is reviewed with the worker(s) involved in the work activities.
- The completed permit is available with other pre-job safety planning documents.

PPE

Workers who perform work on or near energized parts must use appropriate Personal Protective Equipment. The use of this equipment is evaluated during pre-job safety planning phases of each job and identified on the energized electrical work permit.

- Rubber protective equipment (gloves, sleeves, blankets and mats) is to be used. If an operation on a piece of equipment will be so intricate that it is more hazardous to wear gloves, then this work may be done without gloves.
- Rubber protective equipment (gloves, mats, etc.) is maintained in a safe, reliable condition, stored and used according to the manufacturers recommendation and is not used for other than its intended purpose.
- Equipment to be used is inspected before each use to verify the item is in satisfactory condition and has been tested as required.
- Rubber gloves are inspected for holes and air tested before use.
- Workers performing work on any energized electrical equipment shall wear the appropriate arcrated clothing based on the calculated incident energy for that equipment.
- Shock protection (rubber insulating gloves with leather protectors) shall also be required based on the Shock Hazard Analysis conducted for the voltage that is being worked on.
- Only voltage rated insulated tools or insulating protective barriers that are approved by a nationally recognized testing organization shall be used.

ELECTRICAL TEST EQUIPMENT

- Only qualified personnel may use electrical test equipment.
- Electrical test equipment must be visually inspected immediately before use and is not to be used if defective. Defective test equipment is identified by tagging it out of service.
- Electrical test equipment is used only for intended applications.
- When verifying that circuits are de-energized, electrical test equipment is checked on a known energized source for proper operation immediately before and after use.

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• When performing zero energy checks, assure that stored electrical or mechanical energy cannot re-energize the circuit.

LOCKOUT/TAGOUT (LOTO)

All energy sources shall be isolated before employees place themselves in a position to be exposed to hazardous movement of machinery, the hazardous release of a material, or the release of energy.

All employees shall be instructed in the safety significance of the lockout and tagout procedures on each project. MIEDI/client procedures need to be reviewed prior to commencing work. MIEDI employees will be trained to follow these procedures. MIEDI Facility Manager and/or the Safety Manager are responsible for this review and determination.

All equipment shall be locked and tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy-isolating device bearing a lock and or tag. To do so shall result in severe disciplinary action up to and including immediate termination.

MIEDI facility supervision shall survey the specific work site to locate and identify all energy sources to be certain which switch, valve or other energy isolating devices apply to the equipment to be locked and tagged out. More than one energy source (electrical, mechanical and/or others) may be involved. Questionable energy source problems must be resolved before job authorization is obtained and lockout/tagout commences.

Locks

Each facility will have lock and tag cabinets/boxes at locations in proximity to the lock and tag operations. Each control lock cabinet/box contains numbered locks and tags. Control locks are individually keyed so that the key of one lock does not open any other lock. Control locks are to be used for control of McKinstry work areas. Control lock cabinets/boxes are always to be locked. The lock and tag administrator will control the access to control lock cabinets/boxes.

MIEDI will furnish each employee with necessary lockout locks and tags unless specified differently by owner/client. Each individual's personal lockset will be keyed differently. All locks are to have only one key, and will be issued to the employee with the lock set.

Logbook

A master log of all locks issued to employees will be kept by facility supervision. The log will show which locks (by number) are issued to which employee (by name and lead).

MIEDI supervision will use a Lock and Tag Logbook to provide a summary of information about lockouts and tagouts. Logbooks shall contain the following information as a minimum: Unique sequential number, equipment of component affected, date installed, reason for installation, person authorizing

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installation, date removed, person authorizing removal. Logs can be found at LOTO stations in every facility.

Lock Out Procedure

- Notify all affected or potentially affected employees that a lockout / tagout is required to perform work and the reason, therefore.
- Notify the Facility Control/Operations Center before disconnecting power to any equipment on site. Any disconnecting of power on equipment (air handlers, pumps, chillers, cooling towers, fume hoods, supply fans, Data Center cooling and power equipment, fire panels) may send an alarm to the Control/Operations Center. Provide the Control/Operations Center with the name of the equipment, where it is located, and how long you expect the equipment to be locked out.
- If the equipment is operating, shut it down using an approved procedure.
- Operate the switch, valve, or other energy-isolating device so that each energy source (electrical, mechanical, hydraulic, etc.), is isolated from the equipment. Stored energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas steam or water pressure, etc.) shall be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
- Lockout or tagout devices shall be affixed to each energy isolating device by authorized employees.
- Lockout devices, where used, shall be affixed in a manner so they will hold the energy isolating devices in a "safe" or "off" position.
- Tagout devices, where used, shall be affixed in such a manner, as they will clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited.
- Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment shall be fastened at the same point at which the lock would have been attached.
- Where a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.
- After ensuring that no personnel are exposed, and as a check verifying isolation of the energy sources, operate the hand switch or other normal operating controls to make certain the equipment will not operate. CAUTION: Return operating controls to neutral or "Off" position after the test.
- In the event equipment needs to be secured from being energized "protect equipment only", use equipment control locks. The lock and tag administrator will be responsible to place the control lock and multiple lockout device on the system. Each project will have one designated staff person responsible for placement and removal of control locks. A tag must be placed with the control lock identifying the problem, and the contact person. Control locks will be provided by MIEDI and marked designating MIEDI as owner of the lock.

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- On completion of work, or shift, ensure all tools and equipment are clear. Remove all personal locks and tags and have the next shift install their lock. The control lock and lockout device is to remain on the system until such time as no more work is to be performed on the system.
- When the equipment is ready to be re-energized, notify the Control/Operations Center that work is complete on the equipment. This lets the Control/Operations Center know that any alarms or troubles that come into the system are now real and not maintenance or repair work related.
- In the preceding steps, if more than one individual is required to lockout/tagout equipment, each shall place his/her own personal lock and tag on the energy isolating device(s). In complicated lockout/tagout situations where multiple energy sources need to be locked out by multiple employees, an approved lock box may be used.

Removing an Abandoned Lock

- Before an employee's lock is removed, MIEDI's lock removal procedure will be implemented. This procedure should follow these guidelines:
- Identify the owner of the lock by checking the master list.
- Contact the employee assigned to the lock regardless of whether the employee is at work or at home. The employee is to remove the lock.
- If the employee cannot be located:
- MIEDI Facility Manager and employee's supervisor must be present. If a dedicated Safety Manager is on site, he/she must also be present.
- All three supervisors will walk the entire system to ensure that all work is complete, all clean-up is performed and that the system is safe to remove the lock. Only the employee's supervisor has the authority to remove the lock.
- The employee's supervisor is responsible to ensure that the employee whose lock was removed is notified before returning to work that their lock was removed.

Lock Box Procedures

If multiple sources of energy are involved, or if more than one individual or department is working under the protection of a group lockout, a lock box will be used. The supervisor initiating the lockout will complete the requirements of an approved procedure specific to the piece of equipment locked out, noting the equipment is locked out and any exceptions to lockout points for that system or piece of equipment. The completed approved procedure will be attached to the lock box.

After placing keys for each piece of equipment locked out in the lock box, the supervisor initiating the lockout will place a multiple lockout device on the box and lock it with a MIEDI control lock. Each employee working in the area affected by the lock box shall attach his or her personal lock to the multiple lockout device. Personal locks are to be removed at the end of each shift and replaced with locks from the next shift.

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WELDING AND CUTTING

- Only trained, competent employees that are thoroughly knowledgeable in the elimination of hazards will be allowed to perform welding and/or cutting operations.
- Proper PPE must be worn at all times during the performance of welding and/or cutting operations. Soft-cap welding may be allowed in special circumstances only with the approval of the safety manager.
- Long sleeve shirt must be worn.
- Proper eye protection against radiant energy shall be used.
- A hot work permit must be obtained and completed prior to beginning any welding or cutting. Permits are only good for that day. A new permit is required daily for all hot work.
- Inside buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location at least 20 feet from highly combustible materials, such as oil or excelsior. Cylinders should be stored in designated places away from elevators, stairs or gangways. Designated storage places shall be located where cylinders will not be knocked over or damaged by passing or falling objects or subject to tampering.
- The handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tank cars, or motor vehicle cargo tanks shall be in accordance with Compressed Gas Association Pamphlet P-1-1965.
- A 10-pound ABC fire extinguisher shall be located within 25 feet of storage and use areas.
- "No smoking" signs must be located in the area.
- Cylinders shall not be stored within 40 feet of an occupied dwelling (e.g., office trailer).
- Proper ventilation shall be utilized.

HOT WORK PERMITS

- MIEDI facility team members and vendor-partner management teams will rigidly enforce this hot work permit rule. All employees will be trained in the program and will be expected to abide by it.
- This rule will be strictly enforced throughout the facility.
- Fire alarm systems will be placed in BYPASS to eliminate any potential of accidental building evacuation during the hot work.
- The Control/Operations Center must be notified before placing any fire alarm system into BYPASS and must be notified when placing the fire system back into NORMAL operation.
- If fire systems (alarm systems, sprinklers, fire pumps, and halon) must be disabled, a Red Tag permit must also be filled out and the Control/Operations Center notified.
- In all areas where hot work is to be carried out, a hot work permit must be completed and signed by the facility LFE, AFM, or FM.
- The permit must identify the type of work to be performed, the location of the work, a list of all hazards, the location of fire suppression equipment, and the date of the work.

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- Appropriate fire suppression equipment must be readily available (within 20 feet of hot work).
- Hot work areas will be clear of all flammable and combustible materials. Where materials cannot be removed, they must be protected with fire-resistant material.
- An employee, wearing an orange vest for identification, must be designated to act as fire watch. The fire watch must remain in the work area at all times the hot work is being performed.
- Fire watch shall be present for one hour after completion of the work and 30-minute checks shall be completed for three hours after the initial one hour fire watch is completed.
- Employees involved in hot work and fire watches must be trained in the use of fire protection equipment.
- The Facility Manager or his/her designee must approve hot work inside any confined space. Confined space permit and hot work permit must be completed and signed.

UTILITY VEHICLE/GOLF CART POLICY

MIEDI and its clients provide Vehicles to employees so they may fulfill their job-related duties. Vehicles are used to transport equipment and people, patrol the facility grounds, and for facility maintenance activities. This policy establishes consistent standards regarding:

- Vehicle Operating Standards
- Department & Driver Responsibilities
- Operator Requirements & Standards
- Vehicle Condition and Standard Safety Features
- Accident Reporting Procedures
- Compliance with these standards will ensure the safe operation of these vehicles for the facility including Vehicle drivers, vehicle operators, cyclists, and pedestrians.
- Vehicles owned by MIEDI and its clients may only be used for official business by MIEDI employees who are associated with the facility. Vehicles may not be used for personal business such as unauthorized home-to-office travel, which will be considered vehicle misuse.
- Knowledge of and compliance with applicable state laws, rules, regulations, and policies are the responsibility of the driver and noncompliance may result in suspension of user privileges.
- All accidents involving a Vehicle will be reported immediately to the Facility Manager/Assistant Facility Manager to which the Vehicle is registered and to the applicable State/Municipal Department of Public Safety/Police as required by law.

VEHICLE OPERATING STANDARDS

- Vehicle operation is governed under State Revised Statutes and operators are subject to the rules of the road including stopping, turning, and safe operation. Vehicle operators observed in violation of these rules can be cited by the police.
- Drivers must have a valid State driver's license with a satisfactory driving record.

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- Vehicles are to be operated at speeds no greater than 15 MPH or as safety concerns demand. Operators should always consider the terrain, weather conditions, and existing pedestrian and vehicular traffic, which may affect the ability to operate the Vehicle safely.
- Vehicle operators will stop at all "blind intersections" and then proceed with caution.
- Vehicles will be operated only within the confines of the facility.
- Vehicles are not to be driven on any landscaped area unless it is the only available way to gain access to the specific area where work is being performed. If the Vehicle must be on a landscaped area in order to allow a pedestrian(s) the proper right-of-way, it should be brought to a full stop, then immediately returned to the designated driving surface as soon as the area is clear.
- Vehicles will be operated in such a manner that they do not impede or interfere with normal
 pedestrian or vehicular traffic flow on sidewalks, ramps or roadways. In that respect, Vehicles
 will be operated on service drives and roadways whenever possible, rather than on sidewalks
 designed primarily for pedestrian use.
- Vehicles will be operated with the utmost courtesy, care, and consideration for the safety of pedestrians.
- Pedestrians will be given the right-of-way at all times.
- Vehicles will not be parked:
- in fire lanes
- in DMV disabled parking
- in reserved parking
- within 20 feet of the main entrance/exit of any building in any manner that would impede the normal flow of pedestrian traffic

SUPERVISOR RESPONSIBILITIES

- Supervisors will assure that each employee in their department, who operates a Vehicle, is properly advised of this policy.
- Supervisors are responsible for obtaining a signed copy of the Vehicle Safety Guidelines
 Acknowledgement form from each employee in their facility that operates a Vehicle, attesting to
 the employee's knowledge and understanding of, and agreement to abide by, the Vehicle policy.
 This signed Acknowledgement must be completed and placed in the employees personnel file
 prior to the employee driving a Vehicle.
- Supervisors should provide a minimal amount of hands on training prior to an employee driving a Vehicle.
- Supervisors will implement procedures for the control of Vehicles overseen by them. Such procedures may include the use of a "sign-out log" for keys

EMPLOYEE/OPERATOR REQUIREMENTS & STANDARDS

• No one under the age of eighteen (18) will operate a Vehicle.

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- Vehicle operators are responsible for the security of ignition keys during the time that a Vehicle is assigned to them. Any time a Vehicle is unattended, the ignition will be turned off, and the key will be removed from the ignition and kept in the possession of the authorized operator.
- Vehicle operators are not permitted to drive while wearing devices that impede hearing, e.g., stereo headsets, earplugs, etc.
- All passengers must be in seats designed for such use. No passengers are allowed to be transported in the truck beds or on the sides of Vehicles with the exception of the transport of an injured person secured on a backboard.
- Cell phone usage while driving a Vehicle is prohibited.
- MIEDI employees will not operate Vehicles registered to clients unless the supervisor for the client to which the Vehicle is registered has granted prior approval.

VEHICLE CONDITION AND STANDARD SAFETY FEATURES

- Vehicles owned or operated by MIEDI employees will be equipped and maintained with working headlights and taillights (two red lights, one each located on the opposite sides at the rear of the Vehicle that stay on during night operations).
- Vehicle's physical condition should appear to be new condition (no dents, dings, cracked fenders, etc.)
- Vehicles purchased without headlights and/or taillights are to be used only during daytime operations.
- Electric turn signals are required for nighttime operation; hand signals suffice for daytime operation.
- Vehicles will be equipped with a working horn or bell and a "Slow Moving Vehicle" sign, if needed.
- Vehicles will not be modified in any manner that affects the recommended mode of operation, speed, or safety of the Vehicle.

VEHICLE MAINTENANCE RESPONSIBILITY

- Each Vehicle operator is responsible for providing timely notification of safety and maintenance concerns to the MIEDI supervisor of the facility to which the Vehicle is used.
- Supervisors will be responsible for seeing to the timely repair of such concerns and, if the Vehicle cannot be operated safely without said repairs taking place, the Vehicle will be taken "out of service" until the repairs are completed.

GASOLINE/DIESEL POWERED EQUIPMENT

Many facilities have gasoline/diesel powered equipment and thus introduce the hazard of potential fire and dangerous fumes. All generators and equipment that must be used inside the confines of an enclosed building, and are gas or diesel fuel powered, shall have an exhaust system to exhaust fumes to

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the outside of the building. All personnel and vendor-partners at the facility shall abide by the following procedures and requirements.

FIRE

OSHA and fire departments have regulations regarding quantity and methods of handling gasoline/diesel. The following rules will minimize the danger from fire:

- Review OSHA and local fire department requirements and comply with these standards.
- Storage of gasoline/diesel containers must comply with OSHA rules.
- Fuel transfer operations must be conducted outside of the facility.
- When drums are used for storage, drum-pumps which are designed specifically for flammable liquids must be used. Use safety bungs for the vent opening. The use of a gravity feed or bottom draw drum-pump is prohibited.
- Use only approved metal safety cans for filling engine tanks. (Automatic safety latch closer, funnel, and flash arrestor). (No plastic cans)
- Shut down engine and allow it to cool before refueling.
- Have a 20-pound ABC dry chemical type extinguisher available wherever flammable liquids are handled.
- No smoking near gasoline or any other flammable liquids.
- All drums shall be properly labeled as per OSHA 1926.59 Hazard Communication.

FUMES

Gas engines exhaust carbon dioxide and carbon monoxide. Dioxide is heavier than air, monoxide slightly lighter. A mixture of the gases usually is heavier than air although heat may cause it to rise. Both are without color, taste, or smell. Light concentrations cause headache and nausea. Death is swift in heavy concentrations. A few minutes may be too long, don't discount this hazard. If anyone exhibits symptoms, do not attempt rescue without proper personal protection equipment.

Do not run gas engines in pits, manholes, or confined spaces without positive ventilation. Always pipe gas engine exhausts to outside air when engine is located in enclosed space. Start blower before engine. If engine stops, be sure space is well ventilated before sending anyone in to restart. If in doubt, check for fumes with CO Tester.

Danger spots are deep excavations, pits, manholes, hoist engineer's shanties, pipe or crawl spaces under basement floors, and where gas heaters are used.

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HAND AND POWER TOOLS

GENERAL REQUIREMENTS

- All hand and power tools and similar equipment shall be maintained in a safe condition. All hand and power tools for the facility shall receive a safety inspection prior to each use.
- Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating, or moving parts of such equipment shall be guarded if such parts are exposed to contact by employees or otherwise create a hazard.
- Switches:
- All hand-held powered sanders, grinders with wheels 20-inch or less, routers, planers, trimmers, nibblers, shears, scroll saws, and jigsaws with blade shanks one-fourth of an inch wide or less may be equipped with only a positive "on-off" control.
- All hand-held powered drills, tappers, fasteners, drivers, grinders with wheels greater than 2 inches in diameter, disc sanders, belt sanders, reciprocating saws, and other similar operating power tools shall be equipped with a momentary contact "on-off" control and may have a lock-on control if turnoff can be accomplished by a single motion of the same finger or fingers that turn it on.
- All other hand-held powered tools such as circular saws, chain saws, and percussion tools without positive accessory holding means shall be equipped with a constant pressure switch that will shut off the power when the pressure is released.

MACHINE GUARDING

Parts of machines whose operation exposes an employee to injury shall be guarded. Hand tools for placing and removing material shall be such as to preclude the operator from placing a hand in a danger zone.

FAN BLADE GUARDING

A guard with openings no larger than ½ inch shall protect fans with blade periphery less than 7 feet above the floor.

HAND TOOLS

Impact tools, such as drift pins, wedges and chisels, shall be kept free of mushroom heads.

POWER OPERATED HAND TOOLS

- All electric power operated tools shall either be of the approved double-insulated type or properly grounded and have cords free from defects.
- Use of hoses or electric cords to hoist or lower tools is not permitted.

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- Pneumatic power tools shall be secured to hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.
- Safety clips shall be securely installed on pneumatic impact tools to prevent attachments from being accidentally expelled.
- Compressed air shall not be used for cleaning purposes except where reduced to less than 30 psi, and then only with effective chip guarding and personal protective equipment.
- All hoses exceeding ½ inch inside diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure.
- All fuel powered tools shall be stopped while being refueled, serviced or maintained.
- Only employees who have been trained in the operation of a particular power actuated tools shall be allowed to operate the tool.

ABRASIVE WHEELS AND TOOLS

- All abrasive wheels shall be provided with safety guards.
- All abrasive wheels shall be inspected, and ring tested before mounting to ensure they are free from cracks or defects.
- All abrasive wheels shall be matched with RPMs to the motor power source.
- All employees using abrasive wheels shall be protected by appropriate eye protection equipment.

JACK-LEVER AND RATCHET (SCREW AND HYDRAULIC)

- All jacks shall have a positive stop to prevent over travel.
- The manufacturer's rated capacity shall be legibly marked on all jacks and shall not be exceeded.

JACKS

- The base of a jack shall be on a firm foundation or be blocked. After the load is raised, it must be blocked or otherwise secured.
- Jacks must be properly maintained and thoroughly inspected dependent upon service conditions, but once each 6 months as a minimum.

POWDER ACTUATED TOOLS

- Employees must be trained, competent, and certified in each powder-actuated tool that they use.
- Warning signs must be posted while powder actuated tools are in use. Hearing protection is required to be used by the operator.

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TOOLS EMITTING LASER LIGHT BEAMS

- Employees must be trained, competent and certified to use tools emitting laser light beams.
- Warning signs must be posted while using tools emitting laser light beams.

Most survey and construction equipment is optical or Class I laser in nature. On occasion, it may be necessary to use laser equipment with higher power such as Class II or Class IIIa lasers. All lasers are required to be marked as to classification. This policy applies to all laser use. Prior to any laser use the supervisor will evaluate the need for personnel protective equipment, and training.

Categories of Lasers

Class I lasers are the most common and are generally exempt from most control measures. Class I laser output may be viewed directly when it is used in accordance with the manufactures guidelines and as the manufacturer intended. No warning signs, personal protective equipment or special precautions are required.

Class II lasers emit visible low powered radiation as a continuous-wave or pulsed. Class II lasers are used in barcode scanners, laser pointers, some survey, leveling and construction equipment, gun sights and others. These lasers have a low potential for harm due to the expected aversion response. There is some risk of harm if stared at or, if for some reason, the aversion response is impaired. Class II lasers potential for harm rises if viewed through magnifying devices such as field glasses, theodolites, and scopes. When using a Class II laser follow the following precautions:

- Read and familiarize yourself with the manufacturer's instructions and safety recommendations
- Position lasers so that the potential for eye exposures is minimized
- When possible, terminate beam at end of its useful path
- Whenever practical, position beam at a height other than eye level
- Block unnecessary beam reflections and remove shiny objects that my cause unexpected reflections
- Never look directly into the beam or direct it at anyone's face
- The laser should be rigidly placed to prevent accidental altering of beam

Class III and Class IIIa lasers are considered moderate hazard devices. They can emit visible or invisible radiation. Their beams are not normally hazardous when viewed momentarily with the naked eye, but when viewed through binoculars, theodolites or other such devices can be harmful to the eye. The following safety precautions should be followed:

- All the recommendations for Class II apply
- When used outdoors or in an open area in a facility, establish a hazard zone with tape and caution signs or ropes to warn of hazard

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- Evaluate the need to post warning signs indicating that Class III laser work is being performed.
- Protective eye wear shall be worn by all employees, visitors, and others in the zone where the lasers are being used.

CONFINED SPACE PROGRAM

MIEDI employees and vendor-partners will comply with MIEDI's confined space permitting and entry program. All employees entering confined space must be trained by McKinstry Safety Team prior to entry.

PURPOSE

To comply with State and Federal regulations and to ensure that information is available about the dangers related to working in spaces having limited means of egress which may present problems due to accumulation of toxic or flammable contaminants, oxygen deficient or excess atmospheres, or mechanical, electrical, corrosive or temperature hazards, the following Confined Space Program has been established. All affected employees of MIEDI will participate in the confined space program. This written program will be kept at the facility and will be available to all employees and to other parties in accordance with applicable laws and regulations.

DEFINITION

A confined or enclosed space means any space having a limited means of egress, which is subject to the accumulation of toxic or flammable contaminants or has the potential for an oxygen deficient atmosphere. Confined or enclosed spaces may include, but are not limited to, storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, underground utility vaults, tunnels, and open top spaces more than four feet in depth such as pits, tubs, vaults, caissons and vessels.

Before entering any confined space, the space must be tested for percent of oxygen, percent carbon monoxide, percent hydrogen sulfide, and percent explosive gasses. The measurement will be performed with an instrument capable of checking percent concentrations. Only trained individuals can use these instruments.

EXPLANATION OF INSTRUCTIONS

The atmosphere must contain an oxygen concentration above 19.5% and less than 23.5%, flammable gas concentration below 10% of the lower explosive limits. OSHA permits work at concentrations of 19.5% or greater, but less than 23.5%. The further below the limit, the greater the risk of developing mental impairment, unconsciousness, and death. Generally, a person's senses are not sensitive enough to warn of an oxygen deficiency; therefore, an instrument capable of determining oxygen concentrations is used to ensure that breathable air is present in the confined space.

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Normal atmosphere contains zero concentrations of flammable gas. Work is permitted at concentrations of 10% of the lower limit of explosive concentration - known as the lower explosive limit (LEL). Rarely is work performed when there is any concentration of explosive gas. Some explosive gases have an odor added to them. Propane is odorized and at flammable concentrations the odor is highly noxious. An instrument is a better indicator of concentration than a person's nose, so an instrument is required to measure the percent of LEL before entering into a confined space.

The MIEDI Facility Manager, or designee, is to confirm that the proper steps have been taken and that safeguards have been tailored for the unique hazards present in each operation involving the confined space.

The entry supervisor is responsible for the direct work of his or her teammates. This includes working in a safe manner. The entry supervisor must realize the limitations of the instruction to cover all confined space entries and should accordingly review each entry situation, noting peculiarities that are not covered and take whatever steps are necessary to provide a safe work area.

(Staff and contract employees are subject to these instructions)

METHODS OF COMPLIANCE

Evaluation: Conditions within the confined space will be tested to determine if acceptable entry conditions exist before entry is authorized. Pre-entry testing is required. Whenever an employee is within a confined space, continuous monitoring will be required at all times. If there are any questions regarding the confined space, they should be directed to the MIEDI Safety Manager.

- All equipment must be calibrated and operated according to the equipment manufacturer's instructions. The operator of any test equipment will be trained to know the equipment's limitations as well as how to properly calibrate and operate the equipment. The entry supervisor will conduct evaluation of the atmosphere within the confined space. Each authorized entrant shall be provided the opportunity to observe all monitoring and testing.
- The evaluation shall be made immediately prior to entry
- Each entry will include the following testing, which must be conducted in the order listed:
 - o Test for % oxygen
 - Test flammable gases and vapors (% LEL)
 - o Test for toxic gases and vapors

CONFINED SPACE MANAGEMENT PROCEDURES

Once it has been determined that a confined space exists, the Entry Supervisor shall pre-plan before allowing entry to the confined space. The plan will specify the management procedures to be followed depending upon the site and task conditions. These may include provisions for the following:

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- The task to be conducted within the confined space
- Personnel involved and responsibilities
- Possible hazards within the space include information on atmospheric hazards, hazardous energies, and the possibility of engulfment and the risks of falling. Review the Confined Space Assessment form for specific information on the space to be entered.
- Requirements for making the space safe include, isolation, ventilation, atmospheric monitoring, guarding, and fall protection
- Equipment needed to enter may include personal protective equipment (PPE) suited to the hazards (encapsulation suits, respirators, gloves, etc.) personal monitors, ventilation equipment, rescue equipment, radios, spark-proof tools, and lights.
- Communications between the entrant and the observer.
- Emergency Operating Procedure (EOP) to be available at site of confined space to be followed if needed.

WORK PRACTICE CONTROLS FOR CONFINED SPACE ENTRY

Below are the basic steps to be followed in confined space entry. The specific requirements for each confined space entry will depend upon the facility and task conditions. The facility-specific confined space plan will specify the methods for all phases of the project and will specify who is responsible to:

- Train employees
- Initiate the confined space entry permit and ensure that the appropriate items listed below are noted on the permit
- Isolate external hazards associated with the confined space
- Conduct the required atmospheric testing and proceed only if conditions are safe
- Ensure that the initial cleaning and vapor freeing (ventilation) has been done
- Ensure that the proper isolation has been accomplished.
- Ensure that continuous ventilation is in place and the appropriate air monitoring equipment is on hand and working correctly.
- Assemble all required tools and equipment (emergency lighting, fire extinguisher).
- Assure availability of a safety harness, lifeline and retrieval system if the possibility of a highly toxic, flammable or oxygen deficient atmosphere exists or can develop. No employee will enter the space if this possibility is anything other than very rare.
- Place an attendant outside the confined space with the capability of maintaining communication with the entrant.
- Wear all required personal protective equipment
- Grant entry approval
- Contact the facility Control Center and notify them of a confined space entry in progress, the number, and location of the confined space, and who will be entering the space.
- Enter the confined space.

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- Oversee that all work within the confined space is conducted in an alert, cautious manner, always looking for signs of danger
- Evacuate the space if there is any indication of ill effects such as dizziness, irritation or excessive odor. If there is anything that does not appear right, the space must be evacuated immediately.
- Contact the facility Control Center when work is complete, and the confined space entry is terminated.

ISOLATION

Conditions or actions outside of the confined space can create hazards with the space, creating a need for isolating the confined space as a way of protecting the entrants from these remotely caused hazards. For example:

- Lockout and tagout of electrical energy
- Lockout and tagout of mechanical energy
- Blocking the source of liquids and gases (fuel, water, chemicals, steam, etc.)
- Barriers to keep people and items from accidentally entering the space



Figure 2. Example of tunnel entrance on campus.

Lockout/Tagout procedures will be strictly followed. Many times, entry into a confined space will require the lockout/tagout of one or more energy sources. If required, lockout/tagout procedures will be

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included as part of the facility-specific confined space plan and MOP for the work to be accomplished. A single valve cannot be used to block out liquids and gases. This type of blockage requires a blank flange (blind flange), double block and bleed, parting flanges or some other fail-safe method of blocking the materials. Whenever possible, the isolation methods will be visually observed, tested and noted on the permit and MOP.

VENTILATION

- Prior to entry, mechanical ventilation will be used to purge the confined space of any hazardous atmosphere and testing shall be conducted following the purging.
- The time required to purge the space will depend on the volume of the confined space and the capacity of the blower.
- Continuous ventilation shall be used to maintain safe conditions whenever an employee is in a confined space (e.g., <10% of LEL,>19.5% oxygen and below all PEL's).
- Care must be taken with the placement of ventilation equipment to avoid problems and maximize its effectiveness.
- Equipment should be set up such that it blows air into the space instead of exhausting air from the chamber.
- The number of bends in the ducting needs to be kept to a minimum.
- The air should enter the space in the vicinity of where the workers will be in the space.
- The air discharge must be well into the space (not right at the opening) and not close to the ceiling.
- The source of the ventilation air needs to be evaluated to ensure it does not include contaminants such as engine exhaust.
- Each confined space will be different and the optimum location for the ventilation discharge will be determined in pre-planning and MOP authoring.

Use the following calculation for determining the minimum required CFM:

of Air Changes per Hour (ACH) required x cubic feet of the space (LxWxH) / 60 minutes = minimum CFM delivery rate

Example:

4 ACH x 512 (8L x 8W x 8H) standard utility vault / 60 minutes = 34.13 CFM (minimum blower delivery requirements)

NOTE: Must take into account the number of bends in the duct as that will result in air flow loss. Most new blowers have the data printed right on the blower. Also need to take into consideration space configuration and air contaminants/hazardous materials.

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PERMIT

Prior to entry into the space, a Confined Space Entry Permit will be completed for each confined space entry. The permit must be signed by the entrant(s) and entry supervisor. If the confined space conditions remain the same, the permit may be valid for up to eight hours. No permit will be issued for more than one work shift or eight hours, whichever is shorter. The completed permit must be made available to authorized entrants via posting at the entry portal or other effective means. The MIEDI Confined Space Entry Permit, must be used.

ATTENDANT

A confined space entry attendant (observer) is required for each entry. The attendant must have confined space training and experience and shall:

- Monitor and protect the confined space entrant(s) (this is the primary duty of the attendant).
- Have sufficient knowledge of the hazards of the specific confined space being entered. This includes knowing the potential hazards, the signs and symptoms of hazard exposure, and the appropriate emergency procedures to be followed.
- Communicate with the entrant(s) as necessary to monitor their status and alert the entrant(s) of the need to evacuate the space.
- Summon rescue and other emergency services as soon as the attendant determines that the entrant(s) may need assistance.
- Remain outside the confined space and perform no other duties that might interfere with the attendant's primary duty and focus. The attendant will remain in place until relieved by another qualified person or until the entrant(s) exit the confined space.

RESCUE

Pre-entry planning must include the development and implementation of procedures for summoning rescue and emergency services. This must be addressed in the MOP.

RECORD KEEPING

Upon completion of all work in the confined space, the Facility Manager, Facility Control Center, or other designee must be notified. The space is then sealed and posted with confined space signage. All permits and documentation must be kept on file for a minimum of one year.

BATTERY SAFETY

POLICY

MIEDI has developed this safety program to ensure employees are protected when working in battery rooms, or with batteries.

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RESPONSIBILITIES

- Management shall provide the funding necessary to support this policy.
- The Facility Safety Manager, Facility Manager, Lead, or other designee will manage this program.
- Leads shall ensure the safe work practices identified below are implemented by their employees.
- Employees are required to know and use these procedures.

BACKGROUND

Lead-acid batteries are physically large batteries that contain lead plates in a solution of acid to create electricity. They are a common power source for many applications, mostly cars, boats, standby power generators, and UPSs. Nationally, 2300 people are injured each year using lead acid batteries. Acid burns to the face and eyes comprise about 50% of these injuries as these batteries can easily explode. The remaining injuries were mostly due to lifting or dropping batteries as they are quite heavy.

Note: A battery cannot be turned off. There is always potential across the posts of a battery, regardless of any controls.

Note: Batteries can cause thermal burns when current passes through your body and chemical burns if you are exposed to the acid.

DEFINITIONS

Cell – The basic electrochemical unit consisting of an anode and a cathode. The nominal voltage of a lead acid cell is 2.0 volts and a nickel cadmium cell is 1.2-volts. The starting battery in your car or truck is a six-cell battery and your flashlight may require two D cells.

Jar – The container which holds a cell or group of cells. Typical jars will have one, two, three, four or six cells.

Battery – Two or more cells connected together electrically. The cells may be connected in series, parallel or both to provide the required operating voltage and current. A typical UPS system will have one or more 240-cell batteries. The nominal voltage of this battery is 480 VDC.

Flooded Cell – A cell design characterized by an excess of free electrolyte. The products of electrolysis (gasses) and evaporation can freely exit the cell through a vent. Flooded cells typically have clear jars and the electrolyte is a liquid similar in appearance to water.

Valve-regulated, Sealed Lead Acid Cell (VRLA) – A cell that is sealed and fitted with a vent, which opens to release excess pressure as required.

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STANDARD PRECAUTIONS

- Always store or recharge batteries in a well-ventilated area away from sparks or open flames
- Damaged lead acid batteries shall be kept in properly labeled acid-resistant secondary containment structures.
- Use only chargers that are designed for the battery being charged.
- Always keep lead acid battery vent caps securely in place.
- Do not store lead acid batteries in hot locations or in direct sunlight.
- Use nonmetallic containers and funnels.
- If acid gets into your eyes, flush immediately with water for 15 minutes, and then promptly seek medical attention.
- If acid gets on your skin, rinse the affected area immediately with large amounts of water. Seek medical attention if the chemical burns appears to be a second degree or greater.
- Never over charge a lead acid battery and only replenish fluid with distilled water.
- Emergency wash stations shall be located near lead-acid battery storage and charging areas.
- Prevent open flames, sparks or electric arcs in charging areas.
- Lead-acid storage and charging areas should be posted with "Flammable No Smoking" signs.
- Neutralize spilled or splashed sulfuric acid solution with a baking soda solution, and rinse the spill area with clean water.

PROCEDURES – NEW BATTERIES

- Never perform work in a battery room or on a battery alone.
- Follow the facility check-in/checkout procedures for working in battery rooms.
- Before working on any battery or in a battery room, identify the location of safety showers and eye wash stations.
- Locate neutralizing agents (baking soda) and a spill containment kit and review its use.
- Ensure you have an open exit route at all times. Do not allow yourself to be trapped with no escape route.
- Wash your hands after working on a battery. Avoid wiping your eyes, nose or mouth with your hands while working on a battery.
- Do not smoke or have open flame in or near a battery room or around jars. Most jars that you may work around vent hydrogen gas.
- Verify the operation of the exhaust fan(s) in the battery room. These fans are designed to prevent the buildup of hydrogen gas, which is an explosion hazard.
- Wear the PPE required for the task at hand. This may include gloves, aprons, and face shields. Safety glasses are always required.
- Use insulated tools. Cells have high fault currents. A single 2-volt cell may supply over 5000 amps when the positive and negative posts are shorted together. The generated heat is more than enough to melt metal and cause burns.

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• Use insulated blankets or other materials to shield the battery connections should you have to perform work over the battery.

METHOD OF PROCEDURE (MOP) - SERVICING BATTERIES

- Keep metal tools and jewelry away from the battery.
- Inspect for defective cables, loose connections, corroded cable connectors or battery terminals, cracked cases or covers, loose hold-down clamps, and deformed or loosed terminal posts.
- Replace worn or unserviceable parts.
- Check the state of charge of non-sealed and sealed batteries with an accurate digital voltmeter while electrically powered equipment is turned off (MOP must be used). Also check the electrolyte levels and specific gravity in each cell of non-sealed batteries (MOP must be used).
- When checking the electrolyte liquid levels of the batteries, use a rated flashlight that is intrinsically safe. In the event one is not available, use a plastic/nonmetallic flashlight, turn on the flashlight prior to getting near the battery when checking cell levels and turn off the flashlight when you are away from the batteries.
- Follow the battery manufacturer's recommendations about when to recharge or replace batteries.
- Tighten cable clamp nuts with the proper size wrench. Avoid subjecting battery terminals to excessive twisting forces.
- Use a cable puller to remove a cable clamp from the battery terminal.
- Remove corrosion on the terminal posts, hold-down tray and hold-down parts.
- Use a tapered brush to clean battery terminals and the cable clamps.
- Wash and clean the battery, battery terminals, and case or tray with water. The corrosive acid can be neutralized by brushing on some baking soda (sodium bicarbonate) solution. If the solution does not bubble, the acid is probably neutralized. Rinse the battery with water to remove the baking soda solution.
- To prevent shocks, never touch or come in contact with both terminals at the same time. If baking soda solution is applied with a cloth, remember that these solutions can conduct electricity.
- When battery cables are removed, ensure that they are clearly marked "positive" and "negative" so that they are reconnected with the correct polarity.
- Use a battery carrier to lift a battery, or place hands at opposite corners. Remember, batteries can weigh 30 to 60 pounds, so practice safe lifting and carrying procedures to prevent back injuries.
- Use self-leveling filler that automatically fills the battery to a predetermined level. Never fill battery cells above the level indicator.
- Do not squeeze the syringe so hard that the water splashes acid from the cell opening.
- Insulated tools shall be used when working on battery connections and shock protection (rubber insulating gloves with leather protectors) shall be worn when using insulated tools.
- (ALL WORK ON BATTERIES REQUIRES AN APPROVED MOP)

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SAFETY INSPECTIONS

MIEDI has a policy and procedure for conducting inspections of the safety conditions at the facility. The purpose of such inspections is to improve safety conditions and practices.

Note: Any Safety concerns/issues identified during daily rounds shall be documented and addressed.

Note: Annual safety audits shall be conducted per the established schedule by the facility Safety POC.

Safety inspections generally uncover conditions that can cause injuries and/or fires. The following are suggestions that should be used in making an inspection in the facility.

- Conduct annual safety inspections of the facility, using the Safety Audit Form.
- Where unsafe conditions are found.
- Initiate action to correct the condition.
- Place warning signs and guarding to keep employees away from unsafe areas. In addition, warn employees verbally.
- Notify the Facility Safety Manager, Facility Manager, or Lead if you cannot correct the hazard.
- When an employee is noted performing unsafe practices:
- Tell him/her of the unsafe act.
- Explain why the act is unsafe.
- Describe and show the correct, safe action.
- Re-check employee's performance at a later time to assure that safe practices are being followed.
- Make all corrections in a firm, but friendly manner. Let the employee know that you are interested in them and their safety.

INCIDENT REPORTING

All incidents shall be reported to your immediate supervisor.

All incidents shall be reported as soon as practicable to the MIEDI Incident Reporting Hotline:

1-866-772-3108

OCCUPATIONAL SAFETY AND HEALTH ACT

It is MIEDI's policy to achieve compliance with the Safety and Health Act (OSHA) of 1970 (29 CFR 1926, 1910).

Facility personnel are to become familiar with the requirements of this act, and work diligently to meet the stated objective.

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As additions, deletions, or other changes relating to this legislation are made, the facility MIEDI's employees will be advised of such changes by the Safety Manager, or facility POC, and institute action as necessary.

OCCUPATIONAL SAFETY AND HEALTH STANDARDS

Pursuant to authority provided under the Occupational Safety and Health Act, MINIMUM health and safety standards have been developed (29 CFR Part 1926.1910).

The above-referenced Standards have been adopted by MIEDI and every effort to achieve compliance will be made. If and when conditions or practices in violation of these standards are discovered, corrective action will be initiated as soon as possible.

Occupational Safety & Health Compliance Inspections can occur when:

- OSHA/State has been notified that a specific work-related incident has taken place.
- Periodically OSHA and/or State safety officers may visit workplaces for the purpose of ensuring that employers are complying with the above-referenced health and safety standards. Inspections are intended to serve the overall remedial purpose of the Act, which is to make the employer's workplace as safe as reasonably possible. Based on the results of the inspection, the Facility Manager, Owner and/or MIEDI could be subjected to monetary penalties for violation of the OSHA Standards. Inspections are basically in three categories:
 - Fatalities and/or serious accidents This type of inspection occurs after the employer notifies OSHA/State to report a death, probable death of any employee, or the inpatient hospitalization of 2 or more employees within 8 hours of occurrence.
 - General These inspections are scheduled by OSHA/State. They are random and unannounced. Usually the inspection involves the entire facility.
 - Complaints This type of inspection occurs as a result of the inspection agency receiving a complaint concerning an alleged unsafe or unhealthy condition. These complaints are generally registered by an employee or a representative of the employees. While in most instances the inspector limits his/her inspection to complaint particulars, they may choose to conduct an inspection of the entire facility.

The MIEDI Facility Manager and the Safety Manager are to be promptly notified when an OSHA/State Inspector visits the site.

OSHA OR STATE COMPLIANCE OFFICERS

The OSHA or State compliance officers may inspect work sites at any reasonable hour, interview employees, and collect environmental samples. Requests to review documents and/or to take photographs must have prior approval by Owner, MIEDI and/or Facility Manager.

OSHA and State compliance officers shall, at all times, be treated in a courteous and businesslike manner.

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STATE OPERATED COMPLIANCE PROGRAMS

Certain states are now operating under approved State Plans for occupational safety and health rather than the Federal OSHA program. These states may have adopted the existing Federal OSHA standards and procedures or may have developed their own.

Where MIEDI is subject to State Occupational Safety and Health plans, our safety policy and program will be based on State requirements. It is the responsibility of the facility Safety POC to verify which OSHA/ State regulations (federal/state) apply to MIEDI facility operations.

OSHA 300 - PERFORMANCE TRACKING

It is the responsibility of the facility to notify the MIEDI Safety Manager which shall include the incident into the OSHA 300 log. OSHA requires that all recordable injuries be entered on the log within 7 days of knowledge of the injury.

Definitions for the OSHA Log

Recordable Injury or Illness:

- Recordable occupation injuries or illnesses are any occupational injuries or illnesses, which result in:
- Death
- Loss of consciousness
- Days away from work
- Restricted work activity or job transfer
- Medical treatment beyond first aid
- A significant work-related injury or illness diagnosed by a licensed healthcare professional
- A broken bone
- Medical removal from the job

Restricted work activity occurs when an employee, as a result of a job-related injury or illness, is physically or mentally unable to perform all or any part of his or her normal assignment during all or any part of the workday or shift.

Lost workdays are the number of days (consecutive or not) after, but not including the day of injury or illness during which the employee would have worked but could not do so: that is, could not perform all or any part of his or her normal work assignment during all or any part of the workday or shift, because of occupational injury or illness. The number of recordable lost workdays is limited to 180 even if more days are actually missed.

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Posting

The OSHA 300 Summary must be completed and posted on the employee safety bulletin boards from February 1st to April 30th of each year.

Recordkeeping

The log and summary must be maintained for 5 years following the year to which they pertain. These records are to be made available for review by any employee, former employees, their representatives, both personal and union and compliance officers from OSHA or State.

Data Analysis

The OSHA log will be frequently reviewed to identify trends and areas where incidents are occurring to allow application of the appropriate corrective actions.

Training

Face to Face training

All training will be coordinated between the facility team and the MIEDI Safety team. These requests will be scheduled on availability of both the participants and trainer(s). The following are the identified categories and the MIEDI Safety team will identify which modules are required based on the site and conversations with the facility management.

Weekly Training

MIEDI hosts a weekly safety briefing with rotating topics. Attendance is mandatory with exceptions made with manager approval.

OSHA 10

All newly hired facility personnel shall be required to take OSHA 10 – General Industry course.

First Aid/CPR/AED

All newly hired facility personnel must attend and qualify an approved First Aid/CPR/AED training and certification course(s).

Refresher training shall be completed every 2 years via online LMS.

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Fire

All newly hired facility personnel must receive training on fire responses including, but not limited to:

- Escalation of identified fire.
- Fire extinguisher use.
- Fire evacuation with pre-approved meet up locations.
- This training will be refreshed annually.

Natural Disaster

All newly hired facility personnel must receive training on natural disasters which includes, but not limited to:

- Tornado Warning
- Earthquake
- Hurricane
- This training will be refreshed annually.

Human Threat

All newly hired facility personnel must receive training on human threat responses which includes, but not limited to:

- Bomb threats directed at the facility
- Armed assailant at the facility
- This training will be refreshed annually

Site Equipment

All newly hired facility personnel must receive training based on the equipment the MIEDI team will use on site. This list of equipment consists of, but not limited to:

- Forklift Operation/Safety Check
- Man Lift Operation/Safety Check
- Enclosed Spaces Entry/Permit
- Hot Work Use/Permit
- This training will be refreshed and performed with all MIEDI team as new equipment is introduced to the site.

Module Based Training

Learning Management System (LMS) – There are online modules for each Facility team member to take on the LMS system provided by MIEDI. Each module is assigned to a week and shall be completed before

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the end of the shift week for all 52 weeks of the year. Required training shall be completed prior to or returning from PTO.

- Monthly Safety Topic
- There are 12 monthly safety topics prepared by and provided by the MIEDI Corporate Safety team. Each member of the Facility team is required to read and sign the provided documentation. This documentation needs to be provided, by the Facility Safety POC, digitally to the Safety team at the end of each month.

BUSINESS CONTINUITY PLAN

Note: The Business Continuity Plan is under development in coordination with the U of I. The University Business Continuity Plan Committee has been formed with MIEDI and U of I partners to begin developing the plan. This effort is on hold per direction from the U of I as they seek to hire a new Director of Public Safety and Security.

ATTACHMENT 1

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All utility related incidents should be routed to InfoCentre by calling 1-855-936-3685. Depending on the nature of the incident, including utility type, time of day, and availability of staff, the appropriate MIEDI response team is dispatched.

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INITIAL CALL TREE

CONTACT INFORMATION

Contact	Email	Work Phone	After Hours (Cell)	
MIEDI				
InfoCentre (24/7)		1-855-936-3685		
McKinstry Safety Hotline		1-866-772-3108		
On-Call Water Systems			208-912-5020	
Energy Plant		208-370-2833	208-370-2833	
Paul Woods	paulw@mckinstry.com	206-310-3139	206-310-3139	
Scott Smith	<pre>scottsmi@mckinstry.com</pre>	208-892-9470	208-596-1977	
Ben Tucker	benjamin@mckinstry.com	208-892-9690	208-596-6183	
Elmer Johnson	<u>elmerj@mckinstry.com</u>	208-301-0662	208-301-0662	
Marc Compton	marcc@mckinstry.com	208-892-9792	208-949-6214	
University of Idaho				
Security (24/7)	Campus-	208-874-7550	208-874-7550	
	security@uidaho.edu			
Facilities Services	facilities@uidaho.edu	208-885-6246		
P3 Liaison	wpotter@uidaho.edu	208-885-6246	208-618-1856	
EHS	samir@uidaho.edu	208-885-7208		
Risk	<u>risk@uidaho.edu</u>			

INITIAL RESPONSE ACTIVITIES

This section is under development.

UTILITY CONTINUITY AND RECOVERY This section is under development.

inis section is under development.

LIST OF UTILITIES IN PRIORITY ORDER

Utility	Priority Level	Individual Responsible for Recovery and Backup
Electricity	1	Marc Compton
Domestic Water	2	Elmer Johnson
Steam	3	Scott Smith
Compressed Air	4	Scott Smith
Sanitary Sewer	5	Elmer Johnson
Chilled Water	6	Scott Smith
Stormwater	7	Elmer Johnson
Reclaimed Water	8	Elmer Johnson

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UNAVAILABILITY OF THE MAJORITY OF STAFF This section is under development.

District Energy Plant (Steam, Chilled Water, Compressed Air)

In the event of a loss of the majority of the Energy Plant staff the following actions will be taken:

- Temporary, untrained staffing for boiler and chiller operations
- Wood boiler shutdown to minimize risk and complexity of operations
- Bring one natural gas boiler online and train new staff on its operation
- Absorption chiller shutdown to minimize risk and complexity of operations

Water Systems (Domestic Water, Reclaimed Water, Sanitary Sewer, Stormwater)

In the event of a loss of the majority of the Water Systems staff or Water Purveyor the following actions will be taken:

- Activate retainer Water Purveyor to continue operations
 - If retainer Water Purveyor is not available:
 - Contact State of Idaho for availability of regional Water Purveyors

Electrical Systems

MIEDI has no staff with high voltage licenses for work on electrical systems. All work is done by qualified subcontractors. If the high voltage subcontractor is unavailable the next available vendor is contacted to begin work. In the event of a life safety emergency, such as a downed power line, Avista Utilities will be dispatched to make the area safe.

UNAVAILABILITY OF KEY APPLICATIONS AND EQUIPMENT This section is under development.

Wood Boiler

• Shift operations to natural gas boilers.

TES Tank

• Isolate tank and switch to chilled water load following operating mode.

McClure Chiller

- Isolate chiller.
- Depending on weather conditions, bring a chiller at NCCP or SCCP online.
- Coordinate with the university to begin load shedding as needed.

Air Compressors

• Procure and connect a portable air compressor to support load.

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Transformers

• Procure and connect a portable generator to support load.

Distribution Switches

- Isolate section. Coordinate with Avista to reconfigure ring bus to feed campus from other feed.
- Procure and connect portable generators to support loads as needed.

Domestic Wells

- Coordinate with the City of Moscow to supply water to campus.
 - Drop campus pressure.

Reclaimed Water Plant

• Isolate reclaimed plant. Feed campus irrigation system with domestic water.

UNAVAILABILITY OF KEY BUILDINGS AND FACILITIES

This section is under development.

District Energy Plant

In the event of a loss of the Energy Plant the following actions will be taken:

- Shut down all boilers, turbines, air compressors, and equipment before evacuation if safe to do so.
- Notify the University of a complete shutdown of steam and compressed air.
- Bring SCCP online as needed.

South Campus Chiller Plant

In the event of a loss of the South Campus Chiller Plant the following actions will be taken:

- Shut down all chillers, cooling towers, pumps, and chemical treatment equipment if safe to do so.
- Send out a notice of Chilled Water load shedding to U of I Facilities based on ambient conditions.
- Bring NCCP online as needed.

Domestic Water Wells

In the event of a loss of a Domestic Water well the following actions will be taken:

- Switch operations to the secondary well.
- Notify the University.

Domestic Water Storage Tanks

In the event of a loss of a Domestic Water storage tank the following actions will be taken:

- Switch operations to the secondary storage tank.
- Notify the University.

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Reclaimed Water Plant

In the event of a loss of the Reclaimed Water Plant the following actions will be taken:

- Isolate and shut down Reclaimed Water system.
- Notify the City of Moscow Water Treatment Plant and the University.
- Source bulk chlorine for Domestic Water chemical treatment.

MINIMUM REQUIRED RESOURCES FOR RECOVERY

This section is under development.

BUILDING EMERGENCY ACTION PLAN

The Building Emergency Action Plan identifies types of incidents and their associated recommended response action. The following matrix provides a visual representation of this information:

	NATU DI SA	JRAL STER				н	MAN-CAUSED DI SASTER				
ACTION	FLOOD	QUAKE	FIRE	AIRCRAFT CRASH	HAZMAT	CIVIL DISTURBANCE	STATE OF EMERGENCY/ALERT	EXPLOSION	NUCLEAR BIOLOGICAL, CHEMICAL ATTACK	ACTIVE SHOOTER	BOMB THREAT
EVACUATE			x	x	x			х		x	x
LOCKDOWN						x	х			x	
SHELTER IN PLACE	x	x			x				x	x	

MEDICAL EMERGENCIES

- Call 9-1-1 or have someone call for you.
- If it is possible and safe to do so:
 - Protect victim from further injury by removing any persistent threat to the victim. Do not move the victim unnecessarily. Do not delay in obtaining trained medical assistance.
 - o Provide first aid until help arrives if you have appropriate training and equipment.
 - o Send someone outside to escort emergency responders to the appropriate location.

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LOCATION OF FIRST AID KITS AND FIRE EXTINGUISHERS



Figure 3. District Energy Plant (Ground Floor).



ATTACHMENT 1

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Figure 4. District Energy Plant (1st Floor).



Figure 6. South Campus Chiller Plant.

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Figure 7. McClure roof.



Figure 8. Bay 3 storage area.

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Figure 9. Reclaimed Water Chlorination Building.

EVACUATION

In the event of an incident requiring the Evacuation of the facility, the following procedures are to be followed.

PREPLAN YOUR ESCAPE

- Each office area has at least two unobstructed ways out.
- Verify that the exits are always usable (doors, stairs, and hallways are not to be blocked).
- Do not use the elevators.
- Know both a primary and alternate location of fire-rated stairwells that will provide a path all the way to the outside.
- When directed by an authority person an Evacuation Emergency Marshall, evacuate to nearest exit.
- After evacuating the building, do not leave the premises unless instructed to do so by your Emergency Marshall.
- The emergency number is "9-1-1" for fire and police.
- Know where your department will assemble; a head count will be conducted of the personnel.
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EMERGENCY MARSHALLS AND ASSEMBLY AREAS

- Each area of the building has been assigned one or more Emergency Marshall. Please make sure that you check in with your Emergency Marshall in case of an emergency. If your Emergency Marshall is not available, please find Incident Commander.
- All employees are to report to the assembly area so we can ensure all building participants are safe and accounted for. The designated assembly area is shown in the following pictures below.
- Evacuate the building at the nearest exit and proceed to the designated assembly area. Please ensure, for your safety, to wait on only the designated assembly area. Emergency vehicles will need clear access to our facility. DO NOT LEAVE THE ASSEMBLY AREA UNTILL HEAD COUNT IS DONE, AND THE INCIDENT COMMANDER DETREMINES IT IS SAFE TO LEAVE.
- Find Your Emergency Marshall at the assembly area and wait for the head count.
- Unless unusual conditions dictate otherwise, the best evacuation route is the nearest stairway and out the nearest exit.
- Once outside, meet at the designated assembly point. Your Emergency Marshall will take a head count to make sure everyone is out and accounted for. Never attempt to re-enter the building to search for someone missing. Let emergency responding officials (fire and police) know that some personnel are still absent.

PERSONS WITH PHYSICAL DISABILITIES

- If you have a temporary or permanent disability that might prevent your safe, orderly, and prompt evacuation during an emergency, some additional planning is needed. This includes:
- Identifying primary and secondary routes out of an area to the exits or a safe area of refuge. Stairwells are designed to provide protection from smoke and fire; however, doors to these areas must be kept closed to afford this protection.
- Locating communication devices (phones).
- Establishing a Buddy System with individuals who are familiar with your disability to obtain assistance during an evacuation.
- Make sure to know who the ADA coordinator is, and where is the ADA assistance area.
- Being prepared to call "9-1-1" and describing where you are located within the building.
- When the alarm sounds, proceed to the nearest exit and evacuate the building with assistance from your buddy or ADA coordinator.
- If no one can assist you down the stairs, proceed to the stairwell or designated area of refuge; and inform other evacuees that you need immediate rescue. Ask individuals to inform rescuers of your whereabouts.

FIRE

- When there is a Fire Alarm: EVERYONE EVACUATES!
- If you discover a fire or smoke condition, immediately contact InfoCentre to begin the Evacuation

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- Whenever you hear the fire alarm, LEAVE IMMEDIATELY! Don't assume that the fire alarm is false or a test and wait to see what others do. In a fire situation, seconds count.
- Is the Door Hot? Before opening a door, make sure there is no fire on the other side by using the back of your hand to touch the door, doorknob, or door frame. If heat is present, don't open the door; there's probably fire on the other side. If the door, doorknob, or door frame is cool, open the door slowly, pass through, close the door behind you, and leave the area.
- Stay Low When There Is Smoke If you encounter smoke while escaping, drop to a crawl or get as low as you can to the floor. The cleanest air will be within 1 to 2 feet off the floor. If the main exit is blocked by fire or smoke, use your alternate route. If this is not feasible, go back in your area to wait for rescue.
- If You Cannot Escape Close all doors between you and the fire. Seal cracks around doors with a cloth to keep the smoke out. CALL "9-1-1." While waiting for rescuers, signal from a window by waving an object, posting a sign, or shouting.

Keep Exits Clear - All stairwells, exits, and corridors must be kept free of all obstructions at all times. No furnishings, decorations, or other combustible objects or flammables shall obstruct exits. Corridors and other portions of the means of egress are meant to be a certain width so that the expected numbers of people in the building can quickly exit or evacuate in a fire situation. Any time there are obstructions, the possibility of people becoming trapped or slowed down in a fire increases greatly. Since the prime function of corridors is to allow people to escape during a fire, we don't want these areas to be the origin of fire or a means of allowing it to propagate. This can very easily happen if combustibles are stored and allowed to accumulate there.

AIRCRAFT CRASH

Saving the lives of co-workers and others is our first priority in the event of an aircraft disaster. If an aircraft crashes at your location, a tremendous impact, vibration, explosion, fire, smoke, toxic gases, and other hazards can be expected.

To minimize chaos, please follow these steps:

- An orderly evacuation or relocation to a safe area must be executed as soon as possible, or as soon as it is safe to do so, in accordance with the Building Evacuation Procedures.
- Call 9-1-1.
- Report the number of injured people, damage sustained, and any other hazardous conditions that may exist.

HAZMAT INCIDENT

- In the event of an internal chemical spill or environmental emergency proceed as follows:
- Notify InfoCentre of the incident.
- Quickly evacuate the affected area.

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- If the odor is overwhelming and threatens to spread beyond the space where the spill occurred, call 9-1-1, and notify InfoCentre.
- Evacuate the building and move as far away from the spill as possible, ideally to the designated evacuation assembly area if it is not near the spill and if it is safe to do so. Be sure to check in with the Emergency Marshal.
- Those persons with knowledge of the incident should be available to The Safety team, Facilities Management and/or emergency response personnel. A description of what happened, where, when, and the type of product(s) spilled will be
- important in cleaning up the spill in a timely fashion.
- Only when the environmental hazard is removed and the "all clear" is given, will the building be re-occupied.

EXPLOSION

- Get under a sturdy table or desk if things are falling around you. When they stop falling, leave quickly, watching for obviously weakened floors and stairways. As you exit from the building, be especially watchful of falling debris.
- Do not use elevators.
- Check for fire and other hazards.
- Once you are out, do not stand in front of windows, glass doors or other potentially hazardous areas.
- If you are trapped in debris, use a flashlight, if possible, to signal your location to rescuers.
- Tap on a pipe or wall so rescuers can hear where you are.
- Shout only as a last resort. Shouting can cause a person to inhale dangerous amounts of dust.
- Avoid unnecessary movement so you don't kick up dust.
- Cover your nose and mouth with anything you have on hand. (Dense-weave cotton material can act as a good filter. Try to breathe through the material.)

BOMB THREAT

DO NOT USE YOUR CELL PHONE OR RADIO ONCE A THREAT IS RECEIVED, AS RADIO WAVES MAY CAUSE A DEVICE TO DETONATE! DO NOT EVER OPEN OR CLOSE DOORS ONCE A BOMB THREAT IS RECEIVED, AS PRESSURE CHANGE CAN DETONATE BOMBS!

If you receive a bomb threat by telephone, try to attract someone's attention discretely and quietly while continuing to listen to the caller. The person you attracted should immediately call a supervisor. Attached is a bomb threat script and anyone who receives a bomb threat call should follow these steps:

- Be calm and courteous.
- Try to keep the caller talking, asking the caller to repeat his or her message.
- Ask the caller these questions:
 - o Where is it located?

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- When will it go off?
- What does it look like?
- Why are you doing this?
- o Who are you?
- Time you received the call?
- Note phone number from your phone display
- Notice the following:
 - Is the caller male or female?
 - Does the caller have an accent?
 - Are there background noises?
 - Does this voice sound familiar?
- Notify your supervisor so they can notify security.
- Notify the Police Dept. by dialing "9-1-1."
- State that you have received a bomb threat.
- State your address.
- State your Company name.
- Answer all questions from the 9-1-1 Operator. DO NOT HANG UP UNTIL THE OPERATOR RELEASES YOU.
- Visually search your immediate area for any unusual objects. DO NOT DSTURB ANY OBJECTS!
- Follow the instructions of the POLICE when they arrive.

LOCKDOWN

Lockdowns are implemented when there is an immediate threat to the building occupants. In the event of a Lockdown, employees and visitors will be instructed to secure themselves in the room they are in and not leave until the situation has been curtailed. This enables Emergency Responders to secure staff in place, address the immediate threat and remove any innocent bystanders from immediate danger.

Lockdowns prohibit unauthorized personnel from entering the facility. In a lockdown situation all exterior doors are locked with only the main front door being enabled for entry. This door will be monitored by the Workplace Solutions team or our contract security provider.

STEPS TO BE TAKEN IN THE EVENT OF A LOCKDOWN

- The order to implement McKinstry's lockdown procedures will be announced by the McKinstry Facilities Team and Our Emergency Marshals after a decision has been made by the ERT that a credible threat to campus security exists.
- In the event of a lockdown lock all exterior doors and stay inside.
- Set exterior doors to Locked in the Lenel Access Control system.

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- Prevent entry into building. Until security personnel or police arrive at McKinstry, the Emergency Marshals must be prepared to lock all doors to prevent access by any nonemployees.
- Emergency Marshals, the McKinstry Facilities team and/or our third-party Security Service will conduct badge checks before allowing any individual access to the interior of the campus.
- Continue with daily activity inside.
- Be vigilant and immediately report any suspicious activity to the emergency marshals or to InfoCentre.
- Do not, under any circumstances, exit the building unless authorized to do so by emergency personnel.

CIVIL DISTURBANCE

Any indication of a civil disturbance such as a riot, demonstration, or picketing should immediately be reported to InfoCentre.

In additional to Lockdown procedures, response to a Civil Disturbance may also include one or more of the following:

- Blinds should be closed.
- Moving to the safest location in your area, taking fire extinguishers, first aid supplies and all other provisions with you.
- Not leaving the building until it is determined there is no further danger. If you must evacuate the building, exit with caution and do not run. Remember, do not attempt any physical contact with demonstrators unless it is necessary to free someone who is in danger. Do not engage in conversations or make comments to demonstrators as this may provoke them.
- Noting all rooms invaded by the demonstrators to facilitate a later search for suspicious items.
- Reporting, but not touching, any foreign or unusual items.

STATE OF EMERGENCY / ALERT

In the event of a State of Emergency, the Authorities and/or the Workplace Solutions Team may ask that you evacuate the building. In such instances the following measures should be taken:

- Take your keys, purse and personal belongings with you only if it safe to take the time to do so.
- Proceed to the designated evacuation assembly area for your department and check-in with the Evacuation Emergency Marshall so a head count can be given to the Authorities for any missing persons.
- You may not return to the building until the "all clear" is given.

In the event of a National State of Alert, Workplace Solutions may take the following measures:

• Implement the Lockdown Plan

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- Conduct inspections of the building commons areas such as restrooms, closets, roofs, corridors and garages for evidence of any suspicious packages, persons or vehicles.
- Building white zone/curb side drop off areas will be limited to the pick up or discharge of passengers only. Any cars parked at the curb and all unattended vehicles will be towed.
- Deliveries will not be permitted to enter the building until Security has contacted the customer and received permission and/or instruction that delivery is expected and deliveries will be accepted. Any indication of a civil disturbance such as a riot, demonstration, or picketing should immediately be reported to InfoCentre.

SHELTER IN PLACE

There are several events that may cause a campus wide Shelter-in-place order. It may be severe weather, earthquake, tornado, flooding or even the release of hazardous materials within the campus or in outlying areas such as the railyard adjacent to McKinstry. In the event of a shelter in place order, all employees should immediately find interior rooms or offices that will provide protection from debris or hazardous materials.

In the event of a Shelter-In-Place order being given, McKinstry's Workplace Solutions Engineers will be responsible for closing all air intakes and making any adjustments needed to prevent hazardous contaminants from entering the affected buildings' air systems.

HAZMAT INCIDENT (EXTERNAL)

If you are requested to remain inside and Shelter in place:

- Close and lock all exterior doors and windows. Close vents, fireplace dampers, and as many interior doors as possible.
- Turn off air conditioners and ventilation systems. In large buildings, set ventilation systems to 100 percent recirculation so that no outside air is drawn into the building. If this is not possible, ventilation systems should be turned off.
- Go into the pre-selected shelter room. This room should be above ground and have the fewest openings to the outside.
- Seal gaps under doorways and windows with wet towels or plastic sheeting and duct tape.
- Seal gaps around window and air conditioning units, bathroom and kitchen exhaust fans, and stove and dryer vents with duct tape and plastic sheeting, wax paper or aluminum wrap.
- Use material to fill cracks and holes in the room, such as those around pipes.
- If gas or vapors could have entered the building, take shallow breaths through a cloth or a towel. Avoid eating or drinking any food or water that may be contaminated.

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EARTHQUAKE

In the event of an earthquake or rare event of a tornado, do not evacuate unless instructed to do so! You are safer inside. Remember: DROP, COVER, HOLD. Drop to floor, get under cover and hold on until movement stops. Planning ahead is the best way to be proactive in an emergency.

INDOORS:

- MOVE away from windows, glass partitions, shelves, file cabinets and suspended objects, where objects may create a moving hazard.
- COVER by getting under a desk or other furniture.
- HOLD on to stay under cover until movement has stopped.
- Do not use the elevators.
- Do not strike a match or lighter for any reason.
- Do not attempt to leave the building during an earthquake. Wait until you receive an "all clear".
- Hazards such as downed power lines and falling debris can be harmful. If you do leave the building, you may not return until the "all clear" has been given.
- Be aware of aftershocks.
- When the earthquake is over, return to your normal workstation if it is safe. The Evacuation Emergency Marshall will take roll call to account for all employees.
- If safe, conduct a thorough inspection of your office to locate any trapped or injured persons, dangerous or shorting electrical circuits, damaged and leaking water pipes, unstable walls and ceilings.
- Do not talk to the media. Refer all questions to Corporate Communications Department.

FLOODING

- Assess the severity of the situation. If a water pipe has ruptured it is imperative that the flow of water be stopped.
- Immediately notify InfoCentre at 1-855-936-3685
- If it is a major leak, contact the Fire Department at 9-1-1 to assist with eth removal of water
- Notify the local water department and power company
- Should it become necessary, evacuate the building following the evacuation procedures.

ACTIVE SHOOTER

In the event that there is an armed assailant on Campus all McKinstry employees should follow these three actions:

RUN – Evacuate the area upon becoming aware of an attack if it is safe to do so. Call 9-1-1 when it is safe to do so.

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HIDE – If you are unable to immediately evacuate the area for any reason find an interior room with the minimum windows to hide in. Barricade the door the best you can. Silence all electronics and remain as quiet as possible. Use text to communicate if possible.

FIGHT – Be prepared to fight for your life. As a last resort, if faced with the assailant use every possible weapon at your disposal to fight for your survival. Be prepared to act with extreme violence as you attempt to save yourself and others around you.

Follow all instructions of emergency responders.

TRAINING AND EXERCISE REQUIREMENTS

The EAP provides details on the type and frequency of training and exercises required to maintain a safe working environment.

NEW EMPLOYEE TRAINING

As part of their onboarding experience, all new McKinstry employees are required to participate in the McKU New Hire Safety Orientation class. This training will cover the actions to be taken in the event of an emergency or disaster. In addition, new hires should familiarize themselves with their office area and closest means of exit.

EMERGENCY MARSHALL TRAINING

Emergency Marshals will receive additional training from the McKinstry Workplace Solutions team and Incident Commander. The training will occur quarterly and will focus on leader duties in the event of an evacuation, shelter-in-place, lockdown or Active Shooter scenario. Emergency Marshals shall take part in and assist with all scheduled drills. Emergency Marshals shall also maintain current 1st Aid/CPR/EAD certification.

DRILLS AND EXERCISES

All McKinstry employees are required to participate in scheduled drills and exercises. The drills will be coordinated by the Incident Commander in conjunction with the ERT and may involve Evacuation Drills, Earthquake Drills and Active Shooter exercises. The Incident Commander will schedule annual Fire Drills with the local Fire Department and our Fire Protection vendor. Logs of the drills shall be maintained to include the number of participants, total time to evacuate and any issues or recommendations that result from the drill. These logs shall be forwarded to the Senior Facilities Manager for review and recommendation.

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COMMITTEES

The following committees have been formed to support the overall success and operation of the P3 partnership.

ENERGY ADVISORY COUNCIL

The Energy Advisory Committee drives energy and climate policy and provides oversight of integrated energy efficiency measures to attain carbon neutrality. The Committee also seeks to derive resiliency and preservation of natural resources through managed change and integration of climate policies serving campus infrastructure.

The committee advises University leadership on the potential to integrate and leverage resources:

- Concession Agreement. Provide input to prioritization of projects supporting campus public utilities, dovetailing the 5-year Capital Plan with the University's ongoing 6-year Capital Investment Plan
- Other Fund Sources. Synchronize financial capital through grants, agreements, and appropriated funds instruments.
- Natural Resources. Influence best management practices in forestry and agriculture culminating in energy recovery and environmental restoration.
- Educational Opportunities. Engage faculty, staff, and students across all of its schools and programs in educational and research opportunities that will help influence the plan's execution and its continued evolution.
- Higher Education and Research. Influence broader higher education objectives serving businesses with a tailored curriculum and research opportunities emphasizing the ever-changing energy and natural resource market.
- Funding of Higher Education. Engage in enterprise business opportunities ranging from yields in power generation to agricultural and forest activities to reduce the cost of higher education.

CAPITAL PLANNING

The purpose of the Capital Plan Committee is to provide ongoing strategic direction for Capital Improvements with respect to the University of Idaho Utility Systems. The Committee establishes a formal process for MIED! and the Concessionaire to improve efficiency, repeatability, quality, and effective acceptance for annual Capital Improvements submitted to the University.

UNIVERSITY BUSINESS CONTINUITY PLAN TBD

IDAHO RURAL WATER ASSOCIATION TBD

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INTERAGENCY COOPERATION AND COORDINATION (ICC)

The purpose of the Interagency Cooperation and Coordination (ICC) Committee is to provide ongoing, strategic direction for cooperation between MIEDI, the Concessionaire, and the University. The committee establishes formal communications protocols for all stakeholders on campus projects and ensures all parties are coordinating effectively for work on both sides of the Lines of Demarcation.

SUSTAINABILITY

The Sustainability Committee assists the University of Idaho and P3 partners in developing data driven policies to meet the university's carbon neutrality goals. The Committee oversees the collection and reporting of sustainability metrics, maintains U of I relationships with 3rd party sustainability groups, and leverages the campus departments, colleges, and student body to promote the conservation of natural resources.



INITIAL FIVE-YEAR PLAN THE UNIVERSITY OF IDAHO UTILITY SYSTEM

REVISED SUBMISSION FOR SECTION III CAPITAL IMPROVEMENTS PROPOSED FOR APPROVAL

To: University of Idaho Vice President for Finance & Administration Email: <u>vpfinance@uidaho.edu</u>

With a copy to:

Office of the General Counsel Email: <u>counsel@uidaho.edu</u>

Date: March 30, 2021

Revised Submission Date: June 29, 2021

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I. Introduction and Revised Assumptions

This document is provided following the University's response to Sacyr Plenary Utility Partners Idaho LLC's Initial Five-Year Plan on April 29, 2021, and the direction jointly discussed on the same date and the following weeks.

Sacyr Plenary Utility Partners Idaho LLC is excited to submit a revised list of Capital Improvements proposed for Approval that allows for further visibility into the capital expenditures required to develop these projects and, as a result facilitates an informed Approval. This is achieved by adding an indicative estimate for (A) the total costs for construction and installation, including all hard and soft costs, any financing costs, and any applicable sales or use tax, and (B) forecasted annual operations and maintenance costs, both associated with each proposed Capital Improvement. Such approach is further described in Concession Agreement Section 4.3.(c).

All proposed Capital Improvements have been scoped according to these principles, and a distinction between *Engineering Studies* and *Standard Capital Improvements*—as defined in March 30, 2021's submission—is no longer made across the revised Project Sheets in Appendix A. However, a significant number of the proposed Capital Improvements do require additional work to provide further information regarding, among other things, the scope, design, or cost. This circumstance, when applicable, is highlighted in the section "Approach" of each Project Sheet, where the cost of such additional work for each of the Capital Improvements has already been addressed to help expedite the Approval process.

Lastly, I would also like to draw your attention to the fact that, following the written confirmation via email on April 27, 2021 regarding the preferred billing cycle of Capital Improvements, total costs have already been adjusted for all proposed Capital Improvements to reflect semiannual billing cycles.

II. Revised Capital Improvements proposed for Approval

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2022

CODE	SCORE	UTILITY SYSTEM	NAME	COST
2022/01	8.80	Electric System	Electrical Improvements at Menard Law	\$1,518,606
2022/02	8.80	Electric System	Electric Vault Improvements	\$2,610,510
2022/03	8.20	Domestic Water	Replacement and Installation of New Fire Hydrants	\$413,872
2022/04	8.16	Storm	Library and Memorial Gym Storm Sewer Improvements	\$3,587,071
2022/05	7.88	Domestic Water	Domestic Water Systems Emergency Generator	\$2,454,571
2022/06	7.88	Sewer	Sewer Slip Line Memorial Gym to Library	\$138,189
2022/07	7.64	Steam Plant	Replacement and upgrade of 6" Jordan PRV	\$76,089
2022/08	7.52	Steam Plant	Hot Lime Softener PRV Stations Upgrade	\$190,536
2022/09	7.44	Steam Plant	Boilers System Valves Upgrade	\$2,939,705
2022/10	7.36	Steam Plant	Steam Plant Security and Exterior Upgrades	\$250,406
2022/11	7.36	Steam Plant	Catwalk and Ladder Upgrades	\$760,894
2022/12	7.28	Domestic Water	Domestic Waterline Replacement Campus Dr. to Blake Ave.	\$1,099,075
2022/13	7.08	Steam Plant	Steam Plant Renovation and Upgrades	\$511,727
2022/14	7.04	Chilled Water	McClure Chiller Improvements	\$179,552
2022/15	7.04	Chilled Water	SCCP Chiller Replacement and Improvements	\$2,392,997
2022/16	7.04	Storm	Storm Water System Improvements	\$2,176,806
2022/17	7.04	Sewer	Sanitary Sewer System Improvements	\$2,176,806
2022/18	6.92	Chilled Water	NCCP Cooling Tower Improvements	\$1,741,097
2022/19	6.68	Domestic Water	Domestic Water Improvements for Central Mall	\$598,866
2022/20	6.56	All Systems	KPI Metering Improvements	\$1,304,424
2022/21	6.48	Steam Plant	Utility Tunnel General Improvements	\$2,829,428
2022/22	6.48	Steam Plant	Utility Tunnel Improvements at 7th Street and Janssen Engineering Building	\$381,029
2022/23	6.48	Steam Plant	Utility Tunnel Improvements at Renfrew Hall	\$571,412
2022/24	6.00	Chilled Water	SCCP Cooling Tower Improvements	\$119,824
2022/27	5.28	Domestic Water	Sheep Farm Water Vault Improvements	\$119,951
2022/28	5.28	Storm	Storm Sewer Slip Line Campus Dr. and Blake Ave.	\$42,147
2022/29	5.28	Sewer	Sanitary Sewer Slip Line Campus Dr. and Blake Ave.	\$145,950
2022/30	5.28	Chilled Water	Thermal Energy Storage Tank Sensor Upgrades	\$81,664
PROPOSI	ED CAPITAL	IMPROVEMENT COST		\$31,413,204

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APPENDIX A. Revised Project Sheets for Capital Improvements proposed for Approval

2022/01 PROJECT SHEET

PROJECT NAME: Electrical Improvements at Menard Law

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Electrical

Statement of Work: This project proposes the replacement of the existing 3,500 kVA@13.4 kV transformer located in the basement of the building. This is a well-known problem in the system, where the transformer is far beyond its expected life and ground water issues are present. It is assumed for this project that the existing electric meter in the Menard Law Building (meter ref.: ELM071-0-014) is fully operational.

The proposal includes the replacement of the existing transformer with a new pad-mount dry transformer located outside the building. The need for a larger transformer capacity is not anticipated. Works will include trenching, vault or pad, enclosure, subject to final location and design, and may result in disruption of service during the cutover. Transformer's protection switches are assumed to be replaced.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
10	10			7	10	8.80

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$32,751.

Additional notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,518,606.
- (B) Forecasted annual operations and maintenance costs: \$7,500 (Capped O&M Costs).
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it would

2022/01 PROJECT SHEET

improve safety of maintenance personnel due to location and accessibility of equipment both for regular maintenance and emergency access. Street vaults/hand hole have water build up due to ground water leakage. Many have water up to stress cone termination points. Need to be pumped out and assessed for repair or mitigation. Past emergency repair is not in a safe and properly supported condition for 13.2KV service line.

(E) Proposed schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Positive, by reducing energy losses due to the new transformer higher efficiency rate.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,512,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: A preliminary estimation is that is around 1% of the annual consumption might be saved (around 11,000 kWh).

2022/02 PROJECT SHEET

PROJECT NAME: Electric Vault Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency.

UTILITY SYSTEM AFFECTED: Electrical

Statement of Work: This project begins with the undertaking of a complete survey of the electrical vaults and switch gear on campus. Many vaults have old equipment that is in a poor condition and are not serviceable. Improvements will include major repairs and full replacements of any damaged vaults, according to the outcome of further analysis. It will also address ground water issues, with the installation of sump pumps and water level sensors (in all vaults with alarms) as needed. These activities may result in temporary service disruption in several buildings. There are 85 known underground vaults on campus and it seems likely that additional vaults may be identified.

The preliminary scope of this Capital Improvement includes the full replacement of 30 of the 85 existing vaults, which will be selected considering its condition and criticality, and are assumed to be critical vaults that need immediate replacement.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
10	10		_	7	10	8.80

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$555,304.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$2,610,510.
- (B) Forecasted annual operations and maintenance costs: \$12,000 (Capped O&M Costs).

(C) Proposed modification to the Recovery Period: None.

2022/02 PROJECT SHEET

- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives.
- (E) Proposed schedule: EPC extends through June 2023 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Negligible impact.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$2,592,000.

(I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.

(J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/03 PROJECT SHEET

PROJECT NAME: Replacement and Installation of New Fire Hydrants

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Domestic Water

Statement of Work: Replace 21 fire hydrants on campus. Project includes engineering, procurement, excavation, connection to water supply loop, and installation and commissioning of new hydrants with thrust blocks and isolation valves as needed. The project also includes painting the new hydrants to match the University of Idaho brand standards. Install 2 new additional hydrants at Menard Law and Graduate Art Studio for increased fire protection and to facilitate system flushing. Water Piping loop alteration and civil works included.

The proposed hydrants specifications are:

- American Flow Manufacturer and model 5 ¼" Waterous Pacer
- ANSI/AWWA C502 Standard compliant

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
10	10	_	_	7	9	8.20

Approach: Development and engineering prior to construction commencement. Works to be scheduled and organized to reduce risks and potential disruption while part of the water supply system is non-operational,

The hydrants to be replaced are the following:

B15-01 B15-02 B15-03 B15-04 B17-04 B18-01 B18-04

C17-06 C18-02 C19-01 C19-02

D17-05 D17-07 D17-08 D18-02 D18-04 D20-01

E19-01 E19-05 E19-06 E20-06

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is

2022/03 PROJECT SHEET

presented for this Capital Improvement:

- (A) Total Costs: \$413,872.
- (B) Forecasted annual operations and maintenance costs: \$824 (Capped O&M Cost).
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, (i) age of these hydrants making repairs difficult and expensive, (ii) reliability of functioning hydrants is decreasing, and (iii) additional risk to property if the hydrants fail when its operation is required.
- (E) Proposed schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Engineering												
Construction												

(F) Impact on Sustainability: Reduced water leakage.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$410,741
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Anticipated reduction on domestic water consumption due to reduced water leakage.

2022/04 PROJECT SHEET

PROJECT NAME: Library and Memorial Gym Storm Sewer Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Storm Sewer

Statement of Work: The Library and Memorial Gym storm sewer has had a number of infiltrations and performance issues over the last years. The improvements proposed in the selected section (University Avenue and Academic Mall to Memorial Gym) will range from major repair and restoration of the storm water system to the replacement of some sections of the existing piping.

Highly damaged existing 6", 8", and 12" clay tile lines will be replaced with identical or higher nominal caliber piping. At least, seven manholes will be reconditioned due to visible failures and damage. Additional work, including a survey of the system will be needed to assess the full scope of the works undertaken.

The Capital Improvement includes excavation, demolition, bedding, backfill, and surface restoration.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
6	10		_	5.4	10	8.16

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$22,353.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$3,587,071.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.

2022/04 PROJECT SHEET

- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, (i) in 2019 investigations showed that the line in the project are failing and a concern with a collapse may be imminent with emergency repairs done in 2019, (ii) there is evidence in the Library basement that the Sanitary Sewer is infiltrating the storm water, and (iii) there is also evidence of storm water overflow infiltrating the Memorial Gym.
- (E) Proposed schedule: EPC extends through June 2022 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

- (F) Impact on Sustainability: Positive, due to a reduction in leaked water infiltration.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$3,564,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/05 PROJECT SHEET

PROJECT NAME: Domestic Water Systems Emergency Generator

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Domestic Water, Sewer, Reclaimed Water

Statement of work: The domestic water wells are not backed up with emergency power as recommended by IDAPA 58.07.08; Small Community Water System. Without backup power the system can only provide a maximum of 14 days of domestic water if the storage tanks are full before the incident. This is inadequate life support for firefighting or dining, housing, and medical treatment of the 9,500 students on campus during an extended.

Installation of a new generator with capacity to support either Well #3 or #4 including transfer switches, panels, circuits, modifications, and controls necessary to a complete and functional system. Project includes engineering, procurement, installation, wiring, connection, and commissioning of a new 600kW emergency generator.

Emergency Generator specifications:

- Manufactures and model: Caterpillar C18 ACERT In-Line 6, 4 cycle diesel. Stand-alone, encapsulated with noise attenuation (technical data annexed at the end of the Project Summary sheet).
- Nominal capacity: 600kW.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
8	10		_	6.2	9	7.88

Approach: Development and engineering prior to construction commencement and subsequent transition.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$2,454,571.
- (B) Forecasted annual operations and maintenance costs: \$2,004 (Capped O&M Cost).

(C) Proposed modification to the Recovery Period: None.

2022/05 PROJECT SHEET

- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives.
- (E) Proposed schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Engineering												
Construction												
Transition												

- (F) Impact on Sustainability: This solution has a positive impact on sustainability in that the domestic water system supplies the entire campus, including the steam plant and the chiller plants for make-up water. The generator system provides the University the opportunity to mitigate the need to rely on the City of Moscow's municipal water system in a power outage scenario, reducing the replacement costs of water, and insuring the major steam plant has a constant flow of water. This water supply is critical to the steam plant's make-up water needs, ensuring the optimum operating conditions for steam production which reduces inefficient steam plant operation.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$2,436,004.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Expected annual diesel fuel cost will approximately be \$8,556, in addition to fuel delivery fees estimated at \$150 per delivery. Total cost estimated at \$8,706.

Cat[®] C18 DIESEL GENERATOR SETS^{18, 2024}



Standby & Prime: 60Hz



Engine Model	Cat [®] C18 ACERT™ In-line 6, 4-cycle diesel
Bore x Stroke	145mm x 183mm (5.7in x 7.2in)
Displacement	18.1 L (1106 in ³)
Compression Ratio	14.5:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

Image shown might not reflect actual configuration

Model	Standby	Prime	Emission Strategy
C18	600 ekW, 750 kVA	545 ekW, 681 kVA	TIER II Non-Road

PACKAGE PERFORMANCE

Performance	Standby	Prime	
Frequency	60	Hz	
Genset Power Rating	750 kVA	681 kVA	
Genset power rating with fan @ 0.8 power factor	600 ekW	545 ekW	
Emissions	TIER II N	on-Road	
Performance Number	DM8518-04	DM8522-05	
Fuel Consumption			
100% load with fan, L/hr (gal/hr)	161.6 (42.7)	151.1 (39.9)	
75% load with fan, L/hr (gal/hr)	129.6 (34.2)	123.6 (32.6)	
50% load with fan, L/hr (gal/hr)	91.7 (24.2)	89.2 (23.6)	
25% load with fan, L/hr (gal/hr)	46.8 (12.4)	48.7 (12.9)	
Cooling System ¹			
Radiator air flow restriction (system), kPa (in. Water)	0.12 (0.48)	0.12 (0.48)	
Radiator air flow, m ³ /min (cfm)	803 (28357)	803 (28357)	
Engine coolant capacity, L (gal)	20.8 (5.5)	20.8 (5.5)	
Radiator coolant capacity, L (gal)	61 (16)	61 (16)	
Total coolant capacity, L (gal)	82 (22)	82 (22)	
Inlet Air			
Combustion air inlet flow rate, m ³ /min (cfm)	47.8 (1687.8)	46.7 (1649.0)	
Max. Allowable Combustion Air Inlet Temp, °C (°F)	49 (120)	49 (120)	
Exhaust System			
Exhaust stack gas temperature, °C (°F)	534.6 (994.3)	518.2 (964.8)	
Exhaust gas flow rate, m ³ /min (cfm)	135.5 (4784.4)	129.6 (4576.4)	
Exhaust system backpressure (maximum allowable) kPa (in. water)	10.0 (40.0)	10.0 (40.0)	
Heat Rejection			
Heat rejection to jacket water, kW (Btu/min)	189 (10747)	175 (9953)	
Heat rejection to exhaust (total) kW (Btu/min)	634 (36053)	596 (33895)	
Heat rejection to aftercooler, kW (Btu/min)	153 (8700)	142 (8076)	
Heat rejection to atmosphere from engine, kW (Btu/min)	86 (4902)	83 (4726)	

INFORMATIONAL Cat[®] C18 DIESEL GENERATOR SETS^{18, 2024}



Emissions (Nominal) ²	Star	ıdby	Pri	me
NOx, mg/Nm ³ (g/hp-hr)	2798.	7 (5.8)	2462.	2 (5.1)
CO, mg/Nm ³ (g/hp-hr)	225.2	2 (0.5)	195.1	(0.4)
HC, mg/Nm ³ (g/hp-hr)	3.8 (0.01)	5.0 (0.01)
PM, mg/Nm ³ (g/hp-hr)	13.3 (0.03)		13.1	(0.03)
Alternator ³				
Voltages	480V	600V	480V	600V
Motor starting capability @ 30% Voltage Dip	1633 skVA	2023 skVA	1633 skVA	2023 skVA
Current	902 amps	722 amps	819 amps	656 amps
Frame Size	LC7024F	LC7024H	LC7024F	LC7024H
Excitation	AR	AR	AR	AR
Temperature Rise	150 ° C	130 ° C	125 ° C	105 ° C

WEIGHTS & DIMENSIONS



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3477 (137)	1628 (64)	2102 (83)	4431 (9769)

APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.

Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

STANDBY: Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

PRIME: Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

DEFINITIONS AND CONDITIONS

- ¹ For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.
- ² Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.
- ³ UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

LET'S DO THE WORK.

www.Cat.com/electricpower

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LEHE1581-02 (05/20)

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INFORMATIONAL - BAHR





C13/C15/C18 Weather Protective Enclosures

U.S. Sourced Diesel Generator Set 350-750 kW 60 Hz

Picture shown may not reflect actual configuration

Features

Robust/Highly Corrosion Resistant Construction

- Factory installed on skid base
- Environmentally friendly, polyester powder baked paint
- 14 gauge steel
- Interior zinc plated fasteners
- Exterior stainless steel fasteners
- Internally mounted exhaust silencing system
- Designed and tested to comply with UL 2200 Listed generator set package
- Compression door latches providing solid door seal

Excellent Access

- Large cable entry area for installation ease
- Accommodates side mounted single or multiple breakers
- Three doors on both sides
- Vertically hinged allow 180° opening rotation and retention with door stays
- Lube oil and coolant drains piped to the exterior of the enclosure base
- Radiator fill cover

Security and Safety

- Lockable access doors which give full access to control panel and breaker
- Cooling fan and battery charging alternator fully guarded
- Fuel fill, oil fill and battery can only be reached via lockable access
- Externally mounted emergency stop button
- Designed for spreader bar lifting to ensure safety
- Stub-up area is rodent proof

Transportability

These enclosures are of extremely rugged construction to withstand outdoor exposure and rough handling common on many construction sites.

Options

- Caterpillar Yellow or white paint
- UL Listed integral fuel tank with 680, 400, and 300 gallon capacities
- UL Listed sub-base fuel tank with 660, 1000, 1900, and 2200 gallon capacities.
- Seismic certification per applicable building codes: IBC 2000, IBC 2003, IBC 2006, IBC 2009, IBC 2012, CBC 2007, CBC 2010
- IBC Certification for 150 mph wind loading
- Anchoring details are site specific and are dependent on many factors such as generator set size, weight, and concrete strength. IBC Certification requires that the anchoring system used is reviewed and approved by a professional engineer
- AC/DC lighting package



Weather Protective Enclosure Sound Levels

Model	Standby eKW	Cooling Ai	Cooling Air Flow Rate		apability*	Sound Pressure Levels (dBA) at 7m (23 ft)
		m³/s	cfm	°C	°F	100% Load
C12	350	8.5	18010	54	129	87
615	400	8.5	18010	53	127	88
	350	10.2	21542	60	151	86
015	400	10.2	21542	58	136	86
615	450	10.2	21542	53	127	87
	500	12.7	26910	55	131	87
	550	9.1	17234	52	126	86
	600	9.1	17234	50	122	87
C18	650	12.7	26909	46	114	87
	700	12.7	26909	46	114	87
	750	12.7	26909	46	114	87

*Cooling system performance at sea level. Consult your Cat® dealer for site specific ambient and altitude capabilities.

Note: Sound level measurements are subject to instrumentation, installation and manufacturing variability, as well as ambient site conditions.

Component Weights to Calculate Package Weight

Madal	Standby oKM	Narrow S	Narrow Skid Base		Wide Skid Base		Weather Protective Enclosure	
INIOUEI	Stalluby ervv	kg	lb	kg	lb	kg	lb	
C12	350	252	570	570	1276	1166	2570	
013	400	200	570	575	1270	1100	2370	
	350						2570	
015	400	272	602	563	1241	1166		
015	450	273						
	500							
	550	201	004	FCO	1241	1222	2693	
	600	301	004	505				
C18	650				1404	1273	2806	
	700	286	630	637				
	750							



Weather Protective Enclosure Dimensions on Skid Base





Model	Standby oKW	Leng	Length "L"		Width "W"		Height "H"	
		mm	in	mm	in	mm	in	
C12	350	1018	10/ 9	2014	70.2	2320	01.2	
613	400	4940	134.0	2014	79.5	2320	51.5	
	350						91.3	
C15	400	1010	194.8	2014	79.3	2320		
615	450	4940						
	500							
	550	F102	204.0	2014	79.3 91.1	2320	91.3 88.7	
	600	5105	204.0					
C18	650							
	700	5230	205.9	2315				
	750							



Weather Protective Enclosure Dimensions on a UL Listed Integral Fuel Tank Base





Model	Standby oKW	Lengt	Length "L"		Width "W"		Height "H"	
Model		mm	in	mm	in	mm	in	
C12	350	5/61	215.0	2014	70.2	2742	100.0	
013	400	5401	213.0	2014	73.5	2743	100.0	
	350	_					103.0	
C15	400	1010	194.8	2014	79.3	2619		
615	450	4940						
	500							
	550	5102	204.2	2014	79.3 91.9	2561 2675	101.0	
	600	5105	204.2					
C18	650							
	700	6977	274.7	2315				
	750							



Weather Protective Enclosure Dimensions on a UL Listed 660 Gallon Sub-Base Fuel Tank Base



Model	Standby oKW	Lengt	th "L"	Width "W"		Height "H"	
WOUGI		mm	in	mm	in	mm	in
C12	350	1010	104.0	2056	90.0	2055	116.3
613	400	4940	194.0	2000	80.9	2900	
	350		194.8	2056	80.9	2955	116.3
015	400	1010					
615	450	4948					
	500						
C10	550	E10/	204.1	2056	90.0	2007	1111
610	600	5184	ZU4. I	2000	öü.9	2897	114.1



Weather Protective Enclosure Dimensions on a UL Listed 1000 Gallon Sub-Base Fuel Tank Base





Model	Standby oKW	Lengt	Length "L"		Width "W"		Height "H"	
WIUUEI	Stanuby CIVV	mm	in	mm	in	mm	in	
C12	350	6751	226 /	2056	90.0	2055	116.3	
613	400	5751	220.4	2000	80.9	2900		
	350			2056	80.9	2955	116.3	
C1E	400	E7E1	226.4					
615	450	5/51						
	500							
C10	550	E747	226.2	2056	00.0	2007	114 1	
υıσ	600	5/4/	220.3	2056	80.9	2897	114.1	



Weather Protective Enclosure Dimensions on a UL Listed 1900 and 2200 Gallon Sub-Base Fuel Tank Base





Model	Standby oKW	Lengt	th "L"	Width "W"		Height "H"	
WIDUEI	Stanuby ERVV	mm	in	mm	in	mm	in
C12	350	6202	251.2	2056	90.0	2200	126.3
613	400	0302	201.2	2000	80.9	3209	
	350		251.2	2056	80.9	3209	126.3
015	400	6202					
615	450	6382					
	500						
C10	550	7071	206.2	2056	90.0	2151	124.1
010	600	12/1	200.2	2006	00.9	3151	

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7/7

LEHE0466-05 (06/20)

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PROJECT NAME: Sewer Slip Line Memorial Gym to Library

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Sanitary Sewer

Statement of Work: Develop and slip line the existing sanitary sewer line from the Memorial Gym to the Library. Project estimates repairs of lengths of 60' of 10", 60' of 8", and 100' of 6".

During Fiscal Year 2019 investigations revealed that the storm water and sanitary sewer lines in the project area are in a state of disrepair with evidence of high probability of failure in the short term. Additional evidence was discovered in the basement of the library with infiltrated sanitary sewer effluent. Emergency storm system repairs were completed in 2019 however more work is needed to prevent further failures. At this time the slip line approach is the least cost solution until a major replacement is undertaken. Work will include excavation, demolition, bedding, backfill, surface restoration, connection hardware and sealing within manholes. Please refer to a sketch at the end of this summary.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
8	10	_	_	6.2	9	7.88

Approach: Development and engineering prior to construction commencement and subsequent transition. Work to be scheduled and organized to reduce risks and potential disruption while part of the system is non-operational.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$138,189.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, (i) the
2022/06 PROJECT SHEET

clay lines are beyond the life expectancy with the risk of collapse, (ii) slip lining would be the least invasive solution if the existing clay tiles are not so damaged or blocked with broken tiles, (iii) if there are failures of the existing system, another design solution will need to be developed, and (iv) the location is in a sensitive part of Campus, with students and activities. Construction will be organized to minimize the impact to campus operations.

(E) Proposed schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Engineering												
Construction												

- (F) Impact on Sustainability: Reduced sewage leaks.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$137,144
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.



Figure 1. Sewer Slip Line Library to Memorial Gym

2022/07 PROJECT SHEET

PROJECT NAME: Replacement and upgrade of 6" Jordan PRV

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Steam Plant, Electrical Turbines

Statement of Work: There is known performance issues of the existing pressure regulation valve (PRV) design and function for the steam system. This project will replace the piloted 6" Jordan PRV with two smaller parallel (likely 2", subject to final scope) electronic PRVs. These new PRVs will be integrated into the controls of the micro-turbines for the purpose of bypassing steam flow around the turbines and on to campus for flows that are not in the ranges of the various turbine combinations. These PRVs would also work with the 8" PRV for those times when the turbines are bypassed.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
8	9	6	_	7.1	8	7.64

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$26,752.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

- (A) Total Costs: \$76,089.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: N/A
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, this system will be considered as impactful to the reliable operation of the new turbine project at the steam plant. Impacts to the turbine project must be considered.

2022/07 PROJECT SHEET

(E) Proposed schedule: EPC extends through June 2022 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Negligible impact.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$75,600.

(I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.

(J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/08 PROJECT SHEET

PROJECT NAME: Hot Lime Softener PRV Stations Upgrade

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency, Operational Efficiency

UTILITY SYSTEM AFFECTED: Steam Plant and Loops

Statement of Work: In the process of softening water, steam is used. Current PRVs that decrease pressure of steam have failed and may not be sized properly for efficient operations. The scope of this Capital Improvement includes the replacement and upgrade (subject to the outcome of the additional work) of the hot lime softener PRV stations. Additional ancillary elements may have to be replaced.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
8	8	6	_	6.8	8	7.52

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$28,949.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

- (A) Total Costs: Study: \$190,536.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives.
- (E) Proposed schedule: EPC extends through September 2022 (included).

2022/08 PROJECT SHEET

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Negligible impact.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$189,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/09 PROJECT SHEET

PROJECT NAME: Boilers System Valves Upgrade

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency, Operational Efficiency

UTILITY SYSTEM AFFECTED: Steam Plant, Steam loops

Statement of Work: Internal inspection of the Steam Drum has not occurred in the past 7 years because of the stopcheck and main header valves are leaking steam and causing the steam drum to be inaccessible for even a short period of time. This puts the entire boiler system at risk as there is no safe way to evaluate the condition of the piping in the steam drum of every boiler. Insurance liability could also be affected as access to the steam drum for internal inspections is an operational requirement.

Proper steam isolation is essential for safety during maintenance of the steam loop, maintenance of the valves, and internal inspection of the boilers. To tackle this problem, 19 valves will be replaced with high quality steam valves, with the main header valves for each boiler being installed a in a double block and bleed arrangement following code requirements. The valves on the main steam loop will be 8" and 10" high quality domestic high pressure steam isolation valves. An additional 10" isolation valve to isolate 'A' boiler is also considered as part of the scope. There may be additional piping, or ancillary components that are also part of the project scope.

During the temporary shutdown of the steam plant, additional testing and evaluations are anticipated to occur, including (i) Eddy current tests on all four boilers to determine water tube integrity and thickness, (ii) inspection of the air pre-heater tubes on 'A' Boiler to determine useful life.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
8	8	5	_	6.6	8	7.44

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$297,000.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

2022/09 PROJECT SHEET

- (A) Total Costs: \$2,939,705
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, this system needs to be developed and scope defined to configure appropriate amount of engineering and equivalent/replacement parts analysis. Due to the age of the steam plant, future parts compatibility needs to be confirmed.
- (E) Proposed Schedule: EPC extends through September 2022 (included). Plant shutdown tentatively scheduled for July 2022.

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

- (F) Impact on Sustainability: Negligible impact.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$2,916,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/10 PROJECT SHEET

PROJECT NAME: Steam Plant Security and Exterior Upgrades

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Steam Plant, Steam system

Statement of Work: The exterior of the Energy Plant has been neglected for several years and is in a general state of disrepair. Most doors at the Energy Plant are not locked or monitored, creating a security and safety issue.

Install "card-key" access and new doors at all exterior entrances of the Energy Plant. Replace the exterior door to the motor control center shed for the wood boiler. Install other systems/equipment as necessary to fully secure building doors and provide safety to operators and utility assets.

Proposed new equipment:

- 8 newly installed exterior doors
- Control Access System with 8 points of control
- 8 Access card locks
- Supply of 100 PROX III proximity fobs
- (1) new Overhead Door Co, roll up door and hardware (see attached PDF files)

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
10	8			6.4	8	7.36

Approach: Development and engineering prior to construction commencement and subsequent transition.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

(A) Total Costs: \$250,406.

(B) Forecasted annual operations and maintenance costs: \$1,260 (Capped O&M Costs).

2022/10 PROJECT SHEET

- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives.
- (E) Proposed schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Engineering												
Construction												
Transition												

(F) Impact on Sustainability: Negligible impact.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$248,512
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

Manufacturer, Part/Number	Description	Quantity
DSX 1048 Package, NVMC	8 Door Controller NV Master	1
WinStart WinDSX	Operating Software, Docs	1
MultiClass 920P	HID Proximity Reader, 4"	8
Prox Key III	Key Fob	100
DSX LAN	Network Interface	1

Figure 1. Card Key Door Control System Information

ATTACHMENT 2

INFORMATIONAL APRIL 17-18, 2024

2022/10 PROJECT SHEET

	Item	Qty
1	610.RD 5'4" x 6'7" Op	ening 1
	Mounting:	Right: Steel, Face Mount E Guide; Left: Steel, Face Mount E Guide; Lintel - Steel,
		Header - Steel
	Curtain:	Windload - 20 PSF, C187, Steel, Gray, Primed, 22 gauge, Interior Mtd Above Lintel,
		Alternate Endlock
	Operation:	Front Of Hood, Right Hand
	Operator:	RSX - Standard Duty, 1/2 HP, 115/208/230V 1Phase 60Hz, Jackshaft Release, No
		Entrapment (Constant Contact), Brake, Receiver,Built-In,Std
	Bottom Bar:	Extruded 'T', Aluminum, Mill Finish, Astragal
	Guide:	Steel, Powder Coat-Black, Bellmouth Entry
	Hood:	Round, Steel, Gray, Primed, Drive Side
	Bracket:	Steel, Powder Coat-Black
	Misc:	ReadyPak

Figure 2. 610 Rolling Steel Door Brochure and Specifications



ROLLING SERVICE DOORS

HEAVY-DUTY ROLLING SERVICE DOOR



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Standard features at a glance

	Max standard width	30'4" (9246 mm)
	Max standard height	28'4" (8636 mm)
	Curtain	22 ga. galvanized steel up to 15'4" (4674 mm) wide 20 ga. galvanized steel over 18'4" to 25'4" (5588 -7722 mm) wide 18 ga. galvanized steel over 25'4" to 30'4" (7722-9245 mm) wide
	Slat profile	Curved, type C-187 or C-275 (Model 610); Flat, type F-265 (Model 620)
	Finish	Gray, Tan, Brown or White
	Hood	24 ga. galvanized steel
	Wind load	20 psf
	Standard mounting	Face-of-wall
	Operation	Manual push-up up to 84 ft ² (7804 mm ²) or 12' x 7' (3658 mm x 2134 mm) Chain hoist over 84 ft ² (7804 mm ²) or 12' x 7' (3658 mm x 2134 mm)
	Standard spring	20,000 cycle
	Weatherseals	Bottom bar astragal Guide weatherseals and hood baffle (Model 620)
	Guides	Three structural steel angles; PowderGuard® weathered finish with black powder coat
	Bottom bar	Extruded aluminum w/weatherseal to 15'4" (4674 mm) Back-to-back steel angles w/weatherseal > 15'4" (>4674 mm)
_	Lock	Interior slide bolt on push-up Padlockable chain keeper on chain hoist
	Warranty	24-month limited; 3 years/20,000 cycles limited on Overhead Door door and operator system**

Options

- Electric operator (RHX[®], RSX[®], RMX[®]) or crank operation
- Bottom sensing edge, sloping bottom bar
- Galvanized steel bottom bar angles and guides
- Between-jamb mounting
- Stainless steel or aluminum slats
- High-usage package
- High-wind load option (FBC, TDI, DADE)*
- Cylinder lock
 - Exhaust ports
- Flat slat profile option F-265 and C-600 heavy-duty 6" curved slat (Model 610)
- Perforated 18-gauge steel slats with 1/16" (2 mm) diameter holes on 1/16" (2 mm) centers
- Fenestrated slats with uniformly spaced openings of 5/8" x 3" (16 mm x 76 mm) or 1" x 10" (25.4 mm x 254 mm) on F265 slat only
- PowderGuard® Premium powder coat paint finish in 197 standard colors, or color-matched to specification
- PowderGuard® Zinc and PowderGuard® Weathered finishes
- Special application doors:
 - Oversized doors to 1500 ft². (139.4 m²)
 - Combination doors with grilles and/or with full or partial standard, perforated or fenestrated slats

Cover image: Model 610, perforation on top 2/3, bottom 1/3 solid, custom finish

Image above: Stormtite[™], Model 620, finish in Brown

- * FBC Florida Building Code; TDI Texas Department of Insurance; DADE Miami-Dade Building Code Compliance Office
 ** When purchased together

– Spark-resistant doors, craneway doors, pass doors

INFORMATIONAL HEAVY-DUTY AND STORMTITE PRESE



Door that is are strong, durable, handsome and versatile

Model 610 – the best selling door of our line. Stormtite[™] Model 620 is an ideal choice for keeping climate-controlled air in and the elements out. Available to fit openings up to 30'4" x 28'4" (9246 mm x 8636 mm), these doors are fabricated of 18- to 24-gauge galvanized steel (depending upon door width), and can withstand wind loads up to 20 psf. Interlocking slats with endlocks ensure a tight fit while minimizing lateral movement.

Design versatility is afforded by a wide array of options, including a selection of slat profiles; curtain materials, finishes and colors; electric operation, and special features for unique applications. Each of our rolling service doors is configured for precise fitting of components, simpler installation, lower maintenance costs and trouble-free operation for life. The result is a door tough enough to perform exceptionally well in demanding industrial environments - and attractive enough to meet exacting aesthetic requirements.



Model 620, custom finish

Slat profiles



	Finish details
Standard polyester base coat	Two-coat system with polyester based top coat.
PowderGuard® Premium powder coat	Weather resistant polyester powder coat available in 197 colors; custom color match and EZ Clean treatment options available.
PowderGuard [®] Zinc finish	Zinc enriched powder coat provides excellent corrosion protection that outperforms both hot dipped and cold galvanized steel. Color selection from 197 powder coat colors; custom color match also available.
PowderGuard® Weathered finish	Industrial textured powder coat provides a thicker, more scratch resistant coat for added product protection.

Colors









Gray

White

Actual colors may vary from brochure due to fluctuations in the printing process. Always request a color sample from your Overhead Door Distributor for accurate color matching.

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TAB 4 Page 39



ATTACHMENT

Architect's Corner

A resource for architects, containing comprehensive technical and resource materials to support your project, including drawings and specifications for commercial doors.

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Tools to help you get the job done.

Overhead Door pioneered the upward-acting door industry, inventing the first upward-acting door in 1921 and the first electric door operator in 1926. Today, we continue to be the industry leader through the strength of our product innovation, superior craftsmanship and outstanding customer support, underscoring a legacy of quality, expertise and integrity. That's why design and construction professionals specify Overhead Door products more often than any other brand. Our family of over 400 Overhead Door Distributors across the U.S. and Canada not only share our name and logo, but also our commitment to excellence.





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2022/11 PROJECT SHEET

PROJECT NAME: Catwalk and Ladder Upgrades

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Steam Plant, Steam System

Statement of Work: All existing catwalks and ladders will be upgraded throughout the steam plant to allow proper and safe maintenance of the system, ensuring compliance of safety codes. This Capital Improvement estimates that 35% will need to be fully replaced.

These are some examples of the current physical condition and some of the upgrades to be performed:

- Woodchip Silo platform is pieced together and does not meet safety code.
- Woodchip ships ladders need to be secured and allow access to UES employees only.
- Ladder to platform does not have proper fall protection.
- Ladder system on boiler exhaust needs to be removed.
- Install steps on each side of the AHU pipes with platforms and handrails.
- Install cages on all multi-level ladders.
- Install ladders with higher handrails.
- Install handrails at all points of unprotected steep steps.
- Mid-rail and top-rail around boilers are not compliant, entire area needs to have code approved platform.

Additionally, proper access to the boiler's economizers will be added. The additional work will fully identify which structures are in critical condition and in need of replacement as well as the most appropriate solution for these items.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
10	3	_	—	4.9	9	7.36

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$23,377.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

2022/11 PROJECT SHEET

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$760,894.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives.
- (E) Proposed schedule: EPC extends through June 2022 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Negligible impact.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$756,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/12 PROJECT SHEET

PROJECT NAME: Domestic Waterline Replacement Campus Dr. to Blake Ave.

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Domestic Water

Statement of Work: This Capital Improvement covers the replacement of the domestic waterline from Campus Dr. to Blake Ave. This is some of the oldest waterline on campus and is at the end of its life. The length is approximately 550 feet. Work will include excavation, demolition, bedding, backfill, surface and landscape restoration, valves, ties, taps, tees, and thrust blocks. Additionally, controls will be updated.

The project also includes the required elements for future connections and system growth, and the necessary chlorination sampling and testing, to guarantee the safety of the system after being brought on-line.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Resiliency Operational Carbon Efficiency Neutrality		Four Focus Areas	Risk	Score
8	10	_	_	6.2	8	7.28

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$12,460.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

- (A) Total Costs: \$1,099,075.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, (i) the existing 6" line is constructed of universal pipe which is well beyond its life expectancy, (ii) failure of this line would

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create unexpected outages, fire risk, and potential flooding if failure, and (iii) this is a sensitive area of campus with the Camperdown Tree line.

(E) Proposed schedule: EPC extends through September 2022 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Positive, due to the reduction in water leaks.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$1,090,800.

- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/13 PROJECT SHEET

PROJECT NAME: Steam Plant Renovation and Upgrades

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Steam Plant

Statement of Work: The steam plant system is near the end of its useful life and needs to be accessed in order to deliver the campus steam needs reliably and responsibly.

To extend the useful life of the asset, several renovations are needed, including the bearings, conveyors, and hydraulic rams in the truck dump system. Similarly, a replacement of the carrier absorber tank, and a complete overhaul of the silo sweep will be performed, including the auger motor, the gearbox, and other ancillary items, will be included as part of this Capital Improvement.

These systems are critical to the safe operation of the steam plant and are structural to meet the meet the safety and fire regulations.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
8	8	6	4	7.2	7	7.08

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$28,954.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

- (A) Total Costs: \$511,727.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, no

2022/13 PROJECT SHEET

destructive testing is anticipated, however due to the age of equipment the disassembly and reassembly may cause unanticipated damage to failing equipment.

(E) Proposed schedule: EPC extends through September 2022 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Negligible impact.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$507,600.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/14 PROJECT SHEET

PROJECT NAME: McClure Chiller Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency, Operational Efficiency

UTILITY SYSTEM AFFECTED: Chilled Water

Statement of Work: The existing McClure chiller (350-ton Carrier model) has been in service since 1995 and has not been serviced since 2013. The unit is in need of a major overhaul, and additional work needs to be conducted to define next steps. This is the only chiller capable of running in the winter (no redundancy) and should it fail all critical cooling loads are at risk.

As part of the overhaul the following elements will be replaced, bearings, coils, damaged expansion valves, control elements, refrigerant R-134A (including removal and disposal), and any other component that might be needed to extend the chiller's useful life. Installation of a new electrical meter is also included.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
5	8	6	_	5.6	8	7.04

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$26,752.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

- (A) Total Costs: \$179,552.
- (B) Forecasted annual operations and maintenance costs: \$3,000 (Capped O&M Costs).
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, this

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assumes no other causes or problems with the system, and normal wear and tear is the reason for replacement.

(E) Proposed schedule: EPC extends through September 2022 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Positive, electrical consumption is expected to be reduced.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$178,200.

- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: A reduction of 5-10% in the consumption of electricity is expected.

2022/15 PROJECT SHEET

PROJECT NAME: SCCP Chiller Replacement and Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Resiliency

UTILITY SYSTEM AFFECTED: Chilled Water

Statement of Work: The goal of this project is to ensure that the provision of chilled water meets the campus needs at all times. One of the existing 500-ton SmardT chillers will be dismantled and substituted with a new electrically-driven chiller of equal or greater capacity at the SCCP. The new chiller will use an environmentally friendly refrigerant.

This Capital Improvement includes the demolition, waste management of the old chiller, and the transportation, installation, and commissioning of the new chiller. The installation of new electrical meters is included for each of the chillers. Other ancillary systems may be replaced for this work.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
5	8	6	_	5.6	8	7.04

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$32,383.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

- (A) Total Costs: \$2,392,997.
- (B) Forecasted annual operations and maintenance costs: \$5,000 (Capped O&M Costs).
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives.
- (E) Proposed schedule: EPC extends through November 2022 (included).

ATTACHMENT 2

2022/15 PROJECT SHEET

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Positive, due to the better electrical efficiency of the new equipment versus the replaced one. Additionally, the new refrigerant will be more environmentally friendly than the existing one.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

- (H) Fee or charge payable to the Operator: \$2,376,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: A reduction of 5-10% in the consumption of electricity is expected.

2022/16 PROJECT SHEET

PROJECT NAME: Storm Water System Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Storm Sewer

Statement of Work: Due to capacity constraints, much of the storm sewer system is unable to function properly during certain storm events, causing surface flooding and deterioration to manholes and catch basins. As part of the additional work, 2,000 feet of the most critical part of the storm water system that have known problems and perform improvements is going to be surveyed including checked with camera. Prior to the assessment, the system will be jet-cleaned.

As part of this Capital Improvement, 50% of the total length of the assessed system (the section identified to be in the worst condition) will be replaced, including major repairs or full replacements of failing storm catch basins and manholes across campus. Works will also include the excavation, demolition, bedding, backfill, surface restoration, and any other items needed for a complete and functional system. Other adjacent piping systems could be impacted.

The final solution and scope will vary depending on the results of the additional work and based on the conditions found, with works ranging from a complete replacement to slip-lining.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
8	8	_	_	5.6	8	7.04

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$376,179.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

(A) Total Costs: \$2,176,806.

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- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, there is also evidence of storm water overflow infiltrating the Memorial Gym.
- (E) Proposed schedule: EPC extends through September 2023 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

- (F) Impact on Sustainability: Positive, due to the decrease in leaks and infiltrations.
- (G) Anticipated tax credits or other benefits: No tax credits or other befits have been identified.
- (H) Fee or charge payable to the Operator: \$2,160,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/17 PROJECT SHEET

PROJECT NAME: Sanitary Sewer System Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Sanitary Sewer

Statement of Work: Improvements to the sanitary sewer system are needed to increase the system's reliability and functionality. The sanitary sewer system has many sections that are far beyond their useful life. To address this situation, 2,000 feet of the most critical sections of the sanitary sewer system which have had poor performance and caused problems in past years will be investigated. As part of the additional work, these pipes will be jet-cleaned, and assessed via video camera, including the catch basins, the manholes' integrity, and the creation of a pipe material catalog with a condition report.

As part of the Capital Improvement, 50% of the total length of the surveyed system (that identified to be in worst conditions) will be replaced. Works will also include excavation, demolition, bedding, backfill, surface restoration, and any other items needed for a complete and functional system. Other adjacent piping systems could be impacted.

The final solution and scope will vary depending on the results of the additional work and based on the conditions found, with works ranging from a complete replacement to slip-lining.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
8	8		_	5.6	8	7.04

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$376,179.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

(A) Total Costs: \$2,176,806.

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- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See Previous Narratives. It assumes broken pipe pieces and debris. Tree roots and human solid waste blockages have been found historically in this system on campus. High likelihood of COVID-19 contamination risk.
- (E) Proposed schedule: EPC extends through September 2023 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Reduction in sewage water leaks and infiltration. Reduction in sewage system clogs.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

- (H) Fee or charge payable to the Operator: \$2,160,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/18 PROJECT SHEET

PROJECT NAME: NCCP Cooling Tower Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Resiliency

UTILITY SYSTEM AFFECTED: North Campus Chiller Plant

Statement of Work: This Capital Improvement is needed to ensure a reliable and steady chilled water supply to serve all campus' needs. Arup's Condition Assessment Report already indicates that the NCCP cooling towers #1 and #3 are far passed its expected useful life and are in a terminal condition. The proposed additional work includes a thorough analysis to identify any major repairs and improvements in the plant's cooling towers.

Subject to the analysis and the outcome of the additional work, it is anticipated that the scope include a full replacement of the cooling tower in worst condition and other major repairs in the remaining towers. A common header is also considered for all towers with an indoor basin, to allow for enhanced performance in cold weather. Secondary pumps will also be rebuilt or resized for the new flows. Other ancillary systems will be impacted with this work. New metering devices for both electricity and water for each tower affected are considered as part of the scope.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
4	7	6	_	5.3	8	6.92

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$32,952.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$1,741,097.
- (B) Forecasted annual operations and maintenance costs: \$10,000 (Capped O&M Costs).

(C) Proposed modification to the Recovery Period: None.

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- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, had been detected flow and temperature issues. Equipment at end of life. Tower design is outdated, causing poor performance and low efficiency. Secondary pumps are poorly designed for current needs and pump curves do not meet current flow needs. These issues reduce NCCP's ability to meet peak cooling demands, risking critical cooling loads such as IT servers and research.
- (E) Proposed Schedule: EPC extends through August 2022 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

- (F) Impact on Sustainability: Positive. A reduction in water and electricity consumption is expected due to enhanced CT System efficiency. More environmentally friendly chemicals will be used.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,728,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: A reduction of 10% in water and electricity consumption is expected due to enhanced CT System efficiency. This cannot be quantified due to the lack of metering devices.

2022/19 PROJECT SHEET

PROJECT NAME: Domestic Water Improvements for Central Mall

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Domestic Water

Statement of Work: This Capital Improvement will address known failures and poor performance due to the aged systems involved.

Subject to the additional work, a complete replacement of the domestic water line of approximately 600 feet, running from the SE side of the Renfrew Hall to SE of the Agricultural Science Bldg. The new pipe will be 6" PVC instead of the existing 4" galvanized line. Works will include excavation, demolition, bedding, backfill, surface and landscape restoration, valves, ties, taps, tees, and thrust blocks. The required elements that would allow for future connections and system growth, as well as the necessary chlorination sampling, and testing to ensure the safety of the system are also included. In addition, system controls might need to be updated. Other systems might be impacted.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
8	10		_	6.2	7	6.68

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$15,207.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

- (A) Total Costs: \$598,866.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, (i) the

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existing 4" galvanized pipeline has deteriorated beyond repair, (ii) collapses and failures have occurred in 2017, and (iii) this new line will improve the reliability and functionality of the water loop in this area.

(E) Proposed schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

- (F) Impact on Sustainability: Positive, due to the reduction in water leaks.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$594,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/20 PROJECT SHEET

PROJECT NAME: KPI Metering Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Resiliency

UTILITY SYSTEM AFFECTED: All Utility Systems

Statement of Work: This Capital Improvement seeks to obtain accurate information and allow the Concessionaire to submit KPI reports as required. It is currently not possible to provide complete information due to extensive damages in the existing network of meters. The meters referenced in the table below do not exist.

Halling Costant	Mater Site	Mater Site Turne		Used for App G
v v v v v v v v v v v v v v v v v v v	weter Site	weter site Ty	- ¹⁰⁰	Reporting (Y/N)
UIDW	UI-DW-WELL1	PROD	CU FT	Yes
UIDW	UI-DW-WELL2	PROD	CU FT	Yes
UIIRRIGATION	UI-IRRIGATION-PUMP1	PROD	CU FT	Yes
UIIRRIGATION	UI-IRRIGATION-PUMP2	PROD	CU FT	Yes
UIELEC	SEL735-EAST-FEED	CONSUMP	KWH	Yes
UIELEC	SEL735-WEST-FEED	CONSUMP	KWH	Yes
Reclaimed		CONSUMP	GPM	Yes
UIELEC	ELM080-0-011	CONSUMP	KWH	Yes
UIELEC	ELM081-0-011	CONSUMP	KWH	Yes
UISTEAM	CNM065-0-NCCP	CONSUMP	LBS	Yes
UISTEAM	UI-BOILER1	PROD	LBS	Yes
UISTEAM	UI-BOILER2	PROD	LBS	Yes
UISTEAM	UI-BOILER3	PROD	LBS	Yes
UISTEAM	UI-BOILER4	PROD	LBS	Yes
UIDW	DWF018-0-011	CONSUMP	CU FT	Yes
UIDW	DWF026-0-NCCP	CONSUMP	CU FT	Yes
UICW	CWP002-0-NCCP	PROD	TON	Yes
UICW	CWP003-0-NCCP	PROD	TON	Yes
AELEC	E1024304-070	CONSUMP	KWH	Yes
AELEC	E1024306-089	CONSUMP	KWH	Yes
UIELEC	ELM112-0-144	CONSUMP	KWH	Yes
UIDW	DWF071-S3-749	CONSUMP	CU FT	Yes
UICW	748-SCCP-CH1 Tonnage	PROD	TON	Yes
UICW	748-SCCP-CH2 Tonnage	PROD	TON	Yes
UICW	SCCP CH3 CT3, CH-3 Tonnage Calc'd	PROD	TON	Yes

The scope of this Capital Improvement focuses only on the meters that are necessary to prepare KPI reports in the systems identified below.

Utility System	Туре	Location in Schedule 2	Intent of Monitoring Point	KPI? (Y/N)	Cap Ex required?
UICW	Temperature	Part III, Section 1a	Chilled Water supply temperature	Yes	Yes
Steam	Pressure	Part IV, Section 1b	Steam distribution pressure	Yes	Yes
Electric	Electric	Part V, Section 3d	Electronic Power metering	Yes	Yes
UIDW	Pressure	Part VI, Section 2b/Section 7d	Max Pressure at services	Yes	Yes
UIDW	Flow	Part VI, Section 5b	Water system losses	Yes	Yes
Utility SCADA	consumption	Part VIII, Section 3e	All meters connected to Utility Network	Yes	Yes
Reclaimed	Flow	Part XI, Section 1d	Reclaimed water system losses	Yes	Yes
Reclaimed	Pressure	Part XI, Section 2b	Pressure at all services	Yes	Yes

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The meters will be checked, substituted with new units, and newly installed (for those missing). The scope currently assumes meter replacements for at least 50% of the meters inspected. The selection and installation will be done considering their future integration in a control system. All associated mechanical and civil works are also included.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
2	5	2	2	2.9	9	6.56

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$183,600.

Additional notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

- (A) Total Costs: \$1,304,424.
- (B) Forecasted annual operations and maintenance costs: \$30,000 (Capped O&M Cost).
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, the study will consider (i) existing metering/monitoring documentation found/made available at the time of this proposal, (ii) controls and monitoring hardware/software systems, and (iii) historical operational and reporting documentation.
- (E) Proposed Schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

- (F) Impact on Sustainability: There are expected sustainability improvements as systems are monitored and optimized.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

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- (H) Fee or charge payable to the Operator: \$1,296,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: There are expected energy savings as monitoring systems inform operational optimization. These amount cannot be quantified due to the lack of precise metering.

2022/21 PROJECT SHEET

PROJECT NAME: Utility Tunnel General Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Chilled Water, Compressed Air, Steam Loop

Statement of Work: Tunnel sections in the Utility System are up to 108 years old and some have partially collapsed showing extensive signs of failure, providing unsafe conditions for personnel access and circulation of pedestrians and vehicles over the tunnel structures.

As part of the additional work associated to this Capital Improvement, a complete visual structural investigation of 2,500 ft of tunnel will be conducted, including core sampling of concrete walls and an engineering analysis of the utility tunnel network. Subject to the results, the project will include the major repair of a maximum length of 1,250 ft, covering the sections that are identified to be in the worst condition. The scope of this Capital Improvement will exclude any repairing in piping, cables, or any system inside those sections.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
9	7			5.7	7	6.48

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$81,530.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

- (A) Total Costs: \$2,829,428.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives.
2022/21 PROJECT SHEET

(E) Proposed schedule: EPC extends through September 2024 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Negligible impact.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$2,808,000.

- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

2022/22 PROJECT SHEET

PROJECT NAME: Utility Tunnel Improvements at 7th Street and Janssen Engineering Building

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Steam, Water, Chilled Water, Compressed Air

Statement of Work: The tunnel section at 7th Street and Janssen Engineering Building (JEB) is a known location of structural failure. The length of this section is 40 ft in length. The tunnel lid and walls are crumbling and collapsing with ground water intrusions. A collapse would put at risk all the utilities that pass through this section of tunnel (steam, chilled water, compressed air). The tunnel also acts as the sidewalk for pedestrians and runs under the road at the intersection, posing a life safety risk. This section is approximately 72 years old.

The scope of the Capital Improvement includes a major repair of this tunnel section. Any repairing in piping, cables or any system inside this section is not excluded. The additional work will provide further definition and characteristics of the activities to be included in this major repair.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
9	7		_	5.7	7	6.48

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$34,448.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$381,029.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.

2022/22 PROJECT SHEET

- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. Destructive testing is not anticipated to develop this project, however potential damage resulting from inspections is not contemplated in this proposal.
- (E) Proposed schedule: EPC extends through September 2022 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

- (F) Impact on Sustainability: Negligible impact.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$378,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.



Figure 1. Intersection 7th and JEB



Figure 2. Condition of Tunnel Lid



2022/23 PROJECT SHEET

PROJECT NAME: Utility Tunnel Improvements at Renfrew Hall

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Electrical distribution, Steam, Water, Compressed Air, Telecom

Statement of Work: The tunnel section at Renfrew Hall, including the Central Mall tunnel that runs North and South, is a known location of structural failure. The length of this section is 60 feet in length. This section of tunnel is used for foot traffic as well as vehicular traffic including fire engine access to the Central Mall. The tunnel lid and walls are crumbling and collapsing with ground water intrusions. A collapse would put at risk all the utilities that pass through this section of tunnel (high voltage electrical distribution, steam, chilled water, compressed air). This section is approximately 59 years old.

The scope of the Capital Improvement includes a major repair of this tunnel section. Any repairing in piping, cables or any system inside this section is not excluded. The additional work will provide further definition and characteristics of the activities to be included in this major repair.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
9	7		_	5.7	7	6.48

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$35,885.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$571,412.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.

2022/23 PROJECT SHEET

- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. Destructive testing is not anticipated, however potential damage resulting from inspections is not contemplated in this proposal.
- (E) Proposed schedule: EPC extends through September 2023 (included).

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

- (F) Impact on Sustainability: Negligible impact.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$567,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.



Project: Utility Tunnel Repair at Renfrew

2022/24 PROJECT SHEET

PROJECT NAME: SCCP Cooling Tower Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency, Operational Efficiency

UTILITY SYSTEM AFFECTED: South Campus Chiller Plant, South Campus Chilled Water Loop

Statement of Work: This Capital Improvement is needed to improve underperforming conditions in the cooling system. The cooling tower makeup water does not keep up with evaporation rate. Similarly, the tower level control is poorly designed and prone to failure. On shutdown, the tower basin is prone to overflow and causes cavitation of the condenser pump during operations. All these circumstances reduce the plant's ability to meet peak cooling loads.

As part of the additional work suggested for this Capital Improvement, an analysis of the plant's deficiencies will be conducted to define the scope and cost of the changes and improvements needed to extend the life of the asset and improve the cooling towers performance. The cavitation and overflow issues will also be investigated.

Subject to the outcome of such analysis, the installation of an actuated ball valve and probe level control on the 900-ton BAC cooling tower that supports the York chiller is proposed as this project's scope to correct the water flow issue.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
5	5	5	_	4.5	7	6.00

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$16,442.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$119,824.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.

2022/24 PROJECT SHEET

- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. Makeup water supply does not keep up with peak demands.
- (E) Proposed schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Minor reduction in power consumption due to the improve in efficiency.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

- (H) Fee or charge payable to the Operator: \$118,800.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Minor reduction in power consumption due to the improve in efficiency.

2022/27 PROJECT SHEET

PROJECT NAME: Sheep Farm Water Vault Improvements

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Domestic Water

Statement of Work: This Capital Improvement will provide electrical service and insulation to the existing structure to protect the water system components during the winter months. The project includes the installation of approximately 400 ft of 100-amp service from Pump House #3 to the Sheep Farm water vault.

In addition, the scope of work covers the installation of R-21 or better insulation on all walls and ceilings with the addition of a vapor barrier to protect the existing water meters, as well as a backflow prevention valve.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
6	6	_		4.2	6	5.28

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$17,956.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$119,951.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. The existing equipment is subject to freezing and not performing.
- (E) Proposed schedule:

2022/27 PROJECT SHEET

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Negligible impact.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$118,800.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Minor impact in electrical consumption.

2022/28 PROJECT SHEET

PROJECT NAME: Storm Sewer Slip Line Campus Dr. and Blake Ave.

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Sanitary Sewer

Statement of Work: Slip line the existing storm sewer lines along Campus Drive to the Niccolls Building and in front of the Lionel Hampton School of Music to Blake Avenue. This system is known to be some of the oldest on campus and is well beyond its expected service life are in a state of disrepair with evidence of high probability of failure in the short term. This slip lining is expected to be 75' in length. At this time, the slip line approach is the least cost solution until a major replacement is undertaken. Scope of work includes excavation, demolition, bedding, backfill, surface restoration, connection hardware and sealing within manholes. Please note a sketch of this the system at the end of the summary.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
6	6	_	_	4.2	6	5.28

Approach: Development and engineering prior to construction commencement and subsequent transition.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$42,147.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, (i) the clay lines are beyond the life expectancy with the risk of collapse, (ii) slip lining would be the least invasive solution if the existing clay tiles are not so damaged or blocked with broken tiles, (iii) after investigation of the existing piping, slip lining the existing system may not be a solution and another engineering design would be needed, and (iv) the location is in a sensitive part of Campus with the Camperdown trees.

2022/28 PROJECT SHEET

(E) Proposed schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Engineering												
Construction												
Transition												

- (F) Impact on Sustainability: Reduction of sewage leaks. Reduction of retained sewage water and thus, reducing the presence of bugs and rodents.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$41,828
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.



Figure 1. Campus Drive to Blake



Figure 2. Campus Drive by Niccolls



Figure 3. Intersection Blake and Sweet

2022/29 PROJECT SHEET

PROJECT NAME: Sanitary Sewer Slip Line Campus Dr. and Blake Ave.

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency

UTILITY SYSTEM AFFECTED: Sanitary Sewer

Statement of Work: Develop and slip line the existing sanitary sewer line from Campus Drive to Blake Avenue. This section of the sewer system is known to be some of the oldest on campus and well beyond its expected service life. During Fiscal Year 2019 investigations revealed that the storm water and sanitary sewer lines in the project area are in a state of disrepair with evidence of high probability of failure in the short term. At this time, the slip line approach is the least cost solution until a major replacement is undertaken. The expected slip lining is 410' of 6" and 720' of 12"". Works will include excavation, demolition, bedding, backfill, surface restoration, connection hardware and sealing within manholes. Please refer to the sketch at the end of this summary.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
6	6	_	_	4.2	6	5.28

Approach: Development and engineering prior to construction commencement.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$145,950.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, (i) the clay lines are beyond the life expectancy with the risk of collapse, (ii) slip lining would be the least invasive solution if the existing clay tiles are not so damaged or blocked with broken tiles, (iii) after investigation of the existing piping, slip lining the existing system may not be a solution and another engineering design would be needed, and (iv) the location is in a sensitive part of Campus with the Camperdown trees.

2022/29 PROJECT SHEET

(E) Proposed schedule:

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

- (F) Impact on Sustainability: Reduction of sewage leaks. Reduction of retained sewage water and thus, reducing the presence of bugs and rodents.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$144,846.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in supply costs or consumption costs: Negligible change.



Figure 1. Campus Drive to Blake



Figure 2. Intersection Blake and Sweet

2022/30 PROJECT SHEET

PROJECT NAME: Thermal Energy Storage Tank Sensor Upgrades

DATE SUBMITTED: 06/29/2021

PROJECT JUSTIFICATION CATEGORIES: Safety, Resiliency, Efficiency

UTILITY SYSTEM AFFECTED: Chilled Water

Statement of Work: The level sensors on the Thermal Energy Storage (TES) tank are not reliable and some have failed. As a result, no accurate information is provided to the control system. Similarly, operational problems have been identified in the temperature probes, which are needed to properly manage the level of the thermal tank and optimize its performance.

This project will procure and replace the level and temperature measurement systems.

Why: Project has been prioritized according to the scoring criteria presented in the submission.

Safety	Resiliency	Operational Efficiency	Carbon Neutrality	Four Focus Areas	Risk	Score
6	7	6	_	5.7	5	5.28

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$18,036.

Additional Notes: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Costs: \$81,664.
- (B) Forecasted annual operations and maintenance costs: \$7,500 (Capped O&M Cost).
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives.
- (E) Proposed schedule:

2022/30 PROJECT SHEET

	6/21	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22
Additional Work												
EPC												

(F) Impact on Sustainability: Negligible impact.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$81,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible change.

INFORMATIONAL - BAHR



FIVE-YEAR PLAN THE UNIVERSITY OF IDAHO UTILITY SYSTEM

INFORMATIONAL - BAHR

TAB 4 Page 1

This Five-Year Plan consists of a budget and plan prepared by the Concessionaire in accordance with Section 7.2 for the operation of the Utility System and performance of its obligations under the Long-term Lease and Concession Agreement for the University of Idaho Utility System, in respect of the period consisting of Fiscal Years 2023 through 2027.

To: University of Idaho Vice President for Finance & Administration Email: <u>vpfinance@uidaho.edu</u>

With a copy to:

Office of the General Counsel Email: <u>counsel@uidaho.edu</u>

Date: February 1, 2022

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I. Introduction

Sacyr Plenary Utility Partners Idaho LLC is excited to submit this Five-Year Plan, that delineates the Capital Improvements proposed to make in each Fiscal Year to the Utility System, including Capital Improvements to address conditions of the Utility System existing prior to the Closing Date.

Throughout this first year of the Term, the Concessionaire has been able to further understand the conditions, limitations, and operational status of the Utility System. The most visible result of such steep learning has been the discovery of latent issues with the Utility System that were in critical condition prior to the start of the Term and will continue to be in critical condition until applicable Capital Improvements are completed. As a result, the core focus of this Five-Year Plan is the stabilization of the Utility System, prioritizing safety and reliability in accordance with the Performance Standards and Key Performance Indicators, over other potential objectives.

All projects listed in this document are proposed to be performed by Moscow ID Eco District I, LLC, a fullyowned subsidiary of McKinstry Essention, LLC, that serves as Contractor to the Operator within the Long-Term Lease and Concession Agreement for the University of Idaho Utility System.

II. Planning Process

The planning process for Fiscal Year 2023 was built upon a subset of the four founding principles: *safety*, *reliability* leading to resilience, *operational efficiency*, and *carbon neutrality*. In order of priority, those principles are:

- Provide for the safety of the general public, campus community, and operations personnel.
- Operate, maintain, and plan for *reliability* and resilience of the Utility System.
- Improve *operational efficiency*.
- Develop and implement a plan for energy independence and *carbon neutrality*.

While comprehensive stewardship of the Utility System resources requires that all four of these principles be represented in the planning process, early experiences with the Utility System have revealed a critical need to focus the near-term planning efforts on two of them: safety and resilience. Many components of these systems are at the end of their useful life, historically deficient of proper maintenance, or in a partial state of failure leaving the likelihood of a critical system failure unacceptably high and calling for a critical need to upgrade. Achieving a safe environment and resilience in the existing systems is critical before any substantive gains in operational efficiency or carbon neutrality can happen.

Above all, it is imperative that the safety of the general public, the campus community, and the operations personnel be prioritized. Following closely behind, the focus on safety is that of building resilience, starting with reliability. System failures have revealed substantial reliability issues and the Concessionaire's team has systematically identified vulnerabilities in the Utility System.

As a result, the planning process for Fiscal Year 2023 is solely focused on safety and resilience for the *stabilization* of the Utility System, so more progressive long-range planning can commence in the future. Besides the direct safety and business interruption risks, the vulnerabilities identified are direct threats to meeting the Performance Standards and Key Performance Indicators in the Concession Agreement. The Capital Improvements proposed within this Five-Year Plan are specifically identified to manage these risks and constitute a crucial first step in advancing the quality of the Utility System.

A planning process focused on safety and resilience required evaluating the risks associated with the existing systems and their mitigation. This methodical approach characterized the Utility System's subsystems to evaluate deficiencies and vulnerabilities. In the case of complex systems, such as the Energy Plant, the components of the subsystems were also identified. For each system, subject matter experts were engaged in planning sessions to discuss the condition, needs, and potential vulnerabilities associated throughout the Utility System, and within them, 44 subsystems and approximately 180 component sets. Once each system's deficiencies and opportunities were identified, project scopes were developed that centered on addressing these safety and resiliency issues. These projects were structured to maximize complementary work to reduce the number of service disruptions or otherwise gain implementation efficiency. While it will be continuously improved over the next several planning cycles, this effort established the concept of *system planning* for each Utility System.

Vulnerability Assessment

The potential for each Capital Improvement to mitigate risks was established by using a simple vulnerability assessment matrix. This approach evaluated (i) the *impact* of the risk/vulnerability based on the safety and reliability principles, and (ii) the *likelihood* of a failure. It is worth noting that all the Capital Improvements identified herein are presented because they mitigate either a significant safety or resiliency risk, or in several cases, both.

Capital Improvements were assigned an impact rating of low, medium, or high from both a safety and a reliability standpoint. The safety sub-rating estimates the impact of a failure, due to the vulnerability, on the health and life safety of the general public, campus community, and operations staff. The reliability sub-rating estimates the impact of a failure, due to the vulnerability, on business interruption impacts, costs of emergency repair/temporary operations, and cascading property damage resulting from failure (floods, fire, freeze up, building shutdown, etc.). Each risk was also assigned a likelihood rating of low, medium, or high, according to the probability that a failure may occur.

Using a simple matrix, Capital Improvements were assigned a *phase designator*, from Phase 1 to Phase 5. This designation provides guidance about the importance of a Capital Improvement. A later phase designation should not be construed as diminishing the necessity of the project but rather is a reflection of the reality that all projects cannot be done simultaneously.

PHASE ASSIGNED		Impact			
		Low	Med	High	
-	Low	5	4	3	
ikelihoo	Med	4	3	2	
p	High	3	2	1	

Figure 1. Vulnerability Matrix

Projects with the highest impact and likelihood were ranked as Phase 1 projects, a designation that identifies the risk associated with inaction as unacceptably high. These projects must be implemented to mitigate critical safety and/or reliability risks.

These planning efforts have revealed a significant volume of critical (i.e., Phase 1) work and a similar volume of important (i.e., Phase 2) work that is imperative to address in the near term. Utility failures carrying unacceptable safety and reliability concerns are very likely to occur without immediate action.

Projects with a lessor phase designation (i.e., Phase 3-5) also have important roles in risk mitigation. While the impact and likelihood of failures due to inaction are projected to be less severe, there are still risks and a plan for immediate implementation is needed.

It is necessary to understand that this vulnerability assessment is a tool for the University and the Concessionaire to compare projects and help inform what projects need to be prioritized. Unknown and unforeseen issues within systems exist and may cause failures that cannot be predicted. These designators are the best indicator available to measure the criticality of a project.

Annualization of Capital Improvements

Capital Improvements presented within this submittal have been developed and selected through an exhaustive capital planning process, and urgent and immediate approval and completion of these Capital Improvements is necessary to allow the Concessionaire to operate and maintain the Utility System in full compliance with the Performance Standards and Key Performance Indicators.

While we understand the financial constraints of the University, it is our duty to notify the University that these Capital Improvements are essential for the safe and reliable operations and maintenance of the Utility System, and therefore should be approved and undertaken urgently and immediately.

Nevertheless, in order to facilitate the University's review and comply with the Concession Agreement's requirements for the composition of the Five-Year Plan, we have created a timeline for these investments following the level of criticality of such undertakings. Impact and likelihood may be less severe as the project's phase designation number increases but all of them are critical to aspects of the Utility System, pose significant safety and reliability risks, are essential for continuing compliance with the Performance Standards and Key Performance Indicators, and an accelerated approval of their implementation is needed.

III. Supply Use Trends

Supplies expected to be used to operate the Utility System are wood chip fuel, natural gas, and electricity. There is no change from previous years, nor any change expected in the foreseeable future.

The FY2023 Supply use per month and yearly trends are shown below. The estimate for Fiscal Year 2023 is emphasized in red for each plot. The estimated usage of Supplies throughout the year is dependent on campus activities, especially whether students are on campus or not, and weather. Supply use also grows with the increased campus population and building square footage.

Wood Fuels

Wood fuel use peaks in the winter with heating loads but is not at its lowest during peak cooling season. This is because steam fired absorption chillers are used in the summer to produce Chilled Water with wood chips. Wood fuel use is instead at its lowest in the shoulder spring/fall months, when the overall HVAC needs of campus are at their lowest. This is partially the reason why planned wood boiler maintenance shutdowns are scheduled in the spring and summer. In a typical year over 90% of the steam produced at the Energy Plant is from the wood boiler. Wood fuel is measured and purchased in bone dry tons (BDTs) instead of units of energy (e.g., MMBTUs) because the energy content for wood varies significantly depending on species and moisture content.

Natural Gas

Unlike wood fuel, natural gas use at the Energy Plant does not follow a consistent pattern year over year. While it is difficult to predict, there are some common trends. Natural gas is typically used at the Energy Plant to meet peak steam loads when the wood boiler can't keep up with demand and during wood boiler shutdowns. Peak steam loads are in the winter, so there is some natural gas use when temperature drop below freezing. In the summer, there is typically little to no natural gas use.

Scheduled wood boiler shutdowns are not on specific dates, but instead based on the level of maintenance needed and campus loads. To minimize Supply Costs shutdowns are scheduled in the shoulder spring/fall months when loads are at the lowest. Thus, natural gas use is at its highest in the spring and fall. Unscheduled shutdowns occur throughout the year and are likely the driving cause for variability in natural gas use.

Electricity

Electricity use on the East Feed is typically stable throughout the year, with a minor increase late summer during the cooling season and students returning to campus. Electricity purchased from Avista on the East Feed is expected to drop when the turbines and PV array are online, which has been accounted for in the estimate for Fiscal Year 2023. Electricity use on the West Feed is also stable but increases during the

summer season because of the South Campus Chiller Plant. The two electric feeds will likely need to be rebalanced after power generation begins.

Month	Wood (BDT)	Natural Gas (therms)	Electricity (East kWh)	Electricity (West kWh)
July	1,521	-	1,448,197	1,851,351
August	941	17,388	1,297,871	2,111,728
September	801	75,703	1,098,707	2,042,657
October	1,837	51,274	1,248,718	2,332,855
November	2,179	-	1,242,452	2,107,154
December	2,217	12,793	1,199,327	2,090,510
January	2,046	6,464	1,254,451	2,194,548
February	2,376	22,847	1,230,975	2,168,839
March	1,998	8,525	1,344,655	2,136,763
April	1,692	25,641	1,429,055	1,819,024
May	1,662	44,164	1,247,976	1,874,541
June	1,948	-	1,267,437	1,733,364
TOTAL	21,216	264,800	15,309,820	24,463,334

Figure 2. Supply usage estimate for Fiscal Year 2023



Figure 3. Wood chip usage over recent years



Figure 4. Natural gas usage over recent years



Figure 5. East Electric Feed usage over recent years



Figure 6. West Electric Feed usage over recent years

IV. Capital Improvements by Utility System

UTILITY SYSTEM: STEAM (INFO /1)

INFO	CODE	YEAR	PHAS	E NAME	ADDITIONAL WORK	INDICATIVE COST
23/1	001	1	1	Steam Plant Catwalk, Ladder, and Safety Upgrades	\$58,104	\$809,205
23/1	002	1	1	Ash Handling System Upgrades	\$238,788	\$2,938,940
23/1	003	1	1	Energy Plant Steam Piping Upgrades	\$57,996	\$3,024,915
23/1	004	1	1	Gas Boilers Capital Renewal	\$215,892	\$5,404,580
23/1	005	1	1	Utility Tunnel Repair on 6th Street	\$128,952	\$12,299,630
23/1	006	1	1	Water Treatment Improvements Project 1	\$90,180	\$1,309,980
23/1	007	1	1	Wood Fuel Handling System Upgrades	\$177,336	\$2,162,888
23/1	008	1	1	Feedwater System Improvements	\$89,748	\$1,696,493
23/1	009	2	2	Boiler Controls Modernization	\$438,048	\$4,024,783
23/1	010	2	2	Wood Boiler Capital Renewal Project 1	\$256,284	\$2,321,361
23/1	011	3	2	950 CAT Loader Major Rebuild and Hough Replacement	\$1,620	\$771,686
23/1	012	3	2	Distribution Steam and Condensate Upgrades	\$90,180	\$5,750,062
23/1	013	4	3	Energy Plant Emergency Generator Upgrades	\$80,892	\$681,164
23/1	014	4	4	Energy Plant Building Envelope Improvements	\$155,412	\$3,767,158
23/1	015	5	3	Utility Tunnel Upgrades	\$73,548	\$1,986,061
23/1	016	5	4	Condensate Return System Upgrades	\$77,976	\$1,630,428
23/1	017	5	4	Wood Boiler Capital Renewal Project 2	\$314,280	\$2,908,404
23/1	018	5	4	Wood Fuel Storage Conveyance System Improvements	\$129,276	\$957,408
23/1	019	5	4	Wood Fuel Storage Facility Improvements	\$104,112	\$628,055
23/1	020	5	5	Water Treatment Improvements Project 2	\$78,300	\$1,837,414
PROP	OSED CA	APITAL	\$2,856,924	\$56,910,614		

UTILITY SYSTEM: CHILLED WATER (INFO /2)

INFO	CODE	YEAR	PH/	HASE NAME ADDITIONAL WORK						
23/2	021	3	2	Chilled Water Distribution Upgrades Project 1	\$244,080	\$916,853				
23/2	022	5	4	North Campus Chiller Plant Upgrades	\$114,264	\$5,742,498				
23/2	023	5	5	South Campus Chiller Plant Emergency Generator	\$70,848	\$611,887				
PROP	PROPOSED CAPITAL IMPROVEMENT COST \$429,192									

UTILITY SYSTEM: ELECTRICITY (INFO /3)

INFO	CODE	YEAR	PHA	SE NAME	ADDITIONAL WORK	INDICATIVE COST
23/3	024	1	1	Electrical Transformer and Primary Component Capital Equipment Reserve	\$84,564	\$1,287,884
23/3	025	1	1	Electrical Vault Inspections and Upgrades	\$589,248	\$4,909,371
23/3	026	1	1	Menard Law Building Electrical Service Replacement	\$79,056	\$776,752
23/3	027	1	1	Kibbie Dome Building Electrical Service Replacement	\$79,056	\$1,922,799
23/3	028	2	2	Administration South Building Electrical Service Replacement	\$79,056	\$731,057
23/3	029	2	2	Art & Architecture North Building Electrical Service Replacement	\$79,056	\$713,537
23/3	030	2	2	College of Natural Resources Building Electrical Service Replacement	\$79,056	\$833,566
23/3	031	2	2	Hartung Theatre Electrical Service Replacement	\$79,056	\$724,201
23/3	032	2	2	Theophilus Tower Electrical Service Replacement	\$79,056	\$776,761
23/3	033	2	2	Physical Education Building Electrical Service Replacement	\$79,056	\$734,757
23/3	034	2	2	Swimming Center Building Electrical Service Replacement	\$79,056	\$734,757
23/3	035	2	2	West Farm Primary Distribution Improvements	\$145,044	\$8,605,057
23/3	036	5	5	Primary Electric Switch Upgrades	\$128,088	\$2,352,113
PROP	OSED C/	APITAL	IMPRO	DVEMENT COST	\$1,658,448	\$25,102,612

UTILITY SYSTEM: DOMESTIC WATER (INFO /4)

INFO	CODE	YEAR	PHAS	E NAME	ADDITIONAL WORK	INDICATIVE COST
23/4	037	1	1	Domestic Fire Hydrant Major Repairs	\$56,916	\$751,501
23/4	038	1	1	Domestic Water Line Replacement on Central Mall	\$34,128	\$455,191
23/4	039	1	1	Sheep Farm Water Vault Improvements	\$27,108	\$371,400
23/4	040	1	1	Building Backflow Aseemblies Replacement at South Hill Apartments	\$96,660	\$1,389,709
23/4	041	1	1	Domestic Water Emergency Generator	\$99,252	\$5,087,011
23/4	042	1	2	Building Backflow Aseemblies Replacement at McClure Hall	\$13,284	\$92,940
23/4	043	2	2	Domestic Water Line Replacement on University Avenue from Ash Street to Memorial Gym	\$100,764	\$1,295,945
23/4	044	2	2	Domestic Water Line Replacement from Line Street to Energy Plant	\$16,524	\$197,944
23/4	045	2	2	Domestic Water Line Replacement to Agricultural Science Building	\$20,088	\$255,728
23/4	046	2	2	Domestic Water Line Replacement to Food Science Building	\$22,356	\$279,538
23/4	047	3	2	Domestic Water Lines Replacement on Blake Avenue	\$199,908	\$2,571,727
PROP	OSED C	APITAL	IMPRO	/EMENT COST	\$686,988	\$12,748,634

UTILITY SYSTEM: SANITARY SEWER (INFO /6)

INFO	CODE	YEAR	PHASE	NAME	ADDITIONAL WORK	INDICATIVE COST
23/6	048	1	1	Library and Memorial Gym Sanitary Sewer Major Repairs	\$25,380	\$340,713
23/6	049	1	1	Sanitary Sewer Slipline on Campus Drive and Blake Avenue	\$18,036	\$211,020
23/6	050	1	1	Sanitary Sewer Manhole Replacements	\$47,304	\$596,761
23/6	051	1	1	Sanitary Sewer Slipline on Line Street	\$46,548	\$575,490
23/6	052	2	2	Sanitary Sewer Line Replacement at the West Farm	\$17,712	\$226,873
23/6	053	2	2	Sanitary Sewer Line Replacement at the Bruce M. Pitman Center	\$20,844	\$186,083
23/6	054	2	2	Sanitary Sewer Line Replacement at the Administration Building and Art & Architecture	\$38,772	\$497,308
23/6	055	2	2	Sanitary Sewer Slipline from the Brink and Phinney Halls to the Integrated Research and Innovation Center (IRIC)	\$19,440	\$174,347
PROP				/EMENT COST	\$234,036	\$2,808,596

UTILITY SYSTEM: STORMWATER (INFO /7)

INFO	CODE	YEAR	PHASE	NAME	ADDITIONAL WORK	INDICATIVE COST
23/7	056	1	1	Library and Memorial Gym Stormwater Major Repairs	\$92,556	\$1,292,568
23/7	057	1	1	Storm Slipline on Campus Drive and Blake Avenue	\$18,468	\$236,595
23/7	058	1	1	New Stormwater Line at Art & Architecture	\$16,848	\$133,316
23/7	059	2	1	Stormwater Catch Basin and Manhole Upgrades	\$141,156	\$1,852,453
23/7	060	3	1	Stormwater Line Installation from Wallace to Paradise Creek	\$31,320	\$301,212
23/7	061	3	2	Nez Perce Stormwater and Sanitary Sewer Major Repairs	\$25,704	\$252,026
PROP	DSED CA	APITAL	IMPRO\	/EMENT COST	\$326.052	\$4.068.169

V. Capital Improvements by Year

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2023

INFO	CODE	PHAS	E NAME	ADDITIONAL WORK	INDICATIVE COST		
23/1	001	1	Steam Plant Catwalk, Ladder, and Safety Upgrades	\$58,104	\$809,205		
23/1	002	1	Ash Handling System Upgrades	\$238,788	\$2,938,940		
23/1	003	1	Energy Plant Steam Piping Upgrades	\$57,996	\$3,024,915		
23/1	004	1	Gas Boilers Capital Renewal	\$215,892	\$5,404,580		
23/1	005	1	Utility Tunnel Repair on 6th Street	\$128,952	\$12,299,630		
23/1	006	1	Water Treatment Improvements Project 1	\$90,180	\$1,309,980		
23/1	007	1	Wood Fuel Handling System Upgrades	\$177,336	\$2,162,888		
23/1	008	1	Feedwater System Improvements	\$89,748	\$1,696,493		
23/3	024	1	Electrical Transformer and Primary Component Capital Equipment Reserve	\$84,564	\$1,287,884		
23/3	025	1	Electrical Vault Inspections and Upgrades	\$589,248	\$4,909,371		
23/3	026	1	Menard Law Building Electrical Service Replacement	\$79,056	\$776,752		
23/3	027	1	Kibbie Dome Building Electrical Service Replacement	\$79,056	\$1,922,799		
23/4	037	1	Domestic Fire Hydrant Major Repairs	\$56,916	\$751,501		
23/4	038	1	Domestic Water Line Replacement on Central Mall	\$34,128	\$455,191		
23/4	039	1	Sheep Farm Water Vault Improvements	\$27,108	\$371,400		
23/4	040	1	Building Backflow Aseemblies Replacement at South Hill Apartments	\$96,660	\$1,389,709		
23/4	041	1	Domestic Water Emergency Generator	\$99,252	\$5,087,011		
23/4	042	2	Building Backflow Aseemblies Replacement at McClure Hall	\$13,284	\$92,940		
23/6	048	1	Library and Memorial Gym Sanitary Sewer Major Repairs	\$25,380	\$340,713		
23/6	049	1	Sanitary Sewer Slipline on Campus Drive and Blake Avenue	\$18,036	\$211,020		
23/6	050	1	Sanitary Sewer Manhole Replacements	\$47,304	\$596,761		
23/6	051	1	Sanitary Sewer Slipline on Line Street	\$46,548	\$575,490		
23/7	056	1	Library and Memorial Gym Stormwater Major Repairs	\$92,556	\$1,292,568		
23/7	057	1	Storm Slipline on Campus Drive and Blake Avenue	\$18,468	\$236,595		
23/7	058	1	New Stormwater Line at Art & Architecture	\$16,848	\$133,316		
PROPOSED CAPITAL IMPROVEMENT COST \$2,481,408 \$50,0							

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2024

INFO	CODE	PHAS	E NAME	ADDITIONAL WORK	INDICATIVE COST
23/1	009	2	Boiler Controls Modernization	\$438,048	\$4,024,783
23/1	010	2	Wood Boiler Capital Renewal Project 1	\$256,284	\$2,321,361
23/3	028	2	Administration South Building Electrical Service Replacement	\$79,056	\$731,057
23/3	029	2	Art & Architecture North Building Electrical Service Replacement	\$79,056	\$713,537
23/3	030	2	College of Natural Resources Building Electrical Service Replacement	\$79,056	\$833,566
23/3	031	2	Hartung Theatre Electrical Service Replacement	\$79,056	\$724,201
23/3	032	2	Theophilus Tower Electrical Service Replacement	\$79,056	\$776,761
23/3	033	2	Physical Education Building Electrical Service Replacement	\$79,056	\$734,757
23/3	034	2	Swimming Center Building Electrical Service Replacement	\$79,056	\$734,757
23/3	035	2	West Farm Primary Distribution Improvements	\$145,044	\$8,605,057
23/4	043	2	Domestic Water Line Replacement on University Avenue from Ash Street to Memorial Gym	\$100,764	\$1,295,945
23/4	044	2	Domestic Water Line Replacement from Line Street to Energy Plant	\$16,524	\$197,944
23/4	045	2	Domestic Water Line Replacement to Agricultural Science Building	\$20,088	\$255,728
23/4	046	2	Domestic Water Line Replacement to Food Science Building	\$22,356	\$279,538
23/6	052	2	Sanitary Sewer Line Replacement at the West Farm	\$17,712	\$226,873
23/6	053	2	Sanitary Sewer Line Replacement at the Bruce M. Pitman Center	\$20,844	\$186,083
23/6	054	2	Sanitary Sewer Line Replacement at the Administration Building and Art & Architecture	\$38,772	\$497,308
23/6	055	2	Sanitary Sewer Slipline from the Brink and Phinney Halls to the Integrated Research and Innovation Center (IRIC)	\$19,440	\$174,347
23/7	059	1	Stormwater Catch Basin and Manhole Upgrades	\$141,156	\$1,852,453
PROP	OSED C	APITAL	IMPROVEMENT COST	\$1.790.424	\$25.166.055

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2025

INFO	CODE	PHAS	SE NAME	ADDITIONAL WORK	INDICATIVE COST			
23/1	011	2	950 CAT Loader Major Rebuild and Hough Replacement	\$1,620	\$771,686			
23/1	012	2	Distribution Steam and Condensate Upgrades	\$90,180	\$5,750,062			
23/2	021	2	Chilled Water Distribution Upgrades Project 1	\$244,080	\$916,853			
23/4	047	2	Domestic Water Lines Replacement on Blake Avenue	\$199,908	\$2,571,727			
23/7	060	1	Stormwater Line Installation from Wallace to Paradise Creek	\$31,320	\$301,212			
23/7	061	2	Nez Perce Stormwater and Sanitary Sewer Major Repairs	\$25,704	\$252,026			
PROP	PROPOSED CAPITAL IMPROVEMENT COST \$592.812							

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2026

INFO	CODE	CODE PHASE NAME ADDITIONAL WORK					
23/1	013	3	Energy Plant Emergency Generator Upgrades	\$80,892	\$681,164		
23/1	014	4	Energy Plant Building Envelope Improvements	\$155,412	\$3,767,158		
PROP	PROPOSED CAPITAL IMPROVEMENT COST \$236,304						

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2027

INFO	CODE	PHAS	E NAME	ADDITIONAL WORK	INDICATIVE COST
23/1	015	3	Utility Tunnel Upgrades	\$73,548	\$1,986,061
23/1	016	4	Condensate Return System Upgrades	\$77,976	\$1,630,428
23/1	017	4	Wood Boiler Capital Renewal Project 2	\$314,280	\$2,908,404
23/1	018	4	Wood Fuel Storage Conveyance System Improvements	\$129,276	\$957,408
23/1	019	4	Wood Fuel Storage Facility Improvements	\$104,112	\$628,055
23/1	020	5	Water Treatment Improvements Project 2	\$78,300	\$1,837,414
23/2	022	4	North Campus Chiller Plant Upgrades	\$114,264	\$5,742,498
23/2	023	5	South Campus Chiller Plant Emergency Generator	\$70,848	\$611,887
23/3	036	5	Primary Electric Switch Upgrades	\$128,088	\$2,352,113
PROP	OSED C	APITAL	IMPROVEMENT COST	\$1,090,692	\$18,654,268

APPENDIX A. Project Sheets for Capital Improvements

PROJECT CODE: 23/1-001

PROJECT NAME: Energy Plant Catwalk, Ladder, and Safety Upgrades

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (unacceptable fall risks exist that could result in severe injury). The impact associated with resiliency is <u>high</u> (a fall injury can result in interruption of critical steam plant services and reputational damage).

The likelihood of these events is <u>high</u> (unacceptable, unsafe fall conditions exist).



Background: Ladder and catwalk systems are critical for the safe and efficient operation of the District Energy Plant. They provide timely and safe access to major systems with the Plant including the wood silo, wood handling equipment, boilers, and the hot lime softeners. Unsafe catwalks slow down response time during emergencies, increasing the risk of severe damage to equipment and personal injury or death to operators with a maximum fall risk of 72 ft. This project provides a full engineering assessment to either upgrade existing or replace ladder and catwalk systems to be compliance with safety codes.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate severe safety issues by eliminating fall risks.
- Increase resiliency by eliminating risks to the Steam Plant operations staff.

Scope of Work: The scope of work of this Capital Improvement is:

- Demolition of structurally unsafe catwalks and ladders.
- Assessment and construction of new catwalks or modification of existing areas including the following:
 - Replace the woodchip silo platform.
 - · Secure ship ladders to restrict access.
 - Install fall protection and handrails on all ladders or replace with compliant ladder systems.
 - Install cages on all multi-level ladders.
 - · Remove boiler exhaust ladder system.
 - · Install safe steam pipe crossings with platforms and rails.
 - Install handrails at multiple points of unprotected steep steps.
 - · Install safe platform and railing around boilers.
 - · Add boiler economizer access ladders and platforms.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey

covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

Additional work will occur within the Steam Plant perimeter. Any outage periods of the wood fuel boiler will be coordinated with the University.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$58,104.

Additional Information:



Figure 1. Unsafe ladder systems to service boiler exhaust stack and roof.







Figure 3. Severe fall hazard behind window.



Figure 4. Other examples of unsafe conditions to access critical elements.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$809,205.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) there are no structural deficiencies at the woodchip silo that would prevent the construction of a safe catwalk system, and (ii) there are no space constraints that would prevent installation of ladder cages or handrails. Only minor interruption to plant operations during construction.

INFORMATIONAL - BAHR

(E) Proposed schedule: EPC (Commiss.) occurs in July 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Promotes safe and efficient Steam Plant operations.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$803,412.

- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.
PROJECT CODE: 23/1-002

PROJECT NAME: Ash Handling System Upgrades

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (unsafe rotating equipment conditions exist, severe fire risk). The impact associated with resiliency is <u>high</u> (failure likely to disable the wood fuel boiler).

The likelihood of these events is <u>high</u> (equipment is heavily damaged).

PHA		Low	Med	High
Likeliho	w Med	4	3	2
poc	High	3	2	1

Background: The ash handling system removes wood ash from the boiler after combustion and is critical for operation. It consists of a series of ash hoppers, augers, and mechanical systems used to move the ash from the boiler to a truck outside to be hauled away. The wood boiler provides significant economic and environmental benefits to the University, however, at 35 years old, many of the subsystems are in critical need of upgrade. This project replaces the existing ash handling system and separates fine and large ash. Most of the system is original equipment and well beyond its expected life. The entire ash handling system is heavily damaged from years of use with major components warped from the heat, leaking, and breaking down frequently, creating severe fire risks. Sealing the system will significantly reduce the amount of ash that builds up in the plant, increasing the expected life of exposed mechanical systems. Fine ash has a higher economic value when separated from large ash, providing a potential revenue stream to the University. A complete redesign and replacement of the system and an economic feasibility study for separating fine ash is required.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade the ash handling system for the wood boiler to increase uptime.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Address long term health concerns from ash exposure.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Demolition of the ash handling system including:
 - Ash conveyors and subsystems (x9).
 - Elevating conveyor and subsystems.
- Install new ash handling system including:
 - Fine and large ash conveyors.
 - Elevating conveyor.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University for the wood boiler shutdown from spring to fall to minimize the gas use during the construction stage. In addition, the Concessionaire will engage with the relevant University departments to identify potential impacts or benefits from the current ash waste.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$238,788 and will also include a feasibility study for fine ash separation.

Additional Information:



Figure 1. Schematic design of ash handling system.



Figure 2. Elevating conveyance system.



Figure 3. Heavily worn ash augers, significantly reducing performance.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,938,940.
- (B) Forecasted annual operations and maintenance costs: +\$5,800. Fine ash conveyor is a new piece of equipment not presently in the O&M program at the University of Idaho. The new system will have specific O&M requirements to maintain expected life.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) construction can be coordinated with the University and completed within one summer to minimize wood boiler downtime, (ii) sufficient space for parallel fine and large ash conveyance systems, and (iii) 1% electrical efficiency improvement in conveyance system offset by additional fine ash system.
- (E) Proposed schedule: EPC (Const.) extends through September 2023. EPC (Commiss.) occurs in Sept. 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: An improved ash handling system will increase the reliability of the wood fueled boiler, reducing the natural gas consumption. The collection of fine ash can be used for land applications.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

- (H) Fee or charge payable to the Operator: \$2,916,540.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$500, wood fuel, natural gas, and electricity. Decreased wood boiler downtime, improved conveyance efficiency.

PROJECT CODE: 23/1-003

PROJECT NAME: Energy Plant Steam Piping Upgrades

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and campus steam shutdown).

The likelihood of these events is <u>high</u> (multiple valves have failed).



Background: The steam piping in the Energy Plant is critical for transporting steam produced by the boilers to the tunnel network and reducing pressure to safe levels. Isolation valves in the system are used to provide safe access to critical equipment for service. This project replaces the isolation valves and a pressure reducing valve (PRV) in the main steam header, all of which are beyond their serviceable life and/or not designed for operating pressures. The newest valves were replaced in a 2002 State of Idaho DPW project and are already failing, exposing operators to severe burns from high pressure steam leaks. The 8" PRV is not rated for the higher pressures required by the new turbines and cannot be operated in parallel without severe life safety risks. Without the 8" PRV the only redundancy to the turbines is the 6" PRV, which is not sized to meet peak campus loads. This also creates a single point of failure if the turbines are offline, risking a complete steam shutdown to campus if the valve fails.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade plant level steam piping to plant operating pressures.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address health concerns that should be physically mitigated rather than dependent on procedures.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Reconfigure D Boiler 6" piping to connect to main steam header.
- Replace all high pressure isolation valves (x19).
- Replace 8" PRV with two 4" electric PRVs.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and

the provision of fencing to prevent unauthorized access to construction areas.

The Concessionaire will coordinate with the University for the replacement of valves that may require steam shutdown.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$57,996.

Additional Information:



Figure 1. Failed isolation valve preventing safe work on critical systems.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$3,024,915.
- (B) Forecasted annual operations and maintenance costs: +\$0. No O&M Costs change anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) no steam shutdown will be required when connecting D boiler to the main steam header, (ii)

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workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs from August 2023 to September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Minimal reduction in fuel, water, and chemical consumption by reducing steam losses during service.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$3,001,860.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible. Minimal savings from reduced losses during service work.

PROJECT CODE: 23/1-004

PROJECT NAME: Gas boilers Capital Renewal

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high.

PH/ ASSIC	ASE Gned		Impact	
BU		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
Q	High	3	2	1

Background: The natural gas boilers provide redundancy to the wood boiler and meet peak heating loads on campus. They are critical to the successful operation of the Energy Plant and necessary to achieve performance standards and resiliency desires. However, their ages range from 45-81 years old, and the subsystems are in need of replacement and upgrade. This project upgrades the subsystems critical to the successful operation of the boilers. Several single points of failure, or long repair time, issues exist within these systems. Many of these systems are original equipment and are well beyond this serviceable life, posing safety risks from natural gas leaks and boiler tube ruptures. Upgrading these systems will improve efficiency and extend the useful life of the boilers. Complete gas boiler system replacements will be needed without these upgrades.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade gas boilers to extend useful life and improve performance.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Replace degraded and ruptured boiler tubes.
- Replace gas burners for all three boilers.
- Replace gas trains for all three boilers.
- Replace all critical valves for all three boilers.
- Replace FD fans, VFDs, and motors for all three boilers.
- Install cascading blowdown systems for Boilers C and D only.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

ATTACHMENT 3

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

The Concessionaire will coordinate with the University the staggering of boiler work to maintain steam plant resiliency to prevent need for steam shutdown.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$215,892 and will also include (i) Eddy current testing on the boiler tubes, and (ii) non-destructive testing for corrosion and wall thickness degradation on all four exhaust stacks.

Additional Information:



Figure 1. Detailed views of the natural gas boilers.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$5,404,580.
- (B) Forecasted annual operations and maintenance costs: +\$3,100. O&M increase for expanded complexity of controls, gas trains and additional cascading blowdowns.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) only 20% of boiler tubes will need to be replaced after Eddy current testing, (ii) exhaust stack replacement is not needed, (iii) natural gas reductions from 2% burner efficiency increase at current prices based on FY21 data, (iv) stage construction to maintain N+1 redundancy to the wood boiler to prevent risk of steam shutdown to campus, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.
- (E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs in September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved efficiency and performance of the boilers reduces natural gas consumption.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$5,363,388.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$1,200, natural gas. Due to improved efficiency of gas burners.

PROJECT CODE: 23/1-005

PROJECT NAME: Utility Tunnel Repair on 6th Street

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high.

ASSIC	GNED		Impact	
PHA	ASE	Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
q	High	3	2	1

Background: The utility tunnel network is critical for distributing many utilities across campus including steam, chilled water, high voltage power, natural gas, and IT/telecom. This project replaces the tunnel lid on 6th St from Line St to the Wallace Complex. Tunnel lids are critical for protecting utilities from ambient conditions and also serve as the sidewalks of much of campus. The lid on 6th St has been in service for up to 70 years and needs repair to prevent collapse. Some sections on 6th St are supported with non-engineered, temporary screw jacks that may not be adequate. The risk of collapse poses a severe safety risk to the general public and potential shutdown of all Energy Plant utilities. This was identified in the FY19 project to replace the tunnel lid at 6th and Line, but project funding could not support the additional scope. This project can be coordinated with the Capital Improvement 23/1-010 Distribution Steam and Condensate Upgrades for reduced overall costs and impact to campus.

Objectives: The main objectives of this Capital Improvement are:

- Extend the useful service life of the existing tunnel.
- Mitigate severe resiliency issues associated with aging systems.
- Address safety concerns associated with tunnel collapse.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Saw cut removal of tunnel lid.
- Replace the lid of the 6th St utility tunnel (approx. 1200 ft).
- Provide protection for live utility services during construction.
- Bedding and backfill.
- Surface restoration.
- Identify and remove abandoned utilities.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended that University of Idaho ITS department identify and remove abandoned and damaged IT and telecommunications lines in construction areas while accessible.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey

covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University to schedule construction during the summer season to reduce impact to campus operations.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$128,952 and will also include core drilling and laboratory analysis for tunnel walls and lid to determine integrity.

Additional Information:



Figure 1. 6th Street Tunnel lid to be replaced.



Figure 2. Aging sections of the tunnel.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$12,299,630.
- (B) Forecasted annual operations and maintenance costs: \$0. Like for like repairs and/or replacements.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) core sampling and structural investigation may reveal that only sections of the tunnel need to be replaced, which may significantly reduce project cost, (ii) tunnel walls and floor will be in good condition and not require repair or impact construction, (iii) underground construction conditions will be reasonable free of obstruction, conflict, hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and are not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2023. EPC (Commiss.) occurs in October 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: None.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$12,207,024.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible.

PROJECT CODE: 23/1-006

PROJECT NAME: Water Treatment Improvements Project 1

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u>. The impact associated with resiliency is <u>high</u> (extended steam outage to campus).

The likelihood of these events is high (PRV stations are failing).

PHA ASSIC	ASE Gned		Impact	9.1
		Low	Med	Hiah
	Low	5	4	3
ikelihoo	Med	4	3	2
q	High	3	2	1

Background: The Hot Lime Softening (HLS) tanks and associated feedwater and condensate chemistry subsystems are critical for protecting the boilers and steam distribution systems from scaling, which reduces efficiency and risks significant damage. These systems experience frequent fouling due to the type of fluids used, which reduces efficiency. HLS tank #2 is almost 20 years old and in need of reconditioning to extend its useful life. This project rebuilds the PRV stations for each HLS tank, reconditions HLS #2, and upgrades the water treatment system. Most of these systems are beyond or approaching their end of serviceable life. The PRV station for HLS #1 has failed with no parts commercially available. The PRV station for HLS #2 is in critical need of replacement before it fails with no redundancy. Failure of PRV station #2 will result in a complete steam shutdown to campus until replacement as boilers cannot be operated without water treatment. This is an example where N+1 redundancy does not exist.

Objectives: The main objectives of this Capital Improvement are:

- Recondition Hot Lime Softener #2 to extend its useful life.
- Mitigate resiliency issues associated with systems beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Rebuild PRV stations for both HLS tanks.
- Recondition HLS #2 and replace valves with stainless steel valves.
- Replace all critical valves for the zeolite and charcoal systems.
- Replace booster pumps and backwash pumps.
- Replace slurry tank motor.
- Replace saltwater tank, pumps, valves, and piping.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be

responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$90,180 and will also include non-destructive testing on de-aerators and hot lime softeners to determine integrity and remaining serviceable life.

Additional Information:



Figure 1. Failed PRV Station #1.



Figure 2. Hot Lime Softener #2.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,309,980.
- (B) Forecasted annual operations and maintenance costs: \$0. Like for like repairs and/or replacements.
- (C) Proposed modification to the Recovery Period: None.

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(D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) HLS tank and de-aerator are structurally sound and do not need to be replaced, dependent on non-destructive testing, and (ii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs in September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement from reduced pumping requirements to move fluids in the system. Fewer losses and less electric load.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,299,996.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible, associated with a minor improvement from reduced pumping requirements.

PROJECT CODE: 23/1-007

PROJECT NAME: Wood Fuel Handling System Upgrades

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (unsafe rotating equipment and fire risk conditions exist). The impact associated with resiliency is <u>high</u> (failure likely to disable the wood fuel boiler).

The likelihood of these events is <u>high</u> (conditions are critical to address, failure is imminent).



Background: The wood handling system at the Energy Plant transports fuel from delivery trucks to the throat of the wood boiler. The wood boiler provides significant economic and environmental benefits to the University, however, at 35 years old, many of the subsystems are in critical need of upgrade. This project upgrades the fuel handing subsystems including hydraulics, augers, and conveyance systems. Several single points of failure, or long repair time, issues exist within these systems. These systems are original equipment and damaged from years of use, posing severe safety risks to operators, fuel supplier delivery drivers, and vehicle and pedestrian traffic. Emergency repairs were needed in 2021 and will be needed again in the very near future, indicating that significant failures are imminent. Without a functional fuel handling system, the wood boiler will be shut down, significantly increasing Supply costs to the University until addressed. Shutdown of the wood boiler risks N+1 performance standards for the Steam System as the Energy Plant would be completely dependent on natural gas availability, posing a significant risk to campus.

Objectives: The main objectives of this Capital Improvement are:

- Recondition the wood fuel handling system to extend its useful and serviceable life.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Replace glycol heating unit for deliver ramp.
- Upgrade the walking floor with new components including:
 - Hydraulics, slats, nylon surfaces, bearings, seals.
- Upgrade exterior fuel conveyance system with new components including:
 - Unclassified belt and cover.
 - Classifier drive and cover.
 - · Classified belt and magnet.
- Upgrade silo fuel conveyance system with new components including:
 - Elevated screw.

- Silo exit auger.
- · Damaged silo bucket elevator and buckets.
- · Install speed control to silo bucket elevator.
- Damaged metering bin bucket elevator and buckets.
- · Install speed control to metering bin bucket elevator.
- Upgrade metering bin including:
 - Demolition of existing metering bin.
 - Reengineer for improved fuel flow to throat.
 - Replace drives.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

Additional work will occur within the Steam Plant perimeter. Any outage periods of the wood fuel boiler will be coordinated with the University.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$177,336.

Additional Information:



Figure 1. Tipper hydraulics in poor condition surrounded by combustible materials.



Figure 2. Hydraulic system beyond serviceable life.





Figure 4. Elevator buckets are heavily worn.

Figure 3. Aged wood conveyance system in poor condition.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,162,888.
- (B) Forecasted annual operations and maintenance costs: \$0. Like for like replacements. The new system will have specific O&M requirements to maintain expected life. Downtime from breakdowns and jams should be reduced from improved performance.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) construction will be phased during two summer seasons to ensure the wood boiler is available during winter heating season and to reduce logistics impact to fuel suppliers, (ii) a partial replacement of damaged buckets only (15 buckets per elevator), (iii) a 1% electrical efficiency improvement in the conveyance system will be derived, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through June 2024. EPC (Commiss.) occurs from June 2024 to July 2024.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved fuel handling will increase the reliability of the wood boiler, reducing natural gas consumption.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$2,146,932.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$1,000, wood fuel, natural gas, and electricity. The decrease is associated to reduced wood boiler downtime, and improved conveyance efficiency.

PROJECT CODE: 23/1-008

PROJECT NAME: Feedwater System Improvements

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (unsafe piping exists). The impact associated with resiliency is <u>high</u> (failure likely to disable the wood fuel boiler, pumps failing risk complete Energy Plant shutdown).

The likelihood of these events is low.

q	High	3	2	1
ikelihoo	Med	4	3	2
	Low	5	4	3
PHA	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: The feedwater system is critical to boiler operations and is in need of replacement. This project addresses issues in the system to improve performance, resiliency, and safety. Most of these systems are original equipment and are well beyond this serviceable life and becoming unrepairable. The feedwater piping to D Boiler is of an unknown age and likely not up to code. The current pipe layout in the Energy Plant is a result of efforts to minimize cost and maximize uptime during construction over the years. As a result, piping often does not follow an optimum path and has excessive bends, which increases losses in the system.

Objectives: The main objectives of this Capital Improvement are:

- Improve performance of the feedwater system.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns presented by condition of existing assets.
- Improve O&M practices for safe and reliable operation.

Scope of Work: The scope of work of this Capital Improvement is:

- Upgrade feedwater pumps and VFDs (x4).
- Optimize feedwater pipe layout in the Energy Plant.
- Replace distribution valves (x15 4" valves, x2 6" valves).
- Replace D Boiler piping (approx. 175ft).

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$89,748 and will also include (i) a flow analysis to identify losses and potential improvements in the system, and (ii) non-destructive testing of the 2,500 gal feedwater tank to determine remaining useful life.

Additional Information:



Figure 1. Aged feedwater pump.



Figure 2. 64-year-old feedwater pump showing heavy leakage.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,696,493.
- (B) Forecasted annual operations and maintenance costs: \$0. No change in O&M Cost is expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) a 2% increase in the feedwater pump efficiency, and (ii) the 2,500 gal feedwater tank is still serviceable and does not need to be replaced.
- (E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs in September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												

EPC (Commiss.)						

- (F) Impact on Sustainability: Minor improvement from reduced losses in pipe network.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,683,720.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$600, wood fuel, natural gas. The decrease is associated with reduced losses in the pipe network and increased pump efficiency.

PROJECT CODE: 23/1-009

PROJECT NAME: Boiler Controls Modernization

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical, life safety, and health issues). The impact associated with resiliency is <u>high</u> (potential for boiler shutdowns).

The likelihood of these events is medium (controls are failing).

celihood	Med H	4	3	2			
Ľ	Low	5	4	3			
PHASE		Low Med High					
ASSIGNED			Impact				

Background: The control systems for each boiler are over 30 years old and no longer made or supported by the manufacturer. Currently there are no commercially available parts for these systems. The controls for the wood boiler fail regularly, which puts the boiler out of compliance with the University's Air Quality Permit with Idaho DEQ. Gas boiler controls are located at each boiler instead of centralized, significantly increasing response time to problems and reducing the Energy Plant's ability to monitor equipment. The Chilled Water system is also located far away from the operator station. This project addresses these problems by upgrading and centralizing the boiler control systems into one location to improve plant safety and operational efficiency. As critical components of the Steam and Chilled Water Systems, when these controls fail the respective utility system also fails. With spare parts no longer available there is risk of permanent boiler shutdowns until the controls are replaced. Shutdown of boilers risks N+1 performance standards for the Steam System, posing a significant risk to campus.

Objectives: The main objectives of this Capital Improvement are:

- Centralize Energy Plant controls to increase response time before severe damage occurs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Address long term health concerns from wood dust, ash, and noise exposure that should be physically mitigated rather than dependent on procedures.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Demolition of the existing supervisors' office.
- Construction of a 2-story, 30ft x 12ft centralized control room with office space and conference room on second story.
- Installation, wiring, and programming of SCADA system to include the following systems:
 - Wood boiler (x1).
 - Natural gas boilers (x3).
 - Feedwater pumps (x4).
 - Condensate pumps (x4).
 - Steam turbines (x3).
 - Absorption chillers (x2).

- Cooling towers (x3).
- Emergency generator (x1).
- Install a standalone server for data collection and storage.
- Catwalk modification for access to second story.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$438,048 and will also include architectural and engineering design drawings and specifications to construct a control room and office space.

Additional Information:



Figure 1. Obsolete operator station, manned 24/7 and exposed to environmental hazards.



Figure 2. Demo supervisors' office.



Figure 3. Examples of obsolete gas boiler control and operator INFORMATIONALⁿ- BAHR

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$4,024,783.
- (B) Forecasted annual operations and maintenance costs: \$9,900. Decrease from fewer repairs to keep controls operational. Increase from more complex and expanded control system. Additional controls and server maintenance needs. The new system will have specific O&M requirements to maintain expected life.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) commercially available control systems will be compatible with existing boilers, (ii) sufficient space will exist for the necessary centralized control room and supervisors' office, (iii) staged demolition and construction of controls at each boiler so N+1 redundancy is maintained in the event of a failure, (iv) 0.5% reduction in fuel costs due to improved control of boiler operations based on FY21 data, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.
- (E) Proposed schedule: EPC (Const.) extends through August 2024. EPC (Commiss.) occurs from August 2024 to September 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Negligible.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$3,994,056.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$5,000, wood, natural gas, and electricity. The decrease is associated to minor electrical load increase, improved boiler control.

PROJECT CODE: 23/1-010

PROJECT NAME: Wood Boiler Capital Renewal Project 1

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and wood boiler shutdown).

The likelihood of these events is medium.

PHASE ASSIGNED		Low Med High						
	Low	5	4	3				
-ikelihoo	Med	4	3	2				
p	High	3	2	1				

Background: The wood fuel boiler provides significant economic and environmental benefits to the University, however, at 35 years old, many of the subsystems are in critical need of replacement. This project upgrades the boiler subsystems including the woodchip grate system, internal components, and fans. Each of the subsystems addressed is critical to the operation of the wood fuel boiler. Several single points of failure, or long repair time, issues exist within these systems. Most of these systems are original equipment, well beyond serviceable life, and damaged from years of use. Improvements will increase efficiency, extend the useful life of the boiler, reduce Supply Costs to the University by decreasing boiler downtime, and increase the resiliency of this system, a critical aspect to achieve performance standards and associated resiliency goals of the University. The alternative to these upgrades would be either complete replacement of the boiler and associated fuel and ash handling systems, switch to natural gas fuel at significantly higher Supply costs, or transition away from central steam heating to campus.

Objectives: The main objectives of this Capital Improvement are:

- Recondition the wood boiler to extend its useful service life.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Mitigate single point of failure risks by keeping N+1 critical spares on hand.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Recondition throat.
- Replace failing grate supports, linkages, and hydraulic ram systems.
- Recondition firebox and replace all spray on refractory.
- Replace ash hopper firebricks with refractory.
- Eddy current test boiler tubes and retube as needed.
- Rebuild steam drum diverter, mud drum diffusers, and water column.
- Replace soot blower lances (x8), gear trains, and soot blower valves.
- Replace ID fan, FD fan, under-fire fan, over-fire fan, VFDs, motors, and dampers.
- Replace all critical valves.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University the timing during the lowest steam use to reduce natural gas costs during shutdown. Wood boiler shutdown can be done without an impact to steam customers.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$256,284 and will also include Eddy current testing on the boiler tubes.

Additional Information:



Figure 1. Refractory in need of replacement.



Figure 2. Exposed firebrick in boiler. INFORMATIONAL - BAHR



Figure 3. Condition of boiler tubes unknown. TAB 4 Page 48

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,321,361.
- (B) Forecasted annual operations and maintenance costs: \$0. Downtime from breakdowns and labor costs should be reduced from improved performance, but it will compensate the increased O&M costs due to Higher complexity of equipment.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 20% of boiler tubes will need to be replaced, (ii) Supply savings achieved through 1% decrease in wood boiler downtime and improved operations based on FY21 data, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs in October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Improved wood boiler efficiency reduces natural gas use during peak loads.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$2,303,856.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$10,000, wood fuel, natural gas, electricity. The decrease is associated with decreased wood boiler downtime, improved efficiency of the boiler and subsystems.

PROJECT CODE: 23/1-011

PROJECT NAME: 950 CAT Loader Major Rebuild and Hough Replacement

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (fire risk near wood fuel storage). The impact associated with resiliency is <u>high</u> (extended wood boiler outage and increased Supply Costs).

The likelihood of these events is <u>medium</u> (loader is failing and beyond recommended runtime).



Background: The 950 CAT loader is critical for successful operation of the wood chip storage facility. It is used to deliver wood chips from piles to the chip trailer to be used at the Energy Plant. This project rebuilds the engine and mechanical systems of the loader. The loader has passed the recommended runtime hours by the manufacturer and requires a certified rebuild before severe damage occurs. Several failures have occurred in 2021 including fouling fuel injectors and an engine fire, indicating that more significant damage may occur soon if not addressed. Loss of the loader reduces the Energy Plant's ability to meet campus loads with wood fuel, potentially increasing Supply Costs to the University. The backup Hough loader should be replaced as it is well beyond its life expectancy and not reliable. The existing 950 CAT will provide N+1 redundancy to the new loader.

Objectives: The main objectives of this Capital Improvement are:

- Restore N+1 redundancy for the wood chip storage facility.
- Mitigate severe resiliency issues associated with aging systems.

Scope of Work: The scope of work of this Capital Improvement is:

- Certified inspection and rebuild of the existing 950 CAT loader to act as a backup
- Purchase a new loader of similar size to act as the primary loader
- Remove the Hough loader from service
- Administer procurement in accordance with CA Contract Part IV-Performance Standards: Steam and Condensate section 9) Fuel Operations and Storage.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this

proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$1,620, and will also include (i) a certified inspection of the 950 CAT to determine scope of rebuild, and (ii) the administration of procurement of the new loader.

Additional Information:



Figure 2. Smoke due to failing injectors on CAT (Aug. 2021).

Figure 1. CAT engine fire near combustible wood fuels (Oct. 2021).

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$771,686.
- (B) Forecasted annual operations and maintenance costs: \$1000. Upgraded loader will have additional O&M requirements due to increased complexity.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the cost for loader rental during the rebuild is not included in the indicative price, (ii) the new loader would be purchased and on site before the rebuild commences.

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(E) Proposed schedule: EPC (Overhaul) occurs from July 2025 to October 2025.

	07/24	08/24	09/24	10/24	11/24	12/24	01/25	02/25	03/25	04/25	05/25	06/25
Additional Work												
EPC (Proc.)												
EPC (Arriv. site)												
EPC (Overhaul)												

(F) Impact on Sustainability: Minor efficiency and emissions improvement.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$765,936.

(I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.

(J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/1-012

PROJECT NAME: Distribution Steam and Condensate Upgrades

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues associated with steam pipe rupture). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

ASSIC	PHASE ASSIGNED		Impact			
рци	V C C	Low Med Hig				
	Low	5	4	3		
ikelihoo	Med	4	3	2		
p	High	3	2	1		

Background: The steam and condensate piping in the tunnel network is critical for distributing heat to campus buildings safely. This project upsizes major sections of the system and upgrades valves and expansion joints. Most of these systems are beyond or approaching their end of serviceable life. The lines by ISUB are over 95 years old, threaded, and beginning to rust, posing a high safety risk to operators and pedestrians if the pipe ruptures. Rupture poses an extreme safety risk to pedestrians and operators from exposure to high pressure, high temperature steam, reduced steam service from pressure loss to all buildings, decreased condensate return rate, and severe damage to all utilities in the tunnel until the pipe can be isolated. Years of water damage is eroding the outside of the pipe, increasing the likelihood of failure and shutdown to campus buildings. The lines on 6th Street are at least 59 years old and too small to meet current or future steam loads. The 6th Street line will need to be upgraded before additional buildings such as Kibbie or Hartung are connected to the network. Additional isolation valves will improve resiliency and add the ability to redirect steam to buildings in the event of a failure. Eventually all steam and condensate piping on campus will need to be replaced, along with their associated valves, supports, and insulation, as much of the system is beyond its expected life. This project addresses the most vulnerable and high risk sections.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade major steam lines to support campus growth.
- Mitigate severe resiliency issues associated with aging systems.
- Address safety concerns associated with the physical conditions of current assets.

Scope of Work: The scope of work of this Capital Improvement is:

- Replace 8" steam and 4" condensate lines from Idaho Ave. to University Ave. (approx. 325 ft).
- Upgrade 6" steam/5" condensate lines on 6th Street from Central Mall to Wallace Complex to 10" and 6" (approx. 670').
- Upgrade the 5" condensate line on 6th Street from Line Street to Central Mall to 6" (approx. 425 ft).
- Replace aged expansion joints.
- Replace condensate receivers and pumps (x2).
- Install additional condensate sampling points.
- Install double block and bleed isolation valves at key points.

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- Identify and remove abandoned utilities.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended that University of Idaho ITS department identify and remove abandoned and damaged IT and telecommunications lines in construction areas while accessible.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University the construction of steam and condensate pipe during the summer season to reduce impact to campus.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$90,180 and will also include (i) a tunnel inspection to obtain exact quantities of valves, sampling points, expansion joints, and abandoned utilities, (ii) the development of a steam and condensate system flow model to ensure the pipe sizing is adequate, and (iii) the drafting of a constructability plan for steam and condensate shutdown of areas.

Additional Information:



Figure 1. 95-year-old threaded pipe poses a safety hazard.



Figure 2. 95-year-old threaded pipe is rusting through.



Figure 3. 6th Street lines upgrades.



Figure 4. Lines to be replaced by ISUB.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$5,750,062.
- (B) Forecasted annual operations and maintenance costs: \$7,800. Additional isolation valves and equipment required maintenance.
- (C) Proposed modification to the Recovery Period: None.

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(D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 30 expansion joints (10%) will be replaced, (ii) 5 condensate sampling points will be added, (iii) 10 additional isolation valves will be added, (iii) the additional work may identify additional needs to be presented in a future Capital Improvement, (iv) the necessary pipe sizing may change depending on the flow study, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2025. EPC (Commiss.) occurs in October 2025.

	07/24	08/24	09/24	10/24	11/24	12/24	01/25	02/25	03/25	04/25	05/25	06/25
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Negligible.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$5,705,100.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible.
PROJECT CODE: 23/1-013

PROJECT NAME: Energy Plant Emergency Generator Upgrades

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (loss of heat in winter). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is low.

ASSIC	ASE GNED		Impact	
DU		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
q	High	3	2	1

Background: The emergency back-up generator is critical for providing power to the Energy Plant during total electrical outages. This project upgrades the system by replacing the aging generator and electrical components and connecting them to the microgrid. Most of these systems are 26 years old and beyond their serviceable life. Though the turbines are expected to provide power during an Avista outage, the generator is still necessary to provide "black start" functionality if there is an outage while the turbines are offline. Each of the subsystems addressed is critical for the successful operation of the Energy Plant during such an outage. Without power there would be a complete steam and compressed air loss to campus buildings. Modernizing the generator and connecting to the Energy Plant microgrid will provide for automatic start-up and synchronization with the turbines, reducing potential interruptions to plant operations or campus when power from the utility is lost or restored.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade the generator to provide black start capability.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.

Scope of Work: The scope of work of this Capital Improvement is:

- Remove the existing generator, ATS, and emergency panel 'X'.
- Install new 208V, 3-phase, 300 kW diesel generator with 24-hour belly tank on the exterior of the building.
- Install new ATS and emergency panel to support electric loads of the natural gas boilers.
- Upgrade the emergency electrical system and connect to microgrid controls.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian

accommodations will be implemented as needed.

The Concessionaire will coordinate with the University the construction schedule during summer hours to reduce impact to the Energy Plant parking lot.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$80,892 and will also include a power study for proposed emergency circuits.

Additional Information:



Figure 1. Aged generator at the Energy Plant.



Figure 2. Existing fuel tank.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$681,164.
- (B) Forecasted annual operations and maintenance costs: \$0. No change in O&M Costs expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) suitable space is available outside the building, and (ii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2026. EPC (Commiss.) occurs in September 2026.

	07/25	08/25	09/25	10/25	11/25	12/25	01/26	02/26	03/26	04/26	05/26	06/26
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Minor impact from larger diesel generator fuel consumption.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$675,972.

(I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.

(J) Potential change in Supply Costs or consumption of Supplies: Negligible.

PROJECT CODE: 23/1-014

PROJECT NAME: Energy Plant Building Envelope Improvements

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (physical and life safety issues). The impact associated with resiliency is <u>medium</u> (plant security issues).

The likelihood of these events is medium.

ASSIC	ASE GNED		Impact	
		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
p	High	3	2	1

Background: The exterior envelope of the Energy Plant has been in disrepair for some time, with the last major improvement 35 years ago with the addition of the wood boiler. Many portions of the building are original from 1926. Upgrades are needed for the plant to continue operation for the next 50 years. This project addresses the many significant safety issues for both plant operators, and vehicle and pedestrian traffic outside. Security additions at doors and windows are needed to prevent unauthorized access. Providing a setback from the building is necessary for protection from falling objects and glass. Many of these issues can be addressed while also improving the general appearance of the building.

Objectives: The main objectives of this Capital Improvement are:

- Improve the general condition of the Energy Plant to extend useful life.
- Increase security and prevent unauthorized access.
- Address safety and security concerns presented by degraded condition of existing assets.
- Address long term health concerns from ash exposure.

Scope of Work: The scope of work of this Capital Improvement is:

- Install card access locks on all exterior doors.
- Replace windows with safety glass. Recondition all window operating mechanisms.
- Replace failed roof exhaust fans.
- Replace roof.
- Connect roof drains to stormwater collection system instead of sewer.
- Recondition brickwork and repaint sheet metal exterior.
- Plant a tree row on east side of building to reduce safety risks in parking lot.
- Upgrade exterior lighting and Bay 3 to LED lights.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

ATTACHMENT 3

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University the partial closing of Lot 14 and adjacent sidewalks during construction, as well as a potential reconfiguration of the parking lot.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$155,412 and will also include the preliminary architectural and engineering design documents to include windows, landscape tree planting, and exterior façade re-finishing.

Additional Information:







Figure 2. Failed exhaust fan and broken windows.



Figure 3. Brickwork at Energy Plant.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$3,767,158.
- (B) Forecasted annual operations and maintenance costs: \$0. No change in O&M Cost is expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 40% of brickwork will be repointed, (ii) trees will be planted away from utilities and their ownership turned over to the University after construction, (iii) construction work will be staged over 2 years to reduce impact to campus activities, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.
- (E) Proposed schedule: EPC (Const.) extends through June 2027. EPC (Commiss.) occurs from June 2027 to July 2024.

	07/25	08/25	09/25	10/25	11/25	12/25	01/26	02/26	03/26	04/26	05/26	06/26
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement as a result of a new tree row that will act as a carbon sink improving local air quality.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$3,739,392.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible. Any LED savings will be offset by additional loads.

PROJECT CODE: 23/1-015

PROJECT NAME: Utility Tunnel Upgrades

UTILITY SYSTEM: Steam, Chilled Water, Electricity

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended utility outages and building shutdowns).

The likelihood of these events is low.

PH/ ASSIC	ASE Gned		Impact	
		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
q	High	3	2	1

Background: The utility tunnel network is critical for distributing many utilities across campus including steam, chilled water, high voltage power, natural gas, and IT/telecom. This project upgrades the systems within the tunnels that remove water and keep workers and pedestrians safe. These systems are critical for preventing flooding damage to utilities and the tunnel walls as well as reducing the risk of severe life safety hazards such as electrocution or natural gas leaks. Many of these components are not suited for the environment or are at the end of life and are in need of upgrades. The existing sump pumps are not rated for high temperature water and fail often. Much of the racking used to support pipes is heavily damaged from rust and corrosion over time, posing a safety and resiliency risk. Lighting systems are inadequate, causing unsafe conditions. This project removes, replaces, and repairs systems to extend the tunnels' life.

Objectives: The main objectives of this Capital Improvement are:

- Extend the useful life of the tunnel system by implementing effective water management to reduce water intrusion damage.
- Mitigate resiliency issues by replacing damaged/inadequate utility racking and removing abandoned systems.
- Address safety concerns presented by the physical condition of existing tunnel systems.
- Prevent unplanned outages by replacing degraded iron pipe with copper.

Scope of Work: The scope of work of this Capital Improvement is:

- Conduct thorough assessment to provide water management, racking, lighting, and piping improvements throughout the tunnel system.
- Replace sump pumps with high temperature pumps and standardize (x10).
- Convert lights to LED and install central system to shut off lights remotely.
- Replace damaged utility racking.
- Identify and remove abandoned utilities in construction areas.
- Upgrade corroded iron compressed air pipes to Type K copper.

Beyond the Concessionaire's Line of Demarcation associated to this Capital Improvement, it is recommended that University of Idaho ITS department identify and remove abandoned and damaged IT and telecommunications lines in construction areas while accessible.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey

covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University and building occupants any potential utility shutdowns.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$73,548.

Additional Information:



Figure 1. Iron compressed air lines.



Figure 2. Failing sump pump.



Figure 3. Fluorescent lights still in use.



Figure 4. Flooding due to failed sump pump near high voltage power.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,986,061.
- (B) Forecasted annual operations and maintenance costs: \$0. No change in O&M Cost is expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 25% of lighting needs to be converted to LED, (ii) 5% of utility racking requires replacement, (iii) 300' of iron pipe requires replacement, (iv) utility racking will be able to be repaired or replaced without shutting down utility service, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2027. EPC (Commiss.) occurs in October 2027.

	07/26	08/26	09/26	10/26	11/26	12/26	01/27	02/27	03/27	04/27	05/27	06/27
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Improvement from reduced electric loads.

- (G) Anticipated tax credits or other benefits: Possible rebate from Avista being assessed.
- (H) Fee or charge payable to the Operator: \$1,971,108.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible. The reduction from lighting energy savings will be offset by operational sump pumps.

PROJECT CODE: 23/1-016

PROJECT NAME: Condensate Return System Upgrades

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (unsafe working conditions). The impact associated with resiliency is <u>medium</u> (potential risk to building envelope).

The likelihood of these events is low.

ASSI	ASE GNED		Impact	
		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
ō	High	3	2	1

Background: The condensate return system is critical to boiler operations and is in need of upgrades provided by this project. This project addresses issues in the system to improve performance, resiliency, and safety. These systems are beyond expected life and should be replaced before failure. The main hot well tank is 95 years old, underground, and in unknown condition. Loss of these tanks risks a steam system shutdown and structural damage to the building envelope of the Energy Plant.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade condensate return system to improve performance.
- Mitigate resiliency issues associated with systems approaching end of life.
- Address safety concerns that should be physically mitigated rather than dependent on procedures.
- Improve O&M practices for safe and reliable operation.

Scope of Work: The scope of work of this Capital Improvement is:

- Replace condensate pumps at the hot well tanks and install VFDs (x4).
- Install exhaust fans in the hot well room.
- Recondition the hot well tanks and reline (x2).
- Replace critical valving in hot well room.
- Install flash tank to capture high pressure steam losses.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this

proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$77,976 and will also include a structural assessment of the hot well tanks.

Additional Information:



Figure 1. Aged condensate pumps in hot well room.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,630,428.
- (B) Forecasted annual operations and maintenance costs: +\$1,500. The increase is required for the additional flash tank and exhaust fans.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) hot well tanks will still have useful life left if relined, (ii) no major structural repairs or replacement is needed, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.
- (E) Proposed schedule: EPC (Const.) extends through July 2027. EPC (Commiss.) occurs in August 2027.

	07/26	08/26	09/26	10/26	11/26	12/26	01/27	02/27	03/27	04/27	05/27	06/27
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement from more efficient pumps. Reduced flash steam losses.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,618,164.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$100, electricity. The reduction derives from VFDs and reduced steam losses.

PROJECT CODE: 23/1-017

PROJECT NAME: Wood Boiler Capital Renewal Project 2

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (long-term health concerns for operators). The impact associated with resiliency is <u>medium</u> (extended outage and building shutdown).

The likelihood of these events is low.

PH/ ASSIC	PHASE ASSIGNED		Low Med High					
	Γo	5	4	3				
Lik	~							
elihoo	Med	4	3	2				
q	High	3	2	1				

Background: The wood fuel boiler provides significant economic and environmental benefits to the University, however, at 35 years old, many of the subsystems are in critical need of upgrade. This project upgrades the boiler subsystems associated with improving performance and managing emissions. Each of the subsystems addressed is critical to the successful operation of the wood fuel boiler and is in serious need of upgrades. Several single points of failure, or long repair time, issues exist within these systems. Most of these systems are original equipment and are well beyond this serviceable life. Upgrading these systems is critical to plant reliability, will improve efficiency, extend the useful life of the boiler, and reduce Supply Costs to the University.

Objectives: The main objectives of this Capital Improvement are:

- Recondition the wood boiler to extend its useful service life.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address health concerns presented by the condition of existing systems.
- Allow O&M practices for safe and reliable operation.

Scope of Work: The scope of work of this Capital Improvement is:

- Replace economizer.
- Refurbish air pre-heater and improve access.
- Repaint and insulate the boiler skin.
- Replace emissions land.
- Emissions management improvements.
- Upgrade damper controls for over and under fire fan flow.
- Efficiency and balancing study to optimize operation.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

ATTACHMENT 3

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University the construction schedule during the lowest steam use to reduce natural gas costs during shutdown, and the use of Lot 14 for use as a laydown area. The wood boiler shutdown can be done without an impact to steam customers.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$314,280 and will also include (i) an engineering assessment on emissions control method modernization, (ii) an engineering assessment on insulating boiler skin, (iii) a non-destructive testing of the exhaust stack to determine useful life, and (iv) Eddy current testing on air preheater tubes.

Additional Information:



Figure 1. Exterior walls of boiler warping from age and heat.



Figure 2. Non-insulated exterior walls.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,908,404.
- (B) Forecasted annual operations and maintenance costs: \$0. No change in O&M Cost is expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 20% of air preheater tubes will need to be replaced, (ii) exhaust stack will still have useful life

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and will not need to be replaced, (iii) construction will be staged across two summer seasons to ensure the wood boiler is operational during the heating season to reduce Supply Costs, and (iv) wood fuel requirements will be reduced by 2%.

(E) Proposed schedule: EPC (Const.) extends through June 2028. EPC (Commiss.) occurs from June 2028 to July 2028.

	07/26	08/26	09/26	10/26	11/26	12/26	01/27	02/27	03/27	04/27	05/27	06/27
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement in wood boiler efficiency will reduce the use of natural gas during peak loads.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$2,886,948.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$20,000, wood fuel, natural gas. The decrease is associated with the improved efficiency of the boiler and its subsystems.

PROJECT CODE: 23/1-018

PROJECT NAME: Wood Fuel Storage Conveyance System Improvements

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (some mitigation required). The impact associated with resiliency is <u>medium</u> (further degradation will become more impactful).

The likelihood of these events is low.

ASSIC	GNED		Impact		
PHA	ASF	Low	Med	High	
	Low	5	4	3	
ikelihoo	Med	4	3	2	
q	High	3	2	1	

Background: The Fuel Storage conveyance system has been in service since 2010 and requires upgrades. The mechanical measurement, unloading, and conveyance systems all require improvements in order to provide reliability of operation and allow for an adequate O&M practice. Periodic material jams and inadequate lighting present a safety concern to the operations staff. Unacceptable safety concerns are being managed by implementing protocols in the interim, but they need to be addressed promptly.

Objectives: The main objectives of this Capital Improvement are:

- Improve wood handling performance at the Wood Chip Storage Facility.
- Mitigate a severe safety and resiliency issue.
- Upgrade conveyance to increase reliability.
- Mechanical and lighting upgrades to improve safety.
- Implement required O&M practices for a safe and reliable operation.

Scope of Work: The scope of work of this Capital Improvement is:

- Replace load scale and upgrade electronics.
- Replace tipper pins and upgrade hydraulics.
- Improve tipper chute to eliminate jamming.
- Replace conveyance belt and source spare material.
- Install yard lighting and motion sensors to improve safety and security.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian

accommodations will be implemented as needed.

The Concessionaire will coordinate with the University a construction plan for this Capital Improvement.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$129,276 and will also include a schematic design of the scale, the tipper, the conveyance equipment, as well as the lighting improvements.

Additional Information:



Figure 1. Tipper hydraulics surrounded by flammable material.



Figure 2. Wood chip conveyance system.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$957,408.
- (B) Forecasted annual operations and maintenance costs: \$0. No change in O&M Cost is expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) transformer will have sufficient power for new loads, (ii) construction will be scheduled during the spring season to reduce impact to operations, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Commiss.) extends through July 2027.

	07/26	08/26	09/26	10/26	11/26	12/26	01/27	02/27	03/27	04/27	05/27	06/27
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

⁽F) Impact on Sustainability: Improvement derived from a more efficient wood fuel conveyance, thus mitigating unplanned outages and the associated increase in the use of natural gas fuel.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$950,616.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible electricity. The savings derived from the use of LED will likely be offset by the additional loads.

PROJECT CODE: 23/1-019

PROJECT NAME: Wood Fuel Storage Facility Improvements

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (some mitigation required). The impact associated with resiliency is <u>low</u> (further degradation will become more impactful).

The likelihood of these events is low.

PH/ ASSIC	ASE Gned	Impact		
		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
σ	high	3	2	1

Background: The Fuel Storage Facility has been in service since 2010 and is critical to the supply of high-quality fuel to the Steam Plant and therefore, the reliability of steam plant operation. The lack of stormwater collection on the south side of the building has resulted in groundwater seeping into the wood fuel and eroding the area underneath the hardscape. These voids pose a risk to the structural integrity of the facility and need to be repaired. The wet wood fuel negatively impacts the Energy Plant's efficiency and is a risk to the wood boiler as rocks, mud, and potentially broken pavement may make their way into the fuel supply. The Storage Facility access is unrestricted, and instances of unauthorized access occur on occasion. This is a public safety and security concern as property damage or personal injury could occur.

Objectives: The main objectives of this Capital Improvement are:

- Increase Steam Plant resilience and efficiency by maintaining high fuel quality.
- Remove stormwater from the area to protect fuel quality and building foundation.
- Improve safety and security of the Storage Facility by installing access control.
- Replace the horizontal surfaces (apron and roadways) to maintain high quality fuel free of debris.

Scope of Work: The scope of work of this Capital Improvement is:

- Repair portion of damaged hardscape to include concrete demolition and restoration.
- Install stormwater collection system for the roof and south side of building.
- Excavation, backfill, and bedding for stormwater system.
- Install a gate and card access at the Storage Facility entrance.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the provision of perimeter fencing to prevent unauthorized access to construction areas.

The Concessionaire will coordinate with the University a construction plan for this Capital Improvement.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$104,112 and will also include a geotechnical evaluation of hardscape to identify location and magnitude of voids (2 bore holes, 2 test pits).

Additional Information:



Figure 1. Wood Chip Storage Facility location behind Facilities Services.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$628,055.
- (B) Forecasted annual operations and maintenance costs: \$500. Additional O&M associated with maintenance of the gate and the management of the stormwater system.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pumped ground water removal systems will not be required, (ii) a 40'x40' patch of the worst concrete section -may vary on results of geotechnical evaluation-, (iii) efforts will be made to mitigate impact on surrounding vegetation but impacts may occur and are not included in this scope, (iv) a 0.1% reduction in wood fuel requirements from reduced moisture content, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2027. EPC (Commiss.) occurs in September 2027.

	07/26	08/26	09/26	10/26	11/26	12/26	01/27	02/27	03/27	04/27	05/27	06/27
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Positive impact as a result of a higher efficiency operations at the Steam Plant derived from improved fuel quality (reduced moisture and debris).
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$623,268.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$1,000, wood chips. The savings derive from a more efficient operation with reduced-moisture fuel.

PROJECT CODE: 23/1-020

PROJECT NAME: Water Treatment Improvements Project 2

UTILITY SYSTEM: Steam

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u>. The impact associated with resiliency is <u>low</u>.

The likelihood of these events is low.

ASSI	GNED	Impact		
рц	VGE	Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
q	High	3	2	1

Background: The Hot Lime Softening (HLS) tanks and the associated feedwater and condensate chemistry subsystems are critical for protecting the boilers and the steam distribution systems from scaling that reduces efficiency and risks significant damage (such as damaged/destroyed boiler internals, steam and condensate main degradation, and steam trap failure). These systems experience frequent fouling due to the type of fluids used, which reduces efficiency. HLS tank #1 is 58 years old and needs to be replaced. Most of this system is well beyond its serviceable life. HLS #1 is non-functional and well beyond its serviceable life. Replacement is critical for the future reliability of the Steam Plant.

Objectives: The main objectives of this Capital Improvement are:

- Right size the Energy Plant water treatment system.
- Mitigate resiliency issues associated with systems beyond their serviceable life.
- Improve O&M practices for a safe and reliable operation.

Scope of Work: The scope of work of this Capital Improvement is:

- Remove and replace HLS #1.
- Optimize flow path between the HLS tanks to provide redundancy and improve efficiency.
- Replace scaled piping between the HLS tanks.
- Replace distribution valves between HLS tanks.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University to locate a laydown area in Lot 14.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$78,300 and will also include an engineering assessment on water technology options.

Additional Information:



Figure 1. Aged Hot Lime Softener #1.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,837,414.
- (B) Forecasted annual operations and maintenance costs: \$0. No change in O&M Cost is expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

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(E) Proposed schedule: EPC (Const.) extends through September 2027. EPC (Commiss.) occurs in October 2027.

	07/26	08/26	09/26	10/26	11/26	12/26	01/27	02/27	03/27	04/27	05/27	06/27
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Minimal improvement from reduced water consumption.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$1,823,580.

- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible (<1%), wood fuel, natural gas. Less steam vented from a smaller HLS tank.

PROJECT CODE: 23/2-021

PROJECT NAME: Chilled Water Distribution Upgrades Project 1

UTILITY SYSTEM: Chilled Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (flooding risk). The impact associated with resiliency is <u>medium</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (multiple joints have failed in the past).

PHA			5 4 3 Low Med High				
Likelihoo	w Med	4	3	2			
р	High	3	2	1			

Background: Chilled Water is distributed through miles of direct buried piping to campus buildings for cooling needs. Since the South Campus Chilled Plant was constructed the operating pressure of the distribution network has increased due to the height of the Thermal Energy Storage Tank. While this improves overall performance, the increased pressure has put additional stress on pre-existing pipes that were not designed for it. Design deficiencies include pipe and fitting selection not suitable for pressure levels and inadequate thrust blocks to restrict pipe movement. Multiple joints in the system have failed because of this in recent years, causing unplanned outages and flooding until repaired. This project aspires to provide repairs to the highest risk joints in the existing system before failure risks unplanned outages. Upgrades are needed across to the system to improve resiliency and prevent loss of service to critical cooling loads such as research and servers. A chilled water model is needed to identify the highest pressures in the system and most likely points of failure, further safety and resiliency risks, and support campus growth. Remediation of the inadequate piping systems will likely require multiple projects. This project's Additional Work will determine the construction plan and extent of projects required.

Objectives: The main objectives of this Capital Improvement are:

- Address design deficiencies in the CHW distribution network
- Mitigate resiliency issues associated with inadequate piping construction details
- Address safety concerns associated with the physical conditions of current assets

Scope of Work: The scope of work of this Capital Improvement is:

- Replace glued joints with flanged joints
- Provide excavation, demolition, bedding, backfill, surface restoration, etc.
- Model the Chilled Water system to identify deficiencies, restrictions, and support future growth

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which

originated prior to Closing.

A construction safety plan will be developed including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University chilled water shutdown to buildings as needed and potential road and walkway closures.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$244,080 and will also include (i) development of a chilled water system flow model, and (ii) development of a construction plan to repair at risk joints.

Additional Information:



Figure 1. Joint that failed at NCCP in January 2021 and flanged joint installed after failure.



Figure 2. Failed joint not installed correctly

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$916,853.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) as-builts of previous chilled water line construction projects will be available, (ii) the replacement of ten 12" joints in the hardscape and softscape areas would be performed, (iii) the Additional Work and flow study may identify additional needs to be presented in a future Capital Improvement project, (iv) necessary pipe sizing may change depending on flow study, and (vv) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2025. EPC (Commiss.) occurs in October 2025.

	07/24	08/24	09/24	10/24	11/24	12/24	01/25	02/25	03/25	04/25	05/25	06/25
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Supports future connections to the chilled water system, which reduces carbon footprint.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$909,684.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/2-022

PROJECT NAME: North Campus Chiller Plant Upgrades

UTILITY SYSTEM: Chilled Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u>. The impact associated with resiliency is <u>medium</u> (extended outages).

The likelihood of these events is low.

ASSIC	GNED	Impact		
РНА	ASE	Low	Med	High
	Low	5	4	3
ikelihoo	peM	4	3	2
q	High	3	2	1

Background: The North Campus Chiller Plant (NCCP) is critical for supplying chilled water to campus buildings and increases wood boiler performance in the summer. This project upgrades the condenser water loop and cooling towers that serve the absorption chillers. Most of these systems are well beyond their serviceable life and in need of replacement. The cooling towers are heavily scaled, which reduces performance and useful life. Re-engineering the condenser water loop and replacing cooling towers will improve performance, resiliency, and provide for redundancy to the McClure Chiller Plant during cold weather. Neither the cooling towers or pumps were sized for their matching chillers, which reduces performance and the NCCPs ability to support critical cooling loads. Loss of NCCP if the cooling towers go down will impact campus operations by potentially triggering chilled water load shedding and increased Supply Costs to the University as electric chillers are brought online and steam turbine output is reduced.

Objectives: The main objectives of this Capital Improvement are:

- Improve performance and operating efficiency of the NCCP.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Redesign condenser loop with a common header for all chillers and cooling towers.
- Install and indoor basin to allow for cold weather operation.
- Replace primary and secondary pumps and VFDs (x5).
- Replace cooling towers (x3).
- Upgrade controls and monitoring.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage including the protection of live utilities, and

the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University the Line Street closure for crane operations. The construction is scheduled during the fall season to avoid chiller shutdown during the peak cooling season.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$114,264 and will also include eddy current testing on both absorbers.

Additional Information:



Figure 1. Cooling towers at NCCP

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$5,742,498.
- (B) Forecasted annual operations and maintenance costs: \$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that workable solutions for all required coordination with University activity will be achievable.

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Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Dev.) extends through July 2027. EPC (Const.) occurs from August 2027 to November 2027. EPC (Commiss.) occurs in November 2027.

	07/26	08/26	09/26	10/26	11/26	12/26	01/27	02/27	03/27	04/27	05/27	06/27
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved from the reduced water consumption and noise in vicinity.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$5,700,672.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$1,000, electricity. Improved efficiency from right sizing pumps and towers.

PROJECT CODE: 23/2-023

PROJECT NAME: South Campus Chiller Plant Emergency Generator

UTILITY SYSTEM: Chilled Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u>. The impact associated with resiliency is <u>low</u> (extended outage and building shutdown).

The likelihood of these events is low.

ASSI	GNED	Impact		
рци		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
Q	High	3	2	1

Background: The South Campus Chiller Plant (SCCP) is not backed up with emergency power. Without power chilled water cannot be distributed to campus buildings with year-round critical cooling loads during outages. This project installs a generator sized to support the TES tank and associated pumping needed to distribute chilled water to campus, but not run chillers or cooling towers to produce chilled water. Cooling loads on campus would be met as long as the TES tank is charged. These subsystems are critical to the successful operation of the chilled water system. Installing a generator improves resiliency and mitigates risk to critical campus cooling loads such as research and servers. This is a first step towards supplying chilled water to campus during a power outage to achieve performance standards. Future Capital Improvement projects will be proposed to operate chillers and cooling towers during outages.

Objectives: The main objectives of this Capital Improvement are:

- Provide chilled water to critical campus cooling loads during power outages.
- Mitigate resiliency issues associated with a lack of backup power.

Scope of Work: The scope of work of this Capital Improvement is:

- Install a 480V, 3 phase, 3kW diesel generator with 24-hour belly tank on exterior of building.
- Install ATS, emergency panel, circuits, and controls to support CHW circulation pumps, TES tank sensors, and controllers.
- Connect Water Systems SCADA panel to emergency circuit.
- Construct enclosure and fencing around generator.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A construction safety plan will be developed including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be

implemented as needed.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$70,848 and will also include an electrical load assessment to right size the new generator.

Additional Information:



Figure 1. Potential exterior locations for the generator.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$611,887.
- (B) Forecasted annual operations and maintenance costs: +\$4,700. The increase is associated with labor and fuel cost for regular service checks.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the size of the generator is dependent on the outcome of the project 23/2-021, (ii) the generator does not need to be sized to support chilled water production to reduce cost and footprint, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through July 2027. EPC (Commiss.) occurs in August 2027.

	07/26	08/26	09/26	10/26	11/26	12/26	01/27	02/27	03/27	04/27	05/27	06/27
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: There will be a minor impact from the fuel consumption of the diesel generator.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$607,284.

- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible.

PROJECT CODE: 23/3-024

PROJECT NAME: Electrical Transformer and Primary Component Capital Equipment Reserve

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown)

The likelihood of these events is high.

PHASE ASSIGNED		Low Med High					
	Low	5	4	3			
ikelihoo	Med	4	3	2			
p	High	3	2	1			

Background: Campus wide, the building electrical services, including conductors, connectors, transformers, and switches are aged; have no record of being tested nor maintained; and are a significant risk to the reliability of the campus electrical system. Recent failures indicate that substantial upgrade work is needed to bring the electrical distribution system up to required operating condition. This upgrade work is likely to take many years and additional failures are imminent. This project establishes mechanisms to respond to electrical distribution outages while permanent solutions are being planned and implemented. These capital assets are also required to do planned replacements of primary electrical system components. Lead time for primary electrical components can be very long. Without this work, extended outages could interrupt University business, cause property damage, and render unsafe occupancy conditions.

Objectives: The main objectives of this Capital Improvement are:

- Improve the safety/reliability of Primary Electrical Distribution system by preparing immediate response to outages.
- Maintain Performance Standard Part V.6, 7 and 8 and mitigate negative impact to Availability KPIs.
- Provide reserve transformers for emergency replacement service.
- Achieve a reserve supply of strategic primary electrical assets such as transformers, elbows, and bushings.
- Established baseline condition of primary electrical components.
- Procure emergency generation for quick dispatch to address electrical outages due to failures.

Scope of Work: The scope of work of this Capital Improvement is:

- Perform an assessment of the transformers to determine number, size, and characteristics to stock.
- Evaluate existing transformer stock. Retain, refurbish, or dispose of existing as determined.
- Purchase, receive, and stock capital equipment reserve including strategic transformer sizes.
- Purchase portable generator for response to emergency power outages.
- Coordinate capital equipment reserve with transformer replacements to maintain a rolling stock.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey

covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

Equipment will be stored safely and prepared for safe deployment as part of the Safety Plan.

The Concessionaire will coordinate with the University access to all transformers and vaults required for the Additional Work.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$84,564 and will also include (i) evaluation of primary components, developing reserve stock requirements and specification of primary components, (ii) the testing of existing reserve transformers to determine viability, and (iii) an oil and thermography testing of all transformers, primary switches, and vaults.

Additional Information:



Figure 1. Portable generator in place while transformer is being removed/replaced.



Figure 2. The replacement of transformer can take months.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,287,884.
- (B) Forecasted annual operations and maintenance costs: +\$500, as O&M Costs for the new generator.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) a strategic reserve of primary electric components will allow much more predictable response to electrical failures, (ii) the primary electric components for permanent repair will have a long lead time, and (iii) a strategic reserve may serve as rotating stock if sizing is correct for a permanent solution.

(E) Proposed schedule: EPC (Const.) extends through October 2023. EPC (Commiss.) occurs in November 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,278,504.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. The equipment will be static in reserve during normal operations.
PROJECT CODE: 23/3-025

PROJECT NAME: Electrical Vault Inspections and Upgrades

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high.

ASSIC	PHASE ASSIGNED		Impact	
PHASE		Low	High	
	Low	5	4	3
ikelihoo	peM	4	3	2
p	High	3	2	1

Background: The primary electrical system is largely distributed in an underground system including multiple vaults where cables are pulled, terminated, or spliced. These vaults are susceptible to excessive water intrusion. In many cases primary distribution splices are submerged in water that are not suitably rated for this application. This condition causes severe safety issues for personnel and campus community as well as severe resiliency issues. This project remediates water intrusion issues and unsound conditions. Before work is done on the vaults, it's imperative that the condition, capacity, and needs of the campus electrical distribution be well understood. A study to gain this information is necessary as Additional Work.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a severe safety and resiliency issue.
- Maintain Performance Standard Part V.6, 7 and 8 and mitigate negative impact to Availability KPIs.
- Modernize electrical distribution components (vaults) to allow primary electrical system to be adequately maintained per industry and performance standards.
- Implement required monitoring, water control, and O&M practices for a safe and reliable operation.
- Perform a comprehensive campus-wide electrical distribution study to inform future steps toward a safe and resilient electrical system necessary in order to provide operations per performance standards and University expectations.

Scope of Work: The scope of work of this Capital Improvement is:

- Perform assessment of the Campus Electrical Distribution System.
- Investigate 85 electrical vaults, primary switches, conductors.
- Assess condition of underground primary distribution assets.
- Develop a remediation plan for water intrusion and unsound conditions.
- Install sump pumps and water monitoring systems.
- Establish baseline thermography and, where applicable, oil testing.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was

completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University any required periodic restrictions of access to immediate work areas. Planned interruptions to building electrical services may be required.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$589,248 and will also include (i) a Campus Electrical Distribution System Study, (ii) a condition assessment of the underground primary distribution assets, and (iii) developing scope, schedule, budget for water management and primary component remediation.



Figure 1. An electric vault that is completely submerged. Condition of equipment is unknown.



Figure 2. Electrical conduits submerged in vaults.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$4,909,371.
- (B) Forecasted annual operations and maintenance costs: +\$800. The installation of water management systems will increase the O&M requirements.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the scope of this project is highly dependent upon the findings of the Additional Work, and (ii) 10 of the underground vaults require water management, 10% require major repair, 50% require normal repair, and 40% only require minor repair (this estimate is a rough order of magnitude only).

(E) Proposed schedule: EPC (Const.) extends through October 2023. EPC (Commiss.) occurs in November 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$4,870,044.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: +\$500, electricity. Additional electrical costs associated with the operation of the sump pumps.

PROJECT CODE: 23/3-026

PROJECT NAME: Menard Law Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (previous components failures).



Background: Transformers are over 30 years old and have no record of being tested. The November 2019 failure and emergency repair of the oil filled, 13.2kV disconnect switch in Menard Law indicates that failure is imminent on this equipment of same age. That failure was the direct cause of the TLC basement flood that shut the building down for 3 weeks. The emergency repair of components resulted in spliced high voltage cable, eliminated building disconnect, and unsafe conditions. This condition presents a clearly dangerous condition for personnel and building occupants while leaving property at significant risk of damage. The main switch gear is beyond life and needs to be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is University responsibility.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a severe safety and resiliency issue.
- Modernize electrical service to building up to point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.

Scope of Work: The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot style transformers currently installed on the interior of the building. Thermograph and oil test. Establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
 - · Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - Repair damaged items in electrical vaults accessed for transformer replacements.
 - · Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University for the College of Law building shutdown. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,056 and will also include (i) a 30-day power study to evaluate load size for transformer sizing, and (ii) the documentation of vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.



Figure 1. Unsafe conductor splice laying on the floor after emergency repairs in 2019.



Figure 2. Conditions in transformer room dangerous enough to require Arc flash PPE before entering.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$776,752.
- (B) Forecasted annual operations and maintenance costs: +\$200. The upgraded electric meter and new vault sump will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) original transformers and switchgear were sized to serve electric boilers and chillers that have since been removed, (ii) new transformer is expected to be smaller and more efficient, (iii) work not included: no VFI switches nor appurtenances, no SEL 751, no switch operators, no microgrid infrastructure, no temporary generator, (iv) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2023. EPC (Commiss.) occurs in October 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$770,904.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$650, electricity. It is assumed a 1% improvement in electrical efficiency based on historic metering.

PROJECT CODE: 23/3-027

PROJECT NAME: Kibbie Dome Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown)

The likelihood of these events is high.

PHASE		5 Low	Low Med Hig				
Likelihoo	v Med	4	3	2			
p	High	3	2	1			

Background: These transformers are 47 years old and have no record of being tested. Recent failure and replacement of one of the transformers in October 2021 indicates imminent and unpredictable failure of others. Multiple safety and reliability concerns were identified during the emergency replacement. These conditions present a clear dangerous condition for personnel and building occupants while leaving property at significant risk of damage. There is significant risk to campus events scheduled including football games and graduation ceremonies. The main switch gear is beyond life and will require replacement at the same time. If the University upgrades the field lighting to LED at the same time, there is significant energy savings and reduced project cost/O&M by eliminating the need for a 480V transformer.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade electrical system of the Kibbie Dome to reduce risks to scheduled events.
- Mitigate a significant safety and resiliency issue.
- Modernize electrical distribution and metering.
- Achieve a safe arc flash condition.
- Implement required O&M for a safe and reliable operation.

Scope of Work: The scope of work of this Capital Improvement is:

- Replace 1200 kVA pad mount transformer serving north Kibbie Dome Concourse and field lighting (13.2kV to 480V).
- Replace 225 kVA pad mount transformer serving north Kibbie Dome Concourse (13.2kV to 208V).
- Replace 1500 kVA pad mount transformer serving south Kibbie Dome Concourse and field lighting (13.2kV to 480V).
- Replace primary feeders to sectionalizer. Trenching, backfilling, patching included.
- Replace secondary feeders to Main Building Service for all three service points. Trenching, backfilling, patching inc.
- Install protective bollards in front of transformers.
- Install SEL-735 electric meters (x4).
- Install ethernet cabling for meters.
- Install sumps pumps in electric vaults serving transformers (x2) and make repairs as needed.

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Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the upgrading of stadium lights to LED to reduce transformer size and Supply Costs, (ii) replacing switchgear for each transformer and right size for energy savings and improved reliability (x4), and (iii) replacing 400A disconnect switch for road show power.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University an event schedule for shutdowns and the scheduling of the 480V-XFMR replacement after LEDs are installed.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,056 and will also include (i) electric load evaluations to right size new transformers and, (ii) the inspection of the electric vaults serving each transformer.



Figure 1. Example of oil leaking from transformer.



Figure 2. Electrical map of Kibbie Dome for reference.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,922,799.
- (B) Forecasted annual operations and maintenance costs: +\$400. The upgraded electric meters and new vault sumps will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) new transformers expected to be smaller and more efficient, (ii) work not included: no VFI switches nor appurtenances, no SEL 751s, no switch operators, no microgrid infrastructure, no temporary generator, (iii) underground construction conditions will be reasonably free of obstruction but conflict, hazardous materials could impede completion, (iv) efforts will be made to mitigate impact on surrounding vegetation but impacts may occur and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur

(E) Proposed schedule: EPC (Cons	t.) extends through August 2023. EP	³ C (Commiss.) occurs in September 2023.
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	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,908,144.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$530, electricity. It is assumed a 1% improvement in electrical efficiency based on historic Kibbie Dome metering.

PROJECT CODE: 23/3-028

PROJECT NAME: Administration South Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown)

The likelihood of these events is medium.

PHASE		Low Med High					
	Low		4	3			
ikelihoo	Med	4	3	2			
ą	High	3	2	1			

Background: These transformers are over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. These transformers are located within the building, also posing a significant risk to the building envelope if they fail. Main switch gear is beyond life and is strongly recommended for upgrade at the same time.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6 and 8 and minimize KPI Events.

Scope of Work: The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot style transformers currently installed on the interior of the building. Thermograph and oil test. Establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalized to new transformer:
- Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - · Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - · Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,056 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.



Figure 1. Aged transformer and electrical equipment in Admin south basement.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$731,057.
- (B) Forecasted annual operations and maintenance costs: +\$200. The upgraded electric meter and new vault sump will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) new transformer is likely to be smaller and more efficient, (ii) work not included: no VFI switches nor appurtenances, no SEL 751, no switch operators, no microgrid infrastructure, no temporary generator, (iii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs in October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$725,544.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$400, electricity.

PROJECT CODE: 23/3-029

PROJECT NAME: Art & Architecture North Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

PHASE ASSIGNED		Low	Med	High
	Low	5	4	3
Likelihoo	Med	4	3	2
q	High	3	2	1

Background: These transformers are over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. These transformers are located within the building, also posing a significant risk to the building envelope if they fail. Main switch gear is beyond life and is strongly recommended for upgrade at the same time.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6 and 8 and minimize KPI Events.

Scope of Work: The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot style transformers currently installed on the interior
 of the building. Thermograph and oil test. Establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalized to new transformer
- Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - · Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of arc flash analysis and resulting corrective measures/placarding.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,056 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.

Additional Information:



Figure 1. Poor, unsafe access to Art & Architecture north transformer room.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$713,537.
- (B) Forecasted annual operations and maintenance costs: +\$200. The upgraded electric meter and new vault sump will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient, (ii) work not included: no VFI switches nor appurtenances, no SEL 751, no switch operators, no microgrid infrastructure, no temporary generator, (iii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs in October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$708,156.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$50, electricity.

PROJECT CODE: 23/3-030

PROJECT NAME: College of Natural Resources Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

PH	PHASE		4 Med	3 High
Likeliho	w Med	4	3	2
poo	High	3	2	1

Background: These transformers are over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. These transformers are located within the building, also posing a significant risk to the building envelope if they fail. Main switch gear is beyond life and needs to be upgraded at the same time to remain safe and resilient.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6 and 8 and minimize KPI Events.

Scope of Work: The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot style transformers currently installed on the interior of the building. Thermograph and oil test. Establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalized to new transformer
- Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - · Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of arc flash analysis and resulting corrective measures/placarding.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,056 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.



Figure 1. Aged transformers and electrical equipment in CNR basement.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$833,566.
- (B) Forecasted annual operations and maintenance costs: +\$200. The upgraded electric meter and new vault sump will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient, (ii) work not included: no VFI switches nor appurtenances, no SEL 751, no switch operators, no microgrid infrastructure, no temporary generator, (iii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs in October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$827,280.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$1,200, electricity. It is assumed a 1% improvement in electrical efficiency based on historic meter data.

PROJECT CODE: 23/3-031

PROJECT NAME: Hartung Theatre Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown)

The likelihood of these events is medium.

ASSI	ASE GNED		Impact	
		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
Q	High	3	2	1

Background: These transformers are over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. These transformers are located within the building, also posing a significant risk to the building envelope if they fail. Main switch gear is beyond life and needs to be upgraded at the same time to remain safe and resilient.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6 and 8 and minimize KPI Events.

Scope of Work: The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot style transformers currently installed on the interior of the building. Thermograph and oil test. Establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalized to new transformer
- Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - · Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of arc flash analysis and resulting corrective measures/placarding.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,056 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.



Figure 1. Existing pot transformers in Hartung.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$724,201.
- (B) Forecasted annual operations and maintenance costs: +\$200. The upgraded electric meter and new vault sump will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient, (ii) work not included: no VFI switches nor appurtenances, no SEL 751, no switch operators, no microgrid infrastructure, no temporary generator, (iii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs in October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$718,740.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$400, electricity.

PROJECT CODE: 23/3-032

PROJECT NAME: Theophilus Tower Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

PHA		Low	+ Med	High
Like	I wc	5	4	3
oohile	Med	4	3	2
σ	High	3	2	1

Background: These transformers are over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. These transformers are located within the building, also posing a significant risk to the building envelope if they fail. Main switch gear is beyond life and needs to be upgraded at the same time to remain safe and resilient.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6 and 8 and minimize KPI Events.

Scope of Work: The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot style transformers currently installed on the interior of the building. Thermograph and oil test. Establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalized to new transformer
- Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - · Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of arc flash analysis and resulting corrective measures/placarding.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,056 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$776,761.
- (B) Forecasted annual operations and maintenance costs: +\$200. The upgraded electric meter and new vault sump will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient, (ii) work not included: no VFI switches nor appurtenances, no SEL 751, no switch operators, no microgrid infrastructure, no temporary generator, (iii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.
- (E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs in October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$770,904.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$300, electricity. It is assume a 1% improvement in electrical efficiency based on historic meter data.

PROJECT CODE: 23/3-033

PROJECT NAME: Physical Education Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

ASSI	ASE GNED		Impact	
		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
p	High	3	2	1

Background: These transformers are over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. These transformers are located within the building, also posing a significant risk to the building envelope if they fail. Main switch gear is beyond life and needs to be upgraded at the same time to remain safe and resilient.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6 and 8 and minimize KPI Events.

Scope of Work: The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot style transformers currently installed on the interior of the building. Thermograph and oil test. Establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalized to new transformer
- Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - · Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of arc flash analysis and resulting corrective measures/placarding.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,056 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.



Figure 1. Aging transformers in PEB basement.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$734,757.
- (B) Forecasted annual operations and maintenance costs: +\$200. The upgraded electric meter and new vault sump will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient, (ii) work not included: no VFI switches nor appurtenances, no SEL 751, no switch operators, no microgrid infrastructure, no temporary generator, (iii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule:	EPC (Const.)	extends through S	September 2024.	EPC (Commiss.)) occurs in October 2024.
\		- (/			- (/

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$729,216.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$200, electricity. It is assumed a 1% improvement in electrical efficiency based on historic meter data.

PROJECT CODE: 23/3-034

PROJECT NAME: Swimming Center Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

PH/ ASSIC	ASE Gned	LOW	Impact	High
		1	NAl	L L'auto
	Low	5	4	3
ikelihoo	Med	4	3	2
p	High	3	2	1

Background: These transformers are over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. These transformers are located within the building and next to the pool, also posing a severe life safety risk and significant risk to the building envelope if they fail. Main switch gear is beyond life and needs to be upgraded at the same time to remain safe and resilient.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6 and 8 and minimize KPI Events.

Scope of Work: The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot style transformers currently installed on the interior of the building. Thermograph and oil test. Establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalized to new transformer
- Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - · Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of arc flash analysis and resulting corrective measures/placarding.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,056 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.



Figure 1. Unsafe, aging transformers and electrical equipment below the swimming pool.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$734,757.
- (B) Forecasted annual operations and maintenance costs: +\$200. The upgraded electric meter and new vault sump will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient, (ii) work not included: no VFI switches nor appurtenances, no SEL 751, no switch operators, no microgrid infrastructure, no temporary generator, (iii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs in October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$729,216.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$250, electricity. It is assumed a 1% improvement in electrical efficiency based on historic meter data.

PROJECT CODE: 23/3-035

PROJECT NAME: West Farm Primary Distribution Improvements

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (degraded overhead, electrical safety concerns). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high.

ASSIC	GNED		Impact	
PH	\SF	Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
q	High	3	2	1

Background: Electric loads at the West Farm are met with an overhead 4160V electrical distribution system. This system is well beyond its useful life and failures are common, with two occurring in FY21. Currently the West Farm received power from only one overhead line, creating a single point of failure that can impact multiple buildings. This project removes the overhead system, moves it underground, and connects it to the campus loop. Aged pole mounted transformers would be replaced with pad mount transformers, increasing resiliency, and increasing response time. This upgrade will improve efficiency, safety, and eliminate single points of failure to reduce disruptions to West Farm operations. This project is required to eliminate unplanned outages and meet Performance Standards and Availability KPIs.

Objectives: The main objectives of this Capital Improvement are:

- Improves the safety and reliability of the Primary Electrical Distribution system at the West Farm.
- Eliminate aging overhead primary distribution infrastructure.
- Maintain Performance Standard Part V.6, 7 and 8 and mitigate negative impact to Availability KPIs.
- Established baseline condition of primary electrical components.

Scope of Work: The scope of work of this Capital Improvement is:

- Remove overhead existing 4160V distribution including poles, transformers, conductors.
- Install new pad mount transformers, vaults, sectionalizing cabinets, duct banks, conduits, and wires for connection to the existing 13.2kV campus primary.
- Install underground 13.2kV campus primary encased in concrete at point of utility service.
- Provide secondary feeders from pad-mounted transformers to existing building electrical services and reconnect.
- Provide new SEL 735 meters on all building electrical services. Commission meters and establish data management.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which

originated prior to Closing.

A detailed safety plan covering open pit and electrical work will be developed.

The Concessionaire will coordinate with the University the access to all the transformers and vaults required for the Additional Work, as well as for any building service interruptions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$145,044 and will also include (i) power studies on each building to right size transformers, and (ii) oil and thermography testing of all transformers, primary switches, and vaults.



Figure 1. Aging poles, cross bars and mount transformers that pose failure risks.



Figure 2. Pole leaning, risking line slap and downed lines.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$8,605,057.
- (B) Forecasted annual operations and maintenance costs: +\$7,200. Higher voltage distribution, upgraded meters, and new equipment will require additional O&M. Thermography/oil testing required every three years for large transformers.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction but conflict, hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through July 2024. EPC (Commiss.) occurs in August 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Improved due to increased efficiency of distribution conductors and transformers.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

- (H) Fee or charge payable to the Operator: \$8,540,208.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$500, electricity. The reduction is associated with a minor efficiency increase.

PROJECT CODE: 23/3-036

PROJECT NAME: Primary Electric Switch Upgrades

UTILITY SYSTEM: Electric

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u>. The impact associated with resiliency is <u>medium</u>.

The likelihood of these events is low.

PH/ ASSIC	ASE Gned	Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
q	High	3	2	1

Background: Campus is served by two Avista 13.2KV services with pole mounted fuse disconnects. This type of utility service is antiquated and substandard for a campus of this complexity. The 24/7 nature of a campus with residents, research, and critical systems demands a modernized primary electrical service. Failure at the either of the two points of service will result in widespread electrical outages for campus that requires a manual process to address. Additionally, future microgrid and generation projects at the University will require that the point of service switching is upgraded. This project modernizes the electrical service from Avista at both the East and West point of service. This modernization will move the campus toward a more durable utility situation and will help mitigate the risks associated with widespread outages. Further work on this Phase 5 project will include potential cost share with Avista, ownership issues, etc.

Objectives: The main objectives of this Capital Improvement are:

- This project improves the safety and reliability of the Primary Electrical Distribution system and is necessary to maintain Performance Standard Part V.6 and 8 by replacing antiquate manual switching and reducing the amount of overhead electrical service.
- Upgrade the Primary Switching at two points of service from Avista to make these critical switching locations modern and capable of handling microgrid interconnection issues such as back feed protection.
- Coordinate requirements, construction, cost, and ownership with Avista.
- Re-establish primary electric metering and data management after implementation.
- Upgrade the primary electrical conductors at the points of service to the first sectionalizer.

Scope of Work: The scope of work of this Capital Improvement is:

- Provide new 13.2 kV, pad-mounted, motor operated switches with SEL-751 relays at East and West Avista points of service.
- Reinstall and commission SEL metering at East and West Avista points of service.
- Install new primary conductors to refeed campus with underground primary encased in concrete duct bank.
- Coordinate with Avista to install point of service equipment that meets interconnectivity requirements.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was

completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit and electrical work will be developed.

The Concessionaire will coordinate with the University any campus service interruptions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$128,088 and will also include (i) any interconnectivity requirements of primary switches, (ii) any switch requirements to establish modernized utility service to facilitate future microgrid control, and (iii) coordination with Avista on scope, ownership, operation, and cost of this project.

Additional Information:



Figure 1. West campus utility feed, mechanical switching, and overhead distribution (left), and East campus utility feed (right).

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,352,113.
- (B) Forecasted annual operations and maintenance costs: + \$1,800. Upgraded switches and new relays will require additional O&M. Increased associated with primary switch inspection, and annual thermography testing.

- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) coordination with Avista will result in costs incurred to develop this project, (ii) Avista will require upgraded switching/controls for on-campus generation interconnection, (iii) Avista will participate in scoping and cooperate on ownership/cost issues, (iv) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.
- (E) Proposed schedule: EPC (Const.) extends through July 2027. EPC (Commiss.) occurs in August 2027.

	07/26	08/26	09/26	10/26	11/26	12/26	01/27	02/27	03/27	04/27	05/27	06/27
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: This Capital Improvement enables future microgrid and generation projects.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

- (H) Fee or charge payable to the Operator: \$2,334,420.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. Switch upgrades alone will not impact system's efficiency.
PROJECT CODE: 23/4-037

PROJECT NAME: Domestic Fire Hydrant Major Repairs

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue, lack of emergency response capability due to failures). The impact associated with resiliency is <u>high</u> (an inadequate fire suppression will impact the campus operations)

The likelihood of these events is high.

ASSI	ASSIGNED		Impact	
рц/	NGE	Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
p	High	3	2	1

Background: The fire hydrants on campus provide critical fire protection to campus buildings and occupants. This project replaces known failed and aging hydrants. These hydrants are aged and beyond their life expectancy. Replacement parts are becoming commercially unavailable for older hydrants and some have failed, posing a severe fire risk to campus. Two new hydrants will be installed with the project to improve fire protection near Menard Law and the Graduate Art Studio. Flow data doesn't exist for some hydrants due to failure. Base records need to be established.

Objectives: The main objectives of this Capital Improvement are:

- Improve fire protection on campus.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve required the O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Replace 21 fire hydrants.
- Install 2 new fire hydrants.
- Provide assembly and installation of new hydrants including asphalt repair, excavation, and thrust blocks as necessary.
- Manage outages/utility interruptions required to perform work. Coordinate fire service outages.
- Provide removal and disposal of old hydrants.
- Flow test, document flows. Establish electronic records management. Adequate fire flow confirmed.
- Site sediment control, temporary traffic conditions provided/coordinated.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which

ATTACHMENT 3

originated prior to Closing.

Custom safety plans for each of the 23 construction sites, including fencing of open pit areas, traffic control, and temporary walkway conditions will be developed.

The Concessionaire will coordinate with the University that all construction sites allow for campus activities and accommodate for vehicular and pedestrian traffic. Coordination will also cover all water line shutdown requirements, and liaison with public safety entities for temporary outages of water systems.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$56,916 and will also include (i) the resolution of any utility conflicts, and (ii) identification of any utility outage plan needs.

Additional Information:



Figure 2. Failed hydrant on campus near a brush fire in July 2021.



Figure 1. Fire crews putting out fine in July 2021.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$751,501.
- (B) Forecasted annual operations and maintenance costs: +\$1,000. New hydrants will require annual O&M and rebuilding, ten year paint annualized.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is

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assumed that (i) existing conditions will vary for landscape and hardscape replacement, (ii) water service lines to hydrants will not require replacement or upsizing and, (iii) no known underground coordination issues exist, however, detailed utility location will be required. Coordination with the University for water line and building outages will be necessary.

(E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) extends through August 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Multiple fire hydrants are not currently functional, presenting a direct threat to emergency response. Adequate emergency response for property and life protection is a fundamental requirement of campus sustainability.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$745,848.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/4-038

PROJECT NAME: Domestic Water Line Replacement on Central Mall

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (health risks to building occupants due to dead end line). The impact associated with resiliency is <u>high</u> (future failure will impact core campus).

The likelihood of these events is high (line has collapsed).

ASSIGNED			Impact	
PHA	ASE	Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
q	High	3	2	1

Background: At over 70 years old, this line collapsed in 2017, creating a dead-end line in the domestic water system that creates a health risk to building occupants. The line is intended to create a loop in the distribution system near Renfrew Hall and Agricultural Science Building, improving flow and water quality on campus. This project replaces the existing line and upgrades the size to keep up with campus growth.

Objectives: The main objectives of this Capital Improvement are:

- Replace the collapsed domestic water line under the Central Mall.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address health concerns associated with the physical conditions of current assets.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Existing 4" piping modifications, abandonment.
- Install new 6" DR18 C900 PVC Water Line and all appurtenances.
- Bedding and Backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-base paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$34,128.

Additional Information:



Figure 1. Map of Domestic Water System in area with proposed work.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$455,191.
- (B) Forecasted annual operations and maintenance costs: +\$0. No O&M Cost anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable

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solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2023. EPC (Commiss.) occurs from September 2023 to October 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$451,764.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/4-039

PROJECT NAME: Sheep Farm Water Vault Improvements

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (safety risk to the operators). The impact associated with resiliency is <u>high</u> (potential loss of service to Sheep Farm).

The likelihood of these events is high.

ASSIGNED			Impact	
PHA	ASE	Low	Med	High
	Low	5	4	3
ikelihoo	peM	4	3	2
p	High	3	2	1

Background: The Domestic Water service to the Sheep Farm and Soil Stewards north of campus comes in at a vault near Well #3. The vault is unfinished and has a shed constructed over it. The vault floods seasonally, submerging the backflow prevention valves, meter, and other equipment needed to supply the Sheep Farm with water. Though only 10 years old, equipment is already in poor condition and pipes are leaking. This project runs power to the vault from Well #3, relocates equipment out of the vault, and improves the overall condition of the shed to extend its useful life. Installing insulation and heat will help minimize the mold growing on the interior walls of the shed.

Objectives: The main objectives of this Capital Improvement are:

- Reconfigure vault to extend the useful life of equipment.
- Mitigate an unsafe condition for operators and resiliency of service to Sheep Farm due to difficulty of access.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Natural surface demolition and excavation.
- Run power to vault.
- Relocate water flow meter and backflow prevention station, replumb.
- Install finishes to shed including flooring, insulation, lighting, and electric heat.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based point, which originated prior to Closing.

A detailed safety plan covering open pit work, an excavated site, and water service rerouting will be developed.

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Documentation including the disinfection and backflow prevention testing, and an official notice of return to service will be provided.

The Concessionaire will coordinate with the University with regard to the Sheep Farm and Soil Stewards for shutdown. Temporary water provisions will be provided.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$27,108.

Additional Information:



Figure 1. Interior vault at shed.



Figure 2. Leaking water line in vault.

- (A) Total Cost: \$371,400.
- (B) Forecasted annual operations and maintenance costs: +\$200. Increase associated with annual maintenance for new structure and heater.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs from August 2023 to September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: This Capital Improvement will increase the electrical use due to additional heating. Metered water use, and an effective backflow prevention will protect the campus community.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$368,604.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: +\$200, electricity. Increase is associated with the use of the seasonal electric heater.

PROJECT CODE: 23/4-040

PROJECT NAME: Building Backflow Assemblies Replacement at South Hill Apartments

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues in confined spaces). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown)

The likelihood of these events is high.

PHASE ASSIGNED							
		Low	Med	Hiah			
	Low	5	4	3			
ikelihoo	Med	4	3	2			
Q	High	3	2	1			

Background: The backflow assemblies serving each apartment building are located in crawlspaces with very limited access. In nine locations the assemblies are far from the access point and create severe safety risks for workers. Due to the safety hazard these assemblies can't be tested as required by regulations and risks loss of water service to the occupants until the buildings are compliant. Access is needed to each assembly from outside the building instead of the crawlspace. The meters for each building are aged and no longer functional. They need to be replaced and located with the assemblies for accurate billing.

Objectives: The main objectives of this Capital Improvement are:

- Eliminate unsafe work conditions by moving backflow assemblies out of crawlspaces.
- Increase occupant safety by making presently inaccessible backflow assemblies maintainable.
- Bring South Hill Apartments up to code.
- Restore metering for auxiliaries billing.

Scope of Work: The scope of work of this Capital Improvement is:

- Inspect and replace all backflow assemblies as needed.
- Move 9 backflow assemblies to accessible locations.
- Install 30 new backflow preventer assemblies and domestic water flow meters for each building.
- Construct 18 new enclosures outside the buildings for each assembly.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan for work in confined spaces will be developed.

The Concessionaire will coordinate with the University and with the building's occupants for any shutdowns.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$96,660.

Additional Information:



Figure 1. Map of apartment complex with access locations and backflow assemblies marked.

- (A) Total Cost: \$1,389,709.
- (B) Forecasted annual operations and maintenance costs: +\$0. No change in O&M Cost is anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) new backflow preventer assemblies and metering in serviceable configuration, and (ii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through May 2024. EPC (Commiss.) extends through May 2024.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: This Capital Improvement will enhance the public health safety of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,379,484.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/4-041

PROJECT NAME: Domestic Water Emergency Generator

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and campus shutdown, inadequate fire suppression and production capability during power outages).

The likelihood of these events is high.

PHASE ASSIGNED		Impact					
		Low	Med	Hiah			
	Low	5	4	3			
ikelihoo	Med	4	3	2			
q	High	3	2	1			

Background: The domestic water wells are not backed up with emergency power as recommended by IDAPA 58.07.08. Without backup power the domestic water system cannot provide a predictable supply. Fire suppression capabilities would be critically reduced or completely non-functional. Loss of water pressure would result in public health concerns and greatly disrupt campus operations due to the lack of domestic water supply to the campus community. Lack of water main pressure can also leave the domestic water system susceptible to contamination by reverse flow from unprotected/failed backflow prevention and/or leaks in the system. This project installs a new generator with capacity to support Wells #3 and #4.

Objectives: The main objectives of this Capital Improvement are:

- Provide domestic water during power outages.
- Mitigate severe resiliency issues.
- Address severe safety concerns that should be physically mitigated rather than dependent on procedures.

Scope of Work: The scope of work of this Capital Improvement is:

- Install a 480V, 3-phase, 600kW diesel generator at Well #3.
- Install transfer switches, load bank, panels, circuits, and controls.
- Install 500 kVA step up transformer (480V:2.4kV).
- Install automatic transfer switches at Well #3 and #4.
- Construct enclosure and fencing around generator.
- Trench and run cable from new generator to Well #4 (approx. 1,325 ft).
- Provide excavation, demolition, bedding, backfill, surface restoration, etc. for a complete and functional system.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan including appropriate fencing and traffic control management will be developed.

The Concessionaire will coordinate with the University for potential disruptions at the Manis Entomological Laboratory and the Soil Stewards Farm. Similarly, the Concessionaire will coordinate the work with Avista for electrical shutdown.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$99,252 and will also include a feasibility study for alternative 480V electrical conversion at Wells.

Additional Information:



SINGLE GENSET LOCATED AT WELLHOUSE #3 TO SERVE BOTH DEEP WATER AQUIFER WELLS

Figure 1. Electrical site plan.

- (A) Total Cost: \$5,087,011.
- (B) Forecasted annual operations and maintenance costs: +\$4,600. Increase associated with the operations and maintenance of the new generator, ATS switches, transformers, and the required annual testing/certification.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and

hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2023. EPC (Commiss.) occurs from September 2023 to October 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Minor impact from the fuel consumption of the diesel generator.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$5,049,108.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/4-042

PROJECT NAME: Building Backflow Assemblies Replacement at McClure Hall

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

PHASE ASSIGNED		Low Med High					
	Low	5	4	3			
ikelihoo	Med	4	3	2			
Q	High	3	2	1			

Background: The backflow assemblies serving McClure Hall are not up to code as they lack redundant valves. This project replaces both potable and non-potable assemblies with dual-valve systems. These assemblies are aged and beginning to fail. Currently water service must be shut off to service the valves, disrupting the building's occupants. Without redundant backflow devices the building will lose domestic water service if they fail, posing a life safety risk.

Objectives: The main objectives of this Capital Improvement are:

- Replace McClure Hall backflow assemblies to improve resiliency.
- Eliminate single points of failure.
- Bring McClure Hall up to code.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Demo and remove existing 4" backflow preventer for potable system.
- Install new 4" dual-valve backflow preventer.
- Demo and remove existing 3" backflow preventer for non-potable system.
- Install new 3" dual-valve backflow preventer.
- Replace two flow meters.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended the removal of any unnecessary bypasses to reduce O&M Costs on the University's side.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan including standard domestic water protocols will be developed.

The Concessionaire will coordinate with the University and the building's occupants for shutdowns.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$13,284.

Additional Information:



Figure 1. Backflow assemblies in McClure Hall are not up to code.

- (A) Total Cost: \$92,940.
- (B) Forecasted annual operations and maintenance costs: +\$300. Increase for required additional BFP valve O&M and upgraded meter reading, calibration, and O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) isolation valves are in operable condition, (ii) sufficient clearance for needed additional pipework, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.
- (E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs from August 2023 to September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$92,232.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/4-043

PROJECT NAME: Domestic Water Line Replacement on University Avenue from Ash Street to Memorial Gym

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues, risk to firefighting capability). The impact associated with resiliency is <u>high</u> (a future failure will impact core campus).

The likelihood of these events is medium.

High 3 2 1 Likelihood Med 4 3 2 _0 5 4 3 Low Med High PHASE ASSIGNED Impact

Background: This domestic water line serves multiple campus buildings and allows for sections of the distribution system to be isolated as needed. This project replaces the line and upsizes it to provide for campus growth. At almost 100 years old, the line is well beyond its life expectancy and has failed multiple times in the past. Loss of this line creates fire and flooding risks as well as loss of services to connected customers.

Objectives: The main objectives of this Capital Improvement are:

- Replace the aged domestic water line on University Avenue from Ash Street to Memorial Gym.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Provide for future needs of campus.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Existing 6" piping modifications, abandonment.
- Install new 8" DR18 C900 PVC Water Line and all appurtenances.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$100,764.

Additional Information:



Figure 1. Map of domestic water system in area.

- (A) Total Cost: \$1,295,945.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M Costs are anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope and, (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through October 2024. EPC (Commiss.) occurs from September 2024 to October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,286,172.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/4-044

PROJECT NAME: Domestic Water Line Replacement from Line Street to Energy Plant

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues, there is a health risk to building occupants due to dead-end line). The impact associated with resiliency is <u>high</u> (extended steam, chilled water, and turbine shutdown).

The likelihood of these events is medium.



Background: The Energy Plant provides steam, chilled water, and compressed air to core campus buildings. This project replaces the domestic water line serving the building. The domestic water line is aged, possibly original to the building in 1926, and well beyond its expected life. Collapse of this line risks a loss of domestic water service to the building with a complete shutdown of utilities to campus. Additionally, two water lines in the area are dead ends that pose a health safety issue due to stagnant water.

Objectives: The main objectives of this Capital Improvement are:

- Improve Energy Plant resiliency by replacing domestic water service line.
- Improve system water quality by capping dead-end lines.
- Address health concerns associated with the physical conditions of current assets.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Existing 8" piping modifications, removal.
- Install new 8" DR18 C900 PVC Water Line and all appurtenances.
- Cap dead end line at the Energy Plant service connection.
- Cap dead end line on the south side of 6th and Line St.
- Bedding and Backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University and the City of Moscow for the intersection closing and a potential shutdown of the Energy Plant.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$16,524.

Additional Information:



Figure 1. Map of domestic water system in area.

- (A) Total Cost: \$197,944.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M Costs are anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope and, (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with

University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2024. EPC (Commiss.) occurs in August 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$196,452.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/4-045

PROJECT NAME: Domestic Water Line Replacement to Agricultural Science Building

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (future failure will impact building occupants and research).

The likelihood of these events is medium.

			4 Med	3 High
Likeliho	w Med	4	3	2
ро	High	3	2	1

Background: This domestic water line serves the Agriculture Science Building. This project removes the old line and installs a new one. At 49 years old, this line is beyond its expected useful life. The line has failed multiple times in the past and leaks. Failure would result in a loss of service to the building, creating a fire and flooding risk and potentially impacting research.

Objectives: The main objectives of this Capital Improvement are:

- Replace domestic water line to building.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Existing 4" piping modifications, removal.
- Install new 4" DR18 C900 PVC Water Line and all appurtenances.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$20,088.

Additional Information:



Figure 1. Map of Domestic Water System in area with proposed work.

- (A) Total Cost: \$255,728.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M Cost are anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope and, (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with

University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs from September 2024 to October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$253,800.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/4-046

PROJECT NAME: Domestic Water Line Replacement to Food Science Building

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

ASSIC	GNED		Impact				
PHA	PHASE		Low Med				
	Low	5	4	3			
ikelihoo	Med	4	3	2			
q	High	3	2	1			

Background: The domestic water service line to the Food Science Building supplies the facility with potable water for occupants, fire suppression, and research applications. At 78 years old, this line is well beyond its serviceable life and in need of replacement. This project replaces the line and optimizes flow to the building by removing unnecessary pipe, valves, and fittings.

Objectives: The main objectives of this Capital Improvement are:

- Replace water line to the Food Science Building.
- Mitigate resiliency issues associated with systems well beyond their serviceable life.
- Improve O&M practices for a safe and reliable operation.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Existing 6" piping modifications, removal (approx. 125').
- Install new 6" DR18 C900 PVC Water Line and all appurtenances (approx. 125').
- Remove dead-end pipe and valves.
- Install new three-way valve.
- Bedding and Backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and water quality will be developed.

Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$22,356.

Additional Information:



Figure 1. Map of domestic water system in area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$279,538.
- (B) Forecasted annual operations and maintenance costs: +\$200. Additional three-way valve will require O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

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(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs from September 2024 to October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$277,452.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/4-047

PROJECT NAME: Domestic Water Lines Replacement on Blake Avenue

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (health risks to building occupants). The impact associated with resiliency is <u>high</u> (a failure will impact building occupants).

The likelihood of these events is medium.

	MOJ	5 Low	4 Med	3 High
ikelihood	Med Hi	4	3	2
a	High	3	2	1

Background: These domestic water lines serve as a redundant method to supply water to campus from the I-Tank and serves both the Greek Houses along Nez Perce and the South Hill Apartments. At over 70 years old, these lines are well beyond their expected useful life. This project replaced the existing lines and upgrades the size to keep up with campus growth. Failure of these lines risks the ability for the I-Tank to supply campus with water and loss of service to connected buildings.

Objectives: The main objectives of this Capital Improvement are:

- Replace the lines serving the Greek Houses and the South Hill Apartments.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Existing 4" piping modifications, removal to Walenta Drive (approx. 1600').
- Existing 6" piping modifications, removal to South Hill Apartments (approx. 750').
- Install new 6" DR18 C900 PVC Water Line and all appurtenances.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to

service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$199,908.

Additional Information:



Figure 1. Map of Domestic Water System in area with proposed work.

- (A) Total Cost: \$2,571,727.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M Costs are anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) occurs from July 2025 to October 2025. EPC (Commiss.) occurs from September 2025 to October 2025.

	07/24	08/24	09/24	10/24	11/24	12/24	01/25	02/25	03/25	04/25	05/25	06/25
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$2,552,364.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/6-048

PROJECT NAME: Library and Memorial Gym Sanitary Sewer Major Repairs

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues due to leaking sewage). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (inspection shows that failure is imminent).



Background: The sanitary sewer lines serving the area between the Library and Memorial Gym are critical to removing waste from multiple buildings. Investigations conducted during Fiscal Year 2019 showed these lines were in extremely poor condition with collapse imminent. Multiple broken sections of pipe are present with heavy grease buildup. This project slip lines and installs new lines to prevent further damage to nearby buildings and disruption to University's operations. Emergency repairs were needed in FY19 after a section of these sewer lines collapsed, but the upstream lines, in equally poor condition, were not repaired.

Objectives: The main objectives of this Capital Improvement are:

- Repair highly damaged pipe before collapse disrupts campus operations.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety/public health concerns due to leaking sewage in core campus areas.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slip line existing 10" AC pipe at Library (depth=21', length=60').
- Slip line existing 8" AC pipe at Library (depth=21', length=60').
- Slip line existing 6" AC pipe serving Mem Gym (length=100').
- Manhole replacement.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet lines.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be

responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, bypass sewage pumping, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University for any building shutdowns and for required vehicular and pedestrian traffic modifications.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$25,380 and it will also include CCTV inspection and jetting.

Additional Information:



Figure 2. Map of sanitary sewer system in by Memorial Gym and Library.

Figure 1. Condition of 10" sewer line after inspection.

- (A) Total Cost: \$340,713.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M Costs are expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes are not damaged to a point that complete replacement is required, (ii) bypass pumping is

required to keep campus core functions operable, (iii) traffic control and possibly reroute will be required, (iv) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2023. EPC (Commiss.) occurs from September 2023 to October 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Establishing a reliable sanitary sewer service is critical to public health and to achieving functional campus' operations.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$338,148.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.
PROJECT CODE: 23/6-049

PROJECT NAME: Sanitary Sewer Slipline on Campus Drive and Blake Avenue

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high.

PHASE ASSIGNED		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
p	High	3	2	1

Background: These sanitary sewer lines serve the Ridenbaugh Hall, the Niccolls Home Economics Building, the Graduate Art Studio, and the Lionel Hampton School of Music. The pipes are 91 years old and well beyond life expectancy. This project will slipline the existing pipes before they collapse. A collapse of the Campus Drive line would risk vehicle access to the Administration building and the historic Camperdown trees in the area.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer lines on Campus Drive and Blake Ave.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slipline the 6" lines from Campus Drive to Blake Avenue (approx. 270').
- Slipline the 12" lines from Blake Avenue and Sweet Avenue (approx. 690').
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, bypass sewage pumping, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University for any building service interruptions and for required vehicular and pedestrian traffic modifications.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$18,036 and it will also include CCTV inspection and jetting.

Additional Information:



Figure 1. Map of sanitary sewer system in area with relevant work.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$211,020.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M Costs are expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) bypass pumping is required, (ii) a pre/post CCTV inspection will be required, (iii) traffic control will be required, (iv) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs from August 2023 to September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Establishing a reliable sanitary sewer service is critical to public health and to achieving functional campus' operations.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$209,412.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/6-050

PROJECT NAME: Sanitary Sewer Manhole Replacements

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (safety risks to building occupants, vehicles, pedestrians, and operational personnel). The impact associated with resiliency is <u>high</u>.

The likelihood of these events is high.

ASSIC	GNED		Impact	
PHA	ASE	Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
p	High	3	2	1

Background: Manholes across campus are used to access sanitary sewer lines for inspection and service. When manholes are in too poor condition or not present it severely limits the ability of clearing plugged lines, potentially requiring excavation. This project repairs and replaces aging sewer manholes that are beginning to fail. Problems include collapsing walls, sinking asphalt, plugged lines, and damage to pipes.

Objectives: The main objectives of this Capital Improvement are:

- Replace failing sewer manholes.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Repair and install liners at 11 manholes.
- Remove and replace 2 manholes.
- Bedding and backfill.
- CCTV inspection and jetting.
- Construction supervision.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic will be developed.

The Concessionaire will coordinate with the University for any building shutdowns, traffic re-routes, etc. to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$47,304.

Additional Information:



Figure 1. Poor condition brick manhole by ISUB (left) and by Morrill Hall (right).

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$596,761.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M Costs are expected.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) bypass pumping is required to keep campus core functions operable, (ii) traffic control and possibly reroute will be required, (iii) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs from July 2023 to August 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Establishing a reliable sanitary sewer service is critical to public health and to achieving functional campus' operations.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$592,272.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/6-051

PROJECT NAME: Sanitary Sewer Slipline on Line Street

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (heavily damaged and collapse is imminent).

Likelihoo	w Med	4	3	2
	의 의	5 Low	4 Med	3 High
PHA	45E			

Background: These sanitary sewer lines serve the Food Science Building, the Mines Building, the Native American Student Center, and the Janssen Engineering Building (JEB). The pipes are constructed of clay tile and almost 70 years old and are well beyond their life expectancy. A recent sliplining project on a connecting line showed that these lines are in poor condition and need to be repaired soon before they collapse. These lines plug on occasion and require jetting to restore service. The line in the alley between JEB and the Gauss-Johnson Engineering Building (GJ) has a belly in it where it goes under the utility tunnel, which plugs regularly (most recently in September and October 2021). An inspection conducted in October 2021 showed sections of the pipe breaking off, indicating that collapse is imminent. This project sliplines existing pipes and replaces the JEB service line going under the tunnel.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer line on Line Street between Idaho Avenue and 6th Street.
- Recondition existing sanitary sewer lines serving the Food Science Building, the Mines Building and the Native American Student Center.
- Remove belly in line between JEB and GJ.
- Install new manholes for improved access.
- Inspect nearby lines to identify future needs.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slipline the 6" line on Line Street (approx. 700').
- Slipline the 6" lines between the Food Science Building, the Mines Building, and the Native American Student Center (approx. 350")
- Install new 6" DR18 C900 PVC pipe and all appurtenances.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic will be developed.

The Concessionaire will coordinate with the University for any building shutdowns, traffic re-routes, etc. to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$46,548 and it will also include CCTV inspection and jetting.

Additional Information:



Figure 2. Sanitary Sewer map of area.



Figure 1. Broken section of pipe in Janssen Engineering service line.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

(A) Total Cost: \$575,490.

- (B) Forecasted annual operations and maintenance costs: +\$500. New manholes will require regular inspects and cleaning.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) bypass pumping is required to keep campus core functions operable, (ii) pre/post CCTV inspection is required, (iii) traffic control and possibly reroute will be required, (iv) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.
- (E) Proposed schedule: EPC (Const.) extends through September 2023. EPC (Commiss.) occurs from August 2023 to September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Establishing a reliable sanitary sewer service is critical to public health and to achieving functional campus' operations.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$571,104.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/6-052

PROJECT NAME: Sanitary Sewer Line Replacement at the West Farm

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

PHASE ASSIGNED		Low Med High					
			N4 1				
	Low	5	4	3			
ikelihoo	Med	4	3	2			
Q	High	3	2	1			

Background: These lines provide sanitary sewer service to the Meats Lab, Beef Residence, Farm Ops, and other buildings on the West Farm. These pipes are 60 years old and well beyond life expectancy. This project slip lines the existing pipes before they risk collapse. An additional manhole is needed to allow for access for maintenance.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer lines serving the West Farm.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slipline the 4" lines (approx. 950').
- Repair one manhole at intersection of Farm Road and 6th Street.
- Install one new manhole at Farm Storage Building #1.
- Construction supervision.
- Bedding and backfill.
- Asphalt and natural surface restoration.
- CCTV inspect and jet other connecting lines.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University and the buildings' occupants for the sanitary sewer shutdown.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$17,712 and it will also include CCTV inspection and jetting.

Additional Information:



Figure 2. Sanitary Sewer system in affected area.



Figure 1. Bricks falling out at a damaged manhole.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$226,873.
- (B) Forecasted annual operations and maintenance costs: +\$200. New manhole will require regular cleaning and inspection.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding

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trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs from September 2024 to October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the sanitary sewer system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$225,180.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/6-053

PROJECT NAME: Sanitary Sewer Line Replacement at the Bruce M. Pitman Center

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

PHA		5 Low	4 Med	3 High
Likelihoo	w Med	4	3	2
pc	High	3	2	1

Background: Sanitary sewer service from the Bruce M. Pitman Center comes from 4 points, feeding into a common line running parallel to the City of Moscow sewer line. This project abandons the existing parallel line and connects the Bruce M. Pitman Center directly to the City of Moscow line. These pipes are 73 years old and well beyond life expectancy. They are also back graded and frequently plug due to poor design, causing sewer backups into the building.

Objectives: The main objectives of this Capital Improvement are:

- Connect sanitary sewer service from the Bruce M. Pitman Center directly to the City of Moscow lines.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Install 6" DR18 C900 PVC pipe (approx. 80').
- Install service tap and cleanouts (x4).
- Construction supervision.
- Bedding and backfill.
- Asphalt and natural surface restoration.
- Provide bypass pumping during construction.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$20,844.

Additional Information:



Figure 1. Sanitary sewer system in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$186,083.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M costs are anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and

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hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs from September 2024 to October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the sanitary sewer system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$184,680.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/6-054

PROJECT NAME: Sanitary Sewer Line Replacement at the Administration Building and Art & Architecture

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

PH/ ASSIC	PHASE ASSIGNED							
		Low	Med	Hiah				
	Low	5	4	3				
ikelihoo	Med	4	3	2				
ō	High	3	2	1				

Background: At over 100 years old, the sanitary sewer lines that service the Administration building, Art and Architecture, and Interior Design are well beyond life expectancy. This project slip lines the pipes before collapse. The project also installs a new line serving Interior Design and A&A to reduce hydraulic loading on the existing pipes.

Objectives: The main objectives of this Capital Improvement are:

- Recondition sanitary sewer lines serving the Administration Building and Art and Architecture.
- Install a new sanitary sewer line serving Interior Design.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slip line 8" pipe (approx. 300').
- Slip line 6" pipe (approx. 460').
- Install new 6" pipe (approx. 260').
- Construction supervision.
- Bedding and backfill.
- Asphalt and natural surface restoration.
- Provide bypass pumping during construction.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including

temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$38,772.

Additional Information:



Figure 1. Sanitary sewer system in the affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$497,308.
- (B) Forecasted annual operations and maintenance costs: +\$300. Additional pipe will require cleaning, jetting, and inspection.
- (C) Proposed modification to the Recovery Period: None.

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(D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2024. EPC (Commiss.) occurs in August 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the sanitary sewer system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$493,560.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/6-055

PROJECT NAME: Sanitary Sewer Slipline from the Brink and Phinney Halls to the Integrated Research and Innovation Center (IRIC)

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

High 3 2 1 Likelihood Med 4 3 2 _0 5 4 3 Low Med High PHASE ASSIGNED Impact

Background: This line provides sanitary sewer service to the Brink and Phinney Halls but is well beyond its expected life. This project slip lines the existing pipes before they collapse and disrupt the buildings' occupants. Due to the poor condition of this line, it plugs regularly and requires frequent jetting. An additional manhole is needed to improve the access and the efficiency of the jetting operations.

Objectives: The main objectives of this Capital Improvement are:

- Recondition the existing sanitary sewer line from the SW corner of the Brink and Phinney Halls to the Integrated Research and Innovation Center.
- Install a new manhole for improved access.
- Inspect nearby lines to identify future needs.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slip line the 6" line (approx. 190').
- Install double manhole and cleanout.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$19,440 and will also include a CCTV inspection and jetting.

Additional Information:



Figure 1. Sanitary sewer system in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$174,347.
- (B) Forecasted annual operations and maintenance costs: +\$300. Additional double manhole will require regular cleaning and inspections.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with

University for other work that may impact this project will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2024. EPC (Commiss.) occurs from August 2024 to September 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the sanitary sewer system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$173,016.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/7-056

PROJECT NAME: Library and Memorial Gym Stormwater Major Repairs

UTILITY SYSTEM: Stormwater

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (lines are heavily damaged and collapse is imminent).

PH/ ASSIC	ASE Gned		Impact	
		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
q	High	3	2	1

Background: The 93 year old stormwater lines serving the area between the Library and Memorial Gym are critical to removing water during rain events. FY19 investigations showed these lines were in extremely poor condition with collapse imminent. This project slip lines and installs new lines to prevent further flooding damage to nearby buildings. These pipes have dozens of infiltrations, cracks, and broken sections and are well beyond serviceable life. The parallel sewer line that is in similar condition collapsed in FY19, emphasizing the urgent need to make these repairs before collapse.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slip line existing 12" AC pipe at Library (depth=21ft, length=170ft).
- Burst existing 10" pipe and replace with on-hand 10" PVC pipe (depth=21ft, length=130ft).
- Cap and abandon in place the existing pipe east of Memorial Gym.
- Install new 4" PVC pipe east of Mem Gym at shallow depth (200 ft).
- Install new 10" PVC pipe south of Mem Gym (175ft).
- Bedding and backfill.
- Install new manholes.
- CCTV inspect and jet lines.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

A detailed safety plan covering open pit work and vehicular and pedestrian traffic will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University for any building shutdowns, traffic rerouting, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$92,556 and will also include jetting and a CCTV inspection.

Additional Information:



Figure 1. Stormwater system at Memorial Gym and Library.



Figure 2. Condition of 12" stormwater pipe after inspection.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,292,568.
- (B) Forecasted annual operations and maintenance costs: \$300. Additional pipe will require regular cleaning, jetting, and inspection.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes are not damaged to a point that complete replacement is required, (ii) bypass pumping, traffic and pedestrian control and/or rerouting, and manhole repair by liner will be required, (iii) increased project complexity due to depth of pipes, (iv) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impact may occur and remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.
- (E) Proposed schedule: EPC (Const.) extends through September 2023. EPC (Commiss.) occurs from August 2023 to September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Achieving adequate stormwater control will help protect campus buildings and keep stormwater quality and control in compliance.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,282,716.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/7-057

PROJECT NAME: Storm Slipline on Campus Drive and Blake Avenue.

UTILITY SYSTEM: Stormwater

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high.

PH/ ASSIC	PHASE		Low Med High					
	Low	5	4	3				
ikelihoo	Med	4	3	2				
q	High	3	2	1				

Background: These stormwater lines are 100 years old and well beyond life expectancy. This project slip lines the existing pipes before they collapse. Collapse of the Campus Dr line risks vehicle access to the Administration building and the historic Camperdown trees in the area. The brick manhole by Lionel Hampton is collapsing and poses a safety risk to vehicle and pedestrian traffic.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing stormwater lines on Campus Drive and Blake Avenue.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slip line the 6" line from Campus Dr to Blake Ave (approx. 400').
- Slip line the 6" line from Lionel Hampton to intersection of Blake Avenue and Sweet Avenue (approx. 100').
- Replace one manhole at Lionel Hampton.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

A detailed safety plan covering open pit work and vehicular and pedestrian traffic will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University for any temporary stormwater provisions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$18,468 and will also include jetting and a CCTV inspection.

Additional Information:



Figure 1. Stormwater system in the affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$236,595.
- (B) Forecasted annual operations and maintenance costs: \$0. No changes in O&M Costs are anticipated.
- (C) Proposed modification to the Recovery Period: None.

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- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) bypass pumping will be required, (ii) a complete manhole replacement at Lionel Hampton, (iii) open pit safety protocols, and vehicular and pedestrian traffic control and accommodations will be required, (iv) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impact may occur and remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.
- (E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs from August 2023 to September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: Improved stormwater systems will help maintain stormwater quantity and quality control. Improvement of stormwater systems is required for safety and resiliency of the core campus.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$234,792.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/7-058

PROJECT NAME: New Stormwater Line at Art & Architecture

UTILITY SYSTEM: Stormwater

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (flooding occurs regularly).

	MOJ	5 Low	4 Med	3 High
ikelihood	Med	4	3	2
	High	3	2	1

Background: The existing stormwater line serving Art & Architecture was cut off when Commons was constructed. This has caused flooding issues in the basement of Art & Architecture and creates standing water issues near pedestrian walkways, which freeze in cold weather and pose a pedestrian safety risk. This project restores stormwater service to this area by installing a new line from Art & Architecture to Line Street.

Objectives: The main objectives of this Capital Improvement are:

- Correct flooding issues near Art & Architecture by installing a new stormwater line.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Install new 6" SDR 35 PVC pipe (approx. 120').
- Connect new line to existing storm system.
- Install one new catch basin.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

A detailed safety plan covering open pit work and vehicular and pedestrian traffic will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University to avoid disruptions to events on campus.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$16,848 and will also include jetting and a CCTV inspection.

Additional Information:



Figure 1. Stormwater system in the affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$133,316.
- (B) Forecasted annual operations and maintenance costs: \$200. Additional pipe will require regular cleaning, jetting, and inspection.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding

trees and vegetation but impact may occur and remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.

(E) Proposed schedule: EPC (Const.) extends through August 2023. EPC (Commiss.) occurs from August 2023 to September 2023.

	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

(F) Impact on Sustainability: Improved stormwater systems will help maintain stormwater quantity and quality control. Improvement of stormwater systems is required for safety and resiliency of the core campus.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

- (H) Fee or charge payable to the Operator: \$132,300.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/7-059

PROJECT NAME: Stormwater Catch Basin and Manhole Upgrades

UTILITY SYSTEM: Stormwater

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (safety risks to building occupants, vehicles, and pedestrians). The impact associated with resiliency is <u>high</u> (flooding occurs regularly).

The likelihood of these events is high.

PH/ ASSIC	ASE GNED		Impact	
		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
p	High	3	2	1

Background: Catch basins collect stormwater runoff and direct it to the creek to prevent flooding. Manholes across campus are used to access stormwater lines for inspection and service. When these fail it severely limits the ability of clearing plugged lines, potentially requiring excavation. This project includes major repairs and replacements for aging catch basins and manholes that are beginning to fail. Problems include collapsing walls, sinking asphalt, plugged lines, and damage to pipes and pose safety risks to vehicle, cyclist, and pedestrian traffic on campus.

Objectives: The main objectives of this Capital Improvement are:

- Replace failing stormwater catch basins and manholes.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Upgrade and install liners at 30 catch basins.
- Remove and replace 14 catch basins.
- Upgrade and install liners at 3 manholes.
- Remove and replace 1 manhole.
- Asphalt and natural surface restoration.
- CCTV inspection and jetting.
- Construction supervision.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

A detailed safety plan covering open pit work and vehicular and pedestrian traffic will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University for building shutdowns and to avoid disruptions associated with open pit work.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$141,156 and will also include jetting and a CCTV inspection.

Additional Information:



Figure 1. Catch basin on Campus Drive.



Figure 2. Catch basin on Rayburn.



Figure 3. Catch basin on Perimeter Drive.



Figure 4. Catch basin at South Hill Apartments.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,852,453.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M Costs anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impact may occur, and remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.
- (E) Proposed schedule: EPC (Const.) extends through September 2024. EPC (Commiss.) occurs from September 2024 to October 2024.

	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: This Capital Improvement will improve campus' safety and stormwater system's resilience. Stormwater quality will be improved.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,838,484.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 23/7-060

PROJECT NAME: Stormwater Line Installation from Wallace to Paradise Creek

UTILITY SYSTEM: Stormwater

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high.

	MOJ ASE	5 Low	4 Med	3 High
Likelihoo	Med	4	3	2
pc	High	3	2	1

Background: This stormwater system removes stormwater from areas of campus including JW Martin, ICCU Arena, and Wallace. However, the current system is not designed to handle the current loads, causing flooding in the area regularly. This project installs a new line from the northwest corner of Gooding to Paradise Creek. The new line will reduce the hydraulic loading on the existing system by improving flow, extending the useful life of the connected lines.

Objectives: The main objectives of this Capital Improvement are:

- Increase stormwater capacity to reduce flooding and reduce stress on existing system.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner, improve reliability and stormwater quality.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Install new 24" HDPE pipe (approx. 290').
- Install new 24" outfall valve at Paradise Creek.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work and vehicular and pedestrian traffic (including temporary

accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University for a possible shutdown of Paradise Creek Street.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$31,320.

Additional Information:



Figure 1. Stormwater system in the affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$301,212.
- (B) Forecasted annual operations and maintenance costs: +\$800. New pipe will require regular cleaning, jetting, and inspection. Outfall testing as required by MS4 stormwater permit.
- (C) Proposed modification to the Recovery Period: None.

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- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impact may occur, and remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.
- (E) Proposed schedule: EPC (Const.) extends through September 2025. EPC (Commiss.) occurs from September 2025 to October 2025.

	07/24	08/24	09/24	10/24	11/24	12/24	01/25	02/25	03/25	04/25	05/25	06/25
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: This Capital Improvement will improve campus' safety and stormwater system's resilience. Stormwater quality will be improved.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$298,944.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.
PROJECT CODE: 23/7-061

PROJECT NAME: Nez Perce Stormwater and Sanitary Sewer Major Repairs

UTILITY SYSTEM: Stormwater and Sanitary Sewer

DATE SUBMITTED: December 31st, 2021

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high.

PH/ ASSIC	ASE Gned	LOW	Impact	High
				LUST
	M0-	5	4	3
kelihoo	Med	4	3	2
q	High	3	2	1

Background: These sanitary sewer and stormwater lines are aged and need to be inspected and potentially slip lined. The sanitary sewer line on Nez Perce is in poor condition with many root penetrations. It most recently plugged in September 2021. The stormwater lines in the area have been plugged since the eruption of Mount St. Helens in 1980. These issues leave Nez Perce at risk for flooding and cause slippery conditions for pedestrians in poor weather. Their eventual collapse will risk loss of service to connected buildings and potential building flooding damage.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer line on Nez Perce serving the President's house and the Golf Course.
- Inspect nearby sanitary sewer and stormwater lines to identify future needs.
- Change assets in order to achieve the required O&M practices in a safe manner and maintain reliable and effective service for both stormwater and sanitary sewers.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slip line the 6" sanitary sewer line on Nez Perce (approx. 1,600').
- Bedding and backfill.
- CCTV inspect and jet parallel stormwater on Nez Perce (approx. 3,400').
- CCTV inspect and jet other connecting lines.
- Construction supervision.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including

temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University and building occupants for any shutdowns, as well as for the potential need for parking space closures along Nez Perce.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$25,704 and will also include a CCTV inspection of lines within the scope.

Additional Information:



Figure 1. Sanitary sewer lines in affected area.



Figure 2. Stormwater lines in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

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- (A) Total Cost: \$252,026.
- (B) Forecasted annual operations and maintenance costs: +\$0. No changes in O&M Costs anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impact may occur, and remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur.
- (E) Proposed schedule: EPC (Const.) extends through September 2025. EPC (Commiss.) occurs from September 2025 to October 2025.

	07/24	08/24	09/24	10/24	11/24	12/24	01/25	02/25	03/25	04/25	05/25	06/25
Additional Work												
EPC (Dev.)												
EPC (Const.)												
EPC (Commiss.)												

- (F) Impact on Sustainability: This Capital Improvement will improve campus' safety and stormwater system's resilience. Stormwater quality will be improved. Sanitary sewer operation is critical to public health and to prevent environmental contamination.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$250,128.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

INFORMATIONAL APRIL 17-18, 2024

ATTACHMENT 4



FIVE-YEAR PLAN FY24 THE UNIVERSITY OF IDAHO UTILITY SYSTEM

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INFORMATIONAL APRIL 17-18, 2024

This Five-Year Plan consists of a budget and plan prepared by the Concessionaire in accordance with Section 7.2 for the operation of the Utility System and performance of its obligations under the Long-term Lease and Concession Agreement for the University of Idaho Utility System, in respect of the period consisting of Fiscal Years 2024 through 2028.

To: University of Idaho Vice President for Finance & Administration Email: <u>vpfinance@uidaho.edu</u>

With a copy to:

Office of the General Counsel Email: <u>counsel@uidaho.edu</u>

Date: February 1, 2023

INFORMATIONAL APRIL 17-18, 2024 ATTACHMENT 4

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I. Introduction

Sacyr Plenary Utility Partners Idaho LLC is excited to submit this Five-Year Plan, that delineates the Capital Improvements proposed to make in each Fiscal Year to the Utility System, including Capital Improvements to address conditions of the Utility System existing prior to the Closing Date.

Throughout this first and second years of the Term, the Concessionaire has been able to further understand the conditions, limitations, and operational status of the Utility System. The most visible result of such steep learning has been the discovery of latent issues with the Utility System that were in critical condition prior to the start of the Term and will continue to be in critical condition until applicable Capital Improvements are completed. As a result, the core focus of this Five-Year Plan is to further the stabilization of the Utility System, prioritizing safety and reliability in accordance with the Performance Standards and Key Performance Indicators, over other potential objectives.

All projects listed in this document are proposed to be performed by Moscow ID Eco District I, LLC, a fullyowned subsidiary of McKinstry Essention, LLC, that serves as Contractor to the Operator within the Long-Term Lease and Concession Agreement for the University of Idaho Utility System.

II. Planning Process

The planning process for Fiscal Year 2024 was built upon a subset of the four founding principles: *safety*, *reliability* leading to resilience, *operational efficiency*, and *carbon neutrality*. In order of priority, those principles are:

- Provide for the safety of the general public, campus community, and operations personnel.
- Operate, maintain, and plan for *reliability* and resilience of the Utility System.
- Improve operational efficiency.
- Develop and implement a plan for energy independence and *carbon neutrality*.

While comprehensive stewardship of the Utility System resources requires that all four of these principles be represented in the planning process, early experiences with the Utility System have revealed a critical need to focus the near-term planning efforts on two of them: safety and resilience. Many components of these systems are at the end of their useful life, historically deficient of proper maintenance, or in a partial state of failure leaving the likelihood of a critical system failure unacceptably high and calling for a critical need to upgrade. Achieving a safe environment and resilience in the existing systems is critical before any substantive gains in operational efficiency or carbon neutrality can happen.

Above all, it is imperative that the safety of the general public, the campus community, and the operations personnel be prioritized. Following closely behind, the focus on safety is that of building resilience, starting with reliability. System failures have revealed substantial reliability issues and the Concessionaire's team has systematically identified vulnerabilities in the Utility System.

As a result, the planning process for Fiscal Year 2024 is solely focused on safety and resilience for the *stabilization* of the Utility System, so more progressive long-range planning can commence in the future. Besides the direct safety and business interruption risks, the vulnerabilities identified are direct threats to meeting the Performance Standards and Key Performance Indicators in the Concession Agreement. The Capital Improvements proposed within this Five-Year Plan are specifically identified to manage these risks and constitute a crucial first step in advancing the quality of the Utility System.

A planning process focused on safety and resilience required evaluating the risks associated with the existing systems and their mitigation. This methodical approach characterized the Utility System's subsystems to evaluate deficiencies and vulnerabilities. In the case of complex systems, such as the Energy Plant, the components of the subsystems were also identified. For each system, subject matter experts were engaged in planning sessions to discuss the condition, needs, and potential vulnerabilities associated throughout the Utility System, and within them, 44 subsystems and approximately 180 component sets. Once each system's deficiencies and opportunities were identified, project scopes were developed that centered on addressing these safety and resiliency issues. These projects were structured to maximize complementary work to reduce the number of service disruptions or otherwise gain implementation efficiency. While it will be continuously improved over the next several planning cycles, this effort established the concept of *system planning* for each Utility System.

Vulnerability Assessment

The potential for each Capital Improvement to mitigate risks was established by using a simple vulnerability assessment matrix. This approach evaluated (i) the *impact* of the risk/vulnerability based on the safety and reliability principles, and (ii) the *likelihood* of a failure. It is worth noting that all the Capital Improvements identified herein are presented because they mitigate either a significant safety or resiliency risk, or in several cases, both.

Capital Improvements were assigned an impact rating of low, medium, or high from both a safety and a reliability standpoint. The safety sub-rating estimates the impact of a failure, due to the vulnerability, on the health and life safety of the general public, campus community, and operations staff. The reliability sub-rating estimates the impact of a failure, due to the vulnerability, on business interruption impacts, costs of emergency repair/temporary operations, and cascading property damage resulting from failure (floods, fire, freeze up, building shutdown, etc.). Each risk was also assigned a likelihood rating of low, medium, or high, according to the probability that a failure may occur.

Using a simple matrix, Capital Improvements were assigned a *phase designator*, from Phase 1 to Phase 5. This designation provides guidance about the importance of a Capital Improvement and has too been used to allocate the Capital Improvements included in this plan to each of the five years. A later phase designation should not be construed as diminishing the necessity of the project but rather is a reflection of the reality that all projects cannot be done simultaneously.

ASSI	GNED	Impact			
PHASE		Low Med High			
-	Low	5	4	3	
ikelihoo	Med	4	3	2	
p	High	3	2	1	

Figure 1. Vulnerability Matrix

Projects with the highest impact and likelihood were ranked as Phase 1 projects, a designation that identifies the risk associated with inaction as unacceptably high. These projects must be implemented to mitigate critical safety and/or reliability risks and have been proposed for Approval on the first Fiscal Year of the Five-Year Plan (i.e., FY24).

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These planning efforts have revealed a significant volume of critical (i.e., Phase 1) work and a similar volume of important (i.e., Phase 2, proposed for FY25) work that is imperative to address in the near term. Utility failures carrying unacceptable safety and reliability concerns are very likely to occur without immediate action.

Projects with a lessor phase designation (i.e., Phase 3-5) also have important roles in risk mitigation. While the impact and likelihood of failures due to inaction are projected to be less severe, there are still risks and a plan for immediate implementation is needed.

It is necessary to understand that this vulnerability assessment is a tool for the University and the Concessionaire to compare projects and help inform what projects need to be prioritized. Unknown and unforeseen issues within systems exist and may cause failures that cannot be predicted. These designators are the best indicator available to measure the criticality of a project.

Annualization of Capital Improvements

Capital Improvements presented within this submittal have been developed and selected through an exhaustive capital planning process, and urgent and immediate approval and completion of these Capital Improvements is necessary to allow the Concessionaire to operate and maintain the Utility System in full compliance with the Performance Standards and Key Performance Indicators.

While we understand the financial constraints of the University, it is our duty to notify the University that these Capital Improvements are essential for the safe and reliable operations and maintenance of the Utility System, and therefore should be approved and undertaken urgently and immediately.

Nevertheless, in order to facilitate the University's review and comply with the Concession Agreement's requirements for the composition of the Five-Year Plan, we have created a timeline for these investments following the level of criticality of such undertakings. Impact and likelihood may be less severe as the project's phase designation number increases but all of them are critical to aspects of the Utility System, pose significant safety and reliability risks, are essential for continuing compliance with the Performance Standards and Key Performance Indicators, and an accelerated approval of their implementation is needed.

Furthermore, a new tool to facilitate the selection of Capital Improvements proposed within this Five-Year Plan is presented with the summary tables found in the following pages. Capital Improvements not only have been designated a Phase or proposed in a particular Fiscal Year, but they have also been ranked and prioritized by, among other aspects, the criticality and need for urgent Approval. However, it is worth reiterating that, while prioritized, all Capital Improvements proposed should be approved urgently to address safety and resiliency deficiencies.

Lastly, it is worth noting that, given the current macro environment, prices in this Five-Year Plan are assigned a validity period that expires on April 6th, 2023.

III. Supply Use Trends

Supplies expected to be used to operate the Utility System are wood chip fuel, natural gas, and electricity. There is no change from previous years, nor any change expected in the foreseeable future.

The FY24 Supply use per month and yearly trends are shown below. The estimate for Fiscal Year 2024 is emphasized in red for each plot. The estimated usage of Supplies throughout the year is dependent on campus activities, especially whether students are on campus or not, and weather. Supply use also grows with the increased campus population and building square footage.

Wood Fuels

Wood fuel use peaks in the winter with heating loads but is not at its lowest during peak cooling season. This is because steam fired absorption chillers are used in the summer to produce Chilled Water with wood chips. Wood fuel use is instead at its lowest in the shoulder spring/fall months, when the overall HVAC needs of campus are at their lowest. This is partially the reason why planned wood boiler maintenance shutdowns are scheduled in the spring and summer. In a typical year over 90% of the steam produced at the Energy Plant is from the wood boiler. Wood fuel is measured and purchased in bone dry tons (BDTs) instead of units of energy (e.g., MMBTUs) because the energy content for wood varies significantly depending on species and moisture content. As the wood boiler degrades, and its mechanical and electrical systems wear out, unscheduled wood boiler shutdowns will likely increase in both frequency and duration. This may result in decreasing wood fuel use over time.

Natural Gas

Unlike wood fuel, natural gas use at the Energy Plant does not follow a consistent pattern year over year. While it is difficult to predict, there are some common trends. Natural gas is typically used at the Energy Plant to meet peak steam loads when the wood boiler can't keep up with demand and during wood boiler shutdowns. Peak steam loads are in the winter, so there is some natural gas use when temperature drop below freezing. In the summer, there is typically little to no natural gas use.

Scheduled wood boiler shutdowns are not on specific dates, but instead based on the level of maintenance needed and campus loads. To minimize Supply Costs shutdowns are scheduled in the shoulder spring/fall months when loads are at the lowest. Thus, natural gas use is at its highest in the spring and fall. Unscheduled shutdowns occur throughout the year and are likely the driving cause for variability in natural gas use.

Electricity

Electricity use on the East Feed is typically stable throughout the year, with a minor increase late summer during the cooling season and students returning to campus. Electricity use on the West Feed is also stable

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but increases during the summer season due to chilled water production at the South Campus Chiller Plant. Historically the East and West Feeds have been balanced 50/50. However, this changed as of spring of 2022, with the addition of the steam turbines and IRIC PV array coming online. Both generating systems are on the East Feed and have been accounted for in the FY24 supply usage estimate. When more data is available about the amount of power generated on campus it is likely that the two feeds will be rebalanced.

Month	Wood (BDT)	Natural Gas (therms)	Electricity - East (kWh)	Electricity-West (kWh)
July	1,332	16,965	1,432,714	2,130,600
August	1,001	-	1,185,667	2,337,835
September	894	3,127	1,080,970	2,145,962
October	1,504	6,585	1,097,700	2,170,087
November	2,235	8,568	1,153,840	1,989,939
December	2,275	13,563	1,235,593	1,911,918
January	2,452	25,135	1,193,044	1,995,202
February	2,340	-	1,147,508	1,924,463
March	1,988	20,783	1,233,153	1,948,900
April	2,086	5,225	978,664	1,766,371
May	1,506	42,480	903,312	1,833,505
June	1,300	-	1,288,294	1,809,622
TOTAL	20,914	142,430	13,930,461	23,964,405

Figure 2. Supply usage estimate for Fiscal Year 2024.



Figure 3. Wood chip usage over recent years



Figure 4. Natural gas usage over recent years



Figure 5. East Electric Feed usage over recent years



Figure 6. West Electric Feed usage over recent years

IV. Capital Improvements by Priority.

PROPOSED CAPITAL IMPROVEMENTS

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
1	24/1	002	1	Ash Handling System Upgrades	\$242,660	\$3,349,524
2	24/3	062	1	Agricultural Science Building Electrical Service Replacement	\$141,900	\$1,974,462
3	24/1	009	1	Boiler Controls Modernization	\$447,260	\$4,934,866
4	24/3	024	1	Electrical Transformer and Primary Components Equipment Reserve	\$35,090	\$1,698,159
5	24/6	048	1	Sanitary Sewer Major Repairs at the Library and the Memorial Gym	\$26,730	\$401,032
6	24/7	056	1	Stormwater Major Repairs at the Library and the Memorial Gym	\$96,580	\$1,272,361
7	24/4	037	1	Fire Hydrant Major Repairs	\$57,860	\$804,572
8	24/2	063	1	Chilled Water Wintertime Capacity Upgrade	\$21,230	\$2,659,652
9 10	24/4	064	1	Vell #4 Modernization	\$153,010	\$5,085,924
11	24/3	025	1	Chilled Water Canacity Lingrade at the South Campus Chiller Plant (Pronosal R)	\$507.650	\$3,439,073
12	24/3	026	1	Menard Law Building Electrical Service Replacement	\$80,300	\$868.675
13	24/1	003	1	Steam Piping Upgrades at the Energy Plant	\$58,960	\$3,338,022
14	24/1	004	1	Gas Boilers Capital Renewal	\$207,900	\$5,708,096
15	24/1	005	1	Utility Tunnel Repair on 6th Street	\$131,120	\$3,574,107
16	24/4	038	1	Domestic Water Line Replacement on the Central Mall	\$32,560	\$451,741
17	24/6	051	1	Sanitary Sewer Line Recondition on Line Street	\$46,860	\$638,515
18	24/6	050	1	Sanitary Sewer Manhole Replacements	\$43,560	\$596,052
19	24/7	058	1	Stormwater Line Installation from the Art & Architecture Building to Line Street	\$14,410	\$157,976
20	24/6	049	1	Sanitary Sewer Line Recondition on Campus Drive and Blake Avenue	\$17,380	\$226,281
21	24/7	057	1	Stormwater Line Recondition on Campus Drive and Blake Avenue	\$18,480	\$262,127
22	24/4	040	1	Backflow Assemblies Replacement at the South Hill Apartments	\$97,460	\$1,336,636
23	24/4	059	2		\$27,390	\$380,495
25	24/1	012	2	Steam and Condensate Distribution Upgrades	\$57,200	\$6,414,216
26	24/1	010	2	Wood Boiler Capital Renewal, Phase I	\$260,480	\$2,593,877
27	24/3	028	2	Administration South Building Electrical Service Replacement	\$80,300	\$825,018
28	24/3	029	2	Art & Architecture North Building Electrical Service Replacement	\$80,300	\$804,868
29	24/3	030	2	College of Natural Resources Building Electrical Service Replacement	\$80,300	\$938,080
30	24/3	031	2	Hartung Theatre Electrical Service Replacement	\$80,300	\$808,226
31	24/3	032	2	Theophilus Tower Electrical Service Replacement	\$80,300	\$867,556
32	24/3	033	2	Physical Education Building Electrical Service Replacement	\$80,300	\$825,018
33	24/3	034	2	Swimming Center Building Electrical Service Replacement	\$80,300	\$825,018
34	24/3	035	2	West Farm Primary Distribution Improvements	\$143,550	\$10,270,321
35	24/4	042	2	Backflow Assemblies Replacement at the Miclure Hall	\$9,020	\$100,709
37	24/2	043	2	Domestic Water Line Benlacement on University Avenue	\$101 640	\$305,710
38	24/4	044	2	Domestic Water Line Replacement to the Energy Plant	\$14,740	\$224,242
39	24/4	045	2	Domestic Water Line Replacement to the Agricultural Science Building	\$19,030	\$273,576
40	24/4	046	2	Domestic Water Line Replacement to the Food Research Center	\$20,790	\$291,515
41	24/4	047	2	Domestic Water Line Replacement on Blake Avenue	\$200,860	\$2,653,907
42	24/6	052	2	Sanitary Sewer Line Recondition at the West Farm	\$17,930	\$249,100
43	24/6	053	2	Sanitary Sewer Line Replacement at the Bruce M. Pitman Center	\$19,580	\$211,909
44	24/6	054	2	Sanitary Sewer Line Replacement at the Administration Building and Art & Architecture Building	\$39,050	\$520,328
45	24/6	055	2	Sanitary Sewer Line Recondition from the Brink and Phinney Halls to the Integrated Research and Innovation Center	\$18,150	\$194,365
46	24/7	059	2	Stormwater Catch Basin and Manhole Upgrades	\$141,130	\$1,863,576
47	24/7	061	2	Stormwater and Sanitary Sewer Major Renairs on Nez Perce Drive	\$31,570	\$340,961
40	24/7	036	2	Primary Electric Switch Ungrades	\$23,740	\$2 700 652
50	24/1	013	3	Emergency Generator at the Energy Plant	\$82.170	\$779.964
51	24/1	015	3	Utility Tunnel Upgrades	\$58,960	\$1,920,151
52	24/2	067	3	Chilled Water Capacity Upgrade at the North Campus Chiller Plant	\$380,050	\$12,489,269
53	24/6	068	3	Sanitary Sewer Service Lines Recondition on 6th Street	\$44,330	\$793,429
54	24/6	069	3	Sanitary Sewer Line Recondition on Perimeter Drive	\$23,320	\$424,622
55	24/6	070	3	Sanitary Sewer Line Recondition on Rayburn Street	\$56,760	\$997,861
56	24/6	071	3	Sanitary Sewer Line Recondition from the Theophilus Tower to 6th Street	\$18,810	\$343,050
57	24/6	072	3	Sanitary Sewer Service Lines Recondition at the Wallace Residence Center	\$31,680	\$584,414
58	24/8	073	3	Compressed Air Upgrades	\$52,580	\$437,709
<u>59</u>	24/4	016	э 4	Weil #5 Wouldhildtilli	\$153,010	\$3,U85,924 \$1,820,672
61	24/1	014	4	Energy Plant Building Envelope Upgrades	\$37,090	\$1,000,072
62	24/1	008	4	Feedwater System Upgrades	\$91.190	\$1.939.253
63	24/1	017	4	Wood Boiler Capital Renewal, Phase II	\$319,440	\$3,297,320
64	24/1	018	4	Wood Fuel Storage Conveyance System Upgrades	\$131,340	\$1,056,350
65	24/1	019	4	Wood Fuel Storage Facility Upgrades	\$105,820	\$630,006

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66	24/3	075	4	Campus Primary Distribution Improvements	\$383,130	\$21,254,574
67	24/4	076	4	I Tank Recoat	\$49,940	\$3,939,385
68	24/6	077	4	Sanitary Sewer Line Recondition from West Kibbie Dome to Perimeter Drive	\$26,950	\$492,785
69	24/7	078	4	Stormwater Line Recondition on Rayburn Street	\$74,140	\$1,302,603
70	24/7	079	4	Stormwater Line Recondition on Stadium Drive	\$30,250	\$552,008
71	24/1	020	5	Water Treatment Improvements, Phase II	\$79,530	\$2,070,178
72	24/2	023	5	Emergency Generator at the South Campus Chiller Plant	\$72,050	\$671,431
73	24/4	080	5	Golf Course Water Tank Recoat	\$56,980	\$7,070,519
74	24/3	081	5	North Farm Agrisolar Array	\$536,470	\$19,822,953
PROPOSED CAPITAL IMPROVEMENT COST \$8,315,120						

V. Capital Improvements by Utility System and Priority.

UTILITY SYSTEM: STEAM AND CONDENSATE (INFO /1)

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST	
1	24/1	002	1	Ash Handling System Upgrades	\$242,660	\$3,349,524	
3	24/1	009	1	Boiler Controls Modernization	\$447,260	\$4,934,866	
13	24/1	003	1	Steam Piping Upgrades at the Energy Plant	\$58,960	\$3,338,022	
14	24/1	004	1	Gas Boilers Capital Renewal	\$207,900	\$5,708,096	
15	24/1	005	1	Utility Tunnel Repair on 6th Street	\$131,120	\$3,574,107	
25	24/1	012	2	Steam and Condensate Distribution Upgrades	\$57,200	\$6,414,216	
26	24/1	010	2	Wood Boiler Capital Renewal, Phase I	\$260,480	\$2,593,877	
50	24/1	013	3	Emergency Generator at the Energy Plant	\$82,170	\$779,964	
51	24/1	015	3	Utility Tunnel Upgrades	\$58,960	\$1,920,151	
60	24/1	016	4	Condensate Return System Upgrades	\$57,090	\$1,830,672	
61	24/1	014	4	Energy Plant Building Envelope Upgrades	\$151,030	\$4,078,318	
62	24/1	008	4	Feedwater System Upgrades	\$91,190	\$1,939,253	
63	24/1	017	4	Wood Boiler Capital Renewal, Phase II	\$319,440	\$3,297,320	
64	24/1	018	4	Wood Fuel Storage Conveyance System Upgrades	\$131,340	\$1,056,350	
65	24/1	019	4	Wood Fuel Storage Facility Upgrades	\$105,820	\$630,006	
71	24/1	020	5	Water Treatment Improvements, Phase II	\$79,530	\$2,070,178	
PROP	ROPOSED CAPITAL IMPROVEMENT COST \$2,482,150						

UTILITY SYSTEM: CHILLED WATER (INFO /2)

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
8	24/2	063	1	Chilled Water Wintertime Capacity Upgrade	\$21,230	\$2,659,652
11	24/2	065	1	Chilled Water Capacity Upgrade at the South Campus Chiller Plant (Proposal B)	\$507,650	\$23,370,631
36	24/2	021	2	Chilled Water Distribution Upgrades, Phase I	\$248,050	\$965,710
52	24/2	067	3	Chilled Water Capacity Upgrade at the North Campus Chiller Plant	\$380,050	\$12,489,269
72	24/2	023	5	Emergency Generator at the South Campus Chiller Plant	\$72,050	\$671,431
PROP	PROPOSED CAPITAL IMPROVEMENT COST \$1,229,030					

UTILITY SYSTEM: ELECTRIC (INFO /3)

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
2	24/3	062	1	Agricultural Science Building Electrical Service Replacement	\$141,900	\$1,974,462
4	24/3	024	1	Electrical Transformer and Primary Components Equipment Reserve	\$35,090	\$1,698,159
10	24/3	025	1	Electrical Vault Inspections and Upgrades	\$583,220	\$5,459,675
12	24/3	026	1	Menard Law Building Electrical Service Replacement	\$80,300	\$868,675
24	24/3	066	2	Microgrid Expansion, Phase I	\$97,680	\$1,506,795
27	24/3	028	2	Administration South Building Electrical Service Replacement	\$80,300	\$825,018
28	24/3	029	2	Art & Architecture North Building Electrical Service Replacement	\$80,300	\$804,868
29	24/3	030	2	College of Natural Resources Building Electrical Service Replacement	\$80,300	\$938,080
30	24/3	031	2	Hartung Theatre Electrical Service Replacement	\$80,300	\$808,226
31	24/3	032	2	Theophilus Tower Electrical Service Replacement	\$80,300	\$867,556
32	24/3	033	2	Physical Education Building Electrical Service Replacement	\$80,300	\$825,018
33	24/3	034	2	Swimming Center Building Electrical Service Replacement	\$80,300	\$825,018
34	24/3	035	2	West Farm Primary Distribution Improvements	\$143,550	\$10,270,321
49	24/3	036	2	Primary Electric Switch Upgrades	\$130,240	\$2,700,658
66	24/3	075	4	Campus Primary Distribution Improvements	\$383,130	\$21,254,574
74	24/3	081	5	North Farm Agrisolar Array	\$536,470	\$19,822,953
PROP	OSED C	ΑΡΙΤΑΙ	IMPRO	/FMENT COST	\$2 693 680	\$71,450,056

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UTILITY SYSTEM: DOMESTIC WATER (INFO /4)

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST	
7	24/4	037	1	Fire Hydrant Major Repairs	\$57,860	\$804,572	
9	24/4	064	1	Well #4 Modernization	\$153,010	\$5,085,924	
16	24/4	038	1	Domestic Water Line Replacement on the Central Mall	\$32,560	\$451,741	
22	24/4	040	1	Backflow Assemblies Replacement at the South Hill Apartments	\$97,460	\$1,336,636	
23	24/4	039	1	Domestic Water Vault Improvements at the Sheep Center	\$27,390	\$386,495	
35	24/4	042	2	Backflow Assemblies Replacement at the McClure Hall	\$9,020	\$100,709	
37	24/4	043	2	Domestic Water Line Replacement on University Avenue	\$101,640	\$1,358,484	
38	24/4	044	2	Domestic Water Line Replacement to the Energy Plant	\$14,740	\$224,242	
39	24/4	045	2	Domestic Water Line Replacement to the Agricultural Science Building	\$19,030	\$273,576	
40	24/4	046	2	Domestic Water Line Replacement to the Food Research Center	\$20,790	\$291,515	
41	24/4	047	2	Domestic Water Line Replacement on Blake Avenue	\$200,860	\$2,653,907	
59	24/4	074	3	Well #3 Modernization	\$153,010	\$5,085,924	
67	24/4	076	4	I Tank Recoat	\$49,940	\$3,939,385	
73	24/4	080	5	Golf Course Water Tank Recoat	\$56,980	\$7,070,519	
PROPOSED CAPITAL IMPROVEMENT COST \$994,290							

UTILITY SYSTEM: SANITARY SEWER (INFO /6)

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST	
5	24/6	048	1	Sanitary Sewer Major Repairs at the Library and the Memorial Gym	\$26,730	\$401,032	
17	24/6	051	1	Sanitary Sewer Line Recondition on Line Street	\$46,860	\$638,515	
18	24/6	050	1	Sanitary Sewer Manhole Replacements	\$43,560	\$596,052	
20	24/6	049	1	Sanitary Sewer Line Recondition on Campus Drive and Blake Avenue	\$17,380	\$226,281	
42	24/6	052	2	Sanitary Sewer Line Recondition at the West Farm	\$17,930	\$249,100	
43	24/6	053	2	Sanitary Sewer Line Replacement at the Bruce M. Pitman Center	\$19,580	\$211,909	
44	24/6	054	2	Sanitary Sewer Line Replacement at the Administration Building and Art & Architecture Building	\$39,050	\$520,328	
45	24/6	055	2	Sanitary Sewer Line Recondition from the Brink and Phinney Halls to the Integrated Research and Innovation Center	\$18,150	\$194,365	
53	24/6	068	3	Sanitary Sewer Service Lines Recondition on 6th Street	\$44,330	\$793,429	
54	24/6	069	3	Sanitary Sewer Line Recondition on Perimeter Drive	\$23,320	\$424,622	
55	24/6	070	3	Sanitary Sewer Line Recondition on Rayburn Street	\$56,760	\$997,861	
56	24/6	071	3	Sanitary Sewer Line Recondition from the Theophilus Tower to 6th Street	\$18,810	\$343,050	
57	24/6	072	3	Sanitary Sewer Service Lines Recondition at the Wallace Residence Center	\$31,680	\$584,414	
68	24/6	077	4	Sanitary Sewer Line Recondition from West Kibbie Dome to Perimeter Drive	\$26,950	\$492,785	
PROPOSED CAPITAL IMPROVEMENT COST \$431,090							

UTILITY SYSTEM: STORM WATER (INFO /7)

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
6	24/7	056	1	Stormwater Major Repairs at the Library and the Memorial Gym	\$96,580	\$1,272,361
19	24/7	058	1	Stormwater Line Installation from the Art & Architecture Building to Line Street	\$14,410	\$157,976
21	24/7	057	1	Stormwater Line Recondition on Campus Drive and Blake Avenue	\$18,480	\$262,127
46	24/7	059	2	Stormwater Catch Basin and Manhole Upgrades	\$141,130	\$1,863,576
47	24/7	060	2	Stormwater Line Installation from the Wallace Residence Center to Paradise Creek	\$31,570	\$346,961
48	24/7	061	2	Stormwater and Sanitary Sewer Major Repairs on Nez Perce Drive	\$25,740	\$264,731
69	24/7	078	4	Stormwater Line Recondition on Rayburn Street	\$74,140	\$1,302,603
70	24/7	079	4	Stormwater Line Recondition on Stadium Drive	\$30,250	\$552,008
PROP	OSED C	ΔΡΙΤΔΙ	IMPRO	VEMENT COST	\$432,300	\$6,022,344

UTILITY SYSTEM: COMPRESSED AIR (INFO /8)

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
58	24/8	073	3	Compressed Air Upgrades	\$52,580	\$437,709
PROP	OSED C	APITAL I	MPRO	VEMENT COST	\$52,580	\$437,709

VI. Capital Improvements by Year and Priority.

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2024

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
1	24/1	002	1	Ash Handling System Upgrades	\$242,660	\$3,349,524
2	24/3	062	1	Agricultural Science Building Electrical Service Replacement	\$141,900	\$1,974,462
3	24/1	009	1	Boiler Controls Modernization	\$447,260	\$4,934,866
4	24/3	024	1	Electrical Transformer and Primary Components Equipment Reserve	\$35,090	\$1,698,159
5	24/6	048	1	Sanitary Sewer Major Repairs at the Library and the Memorial Gym	\$26,730	\$401,032
6	24/7	056	1	Stormwater Major Repairs at the Library and the Memorial Gym	\$96,580	\$1,272,361
7	24/4	037	1	Fire Hydrant Major Repairs	\$57,860	\$804,572
8	24/2	063	1	Chilled Water Wintertime Capacity Upgrade	\$21,230	\$2,659,652
9	24/4	064	1	Well #4 Modernization	\$153,010	\$5,085,924
10	24/3	025	1	Electrical Vault Inspections and Upgrades	\$583,220	\$5,459,675
11	24/2	065	1	Chilled Water Capacity Upgrade at the South Campus Chiller Plant (Proposal B)	\$507,650	\$23,370,631
12	24/3	026	1	Menard Law Building Electrical Service Replacement	\$80,300	\$868,675
13	24/1	003	1	Steam Piping Upgrades at the Energy Plant	\$58,960	\$3,338,022
14	24/1	004	1	Gas Boilers Capital Renewal	\$207,900	\$5,708,096
15	24/1	005	1	Utility Tunnel Repair on 6th Street	\$131,120	\$3,574,107
16	24/4	038	1	Domestic Water Line Replacement on the Central Mall	\$32,560	\$451,741
17	24/6	051	1	Sanitary Sewer Line Recondition on Line Street	\$46,860	\$638,515
18	24/6	050	1	Sanitary Sewer Manhole Replacements	\$43,560	\$596,052
19	24/7	058	1	Stormwater Line Installation from the Art & Architecture Building to Line Street	\$14,410	\$157,976
20	24/6	049	1	Sanitary Sewer Line Recondition on Campus Drive and Blake Avenue	\$17,380	\$226,281
21	24/7	057	1	Stormwater Line Recondition on Campus Drive and Blake Avenue	\$18,480	\$262,127
22	24/4	040	1	Backflow Assemblies Replacement at the South Hill Apartments	\$97,460	\$1,336,636
23	24/4	039	1	Domestic Water Vault Improvements at the Sheep Center	\$27,390	\$386,495
PROP	DSED C/	APITAL I	IMPRO\	/EMENT COST	\$3,089,570	\$68,555,582

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2025

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
24	24/3	066	2	Microgrid Expansion, Phase I	\$97,680	\$1,506,795
25	24/1	012	2	Steam and Condensate Distribution Upgrades	\$57,200	\$6,414,216
26	24/1	010	2	Wood Boiler Capital Renewal, Phase I	\$260,480	\$2,593,877
27	24/3	028	2	Administration South Building Electrical Service Replacement	\$80,300	\$825,018
28	24/3	029	2	Art & Architecture North Building Electrical Service Replacement	\$80,300	\$804,868
29	24/3	030	2	College of Natural Resources Building Electrical Service Replacement	\$80,300	\$938,080
30	24/3	031	2	Hartung Theatre Electrical Service Replacement	\$80,300	\$808,226
31	24/3	032	2	Theophilus Tower Electrical Service Replacement	\$80,300	\$867,556
32	24/3	033	2	Physical Education Building Electrical Service Replacement	\$80,300	\$825,018
33	24/3	034	2	Swimming Center Building Electrical Service Replacement	\$80,300	\$825,018
34	24/3	035	2	West Farm Primary Distribution Improvements	\$143,550	\$10,270,321
35	24/4	042	2	Backflow Assemblies Replacement at the McClure Hall	\$9,020	\$100,709
36	24/2	021	2	Chilled Water Distribution Upgrades, Phase I	\$248,050	\$965,710
37	24/4	043	2	Domestic Water Line Replacement on University Avenue	\$101,640	\$1,358,484
38	24/4	044	2	Domestic Water Line Replacement to the Energy Plant	\$14,740	\$224,242
39	24/4	045	2	Domestic Water Line Replacement to the Agricultural Science Building	\$19,030	\$273,576
40	24/4	046	2	Domestic Water Line Replacement to the Food Research Center	\$20,790	\$291,515
41	24/4	047	2	Domestic Water Line Replacement on Blake Avenue	\$200,860	\$2,653,907
42	24/6	052	2	Sanitary Sewer Line Recondition at the West Farm	\$17,930	\$249,100
43	24/6	053	2	Sanitary Sewer Line Replacement at the Bruce M. Pitman Center	\$19,580	\$211,909
44	24/6	054	2	Sanitary Sewer Line Replacement at the Administration Building and Art & Architecture Building	\$39,050	\$520,328
45	24/6	055	2	Sanitary Sewer Line Recondition from the Brink and Phinney Halls to the Integrated Research and Innovation Center	\$18,150	\$194,365
46	24/7	059	2	Stormwater Catch Basin and Manhole Upgrades	\$141,130	\$1,863,576
47	24/7	060	2	Stormwater Line Installation from the Wallace Residence Center to Paradise Creek	\$31,570	\$346,961
48	24/7	061	2	Stormwater and Sanitary Sewer Major Repairs on Nez Perce Drive	\$25,740	\$264,731
49	24/3	036	2	Primary Electric Switch Upgrades	\$130,240	\$2,700,658
PROP	OSED C	APITAL	IMPRO	/EMENT COST	\$2,158,530	\$38,898,764

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PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2026

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
50	24/1	013	3	Emergency Generator at the Energy Plant	\$82,170	\$779,964
51	24/1	015	3	Utility Tunnel Upgrades	\$58,960	\$1,920,151
52	24/2	067	3	Chilled Water Capacity Upgrade at the North Campus Chiller Plant	\$380,050	\$12,489,269
53	24/6	068	3	Sanitary Sewer Service Lines Recondition on 6th Street	\$44,330	\$793,429
54	24/6	069	3	Sanitary Sewer Line Recondition on Perimeter Drive	\$23,320	\$424,622
55	24/6	070	3	Sanitary Sewer Line Recondition on Rayburn Street	\$56,760	\$997,861
56	24/6	071	3	Sanitary Sewer Line Recondition from the Theophilus Tower to 6th Street	\$18,810	\$343,050
57	24/6	072	3	Sanitary Sewer Service Lines Recondition at the Wallace Residence Center	\$31,680	\$584,414
58	24/8	073	3	Compressed Air Upgrades	\$52,580	\$437,709
59	24/4	074	3	Well #3 Modernization	\$153,010	\$5,085,924
PROP	OSED C	APITAL	IMPRO	VEMENT COST	\$901,670	\$23,856,393

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2027

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
60	24/1	016	4	Condensate Return System Upgrades	\$57,090	\$1,830,672
61	24/1	014	4	Energy Plant Building Envelope Upgrades	\$151,030	\$4,078,318
62	24/1	008	4	Feedwater System Upgrades	\$91,190	\$1,939,253
63	24/1	017	4	Wood Boiler Capital Renewal, Phase II	\$319,440	\$3,297,320
64	24/1	018	4	Wood Fuel Storage Conveyance System Upgrades	\$131,340	\$1,056,350
65	24/1	019	4	Wood Fuel Storage Facility Upgrades	\$105,820	\$630,006
66	24/3	075	4	Campus Primary Distribution Improvements	\$383,130	\$21,254,574
67	24/4	076	4	I Tank Recoat	\$49,940	\$3,939,385
68	24/6	077	4	Sanitary Sewer Line Recondition from West Kibbie Dome to Perimeter Drive	\$26,950	\$492,785
69	24/7	078	4	Stormwater Line Recondition on Rayburn Street	\$74,140	\$1,302,603
70	24/7	079	4	Stormwater Line Recondition on Stadium Drive	\$30,250	\$552,008
PROP	DSED C	APITAL	IMPRO	/EMENT COST	\$1,420,320	\$40,373,274

PROPOSED CAPITAL IMPROVEMENTS FISCAL YEAR 2028

PRIO	INFO	CODE	YEAR	NAME	ADDITIONAL WORK	INDICATIVE COST
71	24/1	020	5	Water Treatment Improvements, Phase II	\$79,530	\$2,070,178
72	24/2	023	5	Emergency Generator at the South Campus Chiller Plant	\$72,050	\$671,431
73	24/4	080	5	Golf Course Water Tank Recoat	\$56,980	\$7,070,519
74	24/3	081	5	North Farm Agrisolar Array	\$536,470	\$19,822,953
PROP	OSED C	APITAL I	IMPRO	VEMENT COST	\$745,030	\$29,635,081

APPENDIX A. Project Sheets for Capital Improvements

PROJECT CODE: 24/1-002

PROJECT NAME: Ash Handling System Upgrades

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u>. The impact associated with resiliency is <u>high</u> (failure likely to disable the wood fuel boiler).

The likelihood of these events is <u>high</u> (equipment is heavily damaged, failure is imminent).

q	High	3	2	1
ikelihoo	Med	4	3	2
	Low	5	4	3
PH	\SE	Low	Med	High
ASSI	GNED		Impact	

Background: The ash handling system removes wood ash from the boiler after combustion and is critical for operation. It consists of a series of ash hoppers, augers, and mechanical conveyance systems used to move the ash from the boiler to a truck located outside of the plant for disposal. The wood boiler provides significant economic and environmental benefits to the University (\$1.7 million in FY22, in fuel savings by not using natural gas), however, at 36 years old, many of the subsystems are in critical need of upgrade. Most of the existing system is original equipment, well beyond expected operational life, and heavily damaged from years of use. Major components are warped from the heat, leaking, and breaking down frequently, creating severe fire risks.

By November 2022, major components in the ash handling system had failed or displayed signs of imminent failure since this project was originally proposed. It is highly probable that the system will fail as a whole soon, significantly increasing Supply Costs to the University when gas boilers need to be brought online (up to 2 to 5 times more).

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade and improve the ash handling system for the wood boiler to increase operational uptime.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address serious safety concerns associated with the physical condition of current assets.
- Address long term health and safety concerns from ash exposure (per 29 CFR OSHA 1910.134 respiratory protection).
- Change and improve assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project replaces the existing ash handling system with a new, more efficient system which removes the ash material and separates fine from large ash during the process. The project includes enclosing, isolating, and sealing the system to prevent the release of ash into the Energy Plant environment. Sealing the system will significantly reduce the amount of ash that builds up in the plant, which will reduce worker exposure to

respiratory irritants and increase the expected life of exposed mechanical and electrical systems throughout the plant. Separating fine and large ash generates a potential revenue stream, as fine ash has a higher economic value. A complete redesign and replacement of the system, and an economic feasibility study for separating fine ash (included in the Additional Work), is required to determine operational strategy.

The scope of work of this Capital Improvement is:

- Demolition of the existing ash handling system, including:
 - Ash conveyors and subsystems (x9).
 - Elevating conveyor and subsystems.
- Install new ash handling system including:
 - Fine ash conveyor (x1).
 - Large ash conveyor (x1).
 - Elevating conveyors (x2).

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University for the wood boiler shutdown from spring to fall to minimize the gas use during the construction stage. In addition, the Concessionaire will engage with the relevant University departments to identify potential impacts or benefits from the current ash waste.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$242,660 and will also include (i) a schematic design of ash handling improvements, (ii) a feasibility study for fine ash separation, and (iii) an emergency replacement of heavily damaged components.

Additional Information:



Figure 1. Schematic design of ash handling system.



Figure 2. 3/8" steel plate completely worn through from heavy use.



Figure 3. Elevated conveyance system is twisted and damaged, creating a potential crushing hazard if structural integrity becomes compromised.

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Figure 4. Elevating conveyance system needs to be replaced.



Figure 5. Ash augers are heavily worn, significantly reducing performance.



Figure 6. System is becoming heavily damaged, causing excessive dust build-up and breakdowns.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$3,349,524.
- (B) Forecasted annual operations and maintenance costs: +\$6,000. The increase is associated with the fine ash conveyor (a new piece of equipment not previously present) and new system's specific O&M requirements to maintain expected life.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is

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assumed that (i) construction will be coordinated with the University and completed within one summer to minimize wood boiler downtime, (ii) sufficient space for parallel fine and large ash conveyance systems will be available. Excluded work includes (i) the repair or replacement of ash hopper firebricks or refractory, and (ii) the repair or replacement of the F700 ash truck.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved ash handling will increase the reliability of the wood-fueled boiler, reducing the natural gas consumption and greenhouse gas emissions. The collection of fine ash can be used for land applications.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$3,284,600.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$7,500, wood fuel, natural gas, and electricity. It is assumed a 1% increase in wood boiler uptime, improved conveyance efficiency.

PROJECT CODE: 24/3-062

PROJECT NAME: Agricultural Science Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high (transformer is showing</u> signs of degradation, flooding occurring in space).



Background: Long term exposure to heat, vibration, and other stresses slowly break down the internal components and insulation of transformers. Eventually these stresses create a short, resulting in damage and breakdown of the transformer. As the transformer ages the likelihood of failure increases, rising significantly once it reaches its end of life.

The dry-type transformer serving the 1970's wing of the Agricultural Science Building is 10 years beyond its useful life and has no record of being tested historically. It is both hot and noisy, indicating failure is likely. It is located in a basement mechanical room which shows regular signs of flooding, posing a high risk of catastrophic damage and potential electrocution risk. These are the same conditions as in the Teaching and Learning Center prior to the flood in 2019 that shut down the building for three weeks. The flooding in this space, coupled with the high room temperature and lack of ventilation makes it a poor location for a transformer serving critical research.

There is no spare transformer on campus if this transformer fails. Given continued market disruptions and very long lead times (over 1 year), a failure here will likely result in an extended building shutdown and severe impacts to nearby buildings such as the 50's wing of the Agricultural Sciences Building, Agricultural Biotechnology Building, and the Teaching and Learning Center. The main switch gear is the same age and should be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is the University's responsibility.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a severe safety and resiliency issue.
- Modernize electrical service to building up to the point of demarcation.
- Achieve a safe arc flash condition at the primary equipment to establish necessary PPE for O&M work.
- Implement required O&M for a safe and reliable operation.

Scope of Work: This project replaces and relocates the transformer to more a suitable location outside, while also upgrading the feeders and metering. Currently the primary feeders to the building are routed through the utility tunnel. To reduce the amount of excavation needed this pathing will be used for the new secondary feeders. The scope of work of this Capital Improvement is:

- Provide new 750 kVA exterior pad-mounted transformer with switch to replace dry-type transformer currently installed on the interior of the building. Thermograph and oil test to establish baseline records.
- Demolition and disposal of existing transformer and building switch in basement.
- Provide new SEL-735 or equivalent electrical meter.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalizer to new transformer. Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service via tunnel network.
- Arc flash analysis and labeling per NFPA 70E.
- Primary switch vault work:
 - Repair damaged items in electrical vaults accessed for transformer replacement.
 - Repair any areas of water infiltration in electrical vault, provide water management system as necessary.
 - Thermograph vault components, establish baseline records.
- Construct brick screen wall between electrical equipment and vegetation to match building.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Initial oil and thermographic baseline tests.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk (safety will need to be aware of and planned for public walk area). Arc Flash PPE required.

The Concessionaire will coordinate with the occupants and the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$141,900 and will also include (i) 30% electrical

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designs to obtain pricing, (ii) 50% architectural design for the decorative screen wall, (iii) conducting a 30-day power study to evaluate load size for transformer sizing, and (iv) coordination with the University for screen wall and equipment placement.

Additional Information:



Figure 1. Evidence that room floods regularly, posing severe risk to transformer.



Figure 2. Dry type transformer is very noisy and hot.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,974,462
- (B) Forecasted annual operations and maintenance costs: +\$1,000. The upgraded electric meter will require additional O&M. New oil filled transformer has additional O&M requirements compared to existing dry type.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) lead times for equipment is estimated to be 52 weeks, (ii) new transformer is expected to have the same capacity as existing, dependent on the electrical load studies, (iii) sufficient space is available in the tunnel network for new feeders, (iv) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding vegetation, and (vi) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) the repair or replacement of primary electrical distribution switch, (ii) the restoration of vegetation (owner is University), (iii) the disconnection/reconnection of any irrigation lines (owner is University), (iv) temporary electric generator to support building during shutdown, and (v) the replacement of building main distribution panel (owner is University).

(E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from September 2025 to February 2026. EPC (Commiss.) occurs in March 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,940,400
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$500. Electricity. It is assumed a 1% electrical efficiency improvement based on historic metering.

PROJECT CODE: 24/1-009

PROJECT NAME: Boiler Controls Modernization

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical, life safety, and health issues). The impact associated with resiliency is <u>high</u> (one boiler has been permanently shut down, limited ability to operate during power outages).

The likelihood of these events is <u>high</u> (controls have completely failed on two boilers).



Background: The control systems for each boiler at the Energy Plant are over 30 years old and no longer made or supported by the manufacturer. Currently there are no commercially available replacement parts for the existing systems. The controls for the wood boiler fail regularly, which puts the boiler out of compliance with the University's Air Quality Permit with Idaho DEQ due to excessive particulate matter, CO, and NOx emissions (Req. 40 CFR EPA Subchapter U, Title V operating permit). The gas boiler controls are currently located at each boiler instead of centralized, significantly increasing response time to problems and reducing the Energy Plant's ability to monitor equipment. The Chilled Water and Compressed Air system controls are also located far away from the operator's station. As critical components of the Steam and Chilled Water systems, when these controls fail, the respective utility system also fails. With spare parts no longer available for the boilers, there is risk of permanent boiler shutdowns until the controls are replaced. Shutdown of boilers risks N+1 Performance Standards for the Steam and Condensate system, posing a significant risk to campus.

By July 2022, two gas boilers had experienced combustion control malfunctions due to failed controls since this project was first submitted, risking an explosion if operated. To maintain necessary N+1 redundancy, the remaining functional controls on C Boiler have been removed and used to repair the controls on boiler B and keep it operational. As such, C Boiler is inoperable until a Capital Improvement that addresses this problem is completed. Given the recent failures in 2 of the 3 gas boilers, it is unlikely B Boiler will continue running reliably for much longer. This condition severely limits the Energy Plant's ability to generate steam if there is a power disruption, or if the wood boiler is not running (such as during regular scheduled maintenance). The loss of B Boiler also risks the ability to meet campus winter heating loads, as it is the largest capacity boiler in the plant, posing a severe life safety risk to campus occupants, especially housing, and freezing pipes in buildings.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Centralize the Energy Plant's controls to improve response times before severe damage occurs.
- Mitigate severe resiliency issues associated with current controls systems which are well beyond their serviceable

life.

- Address serious safety concerns associated with the physical condition of current assets.
- Address long term health and safety concerns from wood dust, ash, temperature, and noise exposure requiring engineering controls (per 29 CFR OSHA 1910.95/1910.120/1910.134).
- Change and reconfigure assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project addresses all of the problems mentioned above by upgrading and centralizing the boiler and utility control systems into one location to improve plant safety and operational efficiency. The scope of work of this Capital Improvement is:

- Demolition of the existing supervisors' office.
- Construction of a 2-story, 30ft x 12ft centralized control room with office space on second story.
- Installation, wiring, and programming of a new SCADA system to include the following systems:
 - Wood boiler (1x).
 - Natural gas boilers (x3).
 - Feedwater pumps (x4).
 - Condensate pumps (x4).
 - Air compressors (x3).
- Integrate the following existing packaged controls into the new SCADA system:
 - Steam turbines (x3).
 - Absorption chillers (x2).
 - Cooling towers (x3).
 - Emergency generator (x1).
- Install a standalone server for data collection and storage.
- Catwalk modification for access to second story.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design, bidding, and as-built documents.
 - O&M manuals.
 - System testing and commissioning.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage, including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

The Concessionaire will coordinate with the University (specifically UI PTS) for potential a construction laydown area in Lot 14.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this

proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$447,260 and will also include (i) the development of 50% electrical and controls engineering documents for vendor package PLC controls and Master Control System integration, (ii) 50% design documents for architectural, structural, mechanical, and electrical of new control room and office, (iii) the development of a scope to define graphical display for monitoring, trending, and metering, and (iv) the development of a scope for a new Plant Master Control System historian to enable logging, trending, and recording key system parameters.

Additional Information:





Figure 1. Existing operator station is manned 24/7 and exposed to environmental hazards.

Figure 2. Example of obsolete gas boiler controls.



Figure 3. Unsafe environmental temperatures at 24/7 manned station.



Figure 4. C Boiler controls removed to support B Boiler.



Figure 5. Obsolete boiler controls.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$4,934,866.
- (B) Forecasted annual operations and maintenance costs: +\$10,000. The increase is associated with a more complex and expanded control system. Additional controls and server maintenance needs. The new system will have specific O&M requirements to maintain expected life.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) commercially available control systems will be compatible with existing boilers, (ii) sufficient space will exist for the necessary centralized control room and supervisors' office, and (iii) staged demolition and construction of controls at each boiler will occur, so N+1 redundancy is maintained in the event of a failure. Coordination with the University for other work that may impact this project will occur.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Fewer greenhouse gas emissions and improved air quality in the proximity of the Energy Plant from reduced fuel consumption and higher efficiency.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$4,852,100.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$24,000, wood, natural gas, and electricity. The decrease is associated to (i) a minor electrical load increase, and (ii) improved boiler control (it is assumed a 1% reduction in fuel costs due to improved control of boiler operations based on FY22 data).

PROJECT CODE: 24/3-024

PROJECT NAME: Electrical Transformer and Primary Components Equipment Reserve

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown)

The likelihood of these events is high.

-	High	3	2	1
kelihoo	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: Campus wide, the building electrical services, including conductors, connectors, transformers, and switches are aged, have no record of being tested or maintained, and are a significant risk to the reliability of the campus electrical system. The existing transformer reserve consists of failed, used, and otherwise unknown transformers that cannot be relied upon in the event of a failure. Recent failures indicate that substantial upgrade work is needed to bring the electrical distribution system up to the required operating conditions. This upgrade work is likely to take many years and additional failures are imminent.

Lead times for primary electrical components are very long (more than a year) for high cost assets such as transformers, significantly increasing the risk of an outage. Without this work, extended outages could interrupt University business, cause property damage, and render unsafe occupancy conditions.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve the safety/reliability of the primary electrical distribution system by preparing immediate response to outages.
- Maintain Performance Standard Part V.6, 7, and 8 and mitigate negative impact to Availability KPIs.
- Provide reserve transformers for emergency replacement service.
- Achieve a reserve supply of strategic primary electrical assets such as transformers, elbows, and bushings.
- Establish baseline condition of primary electrical components.
- Procure emergency generation for fast dispatch to address electrical outages due to failures.

Scope of Work: This project establishes mechanisms to respond to electrical distribution outages while permanent solutions are being planned and implemented. These assets are also required to complete planned replacements of primary electrical system components to reduce impact from long lead times. The scope of work of this Capital Improvement is:

- Evaluate existing transformer reserve. Retain, refurbish, or dispose of existing as determined.
- Purchase, receive, and stock an equipment reserve including strategic transformer sizes including one (1) 13.2kV:480V transformer and one (1) 13.2kV:208V transformer.
- Purchase lowboy trailer to transport transformers.
- Purchase portable generation (480V and 208V) for response to emergency power outages.
- Coordinate the equipment reserve with transformer replacements to maintain a rotating stock.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- Report documenting results of the transformer reserve assessment and inventory of in-service equipment.
- Project documents:
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

As part of the safety plan, equipment will be stored safely and prepared for safe deployment.

The Concessionaire will coordinate with the University to provide access to all transformers and vaults required for the Additional Work.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$35,090 and will also include (i) an assessment of the transformer reserve to determine usefulness, and (ii) an assessment of the in-service transformers to determine number, size, and characteristics to stock.

Additional Information:



Figure 1. Portable generation in place while transformer is being removed/replaced.


Figure 2. Replacement transformers can take over a year to procure. Dimensions and electrical specifications are critical.



Figure 3. Existing inventory has no known good spares.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

(A) Total Cost: \$1,698,159.

(B) Forecasted annual operations and maintenance costs: +\$750. Additional O&M Costs for new generation.

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- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) a strategic reserve of primary electric components will allow much more predictable response to electrical failures, (ii) market volatility for primary electric components will not affect lead times or pricing, and (iii) a strategic reserve may serve as rotating stock if sizing is correct for permanent solutions. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the replacement of in-service transformers, and (ii) any oil sampling, thermography, or other testing of in-service transformers.
- (E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Commiss.) occurs in September 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,668,700.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. The equipment will be static in reserve during normal operations.

PROJECT CODE: 24/6-048

PROJECT NAME: Sanitary Sewer Major Repairs at the Library and the Memorial Gym

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues due to leaking sewage). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (inspection shows that failure is imminent).



Background: The sanitary sewer lines in this area are critical to removing waste from multiple buildings, including the Art & Architecture North Building, the College of Education, the Memorial Gym, and the Library. Investigations conducted during Fiscal Year 2019 showed these lines are in extremely poor condition with collapse imminent. Multiple broken sections of pipe are present with heavy grease buildup. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area.

Emergency repairs were completed in FY19 after a section of these lines collapsed, but only one section was repaired despite the upstream lines being in equally poor condition. The stormwater lines in this area are also in poor condition and Capital Improvement 24/7-056 Stormwater Major Repairs at the Library and Memorial Gym should be Approved with this project to reduce overall costs and disruption.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Repair highly damaged pipe before collapse disrupts campus operations.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety/public health concerns due to leaking sewage in core campus areas.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project reconditions the above-mentioned sanitary sewer lines to prevent further damage, flooding, and disruption to connected buildings. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Recondition existing 10" AC pipe at Library (depth=21', length=60').
- Recondition existing 8" AC pipe (depth=21', length=60').
- Recondition existing 6" AC pipe serving Memorial Gym (length=100').
- Bedding and backfill.
- Bypass pumping to support building operations.
- Recondition manhole.
- Construction supervision.
- CCTV inspect and jet lines.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, confined space work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$26,730 and it will also include conducting a CCTV inspection and jetting.

Additional Information:



Figure 2. Map of sanitary sewer system by the Memorial Gym and the Library.

Figure 1. Condition of 10" sewer line after inspection.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$401,032.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes and manhole are not damaged to a point that complete replacement is required (project will be rescoped and repriced if replacement is necessary), (ii) bypass pumping is required to keep campus core functions operable and is included in the scope, (iii) traffic control and possibly re-route will be required, (iv) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) the replacement of pipes or manholes, (ii) the restoration of vegetation (owner is University), and (iii) the disconnection/reconnection of irrigation lines (owner is University).
- (E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: None.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$393,800.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/7-056

PROJECT NAME: Stormwater Major Repairs at the Library and the Memorial Gym

UTILITY SYSTEM: Storm Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (lines are heavily damaged and collapse is imminent).



Background: These stormwater lines serving the area between the Library and Memorial Gym are critical to removing water during rain events. They reduce the likelihood of flooding in core campus buildings from storm events, in particular the special collections area of the Library. At 94 years old these lines are in extremely poor condition and heavily damaged with collapse imminent. These pipes have dozens of infiltrations, cracks, and broken sections that compromise its ability to remove stormwater effectively (see results of FY19 investigation below).

By reconditioning pipes before they collapse their useful life can be extended up to another 50 years, with significant cost savings from reduced excavation work. The sanitary sewer lines in this area are also in poor condition and Capital Improvement 24/6-048 Sanitary Sewer Major Repairs at the Library and the Memorial Gym should be Approved with this project to reduce overall costs and disruption.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project reconditions the line with a technology such as sliplining or cure-in-place (CIPP) lining. Some sections are in too poor of condition for reconditioning and will be burst to make way for new pipe. It also proposes a new stormwater line to reduce hydraulic loading in the existing pipes. The specific technology, methods used, and final configuration will be determined in the Additional Work. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Recondition existing 12" AC pipe at the Library (depth=21', length=170').
- Burst existing 10" pipe and replace with on-hand 10" PVC pipe (depth=21', length=130').

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- Cap and abandon in place the existing pipe east of Memorial Gym.
- Install new 4" PVC pipe east of Memorial Gym at shallow depth (200').
- Install new 10" PVC pipe south of Memorial Gym (175ft).
- Bedding and backfill.
- Install new manholes.
- CCTV inspect and jet lines.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic management will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$96,580.

Additional Information:



Figure 1. Storm Water system at Memorial Gym and Library.



Figure 2. Condition of 12" stormwater pipe after inspection.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,272,361.
- (B) Forecasted annual operations and maintenance costs: +\$500. Additional pipe will require regular cleaning, jetting, and inspection.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes, catch basins, and manholes are not damaged to a point that complete replacement is required (project will be rescoped and repriced if replacement is necessary), (ii) traffic control and possible reroute will be required, (iii) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur. Excluded work includes (i) the replacement of pipes, catch basins, or manholes, (ii) restoration of vegetation (owner is University), and (iii) the disconnection/reconnection of irrigation lines (owner is University).

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

- (F) Impact on Sustainability: Adequate stormwater control is needed to protect campus buildings and keep the Storm Water system in compliance.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,250,700.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-037

PROJECT NAME: Fire Hydrant Major Repairs

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue, lack of emergency response capability due to failures). The impact associated with resiliency is <u>high</u> (an inadequate fire suppression will impact the campus operations)

The likelihood of these events is high.

	ligh	3	2	1
poc				
ikeliha	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: The fire hydrants on campus provide critical fire protection to campus buildings and occupants. Several hydrants are aged and beyond their life expectancy. Replacement parts are becoming commercially unavailable for older hydrants, and some have failed, posing a severe fire risk to campus. Flow data doesn't exist for some hydrants due to failure and baseline records need to be established.

Objectives: The main objectives of this Capital Improvement are:

- Improve fire protection on campus.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve required the O&M practices in a safe manner.

Scope of Work: This project replaces known failed and aging hydrants. Two new hydrants will be installed with the project to improve fire protection near the Menard Law Building and the Graduate Art Studio. The scope of work of this Capital Improvement is:

- Replace 21 fire hydrants.
- Install 2 new fire hydrants.
- Provide assembly and installation of new hydrants including asphalt repair, excavation, and thrust blocks as necessary.
- Manage outages/utility interruptions required to perform work. Coordinate fire service outages.
- Provide removal and disposal of old hydrants.
- Flow test, document flows. Establish management of electronic records. Confirm adequate fire flow.
- Site sediment control, temporary traffic conditions provided/coordinated.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):

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- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - · Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

Custom safety plans for each of the 23 construction sites will be developed, including fencing of open pit areas, traffic control, and temporary walkway conditions.

The Concessionaire will coordinate with the University for all construction sites to allow for campus activities and accommodate for vehicular and pedestrian traffic. Coordination will also cover all water line shutdown requirements, and liaison with public safety entities for temporary outages of water systems.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$57,860.

Additional Information:



Figure 2. Failed hydrant on campus near a brush fire in July 2021.



Figure 1. Fire crews putting out fine in July 2021.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$804,572.
- (B) Forecasted annual operations and maintenance costs: +\$1,200. New hydrants will require annual O&M and rebuilding, ten year paint annualized.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) existing conditions will vary for landscape and hardscape replacement, (ii) water service lines to hydrants will not require replacement or upsizing, (iii) no known underground coordination issues exist, however, detailed utility location will be required, and (iv) coordination for water line and building outages will be necessary. Coordination with the University for other work that may impact this project will occur. Excluded work includes the repair or replacement of service lines or isolation valves to hydrants.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Multiple fire hydrants are not currently functional, presenting a direct threat to emergency response. Adequate emergency response for property and life protection is a fundamental requirement of campus sustainability.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$790,900.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/2-063

PROJECT NAME: Chilled Water Wintertime Capacity Upgrade

UTILITY SYSTEM: Chilled Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (minimal physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended chilled water outages and risk to critical spaces).

The likelihood of these events is <u>high</u> (there is no N+1 redundancy during the winter cooling season).

p	High	3	2	1
ikelihoo	Med	4	3	2
	Low	5	4	3
PHA	\ SE	Low	Med	High
ASSI	GNED		Impact	

Background: Chillers are used on campus to provide chilled water for building cooling loads. These loads range from comfort cooling in classrooms and office spaces to high value research and servers. While the peak cooling loads are in summer, mostly for comfort cooling, there is a year round cooling load for critical spaces such as high value research and servers. Wintertime cooling is done at the McClure chiller plant instead of at the main chiller plants. This is done because its cooling tower has an indoor basin, reducing the chances of the tower freezing in cold temperatures. It is the only chiller on campus capable of running in the winter without severe ice buildup and potential damage to equipment. As such there is no winter redundancy for the chilled water system. Any equipment failure or maintenance needed at the McClure plant poses a risk to the critical winter loads.

According to the Performance Standards, the Chilled Water system is required to have N+1 redundancy assuming the largest capacity asset (i.e., chiller) is non-functional. An additional wintertime chiller is needed to meet the requirement and provide for campus growth.

Installing the chiller at the SCCP has several benefits. First, due to the lack of head pressure at the McClure plant, this chiller is not capable of running during the summer to support peak cooling loads. By using the SCCP the new chiller will have sufficient head pressure to run during summer, adding a capacity boost during heat waves, which will help reduce load shedding frequency. Second, pumping costs to recharge the Thermal Energy Storage (TES) tank in the winter will be reduced due to the chiller's proximity to the tank. Finally, the McClure chiller often ices up and vibrates, which causes disruptions to sensitive laboratory equipment in the building such as lasers. Switching to the SCCP in the winter will reduce these disruptions.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve performance and operating efficiency.
- Increase year-round chilled water capacity.

- Mitigate resiliency issues associated with lack of redundancy.
- Achieve N+1 redundancy for the Chilled Water system.

Scope of Work: This project installs a 200-ton, air-cooled chiller at the South Campus Chiller Plant (SCCP) to serve as the primary wintertime chiller. Using an air-cooled chiller with a dry cooler system will provide a reliable means of producing chilled water without the risk of freezing or damaging equipment in cold temperatures.

The chiller proposed in this project, a York YVFA chiller, has a free-cooling hybrid mode that allows it to produce chilled water using the ambient air when temperatures are near freezing. This results in significant energy savings during cold weather. To maximize energy savings the new, high efficiency chiller will serve as the primary wintertime chiller with McClure serving as the backup.

Work is needed to right size the chiller. The Additional Work includes an inventory of existing winter loads and coordination with the University to determine future loads.

The scope of work of this Capital Improvement is:

- Furnish and install one (1) 200-ton air-cooled chiller with dry cooling capability.
- Furnish and install one (1) chilled water pump and one (1) chilled water glycol pump.
- Furnish and install one (1) plate and frame heat exchanger, glycol feeder, expansion tank, and air separator.
- Furnish and install pump VFDs, and pump and chiller feeders.
- Plumbing, mechanical, electrical, and controls modification necessary to connect the new chiller.
- Paint new pipe and pipe stands.
- Start-up, test, and commissioning of new equipment.

While not part of the scope of this project, it is highly recommended that the University service all cooling coils connected to the Chilled Water system before the work. This will assist in right sizing the chillers to potentially reduce overall capital costs, improve building air quality and comfort, and save money due to reduced energy costs.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended an inventory and cleaning of cooling coils on campus to right size chiller and reduce energy costs.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the Additional Work stage.

The Concessionaire will coordinate with the University for potential chilled water disruptions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$21,230 and will also include an assessment of wintertime chilled water loads and coordination with UI HVAC to inventory campus critical loads to right size chiller.

Additional Information:



Figure 1. Layout of the SCCP with the proposed new chiller.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,659,652.
- (B) Forecasted annual operations and maintenance costs: +\$20,000. The increase is associated with newly installed equipment (e.g., chiller, pumps, VFDs, valves, heat exchanger).
- (C) Proposed modification to the Recovery Period: None.

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(D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the average estimated winter season/process cooling load on campus is 120 tons, which is subject to change during the assessment of campus equipment schedules and trend data, (ii) lead times will not impact schedule, and (iii) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) cleaning and servicing the building level cooling coils (owner is University), and (ii) extension of outside concrete pad to support equipment.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages. Reduced greenhouse gas emissions.
- (G) Anticipated tax credits or other benefits: Potentially eligible for Avista Utilities' Schedule 90 rebate program.
- (H) Fee or charge payable to the Operator: \$2,608,100.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: approx. -\$11,000, electricity. New chiller would be more efficient in winter than the existing system. See below.

			Existin	g System			Proposed in Project	
Month	Avg high temp	McClure	McClure chiller	McClure chiller	McClure costs (\$)	York YVFA chiller	York chiller energy to meet	Verk cests (\$)
Ινιοητη	(F)	production (tons)	energy (kWh)	(kW/ton)	wicclure costs (\$)	(kW/ton)	existing loads (kWh)	YORK COSTS (\$)
Jan	37	45,454	49,379	1.0864	\$ 3,012	0.3516	15,982	\$ 975
Feb	42	47,978	49,208	1.0256	\$ 3,002	0.431	20,679	\$ 1,261
Mar	50	54,836	53,304	0.9721	\$ 3,252	0.608	33,340	\$ 2,034
Apr	58	59,397	65,753	1.1070	\$ 4,011	0.7647	45,421	\$ 2,771
May	67	20,961	23,613	1.1265	\$ 1,440	0.8223	17,236	\$ 1,051
Jun	74	0	0	0.0000	\$-	0.8647	0	\$-
Jul	84	0	0	0.0000	\$-	0.9801	0	\$-
Aug	85	0	0	0.0000	\$-	0.9801	0	\$-
Sep	75	0	0	0.0000	\$-	0.9202	0	\$-
Oct	61	48,794	46,204	0.9469	\$ 2,818	0.7855	38,328	\$ 2,338
Nov	44	47,780	46,695	0.9773	\$ 2,848	0.431	20,593	\$ 1,256
Dec	35	56,646	58,537	1.0334	\$ 3,571	0.3516	19,917	\$ 1,215
TOTAL		381,846	392,693		\$ 23,954		211,495	\$ 12,901
Annual Savings Summary	Ca	osts	Sav	ings				
Description	kWh	\$	kWh	\$				
McClure Chiller	392,693	\$ 23,954	0	\$ -				
York YVFA Chiller	211,495	\$ 12,901	181,198	\$ 11,053				
kWh cost	\$ 0.061	From Avista billing	g data. Includes de	emand charges				

PROJECT CODE: 24/4-064

PROJECT NAME: Well #4 Modernization

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (potential impacts to water quality and firefighting capability, known electrical hazards within building). The impact associated with resiliency is <u>high</u> (risk of extended outages and loss of redundancy).

The likelihood of these events is <u>high</u> (equipment is beyond end of life)



Background: The University has owned and operated its own domestic water wells for over 100 years. The locations and depths have changed with the growth of campus and today there are two wells, known as Well #3 and Well #4, north of campus. These wells are critical to the operation of campus, as they are the University's only reliable source of potable water. The City of Moscow runs at a lower pressure than the University does, preventing them from supporting the University in an outage without major disruptions to campus operations. Because of this, it is vital that the wells are resilient and can operate at all times.

Well #4 was constructed in 1978 and requires upgrades to continue operating reliably. All major components are at or beyond their end of life, including the pump, motor, pipes, disinfection system, and electrical system. The well pump and motor have not been pulled in over 20 years and are in unknown condition. Failure of these components puts the University at risk of a complete campus shutdown, as the system only has one other well, with significantly higher repair costs due to their emergency nature.

Currently, the well is not backed up with emergency power as recommended by IDAPA 58.07.08. Without backup power the system can only provide between 2 to 14 days of domestic water, depending on campus use and storage tank levels before the incident. This is inadequate life support for firefighting, dining, housing, research, and medical treatment on campus, including its 9,500 students, during an extended outage. An electrical generator, with its associated equipment, is necessary to both ensure campus has a continuous supply of domestic water during utility power outages and protect the well pump and motor from poor power quality, voltage spikes/swells, and other electrical issues on the Avista Utilities grid. This was demonstrated by the costly emergency repairs necessary to replace the motor at Well #3 when the Avista transformer lost a phase in 2022.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve performance and operating efficiency of the well.
- Mitigate severe resiliency issues associated with equipment beyond its useful life.

- Provide domestic water during electrical grid failures.

Scope of Work: This project modernizes Well #4 by upgrading its major components, including converting the electrical system from 2300V to 480V. To maximize resiliency and project cost savings, the project includes replacing the high cost submersible well motor with a vertical hollow shaft (VHS) motor at ground level. This will eliminate the need to pull the motor in the future and allow for maintenance not previously feasible. Upgrading the well's electrical system at the same time as installing a generator will reduce overall project costs to the University, as development and construction times are reduced, and uncommon equipment will not be necessary to match the 480V generator with the existing 2300V well. The scope of work of this Capital Improvement is:

- Provide a new vertical hollow shaft motor with insulated lower half coupling for upper bearing, Aegis lower shaft grounding ring, 120V thermal heater in windings, and non-reverse coupling.
- Provide a new vertical hollow shaft pump system to match existing submersible pump curve and base mount and all associated equipment needed for a complete package. Danfoss drive in cabinet with line and load reactors and pressure control equipment.
- Provide new style Cla-Val equipment and all associated valves for water lube pump system and controls.
- Provide labor to pull old submersible pump and install new VHS pump system.
- Demo and install a new power service that will include new 800A 480V 3-phase main service disconnect, dry transformer, and service lateral conduit/wire from utility provided transformer. New metering equipment and all connections to existing building 120/240V single phase system.
- Install 480V, 3-phase diesel generator and transfer equipment. New concrete slab, fencing, underground feeder conduits, wire, load bank equipment, and 72-hour fuel tank base.
- Integrate all new equipment into existing SCADA controls.
- Reconfigure disinfection system.
- Repairs to exterior walls, roof, and façade.
- Install motion sensing security lighting on exterior of well house.
- Upgrade interior lighting to LED and replace inside electric heaters.
- Ventilation upgrades to well room and chemical storage room.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project Documents:
 - Design and as-built documents.
 - O&M Manuals.
 - Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan required for crane operations will be developed during the Additional Work stage.

The Concessionaire will coordinate with the North Farm for potential road access disruptions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$153,010 and it will also include (i) coordination with MIEDI Water Purveyor and IDEQ to determine permitting and approval process, and (ii) developing scope for integrating new components into existing SCADA controls.

Additional Information:



Figure 1. Exterior of Well #4.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$5,085,924.
- (B) Forecasted annual operations and maintenance costs: +\$7,500. Additional equipment such as emergency generator will require service. New motor and electrical equipment are more technologically advanced and will require service.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) well shaft is straight and will not require redrilling to support vertical hollow shaft motor, (ii) lead times on equipment will not delay schedule, and (iii) efforts will be taken to minimize damage to surrounding vegetation, but impacts may occur. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) redrilling well, (ii) primary electrical service repair/replacement (owner is Avista Utilities), (iii) restoration of vegetation (owner is University), and (iv) demolition and disposal of any electrical equipment containing PCBs.
- (E) Proposed schedule: EPC (Const.) extends through February 2025. EPC (Commiss.) occurs in February 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement due to mitigation of risk of damage and increased electrical efficiency of equipment.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$4,999,500.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$150, electricity. The decrease is associated with an assumed 1% improvement in electrical efficiency.

PROJECT CODE: 24/3-025

PROJECT NAME: Electrical Vault Inspections and Upgrades

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issue from electrocution risk). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (many vaults are completely submerged).

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ikelihoo	Med	4	3	2
	Low	5	4	3
PH	\SE	Low	Med	High
ASSI	GNED		Impact	

Background: The primary electrical system is largely distributed in an underground system including multiple vaults where cables are pulled, terminated, or spliced. These vaults are susceptible to excessive water intrusion. In many cases, primary distribution splices are submerged in water that are not suitably rated for this application. This condition causes severe safety issues for personnel and the campus community as well as severe resiliency issues that prevents the performance of O&M per prudent industry practices.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a severe safety and resiliency issue.
- Maintain Performance Standard Part V.6, 7, and 8 and mitigate negative impact to Availability KPIs.
- Modernize electrical distribution components (vaults) to allow primary electrical system to be adequately maintained per industry practices and Performance Standards.
- Implement required monitoring, water control, and O&M practices for a safe and reliable operation.
- Perform a comprehensive campus-wide electrical distribution study to inform future steps towards a safe and resilient electrical system, necessary in order to provide operations per Performance Standards and the University's expectations.

Scope of Work: This project remediates water intrusion issues and unsound conditions by removing water, making repairs to the vaults, and installing sump pumps where necessary. Before work is done on the vaults it's imperative that the condition, capacity, and needs of the campus electrical distribution be well understood. A study to gain this information is necessary as part of the Additional Work. The scope of work of this Capital Improvement is:

- Perform assessment of the campus electrical distribution system:
 - · Investigate 85 electrical vaults, primary switches, conductors.
 - Assess condition of underground primary distribution assets.

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- Develop a remediation plan for water intrusion and unsound conditions.
- Install sump pumps and water monitoring systems (x10).
- Establish baseline thermography and, where applicable, oil testing.
- Major repairs of nine (10%) electrical vaults.
- Normal repairs of 43 (50%) electrical vaults.
- Minor repairs of 33 (40%) electrical vaults.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
 - Report documenting results of the electrical distribution study.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned for public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the University any required periodic restrictions of access to immediate work areas. Planned interruptions to building electrical services may be required. This coordination will also involve potential phasing to minimize disruptions to the buildings' occupants during shutdowns and will be planned once the Additional Work is complete.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$583,220 and will also include (i) a campus-wide electrical distribution study (investigation of 85 electrical vaults and primary switches, assessment of the condition of primary distribution assets, and development of as-built distribution one-line diagrams, site plans, and drawings).

ATTACHMENT 4

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Additional Information:



Figure 1. Example of a submerged vault under a primary electric switch.



Figure 2. An electric vault that is completely submerged. Condition of equipment is unknown.



Figure 3. Electrical conduits submerged in vaults.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$5,459,675.
- (B) Forecasted annual operations and maintenance costs: +\$2,000. The installation of water management systems will increase the O&M requirements.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the scope of this project is highly dependent upon the findings of the Additional Work (project will be rescoped and repriced accordingly), and (ii) for the purposes of indicative pricing, 10 of the underground vaults require water management, 10% require major repairs, 50% require normal repairs, and 40% require minor repairs. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the replacement or testing of in-service transformers and primary switches, and (ii) the replacement, repair, or inspection of overhead electrical distribution.

(E) Proposed schedule: Dates my vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$5,366,900.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: +\$500, electricity. Additional electrical costs associated with the operation of new sump pumps.

PROJECT CODE: 24/2-065

PROJECT NAME: Chilled Water Capacity Upgrade at the South Campus Chiller Plant

UTILITY SYSTEM: Chilled Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (minimal physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended chilled water outages and risk to critical spaces).

The likelihood of these events is <u>high</u> (the Chilled Water system does not have enough capacity to meet current loads).

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рс	Н	-		
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Background: Chillers are used on campus to provide chilled water for building cooling loads. These loads range from comfort cooling in classrooms and office spaces to high value research and servers. Historically the chilled water system has had sufficient capacity to meet the needs of campus, however the system has not been upgraded since the construction of the South Campus Chiller Plant (SCCP) in 2010. The oldest chillers in the system, located at the North Campus Chiller Plant (NCCP), have degraded over time as they pass their life expectancy. The chillers at SCCP are the newest, yet have been failing prematurely and require replacement earlier than anticipated, likely due to excessive harmonic distortion. Despite slowly losing capacity over time, especially within the past several years, the demand for chilled water on campus has been growing. This has created a situation where the existing system can no longer support campus during peak loads such as heat waves, leading the University to prioritize some spaces over others in the form of load shedding. By shutting down chilled water to spaces such as offices, the system can support the more critical loads. Without this practice severe damage would occur to equipment across campus, while the low priority loads would lose cooling regardless. Load shedding, once rarely needed, has become common place since 2020 when the temperatures are high. Additional capacity and redundancy are needed to reduce the frequency of load shedding going forward.

The SCCP was originally built to support two additional 500-ton chillers with minimal modification. Space was available for the chillers, cooling towers, pumps, and transformer needed. This changed when the York electric chiller at the NCCP was moved to the SCCP in 2018 to make room for an additional absorption chiller. The York is significantly larger than the other chillers and takes up the space of two chillers, which means there is no room on campus for the additional chillers necessary to keep up with current and future campus loads, or provide N+1 redundancy to the system. Adding capacity to the SCCP will require expanding the building envelope to house additional chillers, adding an additional electrical service, and increasing buried pipe size to support the new capacity.

According to the Performance Standards, the Chilled Water system is required to have N+1 redundancy assuming the largest capacity asset (i.e., chiller) is non-functional. Currently the system does not meet the requirement.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve performance and operational efficiency of the Chilled Water system.
- Increase chilled water capacity to support current and future loads.
- Mitigate resiliency issues associated with lack of redundancy.
- Achieve N+1 redundancy for the Chilled Water system as required by the Performance Standards.

Scope of Work: This project constructs an addition to the SCCP on the west side of the building sized to support additional capacity. Proposal A installs one new chiller, cooling tower, and associated equipment in one of the new spaces to meet the N+1 requirement. A chilled water model, proposed as part of the Additional Work, is required to right size the chiller to meet campus loads and the Performance Standards. Proposal A is scoped and priced on the assumption that the new chiller will be 1200 tons, the size of the existing York chiller, however this is subject to change.

A Proposal B is also presented and installs a second chiller in the newly constructed space, bringing the system to N+2 redundancy. This will further reduce the frequency of load shedding on campus, significantly improve the system's resiliency and ability to handle heat waves, and provide for long term campus growth. By approving Proposal B, the University will see significant savings from reducing the overall project development, construction, and mobilization time.

The scope of work of this Capital Improvement is:

- Proposal A:
 - Expand building envelop of the SCCP to include (i) matching the existing envelope and finish, (ii) expansion of the concrete pad and fencing for cooling towers, and (iii) excavation and shoring of west hillside as needed.
 - Excavation, removal, and replacement of 20" to 30" direct buried piping with hardscape/softscape repair.
 - New electrical service upgrade to support two additional 1200-ton chillers.
 - Upsize primary feeder to support additional electrical load.
 - Upsize chilled water loop pumps and chilled water/condenser water pipe header for two additional 1200-ton chillers.
 - Furnish and install one (1) 1200-ton electric chiller.
 - Furnish and install one (1) cooling tower.
 - Furnish and install associated pumps and piping for the new chiller and cooling tower.
 - Plumbing, mechanical, electrical, and controls modification necessary to connect the new chiller.
 - Paint new pipe and pipe stands.
 - Start-up, test, and commissioning of new equipment.
 - Chilled water modeling software and training to allow ongoing maintenance when future changes are made.
- Proposal B. In addition to the scope described above for Proposal A, Proposal B includes:
 - Furnish and install one (1) 1200-ton electric chiller.
 - Furnish and install one (1) cooling tower.
 - Furnish and install associated pumps and piping for the new chiller and cooling tower.
 - Plumbing, mechanical, electrical, and controls modification necessary to connect the new chiller.
 - Paint new pipe and pipe stands.

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• Start-up, test, and commissioning of new equipment.

Chillers and production assets are sized to meet the design loads of HVAC systems and process cooling loads. However, the age and condition of those systems play a large role in the ability to provide sufficient chilled water. Systems in poor condition, such as dirty cooling coils in HVAC systems, do not transfer energy efficiently (sufficiently cold chilled water may be available, but the equipment is not capable of utilizing it to its full potential, causing occupant discomfort and wasting energy). While not part of the scope of this project, it is highly recommended that the University service all heat exchangers and retro-commission equipment connected to the Chilled Water system during the modeling effort, and put into place a regular O&M program to complete the work if not currently done. This will assist in right sizing the chillers to potentially reduce overall capital costs, improve building air quality and comfort, save money in reduced energy costs, and extend the useful life of the equipment.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended an inventory of chilled water loads to optimize the model, an O&M program to clean cooling coils, retro-commission AHUs, and service other equipment using chilled water to reduce capacity needs and energy costs.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents for architectural, structural, mechanical, and electrical engineering to provide infrastructure that increases plant capacity.
 - Chilled water model.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the Additional Work stage.

The Concessionaire will coordinate with the University for potential chilled water disruptions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$507,650 and will also include (i) a Chilled Water system loop modeling and heat transfer analysis to determine necessary capacity, loop constraints, and optimize loop efficiency, and (ii) a 30-day electrical load study (4 meters).

Additional Information:



Figure 1. Current layout of the SCCP.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$17,289,903 (Proposal A), \$23,370,631 (Proposal B).
- (B) Forecasted annual operations and maintenance costs: +\$30,000 (Proposal A), +\$51,000 (Proposal B). The increase is associated with newly installed equipment (e.g., chiller cooling tower, pumps, VFDs, valves), and newly constructed building envelope (e.g., electrical, plumbing).
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) additional capacity will be added to the SCCP, if the chilled water model exposes other constraints or a preferred alternate location for the additional capacity, a new Capital Improvement might need to be submitted, (ii) current chiller leads times are estimated to be 50 weeks, (iii) chiller sizing based on the 1200-ton York chiller and actual size will be dependent on the model, and (iv) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) the cleaning and servicing of

building level heat exchangers and other equipment (owner is University), and (ii) the restoration of vegetation (owner is University).

(E) Proposed schedule: EPC (Procur.) extends through July 2025. EPC (Const.) occurs from June 2025 to January 2026. EPC (Commiss.) occurs from January 2026 to February 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$16,996,100 (Proposal A), \$22,973,500 (Proposal B).
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. New chiller acts only as redundant back-up to the existing equipment. Supply Cost changes should be minimal unless new equipment is more efficient than existing, in which case it will serve as the new primary chiller.

PROJECT CODE: 24/3-026

PROJECT NAME: Menard Law Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (previous component failures).



Background: Long term exposure to heat, vibration, and other stresses slowly break down the internal components and insulation of transformers. Eventually these stresses create a short, resulting in damage and breakdown of the transformer. As the transformer ages the likelihood of failure increases, rising significantly once it reaches its end of life.

The three transformers at the Menard Law Building are beyond their useful life at over 30 years old and have no record of being tested. The November 2019 failure and emergency repair of the oil filled, 13.2kV disconnect switch in the building indicates that failure is imminent on this equipment of the same age and condition. That failure was the direct cause of the Teaching and Learning Center basement flood that shut the building down for 3 weeks. That emergency repair resulted in spliced high voltage cable, eliminated building disconnect, and unsafe conditions within the Menard Law Building. This presents a highly dangerous condition for personnel and building occupants while leaving property at significant risk of damage.

There is no spare transformer if there is a failure at Menard Law. Given continued market disruptions and very long lead times (over 1 year), a failure here will likely result in an extended building shutdown with potential impacts to other buildings. The main building switch gear is the same age and should be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is the University's responsibility.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a severe safety and resiliency issue.
- Modernize electrical service to building up to the point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.

Scope of Work: This project installs a new pad mount transformer on the exterior of the building, replaces the feeders from the nearest primary switch to the building main switchgear, and upgrades the metering associated with it. The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot-style transformers currently installed on the interior of the building. Thermograph and oil test to establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2 kV) concrete encased feeders from existing vault sectionalizer to new transformer. Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to new SEL-735. Replace as necessary.
 Vault work:
 - Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components to establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):

- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned for public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the College of Law and the University for the building shutdown. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$80,300 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing, and (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.

Additional Information:



Figure 1. Unsafe conductor splice laying on the floor after emergency repairs in 2019.



Figure 2. Conditions in transformer room dangerous enough to require Arc flash PPE before entering.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$868,675
- (B) Forecasted annual operations and maintenance costs: +\$750. The upgraded electric meter and new vault sump will require additional O&M. The new transformer will allow for new O&M practices to be implemented, including oil sampling.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) original transformers and switchgear sized to serve electric boilers and chillers that have since been removed, (ii) new transformer is expected to be smaller and more efficient, (iii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees/vegetation but impacts may occur and are not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) VFI switches and appurtenances, SEL-751 relay, switch operators, and microgrid infrastructure, (ii) temporary electric generator to support building during shutdown, (iii) the disconnection/reconnection of

impacted irrigation lines (owner is University), and (iv) the restoration of vegetation (owner is University).

(E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from September 2025 to January 2026. EPC (Commiss.) occurs in February 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$853,600
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$650, electricity. It is assumed a 1% improvement in electrical efficiency based on historic metering.

PROJECT CODE: 24/1-003

PROJECT NAME: Steam Piping Upgrades at the Energy Plant

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and campus steam shutdown).

The likelihood of these events is <u>high</u> (multiple valves have failed).

PH/ ASSI	ASE GNED	Impact						
		Low	High					
	Low	5	4	3				
ikelihoo	Med	4	3	2				
p	High	3	2	1				

Background: The steam piping in the Energy Plant is critical for transporting steam produced by the boilers to the tunnel network and reducing pressure to safe levels. Isolation valves in the system are used to provide safe access to critical equipment for service, however many are failing. The newest valves were replaced in a 2002 State of Idaho DPW project and are already failing, exposing operators to severe burns from high pressure steam leaks.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade plant level steam piping to plant operating pressures.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address health concerns that should be physically mitigated.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project replaces the isolation valves in the main steam header at the Energy Plant, all of which are beyond their serviceable life and/or not designed for operating pressures. It also includes rerouting D Boiler's piping to the main steam header, which will increase resiliency to steam outages. The scope of work of this Capital Improvement is:

- Reconfigure D Boiler 6" piping to connect to the main steam header.
- Replace all high-pressure isolation valves (x19).

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.

- As-built drawings of the relevant areas.
- Project documents:
 - · Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

The Concessionaire will coordinate with the University for the replacement of valves that may require steam shutdown.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$58,960 and will also include as-built drawings of the area requiring piping and valve upgrades, which will become part of a master as-built drawing set for the Energy Plant.

Additional Information:



Figure 1. Failed isolation valve preventing safe work on critical systems.
Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$3,338,022.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) no steam shutdown will be required when connecting D boiler to the main steam header, (ii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes the replacement or reconfiguration of the steam piping for other boilers or the main header.
- (E) Proposed schedule: EPC (Const.) extends through February 2025. EPC (Commiss.) occurs in March 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Minimal reduction in fuel, water, and chemical consumption by reducing steam losses during service.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$3,281,300.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. Minimal savings from reduced losses during service.

PROJECT CODE: 24/1-004

PROJECT NAME: Gas Boilers Capital Renewal

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (boilers are aged and well beyond expected life).

p	High	3	2	1
ikelihoo	Med	4	3	2
	Low	5	4	3
PHA	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: The natural gas boilers provide redundancy to the wood boiler and meet peak heating loads on campus. They are critical to the successful operation of the Energy Plant and necessary to achieve Performance Standards and resiliency desires. However, their ages range from 45-81 years old and subsystems are in need of replacement and upgrade, including gas burner packages, valves and FD fans. Non-destructive testing of boiler tubes and exhaust stacks is also necessary. Several single points of failure, or long repair time, issues exist within these systems. Many of these systems are original equipment and are well beyond this serviceable life, posing safety risks from natural gas leaks and boiler tube ruptures. Upgrading these systems will improve efficiency and extend the useful life of the boilers. Complete gas boiler system replacements will be needed without these upgrades.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade gas boilers to extend useful life and improve performance.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project upgrades the subsystems critical to the successful operation of the boilers including gas burner packages, valves, and FD fans. It also includes non-destructive testing of boiler tubes and exhaust stacks to determine their remaining useful life. The scope of work of this Capital Improvement is:

- Replace degraded and ruptured boiler tubes.
- Replace gas burners for all three boilers.
- Replace gas trains for all three boilers.
- Replace all critical valves for all three boilers.

- Replace FD fans, VFDs, and motors for all three boilers.
- Install cascading blowdown systems for Boilers C and D only.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
 - Report documenting results of boiler tube inspections.
 - Report documenting results of boiler exhaust stacks.
 - Equipment selection and preliminary design of stack economizer for Boiler D.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

The Concessionaire will coordinate with the University for the staggering of boiler work to maintain the Energy Plant's resiliency and prevent the need for steam shutdown.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$207,900 and will also include (i) non-destructive testing of boiler tubes (Boilers B, C, and D), (ii) non-destructive testing for corrosion/wall thickness degradation on all exhaust stacks (Boilers A, B, C, and D), and (iii) equipment selection and preliminary design of stack economizer for Boiler D.

Additional Information:



Figure 1. Aged gas train on Boiler B.



Figure 2. Aged burner packages on Boilers B and C.



Figure 3. Condition of boiler tubes is unknown.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$5,708,096.
- (B) Forecasted annual operations and maintenance costs: +\$3,600. The increase is associated with an expanded complexity of controls, gas trains, and additional cascading blowdowns.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is

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assumed that (i) only 20% of boiler tubes will need to be replaced after non-destructive testing (project will be rescoped and repriced as needed), (ii) exhaust stack replacements are not included, (iii) staged construction to maintain N+1 redundancy to the wood boiler to prevent risk of steam shutdown to campus will be required, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the replacements of the exhaust stacks (the non-destructive testing included in this project will determine if the exhaust stacks need to be replaced, which would be proposed as a future Capital Improvement), and (ii) an stack economizer on Boiler D (based on the results of the preliminary design and feasibility, the economizer would be proposed as a future Capital Improvement).

(E) Proposed schedule: EPC (Const.) extends through February 2025. EPC (Commiss.) occurs in March 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved efficiency and performance of the boilers reduces natural gas consumption and corresponding greenhouse gas emissions.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$5,611,100.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$7,300, natural gas. Due to improved efficiency of gas burners and FD fans, it is assumed a natural gas reduction in consumption from 2% burner efficiency increase at current prices based on FY22 data.

PROJECT CODE: 24/1-005

PROJECT NAME: Utility Tunnel Repair on 6th Street

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (tunnel lid is damaged and rebar is corroding).

р	High	3	2	1
ikelihoo	Med	4	3	2
	Low	5	4	3
PHA	\SE	Low	Med	High
ASSI	GNED		Impact	

Background: The utility tunnel network is critical for distributing utilities across campus including steam, chilled water, high voltage power, natural gas, and IT/telecom. Tunnels are critical for protecting utilities from ambient conditions and also serve as the sidewalks of much of campus. The lid on 6th St has been in service for up to 70 years and needs work to prevent collapse. The tunnel lid has cracking, exposed rebar, and ground water intrusions. These sections are supported with non-engineered, temporary screw jacks to prevent collapse in the near future. The risk of collapse poses a severe safety risk to the general public and potential shutdown of all the Energy Plant's utilities. This was identified in the DPW project in FY19 to replace the tunnel lid at 6th Street and Line Street, but project funding could not support the additional scope.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Extend the useful service life of the existing tunnel.
- Mitigate severe resiliency issues associated with aging systems.
- Address safety concerns associated with tunnel collapse.

Scope of Work: This project replaces and repairs sections of the tunnel lid on 6th St that are showing signs of structural failure, likely due to vehicle traffic and water infiltration.

The scope includes replacing the tunnel lid at the areas where damage is concentrated, specifically at the entrance to the College of Natural Resources (CNR) and the Integrated Research and Innovation Center (IRIC), and at the Central Mall's pedestrian walkway. It also includes repairs to the sidewalk/tunnel lid where tunnel joints are, as previous repairs are in poor condition and beginning to compromise the tunnel lid by allowing water to infiltrate through the joints (see photos below). These areas can likely be repaired without completely replacing the lid by applying the same methods used at the Line Street tunnel repair project in 2022, significantly reducing overall cost.

The scope of work of this Capital Improvement is:

- Tunnel lid replacements (x2):
 - Drop and protect electrical and communication lines that are within 12" of interior tunnel lid.
 - Blanket utility lines in tunnel to protect from debris.
 - Trench on either side of impacted lid to a depth of approx. 2'.
 - Cut sidewall of impacted tunnel, crosscut, and remove damaged lid.
 - Replace lid with pan deck, repour sidewalks, add weld plates for bike racks.
 - Re-hang electrical and communication lines.
 - Restoration of area to include repaving road, replacing pavers, and replacing truncated dome mats.
- Tunnel lid repairs (x8):
 - Demolition of damaged concrete and sidewalk sections adjacent to repairs.
 - Apply overhead repair mix.
 - Apply reinforcement to area.
 - Clean tunnel lid and apply corrosion inhibitor.
 - Drop IT/telecom from lid as necessary.
 - Seal tunnel joints.
 - Pour new sidewalk sections.
- Provide protection for live utilities during construction.
- Clean work areas as needed.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended that (i) UI ITS identify and remove any abandoned and damaged IT/Telecom lines in construction areas while accessible, and (ii) the replacement of the total length of the sidewalk.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed including the protection of live utilities, the provision of fencing to prevent unauthorized access to construction areas, and open pit work in a core campus area. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University and the City of Moscow for the shutdown of 6th Street. Similarly, coordination will be needed for parking permits, fencing, and storage of materials. Construction will be scheduled during the summer season to reduce impact to both campus' operations and the City.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital

Improvement. The anticipated cost of such additional work is \$131,120 and will also include core drilling and laboratory analysis for tunnel walls and lid to determine their integrity.

Additional Information:



Figure 1. Areas of tunnel on 6th Street with to be replaced and repaired.



Figure 2. Areas that are compromising the structural integrity of the tunnel lid.



Figure 3. Aging sections of the tunnel that require repair or replacement.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$3,574,107.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) tunnel walls and floor will be in good condition and not require repair or replacement, dependent on results of core samples and structural investigation, (ii) underground construction conditions will be reasonable free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the disconnection/reconnection of irrigation lines (owner is University), (ii) the protection of vegetation around the construction area (owner is University), and (iv) the repair or replacement of the sidewalk outside the work areas (owner is University).

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

(F) Impact on Sustainability: None.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$3,520,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-038

PROJECT NAME: Domestic Water Line Replacement on the Central Mall

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (health risks to building occupants due to dead end line). The impact associated with resiliency is <u>high</u> (future failure will impact core campus).

The likelihood of these events is high (line has collapsed).



Background: At over 70 years old, this water line collapsed in 2017, creating a dead-end line in the domestic water system that creates a health risk to building occupants.

Objectives: The main objectives of this Capital Improvement are:

- Replace the collapsed domestic water line under the Central Mall.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address health concerns associated with the physical conditions of current assets.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project replaces the existing line and upgrades the size to keep up with campus growth. The water line is intended to create a loop in the distribution system near the Renfrew Hall and the Agricultural Science Building, improving flow and water quality on campus. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Abandon existing 4" piping modifications.
- Install new 6" DR18 C900 PVC water line and all appurtenances.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-base paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$32,560.

Additional Information:



Figure 1. Map of Domestic Water System in area with proposed work.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

(A) Total Cost: \$451,741.

(B) Forecasted annual operations and maintenance costs: +\$0.

- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes the protection or restoration of vegetation impacted by construction (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$444,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-051

PROJECT NAME: Sanitary Sewer Line Recondition on Line Street

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (heavily damaged and collapse is imminent).

q	High	3	2	1
ikelihoo	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: These sanitary sewer lines serve the Food Science Building, the Mines Building, the Native American Student Center, and the Janssen Engineering Building (JEB). The pipes are constructed of clay tile and are almost 70 years old, well beyond their life expectancy. A recent sliplining project on a connecting line showed that these lines are in poor condition and need to be repaired soon before they collapse. These lines plug on occasion and require jetting to restore service. In addition, the line in the alley between JEB and the Gauss-Johnson Engineering Building (GJ) was poorly designed and has a low spot where it goes under the utility tunnel, which plugs regularly due to unauthorized dumping (most recently in September and October 2021). An inspection conducted in October 2021 showed sections of the pipe breaking off, indicating that collapse is imminent.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer line on Line Street between Idaho Avenue and 6th Street.
- Recondition existing sanitary sewer lines serving the Food Science Building, the Mines Building and the Native American Student Center.
- Remove belly in line between JEB and GJ.
- Install new manholes for improved access.
- Inspect nearby lines to identify future needs.

Scope of Work: This project sliplines existing pipes connecting to Line Street and replaces the JEB service line going under the tunnel to remove the low spot. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Recondition the 6" line on Line Street (approx. 700').
- Recondition the 6" lines between the Food Science Building, the Mines Building, and the Native American

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Student Center (approx. 350').

- Install new 6" DR18 C900 PVC pipe and all appurtenances at JEB.
- Install three new manholes at tees.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$46,860.

Additional Information:



Figure 2. Sanitary Sewer map of area.



Figure 1. Broken section of pipe in Janssen Engineering service line.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$638,515.
- (B) Forecasted annual operations and maintenance costs: +\$1,500. New manholes will require annual inspections and cleaning.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) bypass pumping is required to keep campus core functions operable, (ii) pre/post CCTV inspection is required, (iii) traffic control and possibly re-route will be required, (iv) full pipe replacement between JEB and GJ is expected, (v) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (vi) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes the restoration of vegetation (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: None.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$627,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-050

PROJECT NAME: Sanitary Sewer Manhole Replacements

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (safety risks to building occupants, vehicles, pedestrians, and operational personnel). The impact associated with resiliency is <u>high</u>.

The likelihood of these events is high.

	_			
q	High	3	2	1
ikelihoo	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: Manholes across campus are used to access sanitary sewer lines for inspection and service. When manholes are in too poor condition or not present, it severely limits the ability of clearing plugged lines, potentially requiring excavation. They also pose a safety risk to operators, pedestrians, and vehicles if they are allowed to deteriorate. Some of the problems that have been identified include collapsing walls, sinking asphalt, plugged lines, and damage to pipes. Reconditioning manholes now reduces the overall cost and disruption to the University by reducing the need for excavation and replacement from waiting for complete failure.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Replace failing sewer manholes.
- Mitigate severe resiliency issues associated with systems that are well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project reconditions manholes where feasible to extend their useful life and replaces heavily damaged manholes that are beginning to fail. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Repair and install liners at manholes (x11).
- Remove and replace manholes (x2).
- Bedding and backfill.
- CCTV inspection and jetting.
- Construction supervision.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$43,560.

Additional Information:



Figure 1. Poor condition brick manhole by ISUB (left) and by Morrill Hall (right).

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

(A) Total Cost: \$596,052.

- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 11 manholes are not damaged to a point that complete replacement is required (project will be rescoped and repriced if replacement is necessary), (ii) a pre/post CCTV inspection is required, (iii) bypass pumping is required to keep campus core functions operable and it is included in the scope, (ii) traffic control and possibly re-route will be required, (iii) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) the repair or replacement of pipes, and (ii) the restoration of vegetation (owner is University).

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

- (F) Impact on Sustainability: Establishing a reliable sanitary sewer service is critical to public health and to achieving functional campus' operations.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$585,200.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/7-058

PROJECT NAME: Stormwater Line Installation from the Art & Architecture Building to Line Street

UTILITY SYSTEM: Storm Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high (flooding occurs regularly).

	High	3	2	1
elihood	Med	4	3	2
Lik	Low	5	4	3
PH	\SE	Low	Med	High
ASSI	GNED		Impact	

Background: The existing stormwater line serving the Art & Architecture Building was cut off when the Idaho Commons (now the Idaho Student Union Building ISUB) was constructed in 1998. This has caused flooding issues in the basement of Art & Architecture and creates standing water issues near pedestrian walkways, which freeze in cold weather and pose a pedestrian safety risk.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Correct flooding issues near the Art & Architecture Building by installing a new stormwater line.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project restores stormwater service to this area by installing a new line from the Art & Architecture Building to Line Street. It also includes inspection of the upstream pipe to determine if reconditioning or replacement is necessary. The proposed line may conflict with long term plans of the University and coordination is needed to determine if alternative pathing is necessary. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Install new 6" SDR 35 PVC pipe (approx. 120').
- Connect new line to existing storm system.
- Install one new catch basin.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - · Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

A detailed safety plan will be developed during the Additional Work stage.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$14,410.

Additional Information:



Figure 1. Stormwater system in the affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$157,976.
- (B) Forecasted annual operations and maintenance costs: +\$500. Additional pipe will require regular cleaning, jetting, and inspection.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) connecting pipes will not need to be reconditioned or replaced (project will be rescoped and repriced as necessary), (ii) a pre/post CCTV inspection will be required, (iii) traffic control and possible re-route will be required, (iv) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impact may occur and remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur. Excluded work includes (i) the reconditioning or replacement of connecting pipes, (ii) the restoration of vegetation (owner is University), and (iii) the disconnection/reconnection of irrigation lines (owner is University).

(E) Proposed schedule:	Dates may vary.
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	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved stormwater systems will help maintain stormwater quantity and quality control. Improvement of stormwater systems is required for safety and resiliency of the core campus.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$155,100.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-049

PROJECT NAME: Sanitary Sewer Line Recondition on Campus Drive and Blake Avenue

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (line is well beyond life expectancy).

q	High	3	2	1
kelihoo	Med	4	3	2
	Low	5	4	3
PH	\SE	Low	Med	High
ASSI	GNED		Impact	

Background: These sanitary sewer lines serve the Ridenbaugh, Niccolls, Graduate Art Studio, and Lionel Hampton buildings. The pipes are 91 years old and well beyond life expectancy. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as slip lining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscaping the area. Collapse of the Campus Drive line risks vehicle access to the Administration building and the historic Camperdown trees in the area.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer lines on Campus Drive and Blake Ave.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project reconditions these pipes and manholes to extend their useful life. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slipline the 6" line from Campus Drive to Blake Avenue (approx. 270').
- Slipline the 12" line from Blake Avenue and Sweet Avenue (approx. 690').
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

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There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, confined space work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$17,380 and it will also include conducting a CCTV inspection and jetting.

Additional Information:



Figure 1. Map of sanitary sewer system in area with relevant work.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$226,281.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes and manhole are not damaged to a point that complete replacement is required (project will be rescoped and repriced if replacement is necessary), (ii) a pre/post CCTV inspection will be required, (iii) bypass pumping is required to keep campus core functions operable and it is included in the scope, (iv) traffic control and possible re-route will be required, (v) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (vi) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) the replacement of pipes or manholes, (ii) the restoration of vegetation (owner is University), and (iii) the disconnection/reconnection of irrigation lines (owner is University).

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

- (F) Impact on Sustainability: Establishing a reliable sanitary sewer service is critical to public health and to achieving functional campus' operations.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$222,200.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/7-057

PROJECT NAME: Stormwater Line Recondition on Campus Drive and Blake Avenue

UTILITY SYSTEM: Storm Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (pipes are well beyond their life expectancy).



Background: These stormwater lines serve the areas by Ridenbaugh Hall, the Niccolls Building, the Graduate Art Studio, and the Hampton Music Building. The pipes are over 100 years old and well beyond life expectancy. As they age, the likelihood of collapse increases, risking potential flooding in the area until it can be repaired.

By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area. Collapse of the Campus Drive stormwater line risks vehicle access to the Administration building and the historic Camperdown trees in the area.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing stormwater lines on Campus Drive and Blake Avenue.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project reconditions these pipes and manholes mentioned above to extend their useful life. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Recondition the 6" line from Campus Drive to Blake Avenue (approx. 400').
- Recondition the 6" line from the Hampton Music Building to the intersection between Blake Avenue and Sweet Avenue (approx. 100').
- Replace one manhole at the Hampton Music Building.
- Bedding and backfill.

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- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

A detailed safety plan covering open pit work, confined space work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$18,480.

Additional Information:



Figure 2. Map of stormwater system in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$262,127.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes and manholes are not damaged to a point that complete replacement is required, and stormwater lines between the Administration Building and the Niccolls Building along Campus Drive will not need to be reconditioned or replaced (project will be rescoped and repriced as necessary), (ii) a pre/post CCTV inspection will be required, (iii) traffic control and possible re-route will be required, (iv) underground construction conditions will be reasonably free of obstruction, conflict, and hazardous materials that could impede completion, (v) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (vi) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur. Excluded work includes (i) reconditioning of pipes near the Niccolls Building, (ii) replacement of pipes or manholes, (iii) restoration of vegetation (owner is University), and (iv) disconnection/reconnection of irrigation lines (owner is University).

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

- (F) Impact on Sustainability: Improved stormwater systems will help maintain stormwater quantity and quality control. Improvement of stormwater systems is required for safety and resiliency of the core campus.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$257,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-040

PROJECT NAME: Backflow Assemblies Replacement at the South Hill Apartments

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues in confined spaces). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown)

The likelihood of these events is <u>high</u> (backflows cannot be accessed).



Background: The backflow assemblies serving each building at the South Hill Apartments complex are located in crawlspaces with very limited access. In nine locations the assemblies are far from the access point and create severe safety risks for workers. Due to the safety hazard these assemblies can't be tested as required by regulations and risk loss of water service to the occupants until the buildings are compliant. Access is needed to each assembly from outside the building instead of the crawlspace. The meters for each building are aged and no longer functional. They need to be replaced and located with the assemblies for accurate billing.

Objectives: The main objectives of this Capital Improvement are:

- Eliminate unsafe work conditions by moving backflow assemblies out of crawlspaces.
- Increase occupant safety by making presently inaccessible backflow assemblies maintainable.
- Bring the South Hill Apartments up to code.
- Restore metering for auxiliaries billing.

Scope of Work: The scope of work of this Capital Improvement is:

- Inspect and replace all backflow assemblies as needed.
- Move 9 backflow assemblies to accessible locations.
- Install 30 new backflow prevention assemblies and domestic water flow meters for each building.
- Construct 18 new enclosures outside the buildings for each assembly.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - · Commissioning report as applicable.

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Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan for work in confined spaces will be developed.

The Concessionaire will coordinate with the University and the building's occupants for any shutdowns.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$97,460.

Additional Information:



Figure 1. Map of apartment complex with access locations and backflow assemblies marked.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,336,636.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.

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(D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) new backflow prevention assemblies and metering in serviceable configuration, and (ii) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) the repair or replacement of building level pipes (owner is University), and (ii) the restoration of vegetation (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: This Capital Improvement will enhance the public health safety of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,312,300.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-039

PROJECT NAME: Domestic Water Vault Improvements at the Sheep Center

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (safety risk to the operators). The impact associated with resiliency is <u>high</u> (potential loss of service to the Sheep Center).

The likelihood of these events is high.

	High	3	2	1
celihood	Med	4	3	2
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Background: The domestic water service to the Sheep Center and the Soil Stewards Student Farm north of campus comes in at a vault near Well #3. The vault is unfinished and has a shed constructed over it. The vault floods seasonally, submerging the backflow prevention valves, meter, and other equipment needed to supply the Sheep Center with water. Though only 10 years old, equipment is already in poor condition and pipes are leaking due to these conditions.

Objectives: The main objectives of this Capital Improvement are:

- Reconfigure the domestic water vault to extend the useful life of the equipment.
- Mitigate an unsafe condition for operators and resiliency of service to the Sheep Center due to difficulty of access.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project runs power to the vault from Well #3, relocates equipment out of the vault, and improves the overall condition of the shed to extend its useful life. Installing insulation and heat will help minimize the mold growing on the interior walls of the shed.

The scope of work of this Capital Improvement is:

- Natural surface demolition and excavation.
- Run power to vault.
- Relocate water flow meter and backflow prevention station, replumb.
- Install finishes to shed including flooring, insulation, lighting, and electric heat.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

While the scope of this project includes running power to the shed, significant cost savings could be realized by connecting to the Avista Utilities high voltage distribution line nearby instead. The Additional Work includes coordination with the University and Avista Utilities to explore this alternative.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based point, which originated prior to Closing.

A detailed safety plan covering open pit work, an excavated site, and water service rerouting will be developed. Documentation including the disinfection and backflow prevention testing, and an official notice of return to service will be provided.

The Concessionaire will coordinate with the University with regard to the Sheep Center and the Soil Stewards Student Farm for shutdown.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$27,390 and it will include coordination with the University and Avista Utilities to explore the alternative of connecting to Avista Utilities' distribution line instead of supplying power from Well #3.

Additional Information:



Figure 1. Interior vault at shed is in poor condition.



Figure 2. Leaks from pipe less than 10 years old.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$386,495.
- (B) Forecasted annual operations and maintenance costs: +\$250. Increase associated with annual maintenance for new structure and heater.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the restoration of vegetation (owner is University), and (ii) the temporary supply of domestic water during shutdown.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: This Capital Improvement will increase the electrical use due to additional heating. Metered water use, and an effective backflow prevention will protect the campus community.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$380,600.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: +\$200, electricity. Increase is associated with the use of the seasonal electric heater.

PROJECT CODE: 24/3-066

PROJECT NAME: Microgrid Expansion, Phase I

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u>. The impact associated with resiliency is <u>high</u> (loss of chilled water production to campus).

The likelihood of these events is <u>medium</u> (no backup power to the North Campus Chiller Plant).

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Background: The University began the process of installing steam turbines at the Energy Plant in 2018, with the project nearing completion in 2022. This has been a major success for the University, with large energy savings and reduction in greenhouse gases that the University will benefit from for years to come. The turbines however are only the beginning of the broader vision of energy independence on campus. To further that vision, the turbine project also created a microgrid at the Energy Plant, the University's first, to act as the foundation of a transformed campus electric grid.

Microgrids are groups of loads and distributed energy resources which can act independently of the utility grid. When power from the grid goes down, the microgrid is capable of islanding itself to continue operations using its own electricity generation. Once power is restored the microgrid then reconnects to the grid. This improves reliability and resilience of the connected loads, with power outages often going unnoticed. The Energy Plant is currently the only building on campus with this ability.

As the microgrid on campus grows, more buildings will be connected and supported. The first step is to connect the North Campus Chiller Plant (NCCP), located at the Energy Plant, to the microgrid. The NCCP has a different electrical service than the rest of the Energy Plant and is not protected by the microgrid during power outages. An extended power outage risks a complete stop to chilled water production on campus, risking damage to critical equipment such as servers (while equipment may have backup power, they do not have backup cooling). Some loads critical to Energy Plant operations, such as air compressors for pneumatic controls and pumps are fed from the NCCP instead of the Energy Plant itself, which risks a complete plant shutdown regardless of the microgrid. Connecting the NCCP to the microgrid will reduce this risk. In addition, since the Living Learning Communities (LLC) are connected to the NCCP, this project has the benefit of supporting the dorms' entire electric load during power outages.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:
- Mitigate a severe resiliency issue to chilled water production.
- Expand campus microgrid to improve turbine performance.
- Support student living spaces during power outages.

Scope of Work: This project expands the microgrid in the first of what will be many phases, growing to include the NCCP. The scope of work of this Capital Improvement is:

- Connect the NCCP electrical service to the Energy Plant's microgrid.
- Install necessary automated primary switching and relays in the campus ring bus.
- Repair any damaged items in the electrical vaults accessed.
- Repair any areas of water infiltration in electrical vault.
- Furnish and install one (1) SEL-735 meter for the NCCP.
- Furnish and install one (1) SEL-735 for primary electric meter at the LLC.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - · Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the Additional Work stage.

The Concessionaire will coordinate with the University and the LLC occupants for a potential electrical shutdown. An electrical shutdown of Energy Plant may be necessary, with subsequent impact to steam, chilled water, and compressed air production.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$97,680 and will also include a 30-day power study on the NCCP and the LLC to evaluate impacts to the microgrid.

Additional Information:



Figure 1. The NCCP is not connected to the microgrid.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,506,795.
- (B) Forecasted annual operations and maintenance costs: +\$2,000. The upgraded switches, meters, and other equipment will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (ii) a replacement of the NCCP electrical panel will not be necessary, and (iii) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) a temporary electric generator to support buildings during shutdown, (ii) the repair or replacement of the main distribution panel of the NCCP, and (iii) the repair or replacement of the NCCP transformer.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the mitigation of potential damages and a potential reduction in natural gas use during power outages by utilizing wood.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,480,600.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/1-012

PROJECT NAME: Steam and Condensate Distribution Upgrades

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues associated with steam pipe rupture). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>medium (piping is beyond useful life)</u>.



Background: The steam and condensate piping in the tunnel network is critical for distributing heat to campus buildings safely. The lines by the Idaho Student Union Building (ISUB) are over 95 years old, threaded, and beginning to rust, posing a high safety risk to operators and pedestrians if the pipe ruptures. Rupture poses an extreme safety risk to pedestrians and operators from exposure to high pressure, high temperature steam, reduced steam service from pressure loss to all buildings, decreased condensate return rate, and severe damage to all utilities in the tunnel until the pipe can be isolated. Years of water damage are eroding the outside of the pipe, increasing the likelihood of failure. The lines on 6th St are at least 59 years old and too small to meet current or future steam loads. The 6th Street line will need to be upgraded before additional buildings such as the Kibbie Dome or the Hartung Theatre are connected to the network. Additional isolation valves will improve resiliency and add the ability to redirect steam to buildings in the event of a failure.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade major steam lines to support campus growth.
- Mitigate severe resiliency issues associated with aging systems.
- Improve overall resiliency by adding isolation valves at key locations.
- Address safety concerns associated with the physical conditions of current assets.

Scope of Work: This project upsizes major sections of the system and upgrades valves and expansion joints. Most of these systems are beyond or approaching their end of serviceable life. While all steam and condensate piping on campus will need to be replaced within the next 50 years, along with their associated valves, supports, and insulation, this project addresses the most vulnerable and high risk sections. The scope of work of this Capital Improvement is:

- Replace 8" steam and 4" condensate lines from Idaho Avenue to University Avenue (approx. 325').
- Upgrade 6" steam and 5" condensate lines on 6th Street from the Central Mall to the Wallace Residence Center to 10" and 6" (approx. 670').

- Upgrade 5" condensate line on 6th Street from Line Street to the Central Mall to 6" (approx. 425').
- Replace aged expansion joints.
- Replace condensate receivers and pumps (x2).
- Install additional condensate sampling points.
- Install double block and bleed isolation valves at key locations.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended that UI ITS identify and remove any abandoned and damaged IT/Telecom lines in construction areas.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
 - Steam and condensate flow model.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed including the protection of live utilities, the provision of fencing to prevent unauthorized access to construction areas, and confined space work. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University for the steam and condensate pipe construction during the summer season to reduce impact to campus.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$57,200 and will also include (i) a steam and condensate distribution system walkthrough to obtain exact quantities of valves, sampling points, and expansion joints, (ii) the development of a steam and condensate system flow model to ensure pipe sizing is adequate for current and future growth (including the collection and analysis of building steam load data to ensure pipe sizing is adequate).

Additional Information:



Figure 1. 6th Street steam and condensate pipes to upgrade.



Figure 2. Steam and condensate pipes to replace by ISUB.



Figure 3. 95-year old threaded pipes pose a safety hazard. Pipe is rusting (right).

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$6,414,216.
- (B) Forecasted annual operations and maintenance costs: +\$9,000. The increase is associated with additional isolation valves and equipment required maintenance.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 30 expansion joints (approx. 10% of the system) will be replaced, 5 condensate sampling points will be added, and 10 additional isolation valves will be added, (ii) the Additional Work may identify additional needs to be presented in a future Capital Improvement, (iii) proposed pipe sizing is adequate, but may change depending on the results of the flow study, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the repair or replacement of tunnel or other utilities, and (ii) the demolition of abandoned utilities identified.
- (E) Proposed schedule: EPC (Const.) extends through April 2025. EPC (Commiss.) occurs in May 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: None.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$6,314,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/1-010

PROJECT NAME: Wood Boiler Capital Renewal, Phase I

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and wood boiler shutdown).

The likelihood of these events is <u>medium</u> (equipment is aged and in poor condition).

Like	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: The wood-fueled boiler provides significant economic and environmental benefits to the University, however, at 35 years old, many of the subsystems are in critical need of replacement, including the woodchip grate system, refractory, internal components, and fans. Several single points of failure, or long repair time, issues exist within these systems. Most of these systems are original equipment, well beyond serviceable life, and damaged from years of heavy use. Improvements will increase efficiency, extend the useful life of the boiler, reduce Supply Costs to the University by decreasing boiler downtime, and increase the resiliency of this system, a critical aspect to achieve Performance Standards and associated resiliency goals of the University. The alternative to these upgrades would be either a complete replacement of the boiler and associated fuel and ash handling systems, switch to natural gas fuel at significantly higher Supply costs, or transition away from central steam heating to campus.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition the wood boiler to extend its useful service life.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Mitigate single point of failure risks by keeping N+1 critical spares on hand.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project upgrades the boiler subsystems including the woodchip grate system, refractory, internal components, and fans. Each of the subsystems addressed is critical to the operation of the wood fuel boiler. The scope of work of this Capital Improvement is:

- Recondition throat.
- Firebox:
 - Replace step grates.

- Improve failing grate supports, linkages, and hydraulic ram systems.
- Replace all spray on refractory.
- Replace ash hopper firebricks with refractory.
- Boiler bank:
 - Non-destructive testing of boiler tubes and retube as needed (20% retube assumed).
 - Rebuild steam drum diverter, mud drum diffusers, and water column.
- Replace soot blower lances (x8), gear trains, and soot blower valves.
- ID fan replace rotor.
- FD fan replace with upsized unit.
- Under-fire fan replace unit.
- Over-fire fan replace unit.
- Replace all critical valves.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
 - Report documenting results of non-destructive boiler tube tests.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

The Concessionaire will coordinate with the University the project schedule to occur during the lowest steam use to reduce natural gas costs during shutdown. Wood boiler shutdown can be done without an impact to steam customers.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$260,480 and will also include non-destructive testing on the boiler tubes.

Additional Information:



Figure 1. Exposed firebrick in boiler.



Figure 2. Refractory needs to be replaced to protect boiler structure and operators.



Figure 2. Refractory needs to be replaced.



Figure 4. Condition of boiler tubes is unknown.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,593,877.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 20% of boiler tubes will need to be replaced, dependent on results from the non-destructive testing, and (ii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the repair or replacement of the ash conveyance system, (ii) the repair or replacement of the air preheater,

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(iii) the repair or replacement of the economizer, and (iv) the replacement of feedwater or any steam piping.

(E) Proposed schedule: EPC (Const.) extends through February 2025. EPC (Commiss.) occurs in March 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: Improved wood boiler efficiency reduces natural gas use during peak loads.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

- (H) Fee or charge payable to the Operator: \$2,549,800.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$15,000, wood fuel, natural gas, electricity. The decrease is associated with an improved efficiency of the boiler and subsystems. It is assumed a 1% decrease in wood boiler downtime and improved operations based on FY22 data.

PROJECT CODE: 24/3-028

PROJECT NAME: Administration South Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown)

The likelihood of these events is medium.

-	High	3	2	1
kelihoo	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: Long term exposure to heat, vibration, and other stresses slowly break down the internal components and insulation of transformers. Eventually these stresses create a short, resulting in damage and breakdown of the transformer. As the transformer ages the likelihood of failure increases, rising significantly once it reaches its end of life.

These transformers are beyond their useful life at over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. The transformers are located within the building, also posing a significant risk to the building envelope if they fail.

There is no spare transformer if there is a failure. Given continued market disruptions and very long lead times (over 1 year), a failure here will likely result in an extended building shutdown with potential impacts to other buildings. Given that these transformers support a major server for campus, a failure would result in disruptions to the University's operations, research, and network across campus. The main building switch gear is the same age and should be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is the University's responsibility.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to the point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6, and 8 and minimize KPI Events.

Scope of Work: This project installs a new pad mount transformer on the exterior of the building, replaces the feeders from the nearest primary switch to the building main switchgear, and upgrades the metering associated with it. The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot-style transformers currently installed on the interior of the building. Thermograph and oil test. Establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalized to new transformer. Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
 Vault work:
 - Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):

- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned for public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the occupants and the University for the electrical shutdown of the building, including UI ITS for the server shutdown. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$80,300 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.

Additional Information:



Figure 1. Aged transformer and electrical equipment in Administration South Building basement.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$825,018.
- (B) Forecasted annual operations and maintenance costs: +\$750. The upgraded electric meter and new vault sump will require additional O&M. The new transformer will allow for new O&M practices to be implemented, including oil sampling.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer is likely to be smaller and more efficient, depending on the results of the power study, (ii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) VFI switches and appurtenances, SEL-751 relay, switch operators, and microgrid infrastructure, (ii) temporary electric generator to support building during shutdown, (iii) the disconnection/reconnection of impacted irrigation lines (owner is University), and (iv) the restoration of vegetation (owner is University).

(E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from September 2025 to January 2026. EPC (Commiss.) occurs in February 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$810,700.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$400, electricity.

PROJECT CODE: 24/3-029

PROJECT NAME: Art & Architecture North Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

-	High	3	2	1
kelihood	Med	4	3	2
	Low	5	4	3
PH	\SE	Low	Med	High
ASSI	GNED		Impact	

Background: Long term exposure to heat, vibration, and other stresses slowly break down the internal components and insulation of transformers. Eventually theses stresses create a short, resulting in damage and breakdown of the transformer. As the transformer ages the likelihood of failure increases, rising significantly once it reaches its end of life.

These transformers are beyond their useful life at over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. These transformers are located within the building, also posing a significant risk to the building envelope if they fail.

There is no spare transformer if there is a failure at the Art and Architecture North Building. Given continued market disruptions and very long lead times (over 1 year), a failure here will likely result in an extended building shutdown with potential impacts to other buildings. The main building switch gear is the same age and should be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is the University's responsibility.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to the point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6, and 8 and minimize KPI Events.

Scope of Work: This project installs a new pad mount transformer on the exterior of the building, replaces the feeders from the nearest primary switch to the building main switchgear, and upgrades the metering associated with it. The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot-style transformers currently installed on the interior of the building. Thermograph and oil test to establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalizer to new transformer. Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
 Vault work:
 - Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components to establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):

- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned for public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the occupants and the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$80,300 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (iii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.

Additional Information:



Figure 1. Poor, unsafe access to Art & Architecture North Building transformer room via the tunnel network.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$804,868.
- (B) Forecasted annual operations and maintenance costs: +\$750. The upgraded electric meter and new vault sump will require additional O&M. The new transformer will allow for new O&M practices to be implemented, including oil sampling.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient, depending on the results of the power study, (ii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) VFI switches and appurtenances, SEL-751 relay, switch operators, and microgrid infrastructure, (ii) temporary electric generator to support building during shutdown, (iii) the disconnection/reconnection of impacted irrigation lines (owner is University), and (iv) the restoration of vegetation (owner is University).

(E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from September 2025 to January 2026. EPC (Commiss.) occurs in February 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$790,900.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible.

PROJECT CODE: 24/3-030

PROJECT NAME: College of Natural Resources Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

_	High	3	2	1
kelihooc	Med	4	3	2
	Low	5	4	3
PH	\SE	Low	Med	High
ASSI	GNED		Impact	

Background: Long term exposure to heat, vibration, and other stresses slowly break down the internal components and insulation of transformers. Eventually theses stresses create a short, resulting in damage and breakdown of the transformer. As the transformer ages the likelihood of failure increases, rising significantly once it reaches its end of life.

These transformers are beyond their useful life at over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. These transformers are located within the building, also posing a significant risk to the building envelope if they fail.

There is no spare transformer if there is a failure. Given continued market disruptions and very long lead times (over 1 year), a failure here will likely result in an extended building shutdown with potential impacts to other buildings. The main building switch gear is the same age and should be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is the University's responsibility.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to the point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.

Scope of Work: This project installs a new pad mount transformer on the exterior of the building, replaces the feeders from the nearest primary switch to the building main switchgear, and upgrades the metering associated with it. The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot-style transformers currently installed on the interior of the building. Thermograph and oil test to establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalizer to new transformer. Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
 Vault work:
 - Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):

- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned for the public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the occupants and the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$80,300 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.

Additional Information:



Figure 1. Aged transformers and electrical equipment in CNR basement.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$938,080.
- (B) Forecasted annual operations and maintenance costs: +\$750. The upgraded electric meter and new vault sump will require additional O&M. The new transformer will allow for new O&M practices to be implemented, including oil sampling.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient depending on the results of the power study, (ii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) VFI switches or appurtenances, SEL-751 relay, switch operators, microgrid infrastructure, (ii) temporary electric generator to support building during shutdown, (iii) the disconnection/reconnection of the impacted irrigation lines (owner is University), and

- (iv) the restoration of vegetation (owner is University).
- (E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from September 2025 to January 2026. EPC (Commiss.) occurs in February 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$921,800
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$1,200, electricity. It is assumed a 1% improvement in electrical efficiency based on historic meter data.

PROJECT CODE: 24/3-031

PROJECT NAME: Hartung Theatre Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown)

The likelihood of these events is medium.

pc	High	3	2	1
ikelihoa	Med	4	3	2
	Low	5	4	3
PHA	\SE	Low	Med	High
ASSI	GNED		Impact	

Background: Long term exposure to heat, vibration, and other stresses slowly break down the internal components and insulation of transformers. Eventually theses stresses create a short, resulting in damage and breakdown of the transformer. As the transformer ages the likelihood of failure increases, rising significantly once it reaches its end of life.

These transformers are beyond their useful life at over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. The transformers are located within the building, also posing a significant risk to the building envelope if they fail.

There is no spare transformer if there is a failure. Given continued market disruptions and very long lead times (over 1 year), a failure here will likely result in an extended building shutdown with potential impacts to other buildings. The main building switch gear is the same age and should be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is the University's responsibility.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to the point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6, and 8 and minimize KPI Events.

Scope of Work: This project installs a new pad mount transformer on the exterior of the building, replaces the feeders from the nearest primary switch to the building main switchgear, and upgrades the metering associated with it. The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot-style transformers currently installed on the interior of the building. Thermograph and oil test to establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalizer to new transformer. Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Vault work:
 - Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components, establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned for public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the occupants and the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$80,300 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.

Additional Information:



Figure 1. Existing pot transformers in Hartung.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$808,226.
- (B) Forecasted annual operations and maintenance costs: +\$750. The upgraded electric meter and new vault sump will require additional O&M. The new transformer will allow for new O&M practices to be implemented, including oil sampling.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient depending on the results of the power study, (ii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) VFI switches and appurtenances,

SEL-751 relay, switch operators, and microgrid infrastructure, (ii) temporary electric generator to support building during shutdown, (iii) the disconnection/reconnection of impacted irrigation lines (owner is University), and (iv) the restoration of vegetation (owner is University).

(E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from September 2025 to January 2026. EPC (Commiss.) occurs in February 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$794,200.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$400, electricity.

PROJECT CODE: 24/3-032

PROJECT NAME: Theophilus Tower Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium (equipment is aged).

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ikelihoo	Med	4	3	2						
	Low	5	4	3						
PHA	\ SE	Low Med Hig								
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Background: Long term exposure to heat, vibration, and other stresses slowly break down the internal components and insulation of transformers. Eventually theses stresses create a short, resulting in damage and breakdown of the transformer. As the transformer ages the likelihood of failure increases, rising significantly once it reaches its end of life.

These transformers are beyond their useful life at over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. The transformers are located within the building, also posing a significant risk to the building envelope if they fail.

There is no spare transformer if there is a failure at the Theophilus Tower. Given continued market disruptions and very long lead times (over 1 year), a failure here will likely result in an extended building shutdown with potential impacts to other buildings. The main building switch gear is the same age and should be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is the University's responsibility.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to the point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6, and 8 and minimize KPI Events.

Scope of Work: This project installs a new pad mount transformer on the exterior of the building, replaces the feeders from the nearest primary switch to the building main switchgear, and upgrades the metering associated with

it. The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot-style transformers currently installed on the interior of the building. Thermograph and oil test to establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalizer to new transformer. Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to new SEL-735. Replace as necessary.
- Vault work:
 - Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components to establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned or public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the occupants and the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$80,300 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$867,556.
- (B) Forecasted annual operations and maintenance costs: +\$750. The upgraded electric meter and new vault sump will require additional O&M. New transformer allows for new O&M to be implemented, including oil sampling.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient depending on the results of the power study, (ii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) VFI switches and appurtenances, SEL-751 relay, switch operators, and microgrid infrastructure, (ii) temporary electric generator to support building during shutdown, (iii) the disconnection/reconnection of impacted irrigation lines (owner is University), and (iv) the restoration of vegetation (owner is University).
- (E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from September 2025 to January 2026. EPC (Commiss.) occurs in February 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$852,500.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$300, electricity. It is assumed a 1% improvement in electrical efficiency based on historic meter data.

INFORMATIONAL - BAHR

PROJECT CODE: 24/3-033

PROJECT NAME: Physical Education Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life and safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>medium</u> (equipment is beyond useful life).



Background: Long term exposure to heat, vibration, and other stresses slowly break down the internal components and insulation of transformers. Eventually theses stresses create a short, resulting in damage and breakdown of the transformer. As the transformer ages the likelihood of failure increases, rising significantly once it reaches its end of life.

These transformers are beyond their useful life at over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. The transformers are located within the building, also posing a significant risk to the building envelope if they fail.

There is no spare transformer if there is a failure at the Physical Education Building. Given continued market disruptions and very long lead times (over 1 year), a failure here will likely result in an extended building shutdown with potential impacts to other buildings. The main building switch gear is the same age and should be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is the University's responsibility.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6, and 8 and minimize KPI Events.

Scope of Work: This project installs a new pad mount transformer on the exterior of the building, replaces the feeders from the nearest primary switch to the building main switchgear, and upgrades the metering associated with

it. The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot-style transformers currently installed on the interior of the building. Thermograph and oil test to establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalizer to new transformer. Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam condensate, chilled water, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components to establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned for public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the occupants and the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$80,300 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.

Additional Information:



Figure 1. Aging transformers in PEB basement.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$825,018.
- (B) Forecasted annual operations and maintenance costs: +\$750. The upgraded electric meter and new vault sump will require additional O&M. The new transformer will allow for new O&M practices to be implemented, including oil sampling.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient depending on the results of the power study, (ii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) VFI switches and appurtenances, SEL-751 relay, switch operators, and microgrid infrastructure, (ii) temporary electric generator to support building during shutdown, (iii) the disconnection/reconnection of impacted irrigation lines (owner is University), and (iv) the restoration of vegetation (owner is University).
- (E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from September 2025 to January 2026. EPC (Commiss.) occurs in February 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$810,700.

mitigation of potential damages.

- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$200, electricity. It is assumed a 1% improvement in electrical efficiency based on historic meter data.

PROJECT CODE: 24/3-034

PROJECT NAME: Swimming Center Building Electrical Service Replacement

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>medium</u> (equipment is beyond useful life).



Background: Long term exposure to heat, vibration, and other stresses slowly break down the internal components and insulation of transformers. Eventually theses stresses create a short, resulting in damage and breakdown of the transformer. As the transformer ages the likelihood of failure increases, rising significantly once it reaches its end of life.

These transformers are beyond their useful life at over 30 years old and have no record of being tested. Multiple recent high voltage electrical failures on campus indicate that aged transformers on campus will begin failing more frequently, severely disrupting campus operations. The transformers are located within the building, also posing a significant risk to the building envelope if they fail.

There is no spare transformer if there is a failure at the Swimming Center Building. Given continued market disruptions and very long lead times (over 1 year), a failure here will likely result in an extended building shutdown with potential impacts to other buildings. The main building switch gear is the same age and should be upgraded at the same time to remain safe and resilient. Main switch gear work is beyond the contractual demarcation point and is the University's responsibility.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Mitigate a significant safety and resiliency issue.
- Modernize electrical service to building up to the point of demarcation.
- Achieve a safe arc flash condition at the primary equipment.
- Implement required O&M for a safe and reliable operation.
- Maintain Performance Standard Part V.3, 4, 6, and 8 and minimize KPI Events.

Scope of Work: This project installs a new pad mount transformer on the exterior of the building, replaces the feeders from the nearest primary switch to the building main switchgear, and upgrades the metering associated with

it. The scope of work of this Capital Improvement is:

- Provide new exterior pad-mounted transformers to replace pot style transformers currently installed on the interior of the building. Thermograph and oil test to establish baseline records.
- Provide new SEL-735 or equivalent electrical meter and integrate with all existing building meters.
- Provide new (13.2kV) concrete encased feeders from existing vault sectionalizer to new transformer. Backfill and restore surface to match existing.
- Provide new secondary feeders from new transformer to existing building electrical service.
- Connect steam and condensate, and domestic water meters to SEL-735. Replace as necessary.
- Vault work:
 - · Repair damaged items in electrical vaults accessed for transformer replacements.
 - Repair any areas of water infiltration in electrical vault, provide water management system.
 - Thermograph vault components to establish baseline records.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared around public sidewalk and street traffic (safety will need to be aware of and planned for public walk area). The equipment removal will occur through grated access at sidewalk level. Arc Flash PPE required.

The Concessionaire will coordinate with the occupants and the University for the electrical shutdown of the building. Other buildings may be impacted as well.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$80,300 and will also include (i) conducting a 30-day power study to evaluate load size for transformer sizing and, (ii) the documentation of any vault damage and the development of a plan to remediate vault water issues, structural concerns, etc.
Additional Information:



Figure 1. Aging transformers and electrical equipment below the swimming pool.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$825,018.
- (B) Forecasted annual operations and maintenance costs: +\$750. The upgraded electric meter and new vault sump will require additional O&M. The new transformer will allow for new O&M practices to be implemented, including oil sampling.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the new transformer will likely be smaller and more efficient depending on the results of the power study, (ii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur and their remediation is not included in this scope, and (iv) workable solutions for all required coordination with University activity will be achievable. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) VFI switches and appurtenances, SEL-751 relay, switch operators, and microgrid infrastructure, (ii) temporary electric generator to support building during shutdown, (iii) the disconnection/reconnection of impacted irrigation lines (owner is University), and (iv) the restoration of vegetation (owner is University).

(E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from September 2025 to January 2026. EPC (Commiss.) occurs in February 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$810,700.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$250, electricity. It is assumed a 1% improvement in electrical efficiency based on historic meter data.

PROJECT CODE: 24/3-035

PROJECT NAME: West Farm Primary Distribution Improvements

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (degraded overhead, electrical safety concerns). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high.

8	High	3	2	1
kelihoo	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: Electric loads at the West Farm are met with an overhead 4160V electrical distribution system. This system is well beyond its useful life and failures are common, with two occurring in FY21. Currently the West Farm received power from only one overhead line, creating a single point of failure that can impact multiple buildings. This project is required to eliminate unplanned outages and meet Performance Standards and Availability KPIs.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve the safety and reliability of the Primary Electrical Distribution system at the West Farm.
- Eliminate aging overhead primary distribution infrastructure.
- Maintain Performance Standard Part V.6, 7, and 8 and mitigate negative impact to Availability KPIs.
- Established baseline condition of primary electrical components.

Scope of Work: This project removes the overhead system, moves it underground, and connects it to the campus loop. Aged pole mounted transformers would be replaced with pad mount transformers, increasing resiliency, and increasing response time. This upgrade will improve efficiency, safety, and eliminate single points of failure to reduce disruptions to West Farm operations. The scope of work of this Capital Improvement is:

- Remove overhead existing 4160V distribution including poles, transformers, conductors.
- Install new pad mount transformers, vaults, sectionalizing cabinets, duct banks, conduits, and wires for connection to the existing 13.2kV campus primary.
- Install underground 13.2kV campus primary encased in concrete at point of utility service.
- Provide secondary feeders from pad-mounted transformers to existing building electrical services and reconnect.
- Provide new SEL 735 meters on all building electrical services. Commission meters and establish data management.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) the replacement and evaluation of the building's main distribution panel and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
 - Baseline oil samples and thermography.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit and electrical work will be developed.

The Concessionaire will coordinate with the University and Avista Utilities for electrical shutdowns.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$143,550 and will also include power studies on each building to right size transformers.



Figure 1. Aging poles, cross bars and mount transformers that pose failure risks.



Figure 2. Pole leaning, risking line slap and downed lines.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$10,270,321.
- (B) Forecasted annual operations and maintenance costs: +\$10,000. Pad mount transformers, vaults, and meters will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) estimated lead time for equipment is 52 weeks, (ii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iv) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) alternative power generation, such as portable generators to provide power to buildings during construction, (ii) restoration of vegetation (owner is University), (iii) modification of electrical transmission lines and equipment on Avista Utilities' lines (owner is Avista Utilities), and (iv) replacement of building main distribution panels (owner is University).
- (E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from August 2025 to January 2026. EPC (Commiss.) occurs in January 2026. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$10,095,800.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. Minor efficiency increase from higher efficiency transformers and reduced distribution losses.

PROJECT CODE: 24/4-042

PROJECT NAME: Backflow Assemblies Replacement at the McClure Hall

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (life safety issues due to water quality). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium (single points of failure).

PH	ASE	Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
p	High	3	2	1

Background: The backflow assemblies serving McClure Hall are not up to code as they lack redundant valves. These assemblies are aged and beginning to fail. Currently water service must be shut off to service the valves, disrupting the building's occupants. Without redundant backflow devices the building will lose domestic water service if they fail, posing a life safety risk.

Objectives: The main objectives of this Capital Improvement are:

- Replace the McClure Hall backflow assemblies to improve resiliency.
- Eliminate single points of failure.
- Bring the McClure Hall up to code.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project replaces both potable and non-potable assemblies with dual-valve systems. The scope of work of this Capital Improvement is:

- Demo and remove existing 4" backflow preventer for potable system.
- Install new 4" dual-valve backflow preventer.
- Demo and remove existing 3" backflow preventer for non-potable system.
- Install new 3" dual-valve backflow preventer.
- Replace two flow meters.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended the removal of any unnecessary bypasses to reduce O&M Costs on the University's side of the Line of Demarcation.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.

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- O&M manuals.
- Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan including standard domestic water protocols will be developed.

The Concessionaire will coordinate with the University and the building's occupants for shutdowns.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$9,020.



Figure 1. Backflow assemblies in the McClure Hall are not up to code.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$100,709.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) isolation valves are in operable condition, (ii) there will be sufficient clearance for additional pipework and meters, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes the replacement of isolation valves.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$99,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/2-021

PROJECT NAME: Chilled Water Distribution Upgrades, Phase I

UTILITY SYSTEM: Chilled Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (flooding risk). The impact associated with resiliency is <u>medium</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (multiple joints have failed in the past).



Background: Chilled water is distributed through miles of direct buried piping to campus buildings for cooling needs. Since the South Campus Chilled Plant (SCCP) was constructed the operating pressure of the distribution network has increased due to the height of the Thermal Energy Storage Tank. While this improves overall performance, the increased pressure has put additional stress on pre-existing pipes that were not designed for it. Design deficiencies include pipe and fitting selection not suitable for pressure levels and inadequate thrust blocks to restrict pipe movement. Multiple joints in the system have failed because of this in recent years, causing unplanned outages and flooding until repaired. Upgrades are needed across the system to improve resiliency and prevent loss of service to critical cooling loads such as research and servers. A chilled water model is needed to identify the highest pressures in the system and most likely points of failure, further safety and resiliency risks, and support campus growth. Remediation of the inadequate piping systems will likely require multiple projects.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Address design deficiencies in the chilled water distribution network.
- Mitigate resiliency issues associated with inadequate piping construction details.
- Address safety concerns associated with the physical conditions of current assets.

Scope of Work: This project provides a solution for the highest risk joints in the existing system before failure risks unplanned outages. This project's Additional Work will determine the construction plan and extent of projects required. The scope of work of this Capital Improvement is:

- Replace glued joints with flanged joints (x10).
- Provide excavation, demolition, bedding, backfill, surface restoration, etc.
- Model the Chilled Water system to identify deficiencies, restrictions, and support future growth.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
 - Chilled water model.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A construction safety plan will be developed including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University for any chilled water shutdown to buildings as needed and for potential road and walkway closures.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$248,050 and will also include (i) the development of a chilled water system flow model, and (ii) the development of a construction plan to repair at-risk joints.



Figure 1. Joint failed at the North Campus Chiller Plant in January 2021.



Figure 2. Failed joint not installed correctly.



Figure 3. Flanged joint installed after failure.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$965,710.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) as-builts of previous chilled water line construction projects will be available, (ii) the replacement of ten (10) 12" joints in hardscape and softscape areas will be performed, (iii) the Additional Work and flow study may identify additional needs to be presented in a future Capital Improvement, (iv) necessary pipe sizing may change depending on the flow study, and (v) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur.
- (E) Proposed schedule: EPC (Const.) extenders through February 2025. EPC (Commiss.) occurs in March 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: None.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$949,300.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-043

PROJECT NAME: Domestic Water Line Replacement on University Avenue

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues, risk to firefighting capability). The impact associated with resiliency is <u>high</u> (a future failure will impact core campus).

The likelihood of these events is <u>medium</u> (line is aged and has failed in the past).



Background: This domestic water line serves multiple campus buildings and allows for sections of the distribution system to be isolated as needed. At almost 100 years old, the line is well beyond its life expectancy and has failed multiple times in the past. Loss of this line creates fire and flooding risks as well as loss of services to connected customers.

Objectives: The main objectives of this Capital Improvement are:

- Replace the aged domestic water line on University Avenue from Ash Street to the Memorial Gym.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Provide for future needs of campus.

Scope of Work: This project replaces the line and upsizes it to provide for campus growth. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Abandon existing 6" piping modifications.
- Install new 8" DR18 C900 PVC water line and all appurtenances.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.

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• Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and the water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$101,640.

Additional Information:



Figure 1. Map of domestic water system in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,358,484.
- (B) Forecasted annual operations and maintenance costs: +\$0.

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- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the restoration of vegetation (owner is University), and (ii) the disconnection/reconnection of irrigation lines (owner is University).
- (E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,335,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-044

PROJECT NAME: Domestic Water Line Replacement to the Energy Plant

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues, health risk to building occupants due to dead-end line). The impact associated with resiliency is <u>high</u> (extended steam, chilled water, and turbine shutdown).

The likelihood of these events is <u>medium</u> (line is aged).



Background: The Energy Plant provides steam, chilled water, and compressed air to core campus buildings and is critical to campus operations. While the steam plant has a high condensate return rate back from campus, it still requires domestic water make-up for to the steam system as well as equipment such as cooling towers. The domestic water line to the building is almost 50 years beyond its useful life and needs to be replaced before collapse. Failure of this line would result in a complete shutdown of most utilities to campus buildings. Additionally, two water lines nearby are dead-ends that pose a health safety issue due to stagnant water.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve the Energy Plant's resiliency by replacing the domestic water service line.
- Improve the system's water quality by capping dead-end lines.
- Address health concerns associated with the physical conditions of the current assets.

Scope of Work: This project removes the aged domestic water line to the Energy Plant and caps the two dead-end lines. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Remove existing 8" piping modifications.
- Install new 8" DR18 C900 PVC Water Line and all appurtenances.
- Cap dead-end line at the Energy Plant's service connection.
- Cap dead-end line on the south side of 6th Street and Line Street.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and the water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University and the City of Moscow for the closing of the intersection and a potential shutdown of the Energy Plant.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$14,740.



Figure 1. Map of domestic water system in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$224,242.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the restoration of vegetation (owner is University), and (ii) the disconnection/reconnection of irrigation lines (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$220,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-045

PROJECT NAME: Domestic Water Line Replacement to the Agricultural Science Building

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (future failure will impact building occupants and research).

The likelihood of these events is <u>medium</u> (line has reached its end of life).



Background: This domestic water line serves the Agriculture Science Building. At 50 years old, this line has reached its expected useful life. The line has failed multiple times in the past and leaks. Failure would result in a loss of service to the building, creating a fire and flooding risk, and potentially impacting research.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Replace domestic water line to the building.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project removes the old water line mentioned above and installs a new one. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Remove existing 4" piping modifications.
- Install new 4" DR18 C900 PVC water line and all appurtenances.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.

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- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and the water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$19,030.



Figure 1. Map of the Domestic Water system in area with proposed work.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$273,576.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the restoration of vegetation (owner is University), and (ii) disconnection/reconnection of irrigation lines (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$268,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-046

PROJECT NAME: Domestic Water Line Replacement to the Food Research Center

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>medium</u> (line is well beyond its useful life).



Background: The domestic water service line to the Food Research Center supplies the facility with potable water for occupants, fire suppression, and research applications. At 78 years old, this line is well beyond its serviceable life and in need of replacement before it collapses. Its flow path is also sub-optimal, as repairs and modifications were made historically that sacrificed long term efficiency for building uptime during construction.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Replace water service line to the Food Research Center.
- Mitigate resiliency issues associated with systems well beyond their serviceable life.
- Improve O&M practices for a safe and reliable operation.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project replaces the line mentioned above and optimizes flow to the building by removing unnecessary pipe, valves, and fittings. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Remove existing 6" piping modifications (approx. 125').
- Install new 6" DR18 C900 PVC water line and all appurtenances (approx. 125').
- Remove dead-end pipe and valves.
- Install new three-way valve.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

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- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and the water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$20,790.



Figure 1. Map of the Domestic Water system in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$291,515.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the restoration of vegetation (owner is University), and (ii) disconnection/reconnection of irrigation lines (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$286,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-047

PROJECT NAME: Domestic Water Line Replacement on Blake Avenue

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (health risks to building occupants). The impact associated with resiliency is <u>high</u> (a failure will impact building occupants).

The likelihood of these events is medium.

PH		Low	Med	High
	Low	5	4	3
ikelihoo	Med	4	3	2
p	High	3	2	1

Background: These domestic water main lines serve as a redundant method to supply water to campus from the I Tank, while also serving the Greek Houses along Nez Perce Drive, Targhee Hall, and the South Hill Apartments. At over 70 years old, these lines are well beyond their expected useful life and need to be replaced before collapse. Failure of these lines risks the ability for the I Tank to supply campus with water and loss of service to connected buildings.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Replace the domestic water main line serving the Greek Houses and the South Hill Apartments.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project replaces the existing lines mentioned above and upgrades their size to keep up with campus growth. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Remove existing 4" piping modifications to Walenta Drive (approx. 1600').
- Remove existing 6" piping modifications to South Hill Apartments (approx. 750').
- Install new 6" DR18 C900 PVC water line and all appurtenances.
- Bedding and backfill.
- Construction supervision.
- Disinfection and place system in service according to Public Water System requirements.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core area of the campus and water quality will be developed. Temporary traffic and/or pedestrian accommodations will be implemented as needed. Similarly, a safe return to service and the disinfection process will be documented.

The Concessionaire will coordinate with the University for any building shutdowns and disruptions due to open pit work to allow for campus activities.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$200,860.



Figure 1. Map of Domestic Water System in area with proposed work.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,653,907.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) proposed pipe sizes are contingent on the hydraulic needs of the Domestic Water system, to be confirmed by the University after project DPW21-254 is completed, (ii) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the repair or replacement of service lines to the Greek Houses or the Targhee Hall, (ii) the repair, replacement, or installation of domestic water meters, (iii) the restoration of vegetation (owner is University), and (iv) the disconnection/reconnection of irrigation lines (owner is University).

(E) Proposed schedule:	Dates may vary.
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	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the domestic water system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$2,603,700.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-052

PROJECT NAME: Sanitary Sewer Line Recondition at the West Farm

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>medium</u> (pipes are beyond life expectancy).



Background: These lines provide sanitary sewer service to the Meats Lab, Beef Residence, Farm Ops, and other buildings on the West Farm. They are well beyond their life expectancy at over 60 years old and need to be addressed before collapse. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as slip lining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscaping.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer lines serving the West Farm.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project sliplines the existing pipes before they risk collapse and installs an additional manhole to allow for access for maintenance. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Recondition the 4" lines (approx. 950').
- Repair one manhole at intersection of Farm Road and 6th Street.
- Install one new manhole at Farm Storage Building #1.
- Construction supervision.
- Bedding and backfill.
- Asphalt and natural surface restoration.

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- CCTV inspect and jet other connecting lines.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University and the buildings' occupants for the sanitary sewer shutdown.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$17,930.



Figure 1. Sanitary Sewer system in affected area.



Figure 2. Bricks falling out at a damaged manhole.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$249,100.
- (B) Forecasted annual operations and maintenance costs: +\$500. New manhole will require regular cleaning and inspection.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes and manholes are not damaged to a point that complete replacement is required (project will be rescoped and repriced if replacement is necessary), (ii) a pre/post CCTV inspection is required, (iii) bypass pumping is required to keep campus core functions operable and it is included in the scope, (iv) traffic control and possible re-route will be required, (v) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (vi) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the replacement of pipes or manholes, (ii) the restoration of vegetation (owner is University), and (iii) the disconnection/reconnection of irrigation lines (owner is University).

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the sanitary sewer system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$245,300.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-053

PROJECT NAME: Sanitary Sewer Line Replacement at the Bruce M. Pitman Center

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>medium</u> (pipes are beyond life expectancy and plug regularly).



Background: Sanitary sewer service from the Bruce M. Pitman Center comes from four points, feeding into a common line running parallel to the City of Moscow sewer line. These pipes are well beyond their life expectancy at 74 years old and need to be addressed before they collapse. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. Due to poor design and construction, the pipes are also backgraded and frequently plug, causing sewer to back up into the building.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Connect sanitary sewer service from the Bruce M. Pitman Center directly to the City of Moscow lines.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project abandons the existing parallel line and connects the building directly to the City of Moscow line at the four locations. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Install 6" DR18 C900 PVC pipe (approx. 80').
- Install service tap and cleanouts (x4).
- Construction supervision.
- Bedding and backfill.
- Asphalt and natural surface restoration.
- Provide bypass pumping during construction.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

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- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and disruptions due to open pit work.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$19,580.



Figure 1. Sanitary sewer system in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$211,909.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) bypass pumping is required to keep campus core functions operable and it is included in the scope, (ii) traffic control and possibly re-route will be required, (iii) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (iv) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (v) workable solutions for all required coordination with University activity and the City of Moscow will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the removal of existing pipes or manholes; to be abandoned on place, (ii) restoration of vegetation (owner is University), (iii) the disconnection/reconnection of irrigation lines (owner is University), and (iv) the installation of grease traps or oil separators (owner is University).

(E) Proposed schedule: Dates r	may vary.
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	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the sanitary sewer system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$207,900.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-054

PROJECT NAME: Sanitary Sewer Line Replacement at the Administration Building and Art & Architecture Building

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is medium.

8	High	3	2	1	
kelihoo	Med	4	3	2	
	Low	5	4	3	
PHA	ASE	Low	High		
ASSI	GNED		Impact		

Background: These sanitary sewer lines provide service to many core buildings including the Administration Building, the Art & Architecture Building, and the Life Sciences (South) Building. At 75-100 years old these pipes are well beyond their life expectancy and need to be addressed before they collapse. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition sanitary sewer lines serving multiple core campus buildings.
- Install a new sanitary sewer line serving Virtual Technology & Design and Art & Architecture.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner.

Scope of Work: This project sliplines the pipes before they collapse. To address hydraulic loading issues the project also includes new lines from the Art & Architecture North Building and the Virtual Technology & Design Building. However, these new lines may conflict with long term plans of the University and preliminary coordination is needed with the University to determine if alternative pathing is necessary. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Recondition 8" pipe (approx. 300').

- Recondition 6" pipe (approx. 460').
- Install new 6" pipe (approx. 260').
- Replace damaged manhole.
- Construction supervision.
- Bedding and backfill.
- Asphalt and natural surface restoration.
- Provide bypass pumping during construction.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and disruptions due to open pit work.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$39,050 and it will also include coordination with University on alternative pathing.
ATTACHMENT 4

INFORMATIONAL APRIL 17-18, 2024 CAPITAL IMPROVEMENT PROJECT SHEET – 24/6-054

Additional Information:



Figure 1. Sanitary sewer system in the affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$520,328.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes and manholes selected for reconditioning are not damaged to a point that complete replacement is required (project will be rescoped and repriced if replacement is necessary), (ii) a pre/post CCTV inspection will be required, (iii) bypass pumping is required to keep campus core functions operable and it is included in the scope, (iv) traffic control and possible re-route will be required, (v) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (vi) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vii) workable solutions for all required

coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the replacement of pipes or manholes except where specified, (ii) the restoration of vegetation (owner is University), and (iii) the disconnection/reconnection of irrigation lines (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: None.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$511,500.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-055

PROJECT NAME: Sanitary Sewer Line Recondition from the Brink and Phinney Halls to the Integrated Research and Innovation Center

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is high (line is beyond useful life).

	High	3	2	1
elihood	Med	4	3	2
Lik	Low	5	4	3
PH	\SE	Low	Med	High
ASSI	GNED		Impact	

Background: This line provides sanitary sewer service to the Brink and Phinney Halls but is well beyond its expected life and plugs regularly, requiring frequent jetting. As pipes age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition the existing sanitary sewer line from the SW corner of the Brink and Phinney Halls to the Integrated Research and Innovation Center (IRIC).
- Install a new manhole for improved access.
- Inspect nearby lines to identify future needs.

Scope of Work: This project sliplines the existing pipes before they risk collapse and installs an additional manhole to allow for access for maintenance. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Recondition the 6" line (approx. 190').
- Install double manhole and cleanout.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University and the buildings' occupants for the sanitary sewer shutdown.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$18,150.

Additional Information:



Figure 1. Sanitary sewer system in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$194,365.
- (B) Forecasted annual operations and maintenance costs: +\$500. New manhole will require regular cleaning and inspection.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes and manhole(s) are not damaged to a point that complete replacement is required (project will be rescoped and repriced if replacement is necessary), (ii) a pre/post CCTV inspection will be required, (iii) bypass pumping is required to keep campus core functions operable and it is included in the scope, (iv) traffic control and possible re-route will be required, (v) underground construction conditions will be reasonably free of obstruction, conflict and hazardous materials that could impede completion, (vi) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (vii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the replacement of pipes or manholes, (ii) the restoration of vegetation (owner is University), and (iii) the disconnection/reconnection of irrigation lines (owner is University).

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

- (F) Impact on Sustainability: Improvement of the health safety and the reliability/functionality of the sanitary sewer system.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$191,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/7-059

PROJECT NAME: Stormwater Catch Basin and Manhole Upgrades

UTILITY SYSTEM: Storm Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (safety risks to building occupants, vehicles, and pedestrians). The impact associated with resiliency is <u>medium</u> (flooding occurs regularly).

The likelihood of these events is <u>high</u> (assets are in poor condition).



Background: Catch basins collect stormwater runoff and direct it to the creek to prevent flooding. Manholes across campus are used to access stormwater lines for inspection and service. When these fail, it severely limits the ability of clearing plugged lines, potentially requiring excavation. Problems include collapsing walls, sinking asphalt, plugged lines, and damage to pipes. All pose safety risks to vehicular and pedestrian traffic on campus.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Replace failing stormwater catch basins and manholes.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve required O&M practices in a safe manner.

Scope of Work: This project includes major repairs and replacements for aging catch basins and manholes that are beginning to fail. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Major repair and install liners at 30 catch basins.
- Remove and replace 14 catch basins.
- Major repair and install liners at 3 manholes.
- Remove and replace 1 manhole.
- Asphalt and natural surface restoration.
- CCTV inspection and jetting.
- Construction supervision.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Materials, including asbestos, which originated prior to Closing.

A detailed safety plan covering open pit work and vehicular and pedestrian traffic will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University for building shutdowns and to avoid disruptions associated with open pit work.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$141,130 and will also include conducting a CCTV inspection and jetting.

Additional Information:



Figure 1. Catch basin on Campus Drive.



Figure 2. Catch basin on Rayburn Street.



Figure 3. Catch basin on Perimeter Drive.



Figure 4. Catch basin at the South Hill Apartments.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,863,576.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur. Excluded work includes (i) the repair or replacement of pipes, and (ii) the restoration of vegetation (owner is University).
- (E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: This Capital Improvement will improve campus' safety and stormwater system's resilience. Stormwater quality will be improved.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,830,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/7-060

PROJECT NAME: Stormwater Line Installation from the Wallace Residence Center to Paradise Creek

UTILITY SYSTEM: Storm Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (physical and life safety issues). The impact associated with resiliency is <u>medium</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (excessive hydraulic lading).



Background: This stormwater system removes stormwater from areas of campus including the J.W. Martin Lab, the ICCU Arena, and the Wallace Residence Center. However, the current system is not designed to handle the current loads, causing flooding in the area regularly.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Increase stormwater capacity to reduce flooding and reduce stress on the existing system.
- Inspect nearby lines to identify future needs.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Change assets in order to achieve the required O&M practices in a safe manner, improve reliability and stormwater quality.

Scope of Work: This project installs a new line from the northwest corner of the Gooding Wing to Paradise Creek. The new line will reduce the hydraulic loading on the existing system by improving flow, extending the useful life of the connected lines. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Install new 24" HDPE pipe (approx. 290').
- Install new 24" outfall valve at Paradise Creek.
- Bedding and backfill.
- Construction supervision.
- CCTV inspect and jet other connecting lines.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work and vehicular and pedestrian traffic (including temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University for a possible shutdown of Paradise Creek Street and Stadium Drive.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$31,570 and it will also include conducting a CCTV inspection and jetting of other connecting lines.

Additional Information:



Figure 1. Stormwater system in the affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$346,961.
- (B) Forecasted annual operations and maintenance costs: +\$1,000. New pipe will require regular cleaning, jetting, and inspection. Outfall testing as required by MS4 stormwater permit.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) underground construction conditions will be reasonable free of obstruction, conflict, and hazardous materials that could impede completion, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this Capital Improvement will occur. Excluded work includes (i) reconditioning or replacement of connecting lines, and (ii) restoration (owner is University).

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: EPC (Commiss.) occurs in February 2025. Dates may vary.

- (F) Impact on Sustainability: This Capital Improvement will improve campus' safety and stormwater system's resilience. Stormwater quality will be improved.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$341,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/7-061

PROJECT NAME: Stormwater and Sanitary Sewer Major Repairs on Nez Perce Drive

UTILITY SYSTEM: Storm Water and Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>high</u> (lines are aged and plugged).



Background: These stormwater and sanitary sewer lines are aged and in poor condition, with frequent failures. The sanitary sewer line on Nez Perce suffers from many root penetrations as well. It most recently plugged in September 2021. The stormwater lines in the area have been plugged since the eruption of Mount St. Helens in 1980. These issues leave Nez Perce at risk for flooding and cause slippery conditions for pedestrians in poor weather. Their eventual collapse will risk loss of service to connected buildings and potential building flooding damage.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer line on Nez Perce Drive serving the President's house and the Golf Course.
- Inspect nearby sanitary sewer and stormwater lines to identify future needs.
- Change assets in order to achieve the required O&M practices in a safe manner and maintain reliable and effective service for both the stormwater and sanitary sewers.

Scope of Work: This project proposes reconditioning the sanitary sewer line and clearing the restoring function to the stormwater line via jetting, reconditioning, or replacement, dependent on the results of the Additional Work. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Slip line the 6" sanitary sewer line on Nez Perce Drive (approx. 1,600').
- Bedding and backfill.
- CCTV inspect and jet parallel stormwater on Nez Perce Drive (approx. 3,400').
- CCTV inspect and jet other connecting lines.
- Construction supervision.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work in a core campus area, and vehicular and pedestrian traffic (including temporary accommodations) will be developed. Similarly, a safe return to service will be documented.

The Concessionaire will coordinate with the University and building occupants for any shutdowns, as well as for the potential need for parking space closures along Nez Perce Drive.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$25,740 and will also include conducting a CCTV inspection and jetting.

Additional Information:



Figure 1. Sanitary sewer lines in affected area.



Figure 2. Stormwater lines in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$264,731.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes, catch basins, and manholes will be able to be reconditioned and replacement will not be needed (project will be rescoped and repriced as necessary), and (ii) efforts will be taken to minimize damage to surrounding trees and vegetation but impacts may occur. Coordination with the University for other work that may impact this Capital Improvement will occur. Excluded work includes (i) replacement of pipes, (ii) restoration

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of vegetation (owner is University), and (iii) disconnection/reconnection of irrigation lines (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: This Capital Improvement will improve campus' safety and stormwater system's resilience. Stormwater quality will be improved. Sanitary sewer operation is critical to public health and to prevent environmental contamination.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$259,600.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/3-036

PROJECT NAME: Primary Electric Switch Upgrades

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u>. The impact associated with resiliency is <u>medium</u> (impacting critical loads on campus).

The likelihood of these events is <u>high</u> (grid disruptions increasing in frequency).



Background: Campus is served by two Avista 13.2KV services with pole mounted fuse disconnects. This type of utility service is antiquated and substandard for a campus of this complexity. The 24/7 nature of a campus with residents, research, and critical systems demands a modernized primary electrical service. Failure at either of the two points of service will result in widespread electrical outages for campus that requires a manual process to address. Additionally, future microgrid and generation projects at the University will require that the point of service switching is upgraded.

In the past year, multiple Avista related incidents have caused damage to key utility assets: a thunderstorm caused an electrical failure on a chiller at the South Campus Chiller Plant, a transformer failure caused damage to Well 3, and a series of power bumps caused electrical damage to the disinfection system of the Reclaimed Water plant. Each one of these compromised the ability to produce and distribute utilities on campus.

The root cause of the various power disruptions are unknown, however considering the global supply chain issues it is likely that disruptions will continue and potentially worsen into the future, with time to restore service also increasing. Measures need to be taken on campus to protect critical utility assets, research, and other high cost equipment from future power quality problems.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- This project improves the safety and reliability of the Primary Electrical Distribution system and is necessary to maintain Performance Standard Part V.6, and 8 by replacing antiquated manual switching and reducing the amount of overhead electrical service.
- Upgrade the Primary Switching at two points of service from Avista to make these critical switching locations modern and capable of handling microgrid interconnection issues such as back feed protection.
- Coordinate requirements, construction, cost, and ownership with Avista.
- Re-establish primary electric metering and data management after implementation.

- Upgrade the primary electrical conductors at the points of service to the first sectionalizer.

Scope of Work: This project modernizes the electrical service from Avista at both the East and West point of service. This modernization will move the campus toward a more durable utility situation and will help mitigate the risks associated with widespread outages.

This project proposes modification to the primary points of presence with Avista by installing protective relays to protect campus infrastructure from power quality issues such as voltage sags, voltage spikes, over-current, phase loss, or over/under frequency. This will have the added benefit of extending the life of electrical equipment across campus and may reduce peak demand charges from Avista. No passive or active harmonic filtration or power factor correction equipment is included at this time.

The scope of work of this Capital Improvement is:

- Remove overhead existing 12.3 kV distribution including poles and switches serving the East and West Feeds.
- Provide new 13.2 kV, pad-mounted, motor operated switches with protective relays.
- Reinstall and commission SEL metering at East and West Avista points of service.
- Backfill and restore surface to match existing.
- Start-up, test, and commission new equipment.
- Coordinate with Avista to install point of service equipment that meets interconnectivity requirements.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit and electrical work will be developed.

The Concessionaire will coordinate with the University for any interruptions to campus services.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$130,240 and will also include (i) 30% electrical design to obtain pricing, (ii) a power quality study at both interconnection points to determine power quality issues, (iii) coordination with the University for electrical gear locations, and (iv) coordination with Avista Utilities on scope, ownership, operation, and potential cost sharing of this Capital Improvement.

Additional Work of this project includes an evaluation of the electrical meter data available for the two primary feeds to determine the appropriate equipment and scope of work to protect campus. Project pricing and scope will be modified based on the evaluation. Further work and coordination with Avista is necessary for potential cost sharing, identifying ownership, etc. which will be part of the Additional Work and development stages.

Additional Information:



Figure 1. West campus utility feed, mechanical switching, and overhead distribution.



Figure 2. East campus utility feed.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,700,658.
- (B) Forecasted annual operations and maintenance costs: + \$5,000. Motor operated switches will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) no passive/active harmonic filtration or power factor correction equipment will be needed as a result of the power quality study (if needed, project will be rescoped and repriced), (ii) coordination with Avista will result in costs incurred to develop this project, (iii) Avista will require upgraded switching/controls for on-campus generation interconnection, (iv) Avista will participate in scoping and cooperate on ownership/cost issues, (v) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, and (vi) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) passive/active harmonic filtration or power factor correction equipment, (ii) temporary electric generators to support buildings during shutdown, and (iii) primary electrical service repair/replacement on Avista Utilities owned equipment.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

(F) Impact on Sustainability: None.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$2,657,600.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: Negligible, electricity. Potential peak demand charge reduction, savings unknown until new equipment is in operation.

PROJECT CODE: 24/1-013

PROJECT NAME: Emergency Generator at the Energy Plant

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (loss of heat in winter). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is low.

	High	3	2	1
celihood	Med	4	3	2
Ľ	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: The emergency back-up generator is critical for providing power to the Energy Plant during total electrical outages. At 180 kW it is too small to support much of the electrical load of the building, creating a slow response time to power outages as systems are brought online one by one to ensure the generator doesn't trip. Most of these systems are 26 years old and beyond their serviceable life.

Though the turbines are expected to provide power during an Avista outage, the generator is still necessary to provide "black start" functionality if there is an outage while the turbines are offline. Each of the subsystems addressed is critical for the successful operation of the Energy Plant during such an outage. Without power there would be a complete steam and compressed air loss to campus buildings. Modernizing the generator and connecting to the Energy Plant microgrid will provide for an automatic start-up and synchronization with the turbines, reducing potential interruptions to plant operations or campus when power from the utility is lost or restored.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade the generator to provide "black start" capability.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns associated with the physical conditions of current assets.

Scope of Work: This project upgrades the system by upgrading the aging generator and electrical components, and connecting them to the microgrid. The generator will be sized to support B Boiler, as its response time is shorter than the wood boiler, and it will take less electrical power to bring B Boiler online. Once there is enough steam from B Boiler to spin up a turbine, the turbine will take over the full load of the building. At that point the operations team will bring the wood boiler online.

The scope of work of this Capital Improvement is:

- Remove the existing generator, fuel storage tank, ATS, and emergency panel 'X'.
- Install a new 208V, 3-phase, 300 kW diesel generator with 24-hour belly tank on the exterior of the building.
- Install new ATS and emergency panel to support electric loads of the natural gas boilers.
- Upgrade the emergency electrical system and connect to the microgrid controls.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University the construction schedule during summer hours to reduce impacts to the Energy Plant parking lot.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$82,170 and will also include the provision of a power study for proposed emergency generator circuits.

Additional Information:



Figure 1. Aged generator at the Energy Plant. INFORMATIONAL - BAHR



Figure 2. Existing fuel tank to be removed. TAB 4 Page 199

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$779,964.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) work can be done without shutting down the Energy Plant, and (ii) suitable space is available outside the building for the new generator. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) any repairs or upgrades to the electrical system outside of the emergency circuit, and (ii) any repair or replacement of electrical systems not specified.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: Minor impact from larger diesel generator's fuel consumption.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

- (H) Fee or charge payable to the Operator: \$766,700.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/1-015

PROJECT NAME: Utility Tunnel Upgrades

UTILITY SYSTEM: Steam and Condensate, Chilled Water, Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (severe physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended utility outages and building shutdowns).

The likelihood of these events is low.

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	Low	5	4	3
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Background: The utility tunnel network is critical for distributing utilities across campus including steam, chilled water, high voltage power, natural gas, and IT/telecom. The systems within the tunnels that remove water and keep operators and pedestrians safe are critical for preventing flooding damage to utilities and the tunnel walls as well as reducing the risk of severe life safety hazards such as electrocution or natural gas leaks. Many of these components are not suited for the environment or are at the end of life and are in need of upgrades. The existing sump pumps are not rated for high temperature water and fail often. Much of the racking used to support pipes is heavily damaged from rust and corrosion over time, posing a safety and resiliency risk. Lighting systems are inadequate, causing unsafe conditions.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Extend the useful life of the tunnel system by implementing effective water management to reduce water intrusion damage.
- Mitigate resiliency issues by replacing damaged/inadequate utility racking.
- Address safety concerns presented by the physical condition of existing tunnel systems.
- Prevent unplanned outages by replacing degraded iron pipe with copper.

Scope of Work: This project upgrades the systems within the tunnels described above, that remove water and keep operators and pedestrians safe. The scope of work of this Capital Improvement is:

- Conduct thorough assessment to provide water management, racking, lighting, and piping improvements throughout the tunnel system.
- Replace sump pumps with high temperature pumps and standardize (x10).
- Convert remaining lights to LED.
- Replace damaged utility racking.
- Upgrade corroded iron compressed air pipes to Type K copper.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended

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that UI ITS identify and remove any abandoned and damaged IT/Telecom lines in construction areas.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University and the buildings' occupants for any potential utility shutdowns.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$58,960 and will also include a tunnel investigation to identify exact quantities of light fixtures, damaged racking, and length of iron pipe.

Additional Information:



Figure 1. Iron compressed air lines need to be removed.



Figure 2. Sump pumps are failing.



Figure 2. Fluorescent lights still in use.



Figure 4. Flooding due to failed sump pump near high voltage power.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,920,151.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 25% of lighting still needs to be converted to LED, 5% of utility racking requires replacement, 300' of iron pipe requires replacement, and (ii) utility racking will be able to be repaired or replaced without shutting down utility service. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the replacement of existing LED lighting, and (ii) the demolition and disposal of abandoned utilities.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

(F) Impact on Sustainability: Minor improvement from more efficient electrical loads and extended useful life of the tunnel system.

- (G) Anticipated tax credits or other benefits: Potential Avista Utilities' Schedule 90 rebate program.
- (H) Fee or charge payable to the Operator: \$1,892,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. The reduction from lighting energy savings will be offset by operational sump pumps.

PROJECT CODE: 24/2-067

PROJECT NAME: Chilled Water Capacity Upgrade at the North Campus Chiller Plant

UTILITY SYSTEM: Chilled Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (minimal physical and life safety issues). The impact associated with resiliency is <u>high</u> (extended chilled water outages and risk to critical spaces).

The likelihood of these events is <u>low</u> (equipment is at end of life).

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Background: The North Campus Chiller Plant (NCCP) is critical for supplying chilled water to the campus buildings. The NCCP is co-located with the Energy Plant as the absorption chillers use steam as their heat source, significantly improving the wood boiler's summer performance. This allows the University to generate chilled water at a lower cost than using electric chillers. The chillers and cooling towers at NCCP are well beyond their serviceable life and in need of replacement. Both chillers are operating at a reduced capacity (approx. 50%) and their cooling towers are heavily scaled, reducing performance. Neither the cooling towers nor pumps were sized for their respective chillers, limiting the plant's ability to keep up with campus demands. Loss of these components at the NCCP impacts campus operations by triggering potential load shedding, while also increasing Supply Costs to the University when electric chillers need to be brought online to make up for the loss in capacity.

The existing space used by NCCP was never designed or intended to support chilled water production. Currently, major equipment is installed across three levels within the Energy Plant itself, leading to operational inefficiencies and difficulty replacing equipment. There is no room to expand the plant with additional chillers without relocating. Since every major piece of equipment at the NCCP needs to be replaced, it may be more beneficial to the long term goals of the University to construct a new chilled water plant to the east of the Energy Plant.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve performance and operating efficiency.
- Increase chilled water capacity.
- Mitigate resiliency issues associated with system beyond their serviceable life.
- Provide N+1 redundancy to winter cooling season.

Scope of Work: This project upgrades the plant with new chillers, cooling towers, and pumps to improve performance, efficiency, resiliency, and total capacity. An indoor basin will be installed for the cooling towers to

allow for operation during winter, providing redundancy to the McClure Chiller Plant, as well as a common header for the condenser loop to provide redundancy to the cooling towers. Since McClure is the only source of chilled water in the winter, adding redundancy reduces the likelihood of a complete shutdown and loss to critical servers and research if a failure occurs. Like-for-like chiller replacements are proposed, however larger capacity chillers will be investigated in the Additional Work.

The Additional Work of this project includes a facility condition assessment to determine the feasibility of continuing operations of the NCCP in its current location. Coordination with the University will be necessary at this stage to determine the feasibility of constructing a new plant and potentially present a new Capital Improvement.

The scope of work of this Capital Improvement is:

- Re-pipe condenser loop for cooling towers to operate on a common header.
- Install an indoor basin to allow for cold weather operation.
- Replace primary and secondary chilled water pumps and VFDs (x5).
- Replace single-effect absorption chillers (x2).
- Replace cooling towers (x3).
- Upgrade controls and monitoring.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
 - Facility condition assessment.
 - Chilled water model.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A safety plan, including accommodations around the public sidewalk and the road, will be developed.

The Concessionaire will coordinate with the University for potential chilled water disruptions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$380,050 and will also include a (i) Chilled Water system loop modeling and heat transfer analysis to determine the necessary capacity, loop constraints, and optimize loop efficiency, and (ii) a facility condition assessment of the NCCP.

Additional Information:



Figure 1. Exterior of the NCCP.



Figure 2. The NCCP's pumps installed in basement. Space is limited, reducing the ability to maintain equipment properly.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$12,489,269.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pricing is based on upgrades to the existing location, (ii) lead times will not impact schedule, and (iii) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) the construction of a building to support new equipment, (ii) structural modifications to the existing building to support new equipment, or upgrade to the electrical service, and (iv) the replacement or upgrade to the underground chilled water piping.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$12,300,200.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. New equipment will likely be more efficient.

PROJECT CODE: 24/6-068

PROJECT NAME: Sanitary Sewer Service Lines Recondition on 6th Street

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some low safety risks from sanitary sewer). The impact associated with resiliency is <u>high</u> (extended outage and building shutdown).

The likelihood of these events is <u>low</u> (lines are aged, J.W. Martin Lab has regular issues based on occupant behavior).



Background: The sanitary sewer lines serving the Engineering Annex, Environmental Health & Safety (EHS), Agricultural Education, and the Palouse Research, Extension and Education Center (PREEC) Greenhouse buildings on Sixth Street are all aged and either beyond or approaching their life expectancy (the oldest of which is 57 years old). As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the pipe collapses, the University will see significant cost savings and less disruption, as there is minimal trenching needed. Waiting to replace the pipe could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area, on top of the unanticipated disruption to occupants.

The services lines for J.W. Martin Lab are in poor condition due to unauthorized dumping from building occupants. It was also not constructed correctly and has low spots, or "bellies", in it, which cause poor flow rates and makes it more likely that sewer will back up into the building. Further, the 4" lines are too small and not maintainable due to the lack of access.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition and upgrade existing sanitary sewer lines on several buildings located on 6th Street.
- Upsize and redesign J.W. Martin Lab services lines to address issues.
- Inspect nearby lines to identify future needs.

Scope of Work: This project includes jetting, inspection, and reconditioning of the sanitary sewer lines serving the Engineering Annex, EHS, Agricultural Education, and the PREEC Greenhouse buildings. This project also removes the entire service for the J.W. Martin Lab, upgrades the common sections to 6", and installs a manhole and cleanouts so that scheduled maintenance can be performed. The scope of work of this Capital Improvement is:

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- Engineering Annex, EHS, and Agricultural Education:
 - Asphalt and natural surface demolition and restoration.
 - Bypass pumping.
 - Recondition 4" pipe (approx. 310').
 - · Construction Supervision.
 - Pre-cleaning and CCTV inspection.
 - Post-cleaning and CCTV inspection.
- PREEC Greenhouse buildings:
 - Asphalt and natural surface demolition and restoration.
 - · Bypass pumping.
 - Recondition 6" pipe (approx. 370').
 - · Construction Supervision.
 - Pre-cleaning and CCTV inspection.
 - Post-cleaning and CCTV inspection.
- J.W. Martin Lab:
 - Asphalt and natural surface demolition and restoration.
 - · Bypass pumping.
 - Demolition and removal of 4" pipe (approx. 430').
 - Installation of 4" service lines (approx. 100').
 - Installation of 6" pipe (approx. 340').
 - Recondition 6" pipe (approx. 50').
 - Install double cleanouts (x8).
 - · Install one new manhole.
 - Construction Supervision.
 - Pre-cleaning and CCTV inspection.
 - Post-cleaning and CCTV inspection.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- CCTV inspection report.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - · Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and

traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$44,330 and will also include a CCTV inspection and jetting.

Additional Information:



Figure 1. Utility map of area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$793,429.
- (B) Forecasted annual operations and maintenance costs: +\$620. New manhole and clean outs will allow for new O&M practices to be implemented, including jetting and camera inspections every 5 years.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) Engineering Annex, EHS, Agricultural Education, and PREEC Greenhouse buildings' sanitary sewer service lines will be able to be reconditioned and replacement will not be needed, (ii) vegetation will be restored with like for like replacements at the direction of UI Landscaping, (iii) lead time uncertainty will not affect construction schedule. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) disconnection/reconnection of irrigation lines (owner is University), (ii) inspection, reconditioning, or replacement of City of Moscow sanitary sewer lines (owner is City of Moscow), (iii) maintenance of newly planted vegetation post construction (owner is University), and (iv) installation or repairs

of grease/oil separators or other equipment (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: None.

(G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.

(H) Fee or charge payable to the Operator: \$779,900.

(I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.

(J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-069

PROJECT NAME: Sanitary Sewer Line Recondition on Perimeter Drive

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some low safety risk from sanitary sewer). The impact associated with resiliency is <u>medium</u> (extended outage and building shutdown).

The likelihood of these events is <u>low</u> (line has reached its end of life).



Background: These sanitary sewer lines serve the north and south concourses of the Kibbie Dome, the Facilities Services complex, and the South Campus Chiller Plant. These pipes are aged at over years old and are beyond their life expectancy. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing the proposed work before the pipe collapses, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area. It is recommended that Capital Improvement 24/6-077 Sanitary Sewer Recondition from West Kibbie Dome to Perimeter Drive be bundled with this project to minimize costs and timeline.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition the existing sanitary sewer lines on the west side of the Kibbie Dome.
- Inspect nearby lines to identify future needs.

Scope of Work: This project reconditions the pipes and manholes mentioned above to extend their useful life. The project also includes cleaning and inspecting the Poultry Hill sanitary sewer service lines to assess their condition and readiness for future needs but does not include reconditioning since the only occupied building is being demolished. These pipes will be reconditioned or replaced at a later date, depending on the University's future needs for the site. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Bypass pumping.
- Recondition 8" main line (1350').
- Repair and install manhole liners (x6).
- Construction supervision.
- Pre-cleaning and CCTV inspection.
- Post-cleaning and CCTV inspection.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$23,320 and will also include conducting a CCTV inspection and jetting along Perimeter Drive (1,350') and the service line for Poultry Hill (450').

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Additional Information:



Figure 1. Map of sewer lines in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$424,622.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes will be able to be reconditioned and replacement will not be needed, (ii) Poultry Hill service lines will not be reconditioned, and (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) reconditioning of Poultry Hill services lines, (ii) restoration of vegetation (owner is University), and (iii) inspection, reconditioning, or replacement of City of Moscow sanitary sewer lines (owner is City of Moscow).
- (E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: None.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$418,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-070

PROJECT NAME: Sanitary Sewer Line Recondition on Rayburn Street

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some low safety risks from sanitary sewer). The impact associated with resiliency is <u>high</u> (extended outage and multiple building shutdown).

The likelihood of these events is <u>low</u> (line has reached its end of life).



Background: These sanitary sewer main and service lines support buildings along Rayburn Street including major buildings such as Agricultural Biotechnology, the Renfrew Hall, the Menard Law Building, the Library, the Kibbie Dome, and the Physical Education Building (PEB). These pipes are aged and have reached their life expectancy. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area. It is recommended that Capital Improvement 24/6-048 Library and Memorial Gym Sanitary Sewer Major Repairs be bundled with this project to minimize costs and timeline.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition the existing sanitary sewer lines on Rayburn Street from 6th Street to the Radio-TV Center.
- Inspect nearby lines to identify future needs.

Scope of Work: This project reconditions the pipes and manholes mentioned above to extend their useful life. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Bypass pumping.
- Recondition 6" pipes (420').
- Recondition 8" pipes (525').
- Recondition 10" pipes (515').
- Recondition 12" pipes (950').

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- Repaid and install manhole liners (x7).
- Pre-cleaning and CCTV inspection.
- Post-cleaning and CCTV inspection.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$56,760 and will also include conducting a CCTV inspection and jetting.

ATTACHMENT 4

INFORMATIONAL APRIL 17-18, 2024 CAPITAL IMPROVEMENT PROJECT SHEET – 24/6-070

Additional Information:



Figure 1. Map of sewer lines in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$997,861.
- (B) Forecasted annual operations and maintenance costs: +\$0. No change anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes and manholes will be able to be reconditioned and replacement will not be needed, and (ii) efforts will be taken to minimize damage to surrounding trees and vegetation but impacts may occur. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) restoration of vegetation (owner is University), and (ii) inspection, reconditioning, or replacement of City of Moscow sanitary sewer lines (owner is City of Moscow).

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(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: None.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$982,300.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-071

PROJECT NAME: Sanitary Sewer Line Recondition from the Theophilus Tower to 6th Street

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some low safety risks from sanitary sewer). The impact associated with resiliency is <u>high</u> (extended outage and multiple building shutdowns).

The likelihood of these events is <u>low</u> (lines are beyond their life expectancy but can be reconditioned).



Background: These sanitary sewer lines serve the Shoup Hall, the McConnell Hall, the Theophilus Tower, and the Living Learning Communities (LLC). These pipes are well beyond their life expectancy at up to 66 years old and need to be addressed before collapse. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscaping.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer lines for housing buildings located on 6th Street.
- Mitigate a resiliency issue associated with pipes beyond their useful life.
- Inspect nearby lines to identify future needs.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Bypass pumping.
- Recondition 4" pipes (115').
- Recondition 6" pipes (360').
- Recondition 8" pipes (200').
- Recondition 10" pipes (115').
- Recondition 12" pipes (325').
- Repair and install manhole liners (x4).
- Pre-cleaning and CCTV inspection.

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- Post-cleaning and CCTV inspection.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$18,810 and will also include conducting a CCTV inspection and jetting.

ATTACHMENT 4

INFORMATIONAL APRIL 17-18, 2024 CAPITAL IMPROVEMENT PROJECT SHEET – 24/6-071

Additional Information:



Figure 1. Map of sewer lines in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$343,050.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes and manholes will be able to be reconditioned and replacement will not be needed, and (ii) efforts will be taken to minimize damage to surrounding trees and vegetation but impacts may occur. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) restoration of vegetation (owner is University), and (ii) inspection, reconditioning, or replacement of City of Moscow sanitary sewer lines (owner is City of Moscow).
- (E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: None.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$337,700.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-072

PROJECT NAME: Sanitary Sewer Service Lines Recondition at the Wallace Residence Center

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some safety risks from sanitary sewer). The impact associated with resiliency is <u>medium</u> (extended outage and multiple building shutdowns).

The likelihood of these events is <u>medium</u> (lines are beyond their life expectancy and impacted from unauthorized dumping).



Background: These sanitary sewer lines serve the Wallace Residence Center complex. The pipes are well beyond their life expectancy at 60 years old and need to be addressed before collapse. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the service lines can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area.

These lines also suffer from regular, unauthorized dumping by building occupants, particularly from cooking grease and rags. These contaminants cause build up along the pipe walls that reduce flow rates, which eventually will cause a complete blockage to the line. Depending on the age and condition of the pipe, clearing the blockage may not be possible without damage, ultimately requiring the pipe to be replaced sooner than expected. Grease also makes its way to the City of Moscow main lines, causing disruptions to other entities and exposes the University to fines from the City. While not in this project, it is recommended that the University inspect and service any grease/oil separators and add them where appropriate to reduce these problems.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer lines for the Wallace Residence Center complex.
- Mitigate a resiliency issue associated with pipes beyond their useful life
- Inspect nearby lines to identify future needs.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.

- Bypass pumping.
- Recondition 4" pipes (55').
- Recondition 6" pipes (300').
- Recondition 8" pipes (1,000').
- Recondition 10" pipes (330').
- Repair and install manhole liners (x9).
- Pre-cleaning and CCTV inspection.
- Post-cleaning and CCTV inspection.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended the servicing, repair, and/or installation of grease and oil separators.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$31,680 and will also include conducting a CCTV inspection and jetting.

Additional Information:



Figure 1. Map of sewer lines in affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$584,414.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes and manholes will be able to be reconditioned and replacement will not be needed, and (ii) efforts will be taken to minimize damage to surrounding trees and vegetation but impacts may occur. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) restoration of vegetation (owner is University), (ii) disconnection/reconnection of irrigation lines (owner is University), (iii) repairs or replacement of grease and oil separators (owner is University), and (iv) inspection, reconditioning, or replacement of City of Moscow sanitary sewer lines (owner is City of Moscow).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: None.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$575,300.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/8-073

PROJECT NAME: Compressed Air Upgrades

UTILITY SYSTEM: Compressed Air

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (high noise levels pose long term health risk to operators). The impact associated with resiliency is <u>low</u> (risk of extended outages and loss of redundancy).

The likelihood of these events is <u>high</u> (equipment is well beyond its useful life).



Background: Compressed air is produced at the Energy Plant for use in campus buildings. Most compressed air is used for HVAC pneumatic controls, however there are other uses on campus including research and bicycle air stations. There are three air compressors at the Energy Plant, all of which are aged with high runtimes, yet can be rebuilt to continue operation. Two air dryers remove moisture before distributing to campus, one of which is beyond useful life and should be replaced. The space also requires modification to reduce noise levels and improve ventilation. The air compressors generate significant heat that needs to be rejected, which is currently done with campus chilled water. This is an opportunity to capture the waste heat and utilize it elsewhere.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve performance and operating efficiency of the Compressed Air system.
- Add N+1 redundancy to critical sub-systems to improve reliability.
- Mitigate resiliency issues associated with equipment beyond its useful life.
- Mitigate health hazards with engineered solutions.

Scope of Work: This project rebuilds all three air compressors. To improve N+1 redundancy it also replaces the failing desiccant air dryer with a refrigerant dryer and installs a parallel oil separator. Noise levels will be reduced by a combination of modifying the layout of equipment, installing sound deadening material, or other engineered solutions as appropriate.

To improve overall energy efficiency, heat recovery technology will be explored in the Additional Work of this project. Besides improving the Energy Plant's efficiency, this would also reduce the chilled water load on campus. Based on the results of the assessment, the project will be repriced and rescoped to include waste heat recovery or a future Capital Improvement will be proposed. The scope of work of this Capital Improvement is:

- Major rebuild of three (3) existing air compressors.
- Furnish and install one (1) refrigerant dryer.

- Install one (1) oil separator.
- Plumbing, mechanical, electrical, and controls modification necessary to connect the new equipment.
- Start-up, test, and commissioning of the new equipment.
- Make ventilation and sound reduction improvements to space.
- Assess feasibility of heat recovery system for compressor cooling needs.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the Additional Work stage.

The Concessionaire will coordinate with the University and buildings' occupants for any potential interruptions to compressed air availability.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$52,580 and will also include conducting a feasibility assessment for the installation of heat recovery technology.

Additional Information:



Figure 1. Compressors are aged, but still serviceable. INFORMATIONAL - BAHR



Figure 2. Sound dampening needed around compressors.



Figure 3. Poor ventilation in compressor room reduces equipment life.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$437,709.
- (B) Forecasted annual operations and maintenance costs: +\$200. New equipment will require additional O&M.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that pricing is based on an estimated 2024 design and construction and that air compressors are rebuildable (project will be rescoped and replacement is necessary). Coordination with the University for other work that may impact this Capital Improvement will occur. Excluded work includes (i) replacement of air compressors, (ii) repair or replacement of existing refrigerant dryer, (iii) repair or replacement of existing oil separator, and (iv) installation of waste heat recovery equipment.
- (E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: Equipment should qualify for Avista Utilities' Schedule 90 rebate.
- (H) Fee or charge payable to the Operator: \$430,100.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$3,000, electricity. Compressors should be more efficient after completion of the Capital Improvement. No data is available on existing electricity usage, and it is assumed that Compressed Air system accounts for 1% of the Energy Plant electrical load.

PROJECT CODE: 24/4-074

PROJECT NAME: Well #3 Modernization

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>high</u> (potential impacts to water quality and firefighting capability, known electrical hazards within building). The impact associated with resiliency is <u>high</u> (extended outages and loss of redundancy).

The likelihood of these events is <u>low</u> (equipment is beyond end of life)

High 3 2 1 _ikelihood Med 3 2 4 Low 5 3 4 Low Med High PHASE ASSIGNED Impact

Background: The University has owned and operated its own domestic water wells for over 100 years. The locations and depths have changed with the growth of campus and today there are two wells, known as Wells #3 and #4, north of campus. These wells are critical to the operation of campus, as they are the University's only reliable source of potable water. The City of Moscow runs at a lower pressure than the University does, preventing them from supporting the University in an outage without major disruptions to campus operations. Because of this, it is vital that the wells are resilient and can operate at all times.

Well #3 was constructed in 1964. It was pulled in 2001 for service and again in 2022 after an electrical failure on the Avista grid damaged the motor. While the pump and motor were addressed, the other major components at Well 3, including its electrical service, are still original equipment and well beyond their expected life. Replacement is needed to ensure successful operation of the well and to reduce the risk of another electrical failure damaging the high cost motor that was just pulled.

Currently, the well is not backed up with emergency power as recommended by IDAPA 58.07.08. Without backup power the system can only provide between 2 to 14 days of domestic water, depending on campus use and storage tank levels before the incident. This is inadequate life support for firefighting, dining, housing, research, and medical treatment on campus, including its 9,500 students, during an extended outage. An electrical generator, with its associated equipment, is necessary to both ensure campus has a continuous supply of domestic water during utility power outages and protect the well pump and motor from poor power quality, voltage spikes/swells, and other electrical issues on the Avista Utilities grid.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve performance and operating efficiency of the well.
- Mitigate severe safety and resiliency issues associated with equipment beyond its useful life.
- Provide domestic water during electrical grid failures.

Scope of Work: This project modernizes Well #3 by upgrading its major components, including converting the electrical system from 2300V to 480V. To maximize resiliency and project cost savings, the project includes replacing the high cost submersible well motor with a vertical hollow shaft (VHS) motor at ground level. This will eliminate the need to pull the motor in the future and allow for maintenance not previously feasible. Upgrading the well's electrical system at the same time as installing a generator will reduce overall project costs to the University, as development and construction times are reduced, and uncommon equipment will not be necessary to match the 480V generator with the existing 2300V well. The scope of work of this Capital Improvement is:

- Provide new vertical hollow shaft motor with insulated lower half coupling for upper bearing, Aegis lower shaft grounding ring, 120V thermal heater in windings, and non-reverse coupling.
- Provide new vertical hollow shaft pump system to match existing submersible pump curve and base mount and all associated equipment needed for a complete package. Danfoss drive in cabinet with line and load reactors and pressure control equipment.
- Provide new style Cla-Val equipment and all associated valves for water lube pump system and controls.
- Provide labor to pull old submersible pump and install new VHS pump system.
- Demo and install a new power service that will include new 800A 480V 3-phase main service disconnect, dry transformer, and service lateral conduit/wire from utility provided transformer. New metering equipment and all connections to existing building 120/240V single phase system.
- Install 480V, 3-phase diesel generator and transfer equipment. New concrete slab, fencing, underground feeder conduits, wire, load bank equipment, and 72-hour fuel tank base.
- Integrate all new equipment into existing SCADA controls.
- Reconfigure disinfection system.
- Install motion sensing security lighting on exterior of well house.
- Upgrade interior lighting to LED and replace inside electric heaters.
- Ventilation upgrades to well room and chemical storage room.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project Documents:
 - Design and as-built documents.
 - O&M Manuals.
 - Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan required for crane operations will be developed during the Additional Work stage.

The Concessionaire will coordinate with the Sheep Farm for potential road access disruptions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform

additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$153,010 and it will also include (i) coordination with MIEDI Water Purveyor and IDEQ to determine permitting and approval process, and (ii) developing scope for integrating new components into existing SCADA controls.

Additional Information:



Figure 1. Well being pulled during emergency 2022 repairs.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$5,085,924.
- (B) Forecasted annual operations and maintenance costs: +\$7,500. Additional equipment such as emergency generator will require service. New motor and electrical equipment are more technologically advanced and will require service.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) well shaft is straight and will not require redrilling to support vertical hollow shaft motor, (ii) lead times on equipment will not delay schedule, and (iii) efforts will be taken to minimize damage to surrounding vegetation, but impacts may occur. Coordination with University for other work that may impact this project will occur. Excluded work includes (i) redrilling well, (ii) primary electrical service repair/replacement (owner is Avista Utilities), (iii) restoration of vegetation (owner is University), and (iv) demolition and disposal of any electrical equipment containing PCBs.

(E) Proposed schedule: EPC (Const.) extends through February 2025. EPC (Commiss.) occurs in February 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement due to mitigation of risk of damage and increased electrical efficiency of equipment.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$4,999,500.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$100, electricity. The decreased is associated with an assumed 1% improvement in electrical efficiency.

PROJECT CODE: 24/1-016

PROJECT NAME: Condensate Return System Upgrades

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (unsafe working conditions). The impact associated with resiliency is <u>medium</u> (potential risk to building envelope).

The likelihood of these events is low.

	igh	3	2	1
рс	н		~	
ikelihoo	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: The condensate return system is critical to boiler operations and is in need of upgrades. These systems are beyond expected life and should be replaced before failure. The main hot well tank is 95 years old, underground, in an unknown condition. Loss of these tanks risks a steam system shutdown and structural damage to the building envelope of the Energy Plant.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Upgrade condensate return system to improve performance.
- Mitigate resiliency issues associated with systems approaching end of life.
- Address safety concerns that should be physically mitigated.
- Improve O&M practices for a safe and reliable operation.

Scope of Work: This project addresses issues in the system to improve performance, resiliency, and safety. The scope of work of this Capital Improvement is:

- Replace condensate pumps at the hot well tanks and install VFDs (x4).
- Install exhaust fans in the hot well room.
- Recondition the hot well tanks and reline (x2).
- Replace critical valving in the hot well room.
- Install flash tank to capture high pressure steam losses.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:

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- Design and as-built documents.
- O&M manuals.
- Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$57,090 and will also include a structural assessment of the hot well tanks.

Additional Information:



Figure 1. Aged condensate pumps in hot well room.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

(A) Total Cost: \$1,830,672.

- (B) Forecasted annual operations and maintenance costs: +\$1,500. The increase is associated with the additional flash tank and exhaust fans.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) hot well tanks will still have useful life left if relined, no major structural repairs or replacement will be needed, and (ii) staged construction will occur so no steam shutdown will be required. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the replacement of hot well tanks, and (ii) the replacement of feedwater pumps and piping.
- (E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement from more efficient pumps. Reduced flash steam losses.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,800,700.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$1,000, electricity, wood fuel, natural gas. The decrease derives from the new VFDs and reduced steam losses.

PROJECT CODE: 24/1-014

PROJECT NAME: Energy Plant Building Envelope Upgrades

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (physical and life safety issues). The impact associated with resiliency is <u>medium</u> (plant security issues).

The likelihood of these events is medium.

8	High	3	2	1
kelihoo	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: The exterior envelope of the Energy Plant has been in disrepair for some time, with the last major improvement 35 years ago with the addition of the wood boiler. Many portions of the building are original from 1926. Upgrades are needed for the plant to continue operation for the next 50 years. Security additions at doors and windows are needed to prevent unauthorized access. Providing a setback from the building is recommended for protecting pedestrian in the parking lot from falling objects and glass. Many of these issues can be addressed while also improving the general appearance of the building.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve the general condition of the Energy Plant to extend useful life.
- Increase security and prevent unauthorized access.
- Address safety and security concerns presented by degraded condition of existing assets.
- Address long term health concerns from ash exposure.

Scope of Work: This project addresses the many significant safety issues for both plant operators, and vehicle and pedestrian traffic outside by improving security, replacing damaged doors and windows, reconditioning brickwork, and reroofing. The scope of work of this Capital Improvement is:

- Replace all exterior doors and install card access locks.
- Replace windows with safety glass. Recondition all window operating mechanisms.
- Replace failed roof exhaust fans.
- Replace roof.
- Connect roof drains to stormwater collection system instead of sewer.
- Recondition brickwork and repaint sheet metal exterior.
- Plant a tree row on east side of building to reduce safety risks in parking lot.
- Upgrade exterior lighting and Bay 3 to LED lights.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University the partial closing of Lot 14 and adjacent sidewalks during construction, as well as for a potential reconfiguration of the parking lot.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$151,030 and will also include the preliminary architectural and engineering design documents to include windows, landscape tree planting, and exterior façade re-finishing.

Additional Information:



Figure 1. Many broken windows, exhaust fans need to be replaced.



Figure 2. Recondition brickwork at the Energy Plant.



Figure 3. Metal façade on east side of building is in disrepair.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$4,078,318.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 40% of brickwork will be repointed, and (ii) trees will be planted away from utilities and their ownership turned over to the University after construction. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) any structural repairs to building envelope, (ii) abatement of hazardous materials including asbestos and lead paint (owner is University), and (iii) maintenance of trees after project completion (owner is University).
- (E) Proposed schedule: EPC (Const.) extends through April 2025. EPC (Commiss.) occurs in May 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: Improvement as a result of a new tree row that will act as a carbon sink improving local air quality.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$4,013,900.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. Any LED savings will be offset by additional loads.

PROJECT CODE: 24/1-008

PROJECT NAME: Feedwater System Upgrades

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (unsafe piping exists). The impact associated with resiliency is <u>high</u> (failure likely to disable the wood fuel boiler, pumps failing risk complete Energy Plant shutdown).

The likelihood of these events is <u>low</u> (feedwater pumps are failing).



Background: The feedwater system is critical to boiler operations and is in need of replacement. Most of these systems are original equipment and are well beyond this serviceable life and becoming unrepairable. The feedwater piping to Boiler D is of an unknown age and likely not up to code. The current pipe layout in the Energy Plant is a result of efforts to minimize cost and maximize uptime during construction over the years. As a result, piping often does not follow an optimum path and has excessive bends, which increases losses in the system.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve performance of the feedwater system.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address safety concerns presented by condition of existing assets.
- Improve O&M practices for safe and reliable operation.

Scope of Work: This project addresses issues in the system to improve performance, resiliency, and safety. The scope of work of this Capital Improvement is:

- Upgrade feedwater pumps and VFDs (x4).
- Optimize feedwater pipe layout in the Energy Plant.
- Replace distribution valves (x15, 4" valves; x2, 6" valves).
- Replace Boiler D piping (approx. 175').

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.

- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - · Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas.

The Concessionaire will coordinate with the University for a potential interruption of steam supply to campus.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$91,190 and will also include non-destructive testing of the 2,500 gal feedwater tank to determine remaining useful life.

Additional Information:



Figure 1. Aged feedwater pump.



Figure 2. 64-year-old feedwater pump is leaking heavily, reducing performance.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,939,253.
- (B) Forecasted annual operations and maintenance costs: +\$0.

- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) a 2% increase in the feedwater pump efficiency, and (ii) the 2,500 gal feedwater tank still has useful life and does not need to be replaced. Coordination with the University for other work that may impact this project will occur. Excluded work includes the replacement of the feedwater tank.
- (E) Proposed schedule: EPC (Const.) extends through February 2025. EPC (Commiss.) occurs in March 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Minor improvement from reduced losses in pipe network.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,906,300.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$600, electricity, wood fuel, natural gas. The decrease is associated with reduced losses in the pipe network and increased pump efficiency.

PROJECT CODE: 24/1-017

PROJECT NAME: Wood Boiler Capital Renewal, Phase II

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (long term health risks). The impact associated with resiliency is <u>medium</u> (extended outage and wood boiler shutdown).

The likelihood of these events is <u>low</u> (equipment is aged and in poor condition).



Background: The wood fuel boiler provides significant economic and environmental benefits to the University, however, at 35 years old, many of the subsystems are in critical need of upgrade, including those associated with improving performance and managing emissions. Each of the subsystems addressed is critical to the successful operation of the wood fuel boiler and is in serious need of upgrades. Several single points of failure, or long repair time, issues exist within these systems. Most of these systems are original equipment and are well beyond their serviceable life. Upgrading these systems is critical to plant reliability, will improve efficiency, extend the useful life of the boiler, and reduce Supply Costs to the University.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition the wood boiler to extend its useful service life.
- Mitigate severe resiliency issues associated with systems well beyond their serviceable life.
- Address health concerns presented by the condition of existing systems.
- Allow O&M practices for a safe and reliable operation.

Scope of Work: This project upgrades the boiler subsystems associated with improving performance and managing emissions described above. The scope of work of this Capital Improvement is:

- Replace economizer.
- Refurbish air pre-heater and improve access.
- Repaint and insulate the boiler skin.
- Replace emissions land.
- Emissions management improvements.
- Upgrade damper controls for over and under fire fan flow.
- Efficiency and balancing study to optimize operation.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University the construction schedule during the lowest steam use to reduce natural gas costs during shutdown. The wood boiler shutdown can be done without an impact to steam customers. Similarly, coordination will occur for the use of Lot 14 as a laydown area.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$319,440 and will also include (i) an engineering assessment on emissions control method modernization, (ii) an engineering assessment on insulating the boiler skin, and (iii) a non-destructive testing of the air preheater tubes.

Additional Information:



Figure 1. Exterior walls of boiler warping from age and heat.



Figure 2. Exterior walls need insulation to improve performance.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$3,297,320.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) 20% of air preheater tubes will need to be replaced, (ii) exhaust stack will still have useful life and will not need to be replaced, (iii) construction will be staged across two summer seasons to ensure the wood boiler is operational during the heating season to reduce Supply Costs to the University, and (iv) wood fuel requirements will be reduced by 5% based on FY22 data. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the non-destructive testing or replacement of wood boiler exhaust stack, it will be completed as part of Capital Improvement 24/1-004, and (ii) the repair or replacement of the ash conveyance system.
- (E) Proposed schedule: EPC (Const.) extends through June 2025. EPC (Commiss.) occurs in July 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improvement in wood boiler efficiency will reduce the use of natural gas during peak loads. Reduction in campus greenhouse gas emissions.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$3,241,700.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$50,000, wood fuel. The decrease is associated with the improved efficiency of the boiler and its subsystems.
PROJECT CODE: 24/1-018

PROJECT NAME: Wood Fuel Storage Conveyance System Upgrades

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (some mitigation required). The impact associated with resiliency is <u>medium</u> (further degradation will become more impactful).

The likelihood of these events is low.

g	High	3	2	1
ikelihoo	Med	4	3	2
	Low	5	4	3
PH	A SE	Low	Med	High
ASSI	GNED		Impact	

Background: The Fuel Storage conveyance system has been in service since 2010 and requires upgrades. The mechanical measurement, unloading, and conveyance systems all require improvements in order to provide reliability of operation and allow an adequate O&M practice. Periodic material jams and inadequate lighting present a safety concern to operations staff. The tipper hydraulic system needs to be located away from wood fuels that pose a fire hazard. Unacceptable safety concerns are being managed by implementing protocols in an interim, but need to be addressed.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve wood handling performance at the Wood Chip Storage Facility.
- Mitigate a severe safety and resiliency issue.
- Upgrade conveyance to increase reliability.
- Mechanical and lighting upgrades to improve safety.
- Implement required O&M practices for a safe and reliable operation.

Scope of Work: This project addresses these issues by upgrading the load scale, tipper hydraulics, and conveyor belt. It also includes a lighting upgrade with motion sensors to improve operator safety and security. The scope of work of this Capital Improvement is:

- Replace load scale and upgrade electronics.
- Replace tipper pins and upgrade hydraulics.
- Improve tipper chute to eliminate jamming.
- Replace conveyance belt and source spare material.
- Install yard lighting and motion sensors.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University to communicate a construction plan, and for a potential interruption to the West Farm road access.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$131,340.



Figure 1. Tipper hydraulics surrounded by flammable material.



Figure 2. Wood chip conveyance system.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,056,350.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the transformer will have sufficient power for new loads, (ii) construction will be scheduled during the spring season to reduce impact to site operations, and (iii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes the replacement or upgrade of the transformer, primary feeders, or building switchgear.
- (E) Proposed schedule: EPC (Const.) extends through February 2025. EPC (Commiss.) occurs in March 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved wood fuel conveyance efficiency reduces moisture content in wood fuel, which results in lower fuel consumption.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,038,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: \$-5,000, wood fuel. Minor decrease from improved conveyance efficiency. It is assumed a 0.5% reduction in wood fuel.

PROJECT CODE: 24/1-019

PROJECT NAME: Wood Fuel Storage Facility Upgrades

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (some mitigation required). The impact associated with resiliency is <u>low</u> (further degradation will become more impactful).

The likelihood of these events is low.

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Background: The Fuel Storage Facility has been in service since 2010 and is critical to the supply of high-quality solid fuel to the wood boiler. Multiple issues have been identified that impact the long term success of the facility. The lack of stormwater collection on the south side of the building has resulted in groundwater seeping into the wood fuel and is also eroding the area underneath the hardscape. These voids pose a risk to the structural integrity of the facility and need to be repaired before major damage occurs. The wet wood fuel also negatively impacts the Energy Plant's efficiency and is a risk to the wood boiler as rocks and mud make their way into the fuel supply. Further, facility access is unrestricted, and instances of unauthorized vehicle and pedestrian access occur frequently. This is a public safety and security concern as property damage or personal injury could occur while heavy machinery is operating in the area. There have also been multiple occurrences of theft of the Sub-operator's property that need to be addressed.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Increase the Energy Plant's resilience and efficiency by maintaining high fuel quality.
- Remove stormwater from the area to protect fuel quality and the building's foundation.
- Improve safety and security of the Storage Facility by installing controlled access.
- Replace the horizontal surfaces (apron and roadways) to maintain high quality fuel free of debris.

Scope of Work: This project addresses these concerns by identifying the locations and severity of voids forming under the hardscape and making repairs. It addresses the root cause by installing stormwater drainage south of the building and directing water to the west, away from the wood fuel and hardscape. Finally, security is addressed with a gate and card access at the primary entrance of the facility. The scope of work of this Capital Improvement is:

- Repair portion of damaged hardscape, to include concrete demolition and restoration.
- Install stormwater collection system for the roof and south side of building.
- Excavation, backfill, and bedding for stormwater system.
- Install a gate and card access at the Storage Facility entrance.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
 - Geotechnical report.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed including construction perimeter fencing and restricted access.

The Concessionaire will coordinate with the University, including Facilities Services and users of the West Farm, for potential access disruptions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$105,820 and will also include a geotechnical evaluation of the hardscape to identify the location and magnitude of existing voids (2 bore holes, 2 test pits).



Figure 1. Wood Chip Storage Facility location behind Facilities Services.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$630,006.
- (B) Forecasted annual operations and maintenance costs: +\$500. The increase is associated with the maintenance of the new gate and the management of the stormwater system.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pavement will need to be resurfaced every 10 years, (ii) pumped ground water removal systems will not be required, (ii) a 40'x40' patch of the worst concrete section (may vary on results of the geotechnical evaluation), (iii) efforts will be made to mitigate impact on surrounding vegetation but impacts may occur, and their remediation is not included in this scope, (iv) workable solutions for all required coordination with University activity will be achievable, and (v) a 0.1% reduction in wood fuel requirements from reduced moisture content. Coordination with the University for other work that may impact this project occur. Excluded work includes the restoration of vegetation (owner is University).
- (E) Proposed schedule: EPC (Const.) extends through February 2025. EPC (Commiss.) occurs in March 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved fuel quality by reducing moisture and debris helps achieve a higher efficiency for the wood boiler operations.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$619,300.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$1,000. The decrease is associated with a more efficient operation due to reduced-moisture fuel.

PROJECT CODE: 24/3-075

PROJECT NAME: Campus Primary Distribution Improvements

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>medium</u> (overhead distribution lines pose life safety risk). The impact associated with resiliency is <u>high</u> (single points of failure to half of campus electric grid).

The likelihood of these events is <u>low</u> (exposed to environmental hazards).



Background: The University owns and operates its own electric grid. Power is delivered to campus from two feeds by Avista Utilities, known as the East and West Feeds. While the entire East Feed is underground and protected from environmental hazards, a large portion of the West Feed is still overhead. This poses an inherent risk to campus operations from animals, downed trees, weather, and other hazards as these 13.2 kV lines serve 50% of the campus load. Single points of failure are present that need to be addressed to reduce the chance of campus wide outages.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Improve the safety and reliability of the Primary Electrical Distribution system on the west side of campus.
- Eliminate aging overhead primary distribution infrastructure.
- Maintain Performance Standard Part V.6, 7, and 8 and mitigate negative impact to Availability KPIs.
- Establish baseline condition of primary electrical components.

Scope of Work: This project removes the overhead distribution, installs it in underground duct bank, and replaces aging pole mount transformers with pad mount ones. This will improve the resiliency and safety of the electrical system on the west side of campus and improve the overall electrical efficiency. The scope of work of this Capital Improvement is:

- Remove overhead existing 13.2 kV distribution including poles, transformers, and conductors.
- Provide new pad mount transformers, vaults, sectionalizing cabinets, duct banks, conduits, and wires.
- Install underground 13.2 kV campus primary encased in concrete.
- Backfill and restore surface to match existing.
- Arc flash analysis and labeling per NFPA 70E.
- Provide new secondary feeders from pad-mounted transformers to existing building electrical services and reconnect.

- Provide new SEL 735 meters on all building electrical services. Commission meters and establish data management.
- Oil and thermography testing of new transformers and primary switches to establish baselines.

Beyond the Concessionaire's Line of Demarcation associated with this Capital Improvement, it is recommended (i) a replacement and evaluation of the building's main distribution panels and its distribution system, and (ii) the performance of an arc flash analysis and any resulting corrective measures/placarding.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report.
 - Oil and thermography testing results.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage.

The Concessionaire will coordinate with the University and Avista Utilities for electrical shutdowns.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$383,130 and will also include conducting 30-day power studies at each building to right size transformers.



Figure 1. Map of overhead lines to be replaced.



Figure 2. Example of the many overhead lines on campus

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$21,254,574.
- (B) Forecasted annual operations and maintenance costs: +\$8,000. Pad mount transformers, vaults, and meters will require additional O&M not present in existing equipment.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) estimated lead time for equipment is 52 weeks, (ii) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion, (iii) efforts will be made to mitigate impact on surrounding trees and vegetation but impacts may occur, and their remediation is not included in this scope, and (iii) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) alternative power generation, such as portable generators to provide power to buildings during construction, (ii) restoration of vegetation (owner is University), (iii) modification of electrical transmission lines and equipment on Avista Utilities' lines (owner is Avista Utilities), and (iv) replacement of building main distribution panels (owner is University).
- (E) Proposed schedule: EPC (Procur.) extends through August 2025. EPC (Const.) occurs from August 2025 to January 2026. EPC (Commiss.) occurs in January 2026. Dates may vary

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Procur.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Improved through the increased electrical efficiency of the equipment and the mitigation of potential damages.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$20,893,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. Minor efficiency increase from higher efficiency transformers and reduced distribution losses.

PROJECT CODE: 24/4-076

PROJECT NAME: I Tank Recoat

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some life safety risks due to water quality and structural damage to tank). The impact associated with resiliency is <u>low</u> (potential loss of redundancy to system).

The likelihood of these events is <u>medium</u> (existing coat is beyond expected life and showing signs of wear).

7	High	3	2	1
kelihoo	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: The I Tank was constructed in 1951 and has been a historic icon on campus since. The exterior was last recoated in 1999 using an aluminum-based coating that has aged well, but after over 20 years of service is showing signs of fading and deterioration. The interior was last recoated in 1990 and needs to be redone. Recoating increases the useful life of the tank by reducing corrosion that can pose both a health issue due to contaminated drinking water and a severe life safety issue if the structural integrity of the tank becomes compromised.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Increase life expectancy of the I Tank.
- Mitigate safety and resiliency issues associated with end-of-life coatings.

Scope of Work: This project includes a full preparation and recoating of both the interior and exterior surfaces of the tank to include all supports, braces, struts, tension rods, and appurtenances. It also includes repainting of the existing University of Idaho "I" icons. While the icons do not currently match the University's current brand, the icons are proposed to be repainted "as-is" to match their existing colors and dimensions due to their historic character. The scope of work of this Capital Improvement is:

- Mobilization of all required material, labor, and equipment.
- Containment of all materials being removed from tank, staging, and delineation of job site.
- Abrasive blasting of interior, exterior, bracing, struts, piping, and all other accessories.
- Application of coating of interior, exterior, bracing, struts, piping, and all other accessories.
- Repainting of "I" icon.
- Waste disposal of abrasive blasting media and original coating.
- Disinfection of tank per University's and/or IDEQ's requirements.
- Replacement and installation of an FAA-certified LED beacon light.

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There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the Additional Work stage.

The Concessionaire will coordinate with the University for any laydown areas and impacts to the telecommunications equipment.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$49,940 and it will also include (i) the verification of paint/coating colors with the University, (ii) a review of health and safety requirements for confined space and fall protection plans, (iii) the development of a preliminary order of operation for tank drain down, and (iv) the creation of a constructability plan.



Figure 1. Current I Tank to be repainted to match existing.



Figure 2. Post construction photo taken in 1952 with original icon.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$3,939,385.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pricing is based on like-for-like repaint of "I" icon, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation, and (iii) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) the restoration of vegetation (owner is University), (ii) the removal and reinstallation of telecommunications equipment (University's responsibility), and (iii) any repairs to any structural damage identified.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: None.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$3,870,900.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/6-077

PROJECT NAME: Sanitary Sewer Line Recondition from West Kibbie Dome to Perimeter Drive

UTILITY SYSTEM: Sanitary Sewer

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some low safety risks from sanitary sewer). The impact associated with resiliency is <u>medium</u> (extended outage and multiple building shutdowns).

The likelihood of these events is <u>low</u> (line has reached its end of life).



Background: These sanitary sewer lines serve the north and south concourses of the Kibbie Dome, the Track and Field Complex restrooms, and the South Campus Chiller Plant. These pipes are aged at 52 years old and have reached their life expectancy. As they age, the likelihood of collapse increases, risking sewer backing up into the buildings and potential flooding in the area until it can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area. It is recommended that Capital Improvement 24/6-069 Sanitary Sewer Recondition on Perimeter Drive be bundled with this project to minimize costs and disruptions.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing sanitary sewer lines on the west side of the Kibbie Dome.
- Inspect nearby lines to identify future needs.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Bypass pumping.
- Recondition 4" line from the Track and Field Complex restrooms (165').
- Recondition 6" line from the south concourse of Kibbie Dome (446').
- Recondition 8" main line (1,301').
- Repair and install manhole liners (x6).
- Construction Supervision.
- Pre-cleaning and CCTV inspection.

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- Post-cleaning and CCTV inspection.

There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$26,950 and will also include conducting a CCTV inspection and jetting.



Figure 1. Main pipe installed with the Track and Field complex project in 1970.



Figure 2. Pipe to the south concourse of the Kibbie Dome installed in 1971.



Figure 3. Map of sanitary sewer lines in the affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$492,785.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes will be able to be reconditioned and replacement will not be needed, and (ii) efforts will be taken to minimize damage to surrounding trees and vegetation but impacts may occur. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) restoration of

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vegetation (owner is University), (ii) disconnection/reconnection of irrigation lines (owner is University), and (iii) inspection, reconditioning, or replacement of City of Moscow sanitary sewer lines (owner is City of Moscow).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: None.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$485,100.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/7-078

PROJECT NAME: Stormwater Line Recondition on Rayburn Street

UTILITY SYSTEM: Storm Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some safety risks from flooding). The impact associated with resiliency is <u>medium</u> (potential flooding to nearby buildings).

The likelihood of these events is <u>low</u> (line is beyond end of life but can be reconditioned).



Background: This stormwater line serves areas and buildings along Rayburn Street . At over 55 years old these pipes are aged and have reached their life expectancy. As they age, the likelihood of collapse increases, risking flooding in the area and potential damage to buildings until they can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area. It is recommended that Capital Improvement 24/7-056 Stormwater Major Repairs at the Library and the Memorial Gym be bundled with this project to minimize costs and timeline.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing stormwater line on Rayburn Street from 6th Street to the Physical Education Building.
- Inspect nearby lines to identify future needs.

Scope of Work: This project also addresses an illicit configuration at the Agricultural Science Building, where the existing catch basin drains to the sanitary sewer system instead of the stormwater system. The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Bypass pumping.
- Slip line 8" pipes (800').
- Reconfigure Agricultural Science Building's 8" pipes to drain to the stormwater system.
- Recondition 12" pipes (905').
- Recondition 15" pipes (700').
- Repair and install manhole liners (x12).
- Repair and install catch basin liners (x12).

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- Pre-cleaning and CCTV inspection.
- Post-cleaning and CCTV inspection.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$74,140 and will also include a CCTV inspection and jetting.

Additional Information:



Figure 2. Northern stormwater map of Rayburn Avenue.



Figure 1. Southern stormwater map of Rayburn Avenue

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$1,302,603.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes, catch basins, and manholes will be able to be reconditioned and replacement will not be needed, (ii) efforts will be taken to minimize damage to surrounding trees and vegetation but impacts may occur. Coordination with the University for other work that may impact this Capital Improvement will occur. Excluded work includes (i) restoration of vegetation (owner is University), and (ii) disconnection/reconnection of irrigation lines (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: None.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$1,280,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/7-079

PROJECT NAME: Stormwater Line Recondition on Stadium Drive

UTILITY SYSTEM: Storm Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some safety risks from flooding). The impact associated with resiliency is <u>medium</u> (potential flooding to nearby buildings).

The likelihood of these events is <u>low</u> (line is beyond end of life but can be reconditioned).



Background: This stormwater line serves areas along Stadium Drive, including the ICCU Arena. These pipes are aged and have reached their life expectancy. As they age, the likelihood of collapse increases, risking flooding in the area and potential damage to buildings until it can be repaired. By reconditioning the pipes while still intact, using a technology such as sliplining or cure-in-place-pipe (CIPP) lining, the services can be expected to last many more decades. By completing this work before the collapse, the University will see significant cost savings and less disruptions, as there is minimal trenching needed. Waiting to replace the pipes could cost up to five times more due to the excavation, demolition, and repairs needed to asphalt and landscape the area.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Recondition existing stormwater line on Stadium Drive from 6th Street to the ICCU Arena.
- Inspect nearby lines to identify future needs.

Scope of Work: The scope of work of this Capital Improvement is:

- Asphalt and natural surface demolition.
- Bypass pumping as necessary.
- Recondition 12" pipes (1250').
- Repair and install manhole liners (x10).
- Repair and install catch basin liners (x10).
- Pre-cleaning and CCTV inspection.
- Post-cleaning and CCTV inspection.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - · Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan covering open pit work, and vehicular and pedestrian traffic management will be developed.

The Concessionaire will coordinate with the University and any activities on campus for any building shutdowns and traffic re-routing, etc.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$30,250 and will also include conducting a CCTV inspection and jetting along Stadium Drive (1,250') and the service line to the Hartung Theatre (630').



Figure 1. Stormwater map of affected area.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$552,008.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pipes, catch basins, and manholes will be able to be reconditioned and replacement will not be needed, (ii) efforts will be taken to minimize damage to surrounding trees and vegetation but impacts may occur, and (iii) service lines to Hartung Theatre will be cleaned and inspected for potential future work but reconditioning or replacement is not included. Coordination with the University for other work that may impact this Capital Improvement will occur. Excluded work includes (i) reconditioning or replacement of Hartung Theatre stormwater pipes, (ii) restoration of vegetation (owner is University), and (iii) disconnection/reconnection of irrigation lines (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: None.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$543,400.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/1-020

PROJECT NAME: Water Treatment Improvements, Phase II

UTILITY SYSTEM: Steam and Condensate

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u>. The impact associated with resiliency is <u>low</u>.

The likelihood of these events is low.

q	High	3	2	1
ikelihoo	Med	4	3	2
	Low	5	4	3
PH	ASE	Low	Med	High
ASSI	GNED		Impact	

Background: The Hot Lime Softening (HLS) tanks and associated feedwater and condensate chemistry subsystems are critical for protecting the boilers and steam distribution systems from scaling that reduces efficiency and risks significant damage such as damaged/destroyed boiler internals, steam and condensate main degradation, and steam trap failure. There are two HLS systems within the Energy Plant, which allows for redundancy and continuous boiler operation during maintenance. These systems experience heavy, frequent fouling due to the type of fluids used, which reduces efficiency. Combined with the convoluted, poorly optimized flow path between the tanks this results in excessive losses and higher pumping costs.

HLS tank #1 is 58 years old and needs to be replaced as most of the system is well beyond its serviceable life. Replacement is critical for the future reliability of the Energy Plant.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Right size the Energy Plant's water treatment system.
- Mitigate resiliency issues associated with systems beyond their serviceable life.
- Improve O&M practices for a safe and reliable operation.

Scope of Work: This project replaces the HLS #1 tank as well as the scaled pipe network between the tanks to improve performance. The scope of work of this Capital Improvement is:

- Remove and replace HLS #1.
- Optimize flow path between the HLS tanks to provide redundancy and improve efficiency.
- Replace scaled piping between the HLS tanks.
- Replace distribution valves between HLS tanks.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be prepared during the development stage including the protection of live utilities, and the provision of fencing to prevent unauthorized access to construction areas. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University a potential interruption to Lot 14 to locate a construction staging area.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$79,530.

Additional Information:



Figure 1. Aged HLS #1.

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Figure 2. Aged Hot Lime Softener #1.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$2,070,178.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) HLS tank will be replaced with a tank of similar size, and (ii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) any repairs to or the replacement of HLS #2, and (ii) the repair or replacement of booster pumps, backwash pumps, or other equipment associated with the charcoal and zeolite systems.
- (E) Proposed schedule: EPC (Const.) extends through February 2025. EPC (Commiss.) occurs in March 2025. Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: Some improvement from reduced energy consumption and water losses.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$2,035,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None. Minimal savings from improved flow path and reduced pumping costs.

PROJECT CODE: 24/2-023

PROJECT NAME: Emergency Generator at the South Campus Chiller Plant

UTILITY SYSTEM: Chilled Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u>. The impact associated with resiliency is <u>low</u> (extended outage and building shutdown).

The likelihood of these events is low.

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g	Hig	3	2	1			
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	Low	5	4	3			
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Background: The South Campus Chiller Plant (SCCP) is not backed up with emergency power. Without power, chilled water cannot be distributed to campus buildings with year-round critical cooling loads during outages. Cooling loads on campus would be met as long as the Thermal Energy Storage (TES) tank is charged. These subsystems are critical to the successful operation of the chilled water system. Installing a generator improves resiliency and mitigates risk to critical campus cooling loads such as research and servers.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Provide chilled water to critical campus cooling loads during power outages.
- Mitigate resiliency issues associated with a lack of backup power.

Scope of Work: This project installs a generator sized to support the TES tank and associated pumping needed to distribute chilled water to campus, but not to run the chillers or cooling towers to produce chilled water. This is a first step towards supplying chilled water to campus during a power outage to achieve Performance Standards. Future Capital Improvements will be proposed to operate chillers and cooling towers during outages.

The scope of work of this Capital Improvement is:

- Install a 480V, 3-phase, 300kW diesel generator with 24-hour belly tank on exterior of building.
- Install ATS, emergency panel, circuits, and controls to support chilled water circulation pumps, TES tank sensors, and controllers.
- Connect Water Systems SCADA panel to emergency circuit.
- Construct enclosure and fencing around generator.

There is no recommended related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
- 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report as applicable.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A safety plan will be developed including the protection of live utilities, the provision of fencing to prevent unauthorized access to construction areas, and confined space work. Temporary traffic and/or pedestrian accommodations will be implemented as needed.

The Concessionaire will coordinate with the University for potential chilled water disruptions.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$72,050 and will also include an electrical load assessment to right size the new generator.



Figure 1. Potential exterior locations for the generator.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$671,431.
- (B) Forecasted annual operations and maintenance costs: +\$5,400. The increase is associated with labor and fuel cost for regular service checks on new equipment.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) the generator does not need to be sized to support chilled water production to reduce cost and footprint, and (ii) workable solutions for all required coordination with University activity will be achievable. Coordination with the University for other work that may impact this project will occur. Excluded work includes (i) the repair or replacement of the building's electrical systems, and (ii) the protection or restoration of impacted vegetation (owner is University).

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(F) Impact on Sustainability: There will be a minor impact from the fuel consumption of the diesel generator.

- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$660,000.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/4-080

PROJECT NAME: Golf Course Water Tank Recoat

UTILITY SYSTEM: Domestic Water

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>low</u> (some life safety risks due to water quality and structural damage to tank, difficulty to access beacon safely). The impact associated with resiliency is <u>low</u> (potential loss of redundancy to system).

The likelihood of these events is <u>low</u> (existing coat is reaching expected life and showing signs of wear).



Background: The Golf Course Water Tank was constructed in 1979. Its exterior was recoated in 2008 and is showing some signs of fading and deterioration as it ages. The interior, however, has never been recoated and is beyond its life expectancy. Recoating increases the useful life of the tank by reducing corrosion that can pose both a health issue due to contaminated drinking water and a severe life safety issue if the structural integrity of the tank becomes compromised.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Increase life expectancy of the Golf Course Water Tank.
- Mitigate safety and resiliency issues associated with end-of-life coatings.

Scope of Work: This project includes a full preparation and recoating of both the interior and exterior surfaces of the tank to include all supports and appurtenances. When the tank was last recoated the "University of Idaho" icons were repainted, however the University may desire new icons and colors. Coordination with the University will occur during the Additional Work stage so the new icon can be priced appropriately. The scope of work of this Capital Improvement is:

- Mobilization of all required material, labor, and equipment.
- Containment of all materials being removed from tank, staging, and delineation of job site.
- Abrasive blasting interior, exterior, supports, and all other accessories.
- Application of coating interior, exterior, supports, and all other accessories.
- Repainting of "University of Idaho" or different icons depending on University's direction.
- Waste disposal of abrasive blasting media and original coating.
- Disinfection of tank per University's and/or IDEQ's requirements.
- Replacement and installation of an FAA-certified LED beacon light.
- Install safety ladder on top of the tank to access beacon light.

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There is no related work beyond the Line of Demarcation associated to this Capital Improvement.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the Additional Work stage.

The Concessionaire will coordinate with the University for any laydown areas.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$56,980 and it will also include (i) the verification of paint/coating colors and icon design with the University, (ii) a review of health and safety requirements for confined space and fall protection plans, (iii) the development of a preliminary order of operation for tank drain down, and (iv) the creation of a constructability plan.



Figure 1. Existing Golf Course Water Tank. New color and icons will be coordinated with the University.

Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$7,070,519.
- (B) Forecasted annual operations and maintenance costs: +\$0.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) pricing is provided for the "University of Idaho" icons if repainted as-is, (ii) efforts will be made to mitigate impact on surrounding trees and vegetation, and (iii) workable solutions for all required coordination with University activity will be achievable. Excluded work includes (i) the restoration of vegetation (owner is University), and (ii) any repairs to any structural damage identified.

(E) Proposed schedule: Dates may vary.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

- (F) Impact on Sustainability: None.
- (G) Anticipated tax credits or other benefits: No tax credits or other benefits have been identified.
- (H) Fee or charge payable to the Operator: \$6,947,600.
- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: None.

PROJECT CODE: 24/3-081

PROJECT NAME: North Farm Agrisolar Array

UTILITY SYSTEM: Electric

DATE SUBMITTED: February 1, 2023

SAFETY AND RESILIENCY ASSESSMENT:

The impact associated with safety is <u>n/a</u>. The impact associated with resiliency is <u>n/a</u> (supports future resiliency improvements via reduced disruptions from power outages).

The likelihood of these events is n/a.

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ikelihoa	Med	4	3	2	
	Low	5	4	3	
PHA	\SE	Low	High		
ASSI	GNED	Impact			

Background: There are multiple potential sites for utility-scale solar arrays on campus, with the most promising locations at the dairy and sheep farms. This project continues the University's effort to reduce energy costs and greenhouse gas emissions by installing two ground-mounted photovoltaic (PV) arrays (the Generating Facility). Two sites are proposed, with a total capacity of 7.34 MWdc, which will be connected to the West Feed. Connecting to the West Feed will allow for future integration with the campus microgrid, reducing the impact of outages on the Avista grid, and the "behind the meter" approach will ensure the University realizes the maximum potential energy savings.

Coordination with the College of Agricultural and Life Sciences (CALS) will be needed to utilize these sites, as they are used to support their operations, and this is an opportunity to work with CALS to jointly benefit both efforts. The project proposes co-locating one of the arrays with the sheep farm. The sheep will keep vegetation from interfering with the PV modules, reducing the overall O&M needs, while the sheep benefit from grazing and shade in the summer. This serves the University's educational and research goals as a platform and collaboration opportunity between the Colleges of Agriculture and Life Sciences, Engineering, and Business. While specific sites are proposed here, ground mount PV arrays are flexible and coordination with CALS is needed to determine the most suitable locations to support both needs.

Besides the large economic and educational benefits, this project will significantly reduce the University's carbon footprint by reducing the amount of fossil fuel-derived electricity it purchases, which is vital to meet the University's 2030 carbon neutrality goal. The project also qualifies for the Solar Investment Tax Credit (ITC) program as part of the Inflation Reduction Act, passed in 2022, with up to 40% of the project cost covered as a direct cash rebate. There is also a potential to coordinate with the Department of Energy (DOE), the National Renewable Energy Laboratory (NREL), and Avista Utilities for grants and other additional funding. It is highly recommended that this project be approved for construction before these opportunities expire.

Approval of this Capital Improvement is necessary to mitigate a variety of risks, claims and damages (including those associated with life safety, property damage, system downtime, system resilience, operational interruption), as well as compliance with Performance Standards and Key Performance Indicators.

Objectives: The main objectives of this Capital Improvement are:

- Reduce electricity costs for the University.
- Reduce campus' greenhouse gas emissions as part of the 2030 carbon neutrality goal.
- Support agricultural research and educational opportunities via combined land use.
- Provide for future microgrid expansion to increase resiliency to utility power outages.

Scope of Work: The scope of work of this Capital Improvement is:

- Installation, connection, integration, and commission of a 4.981 MWdc fixed tilt, ground-mounted PV array at the Dairy Farm.
- Installation, connection, integration, and commission of a 2.397 MWdc fixed tilt, ground-mounted PV array at the Sheep Farm.
- Construct access roads to sites.
- Install permanent fencing around sites.
- Install high voltage transmission lines necessary to connect sites to the West Feed.

There is no recommended related work beyond the Line of Demarcation associated with this Capital Improvement. This will be confirmed during the Additional Work stage.

Deliverables: The deliverables of this Capital Improvement are:

- Additional Work (Preliminary Engineering Assessment):
 - 50% design documents.
 - Incentive award documentation, if applicable.
- Cost proposal for fixed-priced construction will include:
 - Utility provider interconnection upgrade budget, if applicable.
 - List of inclusions, exclusions, and potential allowances to carry, if any.
 - Pricing expiration date and timeline for the commitments the University needs to make to hold pricing.
 - Proposed construction schedule.
- Project documents:
 - Design and as-built documents.
 - O&M manuals.
 - Commissioning report.

Safety and Logistics: To the extent required by applicable law, the University will provide (i) an asbestos survey covering any area to be disturbed by a demolition or renovation work; or (ii) proof that the original work was completed using asbestos-free materials. In accordance with the Concession Agreement, the University will be responsible for abatement of any Hazardous Substances, including asbestos and lead-based paint, which originated prior to Closing.

A detailed safety plan will be developed during the development stage.

The Concessionaire will coordinate (i) with the University and the farms for potential site locations and the interaction between the PV array and the farm operations, (ii) with University and Avista for interconnection requirements, and (iii) the City of Moscow as needed.

Approach: As established in section 4.3(c), the Concessionaire requests that the University respond to this proposed Capital Improvement only pursuant to section 4.3(c)(ii), requiring that the Concessionaire perform additional work, to provide more information regarding the scope, design, and cost of the proposed Capital Improvement. The anticipated cost of such additional work is \$536,470 and will also include (i) engagement with the

University and other stakeholders as needed to secure approval of the Generating Facility locations and design constraints, (ii) coordination with Avista Utilities for the interconnection applications and any studies necessary to determine the design, infrastructure upgrades, and interconnection costs for the Generating Facility, as applicable (pricing assumes standard interconnection review and approval with no system impact studies required), (iii) coordination and processing of applications to secure available incentives from Avista Utilities or other entities, if available, (iv) coordination with Avista Utilities as needed regarding programmatic requirements, (v) compliance with applicable permitting requirements, (vi) geotechnical study, (vii) title report and land surveys (easements, underground utilities, elevations/topography), as needed, (viii) 50% plans (architectural, electrical, structural), (ix) arborist report, as needed, and (x) planning and zoning pre-application submittals, coordination, and approval of the project concept for the Generating Facility, if applicable.



Figure 1. Potential PV site at the Dairy Farm.



Figure 2. Examples of agrisolar projects with co-located sheep and PV arrays.
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Pursuant to the Long-term Lease and Concession Agreement, Section 4.3.(c) (2), the following information is presented for this Capital Improvement:

- (A) Total Cost: \$19,822,953.
- (B) Forecasted annual operations and maintenance costs: +\$60,864. Arrays, high voltage transmission lines, and step up transformers will need additional O&M including module replacements, inspections, thermography, monitoring, and cleaning. Vegetation and pest management will be the University's responsibility. No ongoing land use cost is anticipated.
- (C) Proposed modification to the Recovery Period: None.
- (D) Explanation of all relevant assumptions, variables, and data sources: See previous narratives. In addition, it is assumed that (i) a conversation will be held between the Concessionaire and the University, prior to the approval of the Additional Work to provide a feasibility study, understand their expected return on investment, (ii) the Additional Work and indicative budgets will be rescoped and/or repriced as needed to account changes in system type/location, planning/zoning requirements, University requests, Utility Provider requirements, and other unforeseen circumstances, (iii) indicative Budget estimate does not include ITC credit or other funding opportunities, (iv) it is assumed that the existing overhead power lines from the North Farms will be in suitable condition to support the solar array, (v) underground construction conditions will be reasonably free of obstruction, conflict, hazardous materials that could impede completion (vi) workable solutions for all required coordination with the University, Avista Utilities, and the Idaho Public Utility Commission will be achievable. Excluded work includes (i) battery storage, (ii) system impact study, (iii) utility curtailment controls, non-export controls, telemetry, or interconnection upgrades, (iv) maintenance of vegetation after construction (owner is University), (v) disconnection/reconnection of any irrigation lines (owner is University), and (vi) replacement or repairs of existing overhead power lines.

	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24	10/24	11/24	12/24	01/25
Additional Work																							
Interc. Negotiation																							
EPC (Dev.)																							
EPC (Const.)																							
EPC (Commiss.)																							

(E) Proposed schedule: Dates may vary.

- (F) Impact on Sustainability: An 11% reduction in total carbon footprint of campus (based on FY20 GHG data). Improvement due to a reduction in the purchase of electricity from Avista.
- (G) Anticipated tax credits or other benefits: 40% of Capital Improvement may be covered by an Investment Tax Credit. There is a potential opportunity for grant funding via DOE/NREL and support from Avista.
- (H) Fee or charge payable to the Operator: \$19,500,800.

INFORMATIONAL APRIL 17-18, 2024 CAPITAL IMPROVEMENT PROJECT SHEET – 24/3-081

- (I) Proposed changes to the limits on the professional liability insurance coverage: All engineering and consulting firms engaged for Capital Improvements proposed for Approval will have a limit of \$1,000,000 limit or greater on the professional liability insurance coverage. The premium associated to such policy is usually prorated by the firm over their annual contracts.
- (J) Potential change in Supply Costs or consumption of Supplies: -\$617,459, electricity. It is assumed a typical generation at a rate of \$0.061 per kWh. Added generation may change University's rate schedule with Avista.

INFORMATIONAL APRIL 17-18, 2024 ATTACHMENT 4



STRATEGIC INITIATIVES FUND (SIF) INVESTING IN OUR FUTURE

The Strategic Initiatives Fund (SIF) is a single-purpose 501(c)(3) that invests, manages, and distributes the net closing proceeds from the P3 transaction.

Governance:

- SIF Board of Directors (UI CFO, SBOE member, current Legislator)
- Investment and spending policies to achieve the maximum value to current and future beneficiaries over 50 years. <u>Two-part Spending formula</u> for the Long Term Account:
 - **Rate Spend** = maximum of 2.5% rolling average of most recent 12 quarter-end market values
 - Corpus Spend = (most recent Dec 31 market value Rate Spend) / years remaining in Agreement

SIF investment balances, December 31, 2023:

Long Term Account – funds distributions to the University for strategic initiatives Utility Subsidy Account – funds the utility fee costs that exceed University current resources Terminal CapEx Account – held until termination to fund balance of CapEx project payments Total investment account balance 12/31/2023 \$142.7 million 19.8 million <u>0.9 million</u> **\$163.4 million**



STRATEGIC INITIATIVES FUND (SIF) INVESTING IN OUR FUTURE

- Investments in three strategic initiatives **\$19.8M over three years**:
 - Student Success

Scholarships	\$ 925,000	
Online Excellence	1,000,000	
Recruitment & Retention	325,000	
Total Student Success		\$ 6,900,000
Research & R1 Goal		10,500,000
Telling Our Story		2,359,991

Total distributions to the University

\$19,759,991

OUTCOMES & ROI



STUDENT SUCCESS, RESEARCH & MARKETING

CUMULATIVE DATA FY22 THROUGH YTD FY24 (USING FY21 AS BASE YEAR EXCEPT WHERE NOTED)

Enrollment

- **I** Total enrollment up 10% headcount / 7% FTE
- I Tuition revenue up \$11.3M / 12%
- Auxiliary revenue up \$5.1M / 24%
- Largest two freshman classes in history
- I On-campus housing occupancy up 22% (A)
- I On-campus dining up in all categories

Research

- Proposals submitted (\$) up 15% (A)
- Awards received (\$) up 30%
- Research expenditures up 30%
- Largest awards in University history
- Increase in post-docs and grad student positions

(A) Using FY20 as base year for Auxiliaries revenue and housing occupancy due to the COVID impact in FY21 (Fall 2020 – Spring 2021), and also for Research Awards

SUBJECT

Program Progress Reports

REFERENCE

December 2013	The Board approved amendments to Policy III.G. that require institutions to provide a report on graduate programs approved by the Board.
October 2019	The Board approved a first reading of proposed amendments to Policy III.G. requiring review of all new baccalaureate degree programs at all public postsecondary institutions.
December 2019	The Board approved a second reading of proposed amendments.
April 2021	The Board was presented with program progress reports for baccalaureate and graduate programs offered by Idaho public institutions.
April 2022	The Board was presented with program progress reports for baccalaureate and graduate programs offered by Idaho public institutions.
April 2023	The Board was provided with program progress reports for baccalaureate and graduate programs offered by Idaho public institutions.

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies and Procedures, Section III.G.9, Postsecondary Program Review and Approval

BACKGROUND/DISCUSSION

Board Policy III.G.9. requires all institutions to provide an initial progress report on new graduate and baccalaureate programs approved by the Board. This provision was added in response to Board member inquiries regarding the status of new programs and whether institutions met their projected enrollments from initial proposal submission. This report is provided to Board members to help evaluate whether programs are meeting expectations regarding continued student interest and sustainability.

Board staff, with input from the Council on Academic Affairs and Programs, developed a template and a timeline to determine when programs will be reviewed.

- Baccalaureate programs reviewed after six years of implementation.
- Master's programs reviewed after four years of implementation.
- Doctoral programs reviewed after six years of implementation.

In accordance with Board Policy III.G.9.b, Boise State University, Idaho State University, Lewis-Clark State College, and University of Idaho have submitted progress reports for this review cycle.

IMPACT

Program progress reports provide the Board with updates on new baccalaureate and graduate programs and whether institutions met intended goals and benchmarks.

ATTACHMENTS

Attachment 1 – Program Progress Reports

BOARD STAFF COMMENTS AND RECOMMENDATIONS

The following represents a summary of results for each of the 21 programs reviewed, whether initial enrollment and graduate projections were achieved, and future plans for either boosting numbers, planned marketing strategies, or considerations for program discontinuation.

Five (5) programs reported they <u>exceeded</u> their projections for enrollment and/or graduates.

Boise State University	Bachelor of Arts, Global Studies
Boise State University	Bachelor of Arts, Special Education
Boise State University	Ph.D., Ecology, Evolution and Behavior
Idaho State University	Master of Arts in Spanish
University of Idaho	Bachelor of Science, Medical Sciences

Five (5) programs reported they <u>met</u> their initial projections for enrollment and/or graduates.

Boise State University	Master of Science, Genetic Counseling
Boise State University	Bachelor of Arts, Urban Studies and Community
	Development
University of Idaho	Bachelor of Science, Horticulture and Urban Agriculture
University of Idaho	Bachelor of Science, Biotechnology and Plant Genomics
University of Idaho	Bachelor of Science, Crop Science

Eleven (11) programs reported they <u>did not</u> fully meet their initial projections for enrollment and/or graduates.

Boise State University	Bachelor of Business Administration (online)
Idaho State University	Master of Science in Clinical Psychopharmacology
Idaho State University	Master of Nutrition with Dietetic Internship
Lewis-Clark State College	Bachelor of Arts/Bachelor of Science, Psychology:
	Secondary Education
Lewis-Clark State College	Bachelor of Arts/Bachelor of Science, Secondary
	Education: Communication Arts
Lewis-Clark State College	Bachelor of Arts/Bachelor of Science, Sports Media Studies
University of Idaho	Bachelor of Science, Entomology
University of Idaho	Bachelor of Arts/Bachelor Science, Film and Television
	Studies
University of Idaho	Bachelor of Science, Crop Management
University of Idaho	Master of Science, Plant Pathology
University of Idaho	Bachelor of Science, Soil and Water Systems

For the 11 programs that did not fully meet their initial projections, institutions cited the following factors that may have impacted growth: faculty turnover, effects of the COVID-19 pandemic, changes to certification requirements, delivery options available to students, or limited resources at the time of implementation. Institutions will continue to monitor program progress for sustainability of these programs. Long-term sustainability of all programs, including those that have not met initial projections, will be monitored through the regular Program Prioritization process as described in Board Policy III.F.

Boise State University

The Bachelor of Arts in Global Studies was approved by the Board in February 2017 and implemented Fall 2017. The program projected an initial enrollment of 20 students in its first year with increment increases of 20 enrollments each year thereafter. According to the numbers reported, the program surpassed projections in the first two years of the program with 24 enrollments in Fall 2017 and 53 in Fall 2018. The program maintained steady enrollment until Fall 2020 when numbers dipped to 60 enrollments compared to the 80 projected. The program reports this was primarily due to the COVID-19 pandemic. The number of graduates met or exceeded projections except in FY23. The report noted that the program underwent a thorough revision of curriculum and program learning outcomes, which were implemented in Fall 2023. To further increase enrollment, the program plans to initiate marketing and recruitment efforts with a focus on Idaho high school graduates. The program anticipates the enrollment numbers will grow and stabilize at approximately 60 students. While this number is lower than initially projected, it better reflects the student demand.

The Bachelor of Arts in Special Education was approved in April 2017 and implemented in Fall 2017. The program reports that enrollment exceeded expectations with approximately twice as many students enrolled per year. The program projected 2-10 enrollments over six years. The program's actual enrollments were five in year one with approximately 11-22 enrollments over five years. The program reports that the number of graduates fluctuated from year to year but has largely been within projections. There were no graduates reported for FY23; however. Boise State reports that the program is sustainable at its current enrollment numbers.

The Bachelor of Arts in Urban Studies and Community Development was approved in December 2016 and implemented in Fall 2017. The program projected 20 initial enrollments in Fall 2017 and anticipated an increase by 20 enrollments each year to reach 120 by year six. The program reported that while current enrollments are encouraging, those did come in below initial projections with 10 in Fall 2017 and 24-35 over six years. The program cites this is partly due to the pandemic's impacts on the program's ability to offer experiential learning opportunities and on faculty's ability to promote the program within the institution and region. The graduate numbers have largely met expectations with four graduates in FY19 compared to zero projected and reached 12 by FY22. The program reports that they implemented a comprehensive curriculum revision in Fall 2023 to address the lower-than-expected enrollment. Boise State reports that the program is expected to be sustainable with an enrollment of approximately 40 students and graduates of 10 per year.

The online Bachelor of Business Administration in Management was approved by the Board in February 2017 and implemented Fall 2017. The program featured a robust enrollment exceeding 300 actively enrolled students in Fall 2023 and 317 graduates from the 2018-2023 academic years. While enrollment numbers have been healthy with 31 initial enrollments and a range of 112-306 over the last six years, those did not fully meet projections, which were 30-440 over six years. The program indicated this was partly due to lower initial enrollment numbers at the start of the program caused by unforeseen circumstances like the pandemic and job market shifts. Despite this, the program remains confident that their high-quality online program will continue to expand and eventually meet their enrollment targets, albeit over a slightly longer timeframe than initially projected. The program reports that the number of graduates exceeded initial annual targets but fell short of projected numbers in the last few years. It's important to note that the estimated numbers were based on the higher enrollment projections. Additionally, the university notes that initial projections in 2017 were based on limited resources at the time. Since then, Boise State has adopted new tools to better estimate student headcount projections for online programs. The program noted they anticipate approximately 125 students will graduate in FY24.

The online Master of Science in Genetic Counseling was approved by the Board in October 2017 and implemented Fall 2019. The program reports that they experienced high demand and fluctuating enrollment over the years. The program projected 10 initial enrollments beginning in Fall 2019 to reach 33 in Fall 2023. Actual enrollments came in slightly higher in the first initial year with 12 enrollments and 24 in Fall 2020 compared to 22 projected. The numbers fluctuated over the last three years but did not increase in Fall 2022 as expected. The program cites this is partly due to the pandemic related to labor market issues in the health care industry, which significantly affected genetic counseling and available clinical supervisors and sites. Additionally, the program notes that many health care programs are experiencing the unintended consequences of the Idaho Abortion Law that went into effect in July 2023, which has impacted the availability of clinical sites. This has hindered the ability of the program to seek other new clinical rotation sites and is contributing to the program's limited enrollment growth current and future. The program reports that the number of graduates has consistently met projections with 11 reported in FY21 compared to the 9 initially projected and 12 in FY22. There was a slight dip in FY23 with 10 enrollments due to the loss of one student because of the pandemic and two students who took a break but returned the following year. The program noted they anticipate 14 students to graduate after Spring 2024 semester. The program

plans to continually review and monitor the availability of clinics both in Idaho and nationally as states may pass new laws that can impact clinical availability, and clinical experience is necessary to complete this degree program. To address this, the program is doing two things: 1) working on identifying and engaging with new clinics nationwide as much as possible, and 2) adjusting the enrollment numbers in the program depending on the clinical placement availability. The program anticipates the enrollment will likely be more limited in the future and will adjust expected enrollment accordingly.

The Ph.D. in Ecology, Evolution, and Behavior was approved by the Board in February 2016 and implemented in Fall 2017. The program initially projected enrolling an average cohort of seven students per year. Based on the information provided, actual numbers superseded enrollment projections starting in Fall 2018 with 15 enrollments and reached 34 in Fall 2023. The program estimated that graduates would be expected after six years of implementation and reported that they saw their first doctoral graduate within four years of implementation. However, they indicated the initial average of 6.5 per year was not fully met. The primary factor cited was the limited availability of funding for graduate assistant (GA) lines. The proposal initially requested 22 GA lines; however, due to expiration of one-time funds and other budget reductions, the program is currently limited to 11.5 GA lines. Due to this limitation, the number of graduates would be expected to be closer to 3.5 graduates, which would align with the actual number of graduates reported (4 graduates in year six).

Idaho State University

The Master of Arts in Spanish was approved in December 2018 and implemented Fall 2019. The program initially projected two enrollments at implementation in FY20 and 7-30 over the next five years. Actual numbers superseded projections with 46 enrollments in FY21 and 127 by FY23. The program projected four graduates by FY23 and exceeded this number with 12 graduates and 24-35 graduates over the subsequent two years. Due to part-time enrollments, most of which are working professionals and teachers, the average time to completion varied. The program adjusted staffing and course schedules to meet the demands for additional summer course offerings and has also implemented a new admissions process that provides better admissions assessment criteria and a more holistic view of applicant that will achieve greater student success.

The Master of Science in Clinical Psychopharmacology was approved by the Board in December 2018 and implemented Fall 2019. The program admits licensed psychologists full-time or part-time in either a track to train psychologists who intend to prescribe medications that includes additional clinical training hours and synchronous course work; or an online, didactic-only track that includes asynchronous course work. The program initially projected four students at implementation with 8-18 enrollments over the next five years. Based on the information provided, the program did not fully reach enrollment projections with

actual enrollment ranging from 3-13 over a five-year period. The program also reports that initial graduate projections were not met with two in FY21 and three in FY22 compared to the 4-6 projected. The primary factor for low enrollment is when originally launched, the program only offered in-person synchronous course work and clinical training hours, with no online or clinical training hours option. This meant that practicing psychologists were having to relocate to Boise, leaving behind their practices, to matriculate into the program. The program has since added an asynchronous, online program without the requirement of clinical training hours (which are available to practicing psychologists outside of ISU's program). This has led to the subsequent expansion in enrollment with their current year's cohort standing at 13 (seven more than two years ago). ISU believes the addition of the new online track will allow the program to meet enrollment and graduation projections within the next two to four years. ISU also notes that Clinical Psychopharmacology programs are evaluated by the American Psychological Association Designation Committee for Education and Training Programs in Psychopharmacology for Prescriptive Authority and was initially granted APA designation for three years on January 6, 2021.

The Master of Science in Nutrition initial proposal comprised two tracks: one that included a Dietetic Internship and one that did not. Adding the master's degree was in response to a change to the profession of requiring a graduate degree to sit for the national exam for dietitians that went into effect January 1, 2024. The program initially projected 22 enrollments at implementation and 40 enrollments for each of the following five years. The program reported 18 enrollments at implementation and has remained stable in the low 30s for the last three years. The program notes that numbers provided in the report include five enrollments in the MS in Nutrition track. Due to lower numbers, the program focused its limited resources on the MS in Nutrition, Dietetic Internship track. The last graduate from the MS in Nutrition was Fall 2022. The program initially projected 18 graduates in FY21 and anticipated reaching 22 by year four. Based on the information provided, graduate numbers were not fully reached with 13-16 graduates over four years reported. The program believes the expansion of the undergraduate Didactic Program in Dietetics to the Meridian campus in Fall of 2024 will allow them to reach initial enrollment and graduation projections in the next review window.

Lewis-Clark State College

The Bachelor of Arts/Bachelor of Science, Psychology: Secondary Education major was approved in March 2017 and implemented Fall 2017. The program initially projected six enrollments in FY18 to reach 21 enrollments by FY21. Based on the information provided the program did not meet enrollment projections reporting four students in FY19 and 1-4 enrollments for subsequent years. The program projected one graduate in FY19 to reach two by FY22. To date, the program has not had any graduates. As the numbers suggest, traditional enrolled students have not seemed to gravitate to this program. The program indicates that one reason might be that, unlike other Secondary

Education degrees, Psychology: Secondary Education is not a single subject teaching endorsement and does not include coursework for a second endorsement. Consequently, students earning the degree would need to earn an additional 20 credit endorsement to be eligible for Idaho certification. Compared to other Secondary Education areas, there are far fewer online and virtual remote course options for Psychology: Secondary Education. To attract more students, Psychology faculty members are increasingly expanding the number of online courses being offered.

The Bachelor of Arts/Bachelor of Science, Secondary Education: Communication Arts was approved in May 2017 and implemented Fall 2017. The program reports they had an average enrollment of 3.4 students per year. Initial enrollment projections were three in FY18 and the program anticipated reaching 10 in FY21 and for subsequent years. Based on the information provided, the program did not fully meet enrollment projections with five reported starting in FY20 and a range of 3-7 enrollments for subsequent years. The program projected one graduate starting in FY21 with 1-2 graduates for subsequent years. To date, the program has not had any graduates. The program was introduced following a request from Teacher Education faculty due to shortages of teachers certified to teach communication arts. Initially designed for post-baccalaureate candidates seeking certification through alternative pathways, the program was deemed necessary to meet state certification requirements, which mandated a traditional certification route through a bachelor's degree program. However, recent changes in the state's education policies now allow certified English teachers to also teach speech/communication classes, rendering the separate communication arts endorsement less essential for most Idaho school districts. Consequently, the program is under review for discontinuation, pending further discussion with Teacher Education faculty and assessment.

The Bachelor of Arts/Bachelor of Science in Sports Media Studies was approved in May 2017 and implemented in Fall 2017. The program reports that they had an average enrollment of 9 students per year. Initial enrollment projections were 10 in the first year to reach 50 by year six. Based on the information provided the program did not reach enrollment projections and reported an enrollment of three students at implementation with a range of 4-15 enrollments for subsequent years. The program projected three graduates by year three with 3-7 for the ensuing years. Based on information provided, actual graduate numbers were not fully reached with one graduate reported in FY20 and 1-3 for the subsequent years. Lewis-Clark State College indicates the Sports Media Studies degree program was launched during a period of high enrollment and popularity for sport-related programs at LC. Leveraging existing coursework Sports and facultv resources from Kinesiology, Management, and Communication Arts, the program adopted an interdisciplinary approach without creating new curriculum or hiring additional staff. Internship opportunities were integrated into the curriculum, utilizing resources such as the Sports Information

team, student-run newspaper, and local media outlets. However, despite these efforts, enrollments in Kinesiology and Sports Management declined shortly after the program's inception, and Sports Media Studies struggled to gain momentum. Despite challenges, the institution remains hopeful about the potential of the Sports Media Studies degree, as it is part of a broader range of programming, with costs embedded within existing "parent" programs. To help increase enrollment, faculty have plans to refine the program and expand both synchronous and asynchronous online course options making the Sports Media Studies major more accessible to distance learners.

University of Idaho

The Bachelor of Science in Entomology was approved in January 2017 and implemented summer 2017. The program initially projected 20 enrollments in FY18 and anticipated reaching 25 by FY23. The program reported five enrollments in spring 2018 and had 6-13 enrollments in subsequent years. While projections were not fully reached, the program reports that the program is growing and has doubled from six students in FY23 to 13 students in FY24. The program projected 20 graduates in FY19 with a range of 20-25 thereafter. Based on the information provided, the program did not meet graduate projections.

The Bachelor of Arts/Bachelor of Science in Film and Television Studies (renamed Film and Television program) was approved in February 2017 and implemented in Fall 2017. The program initially projected 40 total enrollments in FY18 with a range of 65-80 for the ensuing years. Based on the information provided, the program did not fully meet enrollment projections with seven initial enrollments and 22-56 enrollments in subsequent years. Both degrees, however, have experienced steady enrollment growth for the past six years and current enrollments suggest continued rate of growth into the future. The program provides that enrollment growth was slow in the first year because there were process delays before the programs could be advertised and the subsequent pandemic slowed program growth. University of Idaho believes the Film and Television degree programs will continue to attract, retain, and graduate students.

In 2017, U of I's College of Agricultural Life Sciences went through a significant reorganization that included creating new departments, creating new majors and converting program emphases to stand-alone majors. Those relevant to this review were converting Sustainable Cropping Systems to Crop Science, Environmental Horticulture to Horticulture and Urban Agriculture, Plant Biotechnology to Biotechnology and Plant Genomics, and creating a new Crop Management major. The program notes that the Crop Science major and Crop Management major were combined into one major titled Crop Science and Management in Fall 2023. This progress report is reflective of the five majors as part of the reorganization.

- Horticulture and Urban Agriculture. This major projected 26 enrollments starting FY18 to reach 39 in year five and reported 19 enrollments in FY20 compared to the 32 projected and reached 33 enrollments in FY22 compared to the 39 projected. Graduate numbers were achieved starting in FY19 with seven graduates and experienced a slight decrease in numbers in subsequent years.
- **Crop Science**. This major projected 16 enrollments starting in FY18 to reach 22 by year five and achieved those projections starting in FY20 with 19-27 enrollments over three years. Graduate numbers were not fully reached but steady in FY19 and FY20 with four graduates compared to the five projected with a slight dip in FY21. Numbers increased to 9 graduates in FY23.
- **Biotechnology and Plant Genomics**. This major projected eight enrollments in FY18 to reach 14 by year five and achieved those projections in FY20 with 10-19 enrollments over three years. Graduate numbers were not fully reached but steady for the first three years and reached projections by FY22.
- **Crop Management**. This major projected eight enrollments in FY17 to reach 60 by FY22. The program reported eight enrollments in FY20 and reached 16 enrollments in FY22. Based on the information provided, enrollment projections were not fully met. The program projected four graduates starting in FY19 with a range of 8-15 in the subsequent three years. The actual numbers reported were below this threshold with 1-5 graduates.

Over the last two years, the College has experienced faculty turnover. Teaching faculty vacancies temporarily reduced recruitment efforts and delayed offering some courses, while other courses have been taught on overload until new hires can be brought on board. The program has replaced some vacated positions and will continue to fill empty positions to teach plant science courses. With each new hire, the course load per position becomes more manageable for the associated teaching allocation.

The Bachelor of Science in Medical Sciences was approved in February 2017 and implemented in Fall 2017. The program reports that enrollments in this major started relatively high in the first year primarily due to enrolled students changing to the new major. The program projected 50 enrollments in the first year to reach 75 by year six. Based on the information provided, the program met and surpassed enrollment projections with 156 enrollments in FY19 compared to the 55 projected and reaching 194 in FY23 compared to the 60-75 projected for the following four years. The program projected five graduates by year three of the program and started showing graduates earlier with one graduate in FY18 and 4-45 over four years with a decrease in FY23 with 25 graduates.

The Master of Science in Plant Pathology was approved by the Board in August 2018 and implemented in summer 2019. The program notes that the first enrollments occurred in Fall 2019. The program projected 11 enrollments in FY20 to reach 13 by year six. Based on the information provided, the program did not fully reach the enrollment projections with two initial enrollments in FY20 and an average of five enrollments for subsequent years. The program projected three graduates in FY20 with 3-4 projected for ensuing years. Actual numbers of graduates were one in FY20 with five reported in FY22, one in FY24 and zero in FY21 and FY23.

The Bachelor of Science in Soil and Water Systems was approved in January 2017 and implemented summer 2017. The program provides that as of Fall 2023, they enrolled 64 students across three majors (Environmental Soil Science, Agricultural Systems Management and Water Science and Management). The Water Science and Management major slightly missed its enrollment target, with 7 students reported versus an expected 9, due primarily to recruitment challenges and significant faculty turnover just prior to the pandemic. Initial enrollments were projected at 15 enrollments in Fall 2018 and 20-30 enrollments for subsequent years. Based on the information provided, the program did not meet enrollment projections with two initial enrollments in FY19 and 2-6 enrollments for the ensuing years. The program projected one graduate in FY19 with a range of 5-7 over three years. The program did not fully reach projections and graduated two in FY22. Other years did not have graduates reported. The program is actively working to increase enrollment in this degree to ensure its sustainability. They have also hired a new hydrologist and initiated the recruitment of an irrigation specialist to bolster curriculum and attract more students. The COVID-19 pandemic's timing also adversely affected recruitment. Given the critical importance of water resources management in the State and the Western U.S., this major is pivotal. With strategic faculty enhancement and improved recruitment efforts, the program is confident in achieving significant enrollment growth.

BOARD ACTION

This item is for informational purposes only.

New Program Review

Institution:Boise State UniversityProgram:BA Global Studies

Elements for Report

1. Executive Summary of the program report

Established in fall 2017, Boise State's Bachelor of Arts in Global Studies program was a pioneering initiative, one of the first of its kind in the Intermountain West and Pacific Northwest. Conceived in 2016 with strong support from then-Mayor David Bieter, the Idaho Department of Commerce, and the Agency for New Americans, the program garnered widespread endorsement from across the university. Over 12 departments embraced and contributed to the curriculum, solidifying the program's interdisciplinary foundation and setting it on a path for success.

While the initial three years of the Global Studies program saw enrollments align with projections, enrollment numbers in the last few years have fallen short of expectations. The number of graduates has exceeded or at least kept with projections except in FY23. The most significant factor in declining enrollments was the COVID-19 pandemic. During the pandemic, travel and lock-down restrictions significantly curtailed study abroad, internships and experiential learning. In response, the program underwent a thorough curriculum revision and a revision of its program learning outcomes, both implemented in fall 2023. This proactive approach demonstrates the program's commitment to continuous improvement and ensuring graduates are well-equipped for success in the evolving global landscape.

Boise State's 2024 Academic Portfolio Optimization report by Hanover Research Services identified International Policy Analysis, a field under Global Studies, as an emerging academic area with high growth potential. In accordance, we expect the enrollment numbers will grow again and stabilize at approximately 60 students, lower than initially projected and based on our more recent and more complete understanding of student demand. The program is sustainable with an enrollment of 60 students and graduates of approximately 15 per year.

To increase enrollments, we have initiated marketing and recruitment efforts targeting Idaho high school graduates from across the state. In addition, in summer of 2024, we are launching a fully online 7-week version of Global Studies 101. Global Studies 101 is a "Foundations of the Discipline" course in the social sciences at Boise State. Offering a fully online course will increase accessibility for all students and increase program visibility.

2. Brief overview of the program

Housed within the School of Public Service's Department of Global Studies, the Bachelor of Arts in Global Studies empowers students to thrive in an interconnected world. Three emphasis areas – Global Environment (replaced the Word Economics emphasis, which had low enrollments), International Governance and Development, and World Cultures – equip students with interdisciplinary expertise gleaned from collaboration across three colleges: Arts and Sciences, Business and Economics, and Education. This dynamic program fosters ethical, civically engaged citizens prepared to navigate the complex, diverse, and ever-evolving realities of our global community and workforce.

3. Enrollment and Graduates

Enrollments	Implementation	Fall	Fall	Fall	Fall	Fall	Fall
	Year: Fall 2017	2018	2019	2020	2021	2022	2023
Actual (fall headcount)	24	53	57	60	53	46	41

Enrollments	Implementation	Fall	Fall	Fall	Fall	Fall	Fall
	Year: Fall 2017	2018	2019	2020	2021	2022	2023
Projected fall headcount (per original program proposal)	20	40	60	80	100	120	N/A

Number of Graduates	Implementation Year: FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Actual	0	1	11	18	15	9	Not Available

Number of Graduates	Implementation Year: FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Projected (per original program proposal)	0	0	4	8	12	16	Not Available

Projected Enrollments and Graduates from original proposal – for reference

Propos	Proposed Program: Projected Enrollments and Graduates First Five Years											
Progra	Program Name: Global Studies											
Projec	ted Fall	ed Fall Term Headcount Enrollment in Program				Projected Annual Number of Graduates From Program						
FY 18 (first year)	FY 19	FY 20	FY 21	FY 22	FY 23	FY 18 (first year)	FY 19	FY 20	FY 21	FY 22	FY 23	
20	40	60	80	100	120	0	0	4	8	12	16	

INFORMATIONAL - IRSA

TAB 5 Page 2

New Program Review

Institution:Boise State UniversityProgram:BA Special Education

Elements for Report

1. Executive Summary of the program report

Launched in Fall 2017, Boise State's Bachelor of Arts in Special Education directly addressed critical needs identified by various stakeholders. Local school districts, facing a growing teacher shortage, advocated for a program to quickly equip new educators. The program provided a smooth transition for students with Associate's degrees in related fields from two-year institutions seeking special education certification. Recognizing the evolving interests of some students, the program offered flexibility for those exploring multidisciplinary studies, psychology, or other areas before committing to special education. This innovative approach empowers students to pursue dual majors or a standalone major in special education, even if they haven't identified it as their initial focus. Notably, in 2017, Idaho had only one other bachelor's program in special education, highlighting the program's significant contribution to the state's educatoral landscape by filling a crucial gap and offering unique flexibility for aspiring educators.

Enrollment in Boise State's Bachelor of Arts in Special Education program has exceeded expectations (approximately twice as many students enrolled per year than is estimated to be in this specialized and small program). Program is sustainable at its current enrollment numbers. Number of students graduated has fluctuated from year over year, but has been largely within projections.

2. Brief overview of the program

Housed within the College of Education's Early and Special Education Department, the Bachelor of Arts in Special Education program at Boise State University was specifically designed to address a critical and long-standing shortage of qualified special education teachers in the region. The program offers a streamlined and efficient path to earning special education teacher certification. The BA in Special Education program encompasses a broad range of exceptionalities, covering students from kindergarten through grade 12. Graduates of Boise State's BA in Special Education program are equipped to confidently teach in any special education classroom or program, with certification options spanning: P-12, P-8, and K-12.

Not

Available

INFORMATIONAL APRIL 18, 2024

3. Enrollment and Graduates

Projected (per original

program proposal)

Enrollments	Implementation Year: Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Actual (fall headcount)	5	11	17	22	22	19	21
Tourse University	True Law and d'an	F -U	T -11	T -11	T -11	T-U	T-11
Enroliments	Year: Fall 2017	Fail 2018	Faii 2019	Faii 2020	Faii 2021	Fair 2022	Faii 2023
Projected fall headcount (per original program proposal)	2	3	5	10	10	10	Not Available
Number of Graduates	Implementation: FY 18_	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Actual	0	0	0	3	5	0	Not Available
	·						
Number of Graduates	Implementation: FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24

Projected Enrollments and Graduates from original proposal – for reference

0

1

2

2

5

0

Propos	Proposed Program: Projected Enrollments and Graduates First Five Years											
Program Name: Bachelor of Arts in Special Education												
Projected Fall Term Headcount Enrollment in Program Projected Annual Number of Graduates From Program												
FY_18 (first year)	FY_19	FY_20	FY_21	FY_22	FY_23	23 FY_18 FY_19 FY_20 FY_21 FY_22 FY_23 (first year)						
2	3	5	10	10	10	0	0	1	2	2	5	

New Program Review

Institution:Boise State UniversityProgram:BA Urban Studies and Community Development

1. Executive Summary of the program report

Launched in 2017, the Bachelor of Arts in Urban Studies and Community Development cultivates skilled urban analysts equipped with in-depth understanding of how cities, communities, and regions operate, particularly within the Intermountain West. At that time (and is still the case), there were no similar undergraduate programs at other Idaho public institutions. The program's graduates are empowered to pursue diverse careers, including community development administrators, economic development analysts, city managers, and transportation directors. The program garnered critical support from the then-mayors of Meridian, Coeur d'Alene, Eagle, and Middleton.

As Idaho grows, demand for graduates in this field is expected to be relatively high. Boise State's 2024 Academic Portfolio Optimization report by Hanover research characterized Idaho's and the region's labor demand in Urban Studies and Community Development as a "high growth" area. This is reflected in the program's impressive record placing graduates in professional positions at government agencies (including the cities of Meridian, Caldwell, Eagle, and Boise), planning firms, and nonprofit organizations within the state and region.

While current enrollment figures are encouraging, they are below initial projections. This is partly due to unexpected events, such as the pandemic's impacts on enrollments, on the program's ability to offer experiential learning opportunities, and on faculty's ability to promote the program within the institution and the region. However, number of graduates have largely met expectations, showing the efficiency in the program getting students to the graduation. In response to the lower than expected enrollments, the program implemented a comprehensive curriculum revision in Fall 2023. This revision introduced several new URBAN courses, enhancing student flexibility and offering significant benefits for transfer students. Program leadership is currently working to identify additional opportunities to align the curriculum with area community college programs and to market the degree within our region. Newer studies and experience lead us to reconsider the initial enrollment estimates and lower them to 40 students per year. The program is expected to be sustainable with an enrollment of approximately 40 students and graduates of 10 per year.

2. Brief overview of the program

The complex world of urban issues and community development is the focus of the interdisciplinary Bachelor of Arts in Urban Studies and Community Development, housed within the Department of Urban Studies and Community Development. This unique

program leverages the expertise and collaboration of various colleges, including Arts and Sciences, Health Sciences, Business and Economics, and Engineering, to equip graduates with the skills needed to tackle the Intermountain West's specific challenges. Through a diverse blend of classroom learning, hands-on projects, partnerships with local communities, research opportunities, and interdisciplinary collaboration, students gain the knowledge and experience to become a changemaker, prepared to address real-world urban issues and community development needs.

3. Enrollment and Graduates

Enrollments	Implementation	Fall	Fall	Fall	Fall	Fall	Fall
	Year: Fall 2017	2018	2019	2020	2021	2022	2023
Actual (fall headcount)	10	24	30	25	35	26	25

Enrollments	Implementation	Fall	Fall	Fall	Fall	Fall	Fall
	Year: Fall 2017	2018	2019	2020	2021	2022	2023
Projected fall headcount (per original program proposal)	20	40	60	80	100	120	Not Available

Number of Graduates	Implementation Year: FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Actual	0	4	7	3	12	12	Not Available

Number of Graduates	Implementation Year: FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Projected (per original program proposal)	0	0	4	8	12	16	Not Available

Projected Enrollments and Graduates from original proposal – for reference

Propos	Proposed Program: Projected Enrollments and Graduates First Five Years										
Program Name: Urban Studies and Community Development											
Projected Fall Term Headcount Enrollment in Program					ent in	Projected Annual Number of Graduates From Program					From
FY 18 FY 19 FY 20 FY 21 FY 22 FY 23 (first vear)					FY 23	FY 18 (first year)	FY 19	FY 20	FY 21	FY 22	FY 23
20	40	60	80	100	120	0	0	4	8	12	16

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New Program Review

Institution:	Boise State University
Program:	BBA Management (online)

Elements for Report

1. Executive Summary of the program report

Launched in Fall 2017, our Bachelor of Business Administration (BBA) in Management program delivers accessible, high-quality business education to students seeking flexibility due to work or personal commitments. Aligned with the Complete College Idaho initiative, the program empowers Idahoans to elevate their education and career prospects. Notably, U.S. News & World Report ranks our program #23 nationally, placing it within the top 12% of all online BBA in Management programs nationwide.

The BBA in Management program boasts robust enrollment, exceeding 300 actively enrolled students in fall 2023, and 317 total completions spanning from 2018-2023. While enrollment is very healthy and continues to grow every year, it fell short of the aspirational goals listed in the original State Board proposal. This was partly due to lower new start numbers caused by unforeseen external influences like the pandemic and job market shifts, and partly because students are graduating with the degree in fewer semesters than projected in the initial proposal. With an increased pace to degree, the cumulative number of students enrolled in the program will not compound in the initial manner projected. We expect that this high quality, fully online program will continue to grow and reach numbers expected, however, it will likely take a few extra years. A robust marketing and recruitment campaigns are actively running to attract and enroll future students in the program. This program intentionally serves Idahoans from across the state, with over 28% of enrolled Idaho students from rural communities. The number of graduates has exceeded annual targets initially, but has fallen short of projections in the last few years (those estimates of graduate numbers were based on higher enrollment projections). We anticipate that approximately 125 students will graduate in FY24. We are very pleased with the growth of this program and the program demonstrates an increasingly successful track record of converting enrolled students into graduates.

Additionally, the initial projections in 2017 were based on limited resources at the time. Since 2017, Boise State has adopted new tools to better estimate student headcount projections for online programs.

2. Brief overview of the program

Offered fully online through the Department of Management in the College of Business and Economics, the Bachelor of Business Administration in Management equips students

for diverse career paths. With newly added emphasis areas in either Entrepreneurship or Resort and Hospitality Management, the program provides a strong foundation in business principles while fostering specialized skills. Students gain practical experience through hands-on coursework, develop valuable technical skills, and build a network of connections with learners across the country.

3. Enrollment and Graduates

Enrollments	Implementat ion Year: Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Actual (fall headcount)	31	112	157	191	235	286	306

Enrollments	Implementat ion Year: Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Projected fall headcount (per original program proposal)	30	154	274	381	440	440	Not Availa ble

Number of Graduates	Implementat ion Year FY 18_	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Actual	0	11	51	75	82	98	Not Availa ble

Number of Graduates	Implementat ion Year FY 18_	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Projected (per original program proposal)	0	9	41	81	126	150	Not Availa ble

Projected Enrollments and Graduates from original proposal – for reference

Propos	Proposed Program: Projected Enrollments and Graduates First Five Years										
Program Name: BBA in Management											
Projected Fall Term Headcount Enrollment in upper-division courses Projected Annual Number of Graduates From Program											
FY18 (first year)	FY19	FY20	FY21	FY22	FY23	FY18 (first year)	FY19	FY20	FY21	FY22	FY23
30	154	274	381	440	440	0	9	41	81	126	150

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New Program Review

Institution:	Boise State University
Program:	MS Genetic Counseling

Elements for Report

1. Executive Summary of the program report

Dedicated to expanding access to the genetic counseling profession, the Master of Science (MS) program integrates the rigorous standards of the Accreditation Council for Genetic Counseling (ACGC) into an innovative, fully online learning experience. Established in 2019, this accredited program addresses the increasing demand for online genetic counseling education, empowering qualified individuals to pursue this rewarding career path regardless of geographic limitations or other constraints. By providing a comprehensive curriculum that fosters skilled and empathetic healthcare professionals, the program ensures graduates are well-prepared to meet the evolving needs of diverse communities. The program achieved the coveted full program accreditation status in October of 2023 for a period of 6 years.

Since its launch in 2019 as the then only fully online MS in Genetic Counseling program in the Western region, Boise State's program has experienced both high demand and fluctuating enrollment. During the planning phase, the program had projected to grow from 12 per cohort to 14 per cohort in FY 2022. While initial enrollments in fall 2019, 2020 and 2021 surpassed projections, demonstrating its popularity, enrollment did not increase in fall 2022 as expected. This is attributed to pandemic related labor market issues in the health care industry which significantly affected genetic counseling and available genetic counseling clinical supervisors and sites. Additionally, many health care programs, including genetic counseling are experiencing the unintended consequences of the Idaho Abortion Law that went into effect in July 2023. To date, the program has lost 12 sites and anticipates several other sites that will not renew their Clinical Affiliation Agreements. This also hinders the ability of the program to seek out new clinical rotation sites and contributes to the program's limited enrollment growth now and in the future. The program had 2 students that required a temporary break in 2022 but resumed their education the following year which appears as an uptick in enrollment in fall 2023. It should be noted that the program was successful in supporting these students through life events that interrupted their studies and will have these students graduate in 2024. To date the program has lost only 1 student to attrition in 5 cohorts. Importantly, numbers of graduate have consistently met projections, highlighting the program's effectiveness in nurturing skilled genetic counseling professionals.

2. Brief overview of the program

Offered fully online within the College of Health Sciences' School of Allied Health, the Master of Science in Genetic Counseling equips graduates to address emerging trends in the field. These trends include leveraging advancements in genetics and genomics, serving underrepresented and rural communities, developing business acumen, and collaborating effectively with other healthcare professionals. The program adheres to rigorous Quality MattersTM standards for online course design, fostering an interactive learning environment. Students gain experience through diverse clinical rotations across the Western region while honing their interprofessional communication and business skills to serve culturally, economically, and socially diverse communities.

3. Enrollment and Graduates

Enrollments	Implementation Year: Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Actual (fall headcount)	12	24	24	23	26

Enrollments	Implementation Year: Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Projected fall headcount (per original program proposal)	10	22	26	30	33

Number of Graduates	Implementation: FY 20	FY 21	FY 22	FY 23	FY 24
Actual	0	11	12	10 ¹	Not Available

Number of Graduates	Implementation: FY 20	FY 21	FY 22	FY 23	FY 24
Projected (per original program proposal)	0	9	12	13	15

Projected Enrollments and Graduates from original proposal – for reference

¹ The program lost one student to COVID related issues (that was the only student to lose to attrition in 5 cohorts). Two students needed to take a break and came back the following year. Thus, we expect to have 14 students graduating after the Spring 24 semester.

	Proposed Program: Projected Enrollments and Graduates First Five Years									
Program Name: Master of Science in Genetic Counseling										
Projected Fall Term Headcount Enrollment in Program				Projec	cted Ann	ual Num Prog	ber of Gi Iram	aduates	From	
FY20	FY21	FY22	FY23	FY24	FY25	FY20 FY21 FY22 FY23 FY24 F				FY25
10 22 26 30 33 33 0 9 12 13 15 15									15	

New Program Review

Institution:Boise State UniversityProgram:Ph.D. Ecology, Evolution, and Behavior

Elements for Report

1. Executive Summary of the program report

The interdisciplinary Ph.D. in Ecology, Evolution, and Behavior (EEB) offers a cuttingedge approach, empowering graduates to solve critical ecological challenges through the lens of diverse scientific disciplines. Launched in 2017, the program immerses students in Idaho's diverse habitats, providing unique learning and research opportunities with renowned natural resources. Students actively collaborate with faculty and field scientists, gaining valuable experience through partnerships with organizations like the Intermountain Bird Observatory, U.S. Geological Survey, and international collaborators such as the Peregrine Fund and Gorongosa National Park in Mozambique.

Enrollment in the Ph.D. program has grown to a consistent 7 - 9 new incoming students per year, with the Fall 2023 cohort welcoming 7 students, meeting the proposal enrollment projections. The proposal projected that the first students would graduate from the program after six years in the program, however, we are excited to report that we saw our first doctoral graduates within four years of implementation. While the year 6 expected number of graduates did not meet initial projection of approximately 6.5 per year, the growth of the program has been limited by available funds, in particular dedicated GA lines. The proposal and projections sent to the state board in 2017 called for 22 GA lines yet due to the expiration of one-time funds and other budget reductions, the program has averaged 11.75 GA lines from 2018 to 2023, the adjusted number of graduates would be expected to be closer to 3.5 graduates per year after 6 years in the program. Thus, the program meets projected number of graduates in year 6 given the resources provided and are currently available.

Even with these limitations in resources, the number of PhD students has markedly increased over the years, partially driven by external grants secured by faculty. For example, in Fall 2019 about 30% of enrolled students were grant funded, whereas in Fall 2023 that number increased to approximately 65%.

2. Brief overview of the program

Boise State University's Ph.D. in Ecology, Evolution, and Behavior, housed within the Department of Biological Sciences, equips scientists to tackle complex environmental challenges. With a unique emphasis on Global Change Biology, the program trains its graduates to use theories from diverse fields – biology, physics, and social science – to

contribute to both fundamental research and real-world problem-solving. By studying complex ecosystems and their interacting inhabitants, students gain the expertise to provide actionable and understandable knowledge to policymakers and the public. Areas of particular strength include raptor biology, community and population ecology, biogeochemistry, human behavioral ecology, and human-environment systems.

3. Enrollment and Graduates

Enrollments	Implementation Year: Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Actual (fall headcount)	6	15	21	28	27	32	34

Number of Graduates	Implementation Year: FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Actual	0	0	0	1	1	4	Not available

Projected Enrollments and Graduates from original proposal – for reference

Institution	Relevant Enrollment Data			Numb	Graduation Rate		
	Current (Fall 2014)	Year 1 Previous	Year 2 Previous	Current (2014-15)	Year 1 Previous	Year 2 Previous	
BSU: PhD in Ecology, Evolution, and Behavior (proposed)	The progra of 2017. will admit students of yield the pro- depicted a roughly 40 fully to	am will beg We project cohorts av each year. rojected en bove, level once the p up and run	gin in Fall that we eraging 7 This will rollments ing out at program is ning.	We project graduate fr 6 years in th cohort st attrition ra an average year once t	that first stu om the prog he program ize and on a te of 10%, v e of 6.5 grad he program nd running.	idents will gram after . Based on typical ve project uates per is fully up	6.5 per year

New Program Review

Institution:	Idaho State University
Program:	Master of Arts in Spanish

Elements for Report

1. Executive Summary of the program report

The Department of Global Studies & Languages submitted the proposal to establish a Master of Arts in Spanish to meet a proven need for additional post-baccalaureate Spanish language education options in the state of Idaho as well as the surrounding region. The program was designed to meet the needs of both traditional graduate students, as well as educators seeking further certification and degrees. The initial projections called for 2 students to be enrolled in the first year, with the program enrolling 7 students in year two and slowly increasing in size over the next 5 years. As is clear based on the data below, we have greatly exceeded the proposed 5-year enrollment target, and currently have roughly 110 students enrolled in the program. Due to the part-time nature of many students (a good portion of whom are working professionals and teachers in particular), the average time to complete the program varies – and staffing and course schedules have been adjusted within the department to meet the expressed desire for additional summer course offerings. In the Fall of 2023, a new admissions process was put in place that provides better admissions assessment criteria and a more holistic view of the applicant – this will lead to even greater student success within the program moving forward.

2. Brief overview of the program

The MA in Spanish is an academically rigorous, advanced program of study in Spanish Language, Literature, and Cultural Analysis. The degree is offered fully online and comprised of a 30-credit program of study that provides high school teachers of Spanish and other individuals seeking to reach an advanced level of proficiency the opportunity to attain the qualifications and language skill level required to participate effectively in a variety of educational and professional settings. Students are encouraged to personalize their program of study by including nine credits of elective coursework in Spanish, Spanish for the Professions, or in another approved area of study. Students may begin their studies year-round, applying for the Fall, Spring, or Summer semester.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

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Enrollments	Implementation Year: FY20	FY20	FY21	FY22	FY23	FY24
Actual (fall headcount)	2020	6	46	119	127	109

Number of Graduates	Implementation: FY20	FY20	FY21	FY22	FY23	FY24
Actual	2020			12	35	24

Original Proposal Projections for Reference:

	Proposed Program: Projected Enrollments and Graduates First Five Years												
Program Name: Online M.A. in Span Projected Fall Term Headcount Enrollment in Program						nish For TEACHERS and Professionals Projected Annual Number of Graduates From Program							
FY20 (first year)	FY21	FY22	FY23	FY24	FY25	FY 20	FY21	FY22	FY23	FY24	FY25		
2	7	12	17	23	30	0	0	1	4	5	8		

New Program Review

Institution:Idaho State UniversityProgram:Master of Science in Clinical Psychopharmacology

Elements for Report

1. Executive Summary of the program report

The Idaho State University Master of Science in Clinical Psychopharmacology (MSCP) is a post-doctoral program intended to train clinical psychologists in the safe and effective use of psychotropic medication. The program admits licensed psychologists full-time or part-time in either a track to train psychologists who intend to prescribe medications that includes additional clinical training hours and synchronous course work; or an online, didactic-only track that includes asynchronous coursework. The online, didactic-only track enrolled the first cohort of students in the Fall 2022 semester. The clinical faculty in the department of Clinical Psychopharmacology in the L.S. Skaggs College of Pharmacy, provide services to the community at the Idaho State University Integrated Mental Health Clinic in Meridian, ID. This clinic also serves as a training site for students, which is unique amongst MSCP programs nationally.

In 1991, the US Department of Defense was the first to grant prescription privileges to military psychologists through a psychopharmacology training program. Since then, states have granted prescriptive authority to psychologists beginning with New Mexico in 2002, followed by Louisiana (2004), Illinois (2014), Iowa (2016), Idaho (2017), and most recently Colorado in 2023. Currently, there are just over 300 prescribing psychologists in US and the US military. Idaho currently has 11 licensed prescribing psychologists. Idaho State University's MSCP program initially joined Fairleigh Dickinson University, New Mexico State University, Alliant California School of Professional Psychology, and The Chicago School of Professional Psychology as the only schools offering the MSCP degree in the US – at the time ISU was the only MSCP program in a College of Pharmacy. Since the launch of ISU's MSCP program in 2019, Drake University started an MSCP program in the Fall 2022 semester that is also housed in a College of Pharmacy. Antioch University Seattle and the University of Colorado Denver are slated to launch MSCP programs in the Fall 2024 semester. Currently, there are over 1400 graduates of MSCP programs nationwide. Most of those graduates have not pursued prescriptive authority but value the MSCP education and training to inform their clinical practice and provide consultation. Of the current MSCP programs, New Mexico State University is the most similar to ISU. The program at New Mexico State University was established in 1999 and has 103 graduates and 25 students currently enrolled. Fairleigh Dickinson University and Alliant California School of Professional Psychology are the most established programs. The program at Fairleigh Dickinson University has 486 graduates and 100 students currently enrolled. The program at Alliant California School of Professional Psychology has 627 graduates and 25 students currently enrolled. The program at Idaho State University is primarily supported by appropriated funds, but also generates revenue through online program fees and the operation of the Integrated Mental Health Clinic.

Future goals for the Idaho State University MSCP program are to grow enrollment in the program and to expand clinical services offered in Meridian. It should be noted that the program has not met its initial enrollment projections. The primary reason for this is that when originally launched, the program only offered in person synchronous course work and clinical training hours, with no online or sans clinical training hours option. This option meant that we were requiring practicing psychologists to relocate to Boise, leaving behind their practices, in order to matriculate into the program. The addition of an asynchronous, online program without the requirement of clinical training hours (which are available to practicing psychologists outside of our program) has led to the subsequent expansion in enrollment with our current year's cohort standing at 13 (7 more than 2 years ago). We believe the addition of the new online track will allow us to meet our enrollment and graduation projections within the next 2-4 years.

2. Brief overview of the program

The MSCP program at Idaho State University is 38 credits or the equivalent to two years of full-time didactic coursework. Students pursuing prescriptive authority can complete an additional 2 credits of supervised clinical training. In the first half of the MSCP program, students complete foundational courses in anatomy and physiology, pathophysiology, neuroscience, pharmacology, neuropharmacology, and physical assessment. In the second year, students complete integrated coursework in psychopharmacotherapeutics, research methods, and professional, ethical, and legal issues. The curriculum in the Idaho State University MSCP program is primarily guided by Idaho state statute, under the Board of Psychologist Examiners and guidelines established by the American Psychological Association (APA) for MSCP program designation (equivalent to program accreditation).

Idaho Title 54, Chapter 23, 54-2317, outlines that the students achieve clinical competency in areas including basic science, neuroscience, physical assessment and laboratory exams, clinical medicine and pathophysiology, clinical and research pharmacology and psychopharmacology, clinical pharmacotherapeutics, research, and professional, ethical, and legal issues. The statute also states that the MSCP program shall satisfy the requirements to become designated a post-doctoral education and training program in clinical psychopharmacology by the APA.

The APA states that "training of psychologists in the practice of psychopharmacology is based on two foundations. The first is rigorous education in the psychological sciences with training as a practitioner of psychological interventions. The second is a firm grounding in the basic medical sciences that form the basis for utilizing biological interventions in a safe and effective manner." APA first developed the Model Education and Training Program in Psychopharmacology for Prescriptive Authority in 1996 and it has subsequently been revised in 2009 and 2019. APA's recommended curriculum promotes integrating knowledge, skills, and attitudes fundamental to professional practice with psychopharmacologic interventions. This represents a movement to a competencybased education and training model, like that of other healthcare professions. The APA recommended curriculum mirrors that of Idaho statute but is expanded to include systems of care (coordination of care with different medical specialties, consultations and referrals, and coordination and consultation in long-term care). The APA additionally has recommended supervised clinical experiences in physical assessment and a prescribing psychology fellowship that includes acute, short-term, maintenance medication strategies, polypharmacy, tapering/discontinuing medications, and integrating other forms of psychological care into the treatment plan, preferentially including exposure to inpatient, consultation/liaison, emergency department, and outpatient care. MSCP programs are evaluated by the APA Designation Committee for Education and Training Programs in Psychopharmacology for Prescriptive Authority (RxP Designation Committee) based on the curriculum requirements.

Idaho State University's MSCP program was initially granted APA designation for 3 years on January 6th, 2021. The program has subsequently successfully undergone an interim review in 2022 and a full program review in 2023. In 2023, the program was granted a 5-year designation status through 2028 with a curriculum that meets both the Idaho statute and APA designation criteria.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY20	FY20	FY21	FY22	FY23	FY24
Actual (fall headcount)	2020	3	5	5	12	13

Number of Graduates	Implementation: FY20	FY19	FY20	FY21	FY22	FY23
Actual	2020			2	3	0

Original Proposal Projections for Reference

Program Name: MS Clinical Psychopharmacology											
Projected Fall Term Headcount Enroliment in Program					Projected Annual Number of Graduates From Program						
FY_19 (first year)	FY_20	FY_21	FY_22	FY_23	FY_24	FY_19 (first year)	FY_20	FY_21	FY_22	FY_23	FY_24
4	8	10	12	14	18	0	4	4	6	6	6

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New Program Review

Institution:Idaho State UniversityProgram:Master of Science in Nutrition with DieteticInternship

Elements for Report

1. Executive Summary of the program report

When the department submitted the Master of Science in Nutrition request there were two tracks: Master of Science in Nutrition and Master of Science in Nutrition with Dietetic Internship(MS/DI). The MS/DI was built upon the long existing dietetic internship post baccalaureate certificate program housed at ISU for 20 years. Adding a master's degree to the program was in response to a change to the profession of requiring a graduate degree to sit for the national registration exam for dietitians that went into effect January 1, 2024. The program was an early adopter and experienced a drop in the number of applications. Many students wanted to complete their internships without earning a graduate degree while that was still an option for practicing as a dietitian. Although the program did not fill all 18 available seats, the headcount numbers were consistent since the beginning. This trend improved in FY 2024 when the program filled to full capacity of 18 seats. The requirement to have a graduate degree for eligibility to take the registration exam for dietitians is now in effect. Additionally, the department is increasing its undergraduate degree capacity by adding programming on the Meridian campus. Both changes will ensure that the program will fill to capacity going forward.

The program admission process into the MS/DI is rigorous and is reflected in the graduation rates. They have been excellent as nearly all students who begin the program graduate. Since program implementation only three students withdrew from the program. This will continue to be the case as entrance standards remain in place.

The numbers below include five students in the MS in Nutrition track that did not include an internship component. The program made the decision to focus its limited resources on the MS/DI and the last graduate from the MS in Nutrition track was fall 2022.

2. Brief overview of the program

The MS/DI seats students on both the Pocatello and Meridian campuses and provides both a graduate degree and about 1,200 hours of supervised practice that prepares students to take the national registration exam for dietitians. Admission to the program occurs in the spring and students begin coursework the next fall. Their first semester (fall 1) is online coursework as the program does not have the clinical facility capacity to support two overlapping cohorts completing supervised practice. Supervised practice begins in spring semester, continues through summer semester, and graduation occurs their second fall (fall 2) semester. After
successful completion of program requirements students are awarded a Dietetic Internship verification statement and are eligible to sit for the national exam.

It should be noted that the program did not meet its projected enrollment or graduation numbers over this review window. Initial projections were 22 enrollments at inception growing to 40 students. The program implemented with 18 and has remained stable in the low 30s for the last three years. Graduations per year have hovered around 15 on average. We know that substantive workforce need for registered dieticians exists, and the recent approval of the Department of Nutrition and Dietetics' expansion of the undergraduate Didactic Program in Dietetics (DPD) to the Meridian campus to begin in Fall of 2024 should shore up this pipeline and let us reach our initial enrollment and graduation projections in the next review window. The undergraduate Didactic Program in Dietetics allows students to enter the DPD in their junior year and progress into the MS/DI program following its completion.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY	FY20	FY21	FY22	FY23	FY24
Actual (fall headcount)	2020	18*	26*	32	31	31

Number of Graduates	Implementation: FY	FY20	FY21	FY22	FY23	FY24
Actual	2020		15	16	16	13

*Due to coding issues FY20 and FY21 headcounts are derived from department records.

Original Proposal Projections for reference:

Propos	ed Prog	am: Pro	jected E	nrollmen	its and G	Graduate	s First Fi	ve Years			
Progra	m Name	:									
Proje	cted Fall	Term He Prog	adcount gram	Enrollm	ent in	Proje	cted Ann	ual Num Prog	ber of G Iram	raduates	From
FY_20 (first year)	FY_21	FY_22	FY_23	FY24_	FY_25	FY_20 (first year)	FY_21	FY_22	FY_23	FY_24	FY_25
22	40	40	40	40	40	0	18	20	22	22	22

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New Program Review

Institution:Lewis-Clark State CollegeProgram:Sports Media Studies BA/BS UG (420)

Elements for Report

1. Executive Summary of the program report

The number of Sports Media Studies majors has been below the estimated/aspirational enrollments included in the original Sports Media Studies BA/BS proposal submitted to the State Board of Education.

The average enrollment has been nine students per year. The major, however, is part of a larger Communication Arts program in the Division of Humanities, which had a Fall 2023 enrollment of 42 (as measured by head count upon Fall Census Day Report). The Sports Media Studies BA/BS coursework also supports other majors, such as Business and Communication BA/BS UG (225), Communication Arts BA/BS UG (405), Communication Arts: Secondary Education BA/BS UG (405.32), Exercise Science BA/BS UG (314), Kinesiology BA/BS UG (310), and Kinesiology: Secondary Education BA/BS UG (310.32), and vice versa. For example, the Sports Media Studies requirements closely align with the requirements for the Communication Arts major and the Kinesiology major. That means higher course enrollments for courses included in all three programs, while giving flexibility to students interested in both media studies and kinesiology.

Communication Arts faculty members have been expanding both synchronous and asynchronous online courses options, offering almost all COMM course requirements that are part of the Sports Media Studies program either fully online or as virtual courses. This should increase future enrollment by making the degree more accessible to distance learners.

2. Brief overview of the program

As outlined in the 2023-2024 LC State catalog (<u>http://catalog.lcsc.edu/academic-programs/physical-life-movement-sport-science-division/baccalaureate-degrees/sports-media-studies-ba-bs/#text</u>), the Sports Media Studies BA/BS UG (420) program combines coursework from multiple academic disciplines to prepare students to work in the dynamic, exciting fields of sport journalism, sport broadcasting, digital sports production, and sport media relations. Students enjoy internships in high school athletics and within college/university athletic departments. They also work with local newspapers, media outlets, and sport businesses. The degree is part of both the Humanities Division and the Physical, Life, Movement & Sport Sciences Division.

Students in this program have two academic advisors: one from the Humanities Division and one from the Physical, Life, Movement and Sport Sciences Division.

As part of the Sports Media Studies BA/BS UG program, students complete 21.0 credits of coursework toward the General Education core requirements. Students also complete 63.00 credits of program-specific coursework, with a heavy focus on communications (COMM) courses, English (ENGL) courses, kinesiology (KIN) courses, and health (HLTH) courses. Additionally, students complete roughly 20 elective credits. For students pursuing the BA, rather than the BS distinction, 4-16 of the elective credits are in a second or heritage language.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY17-18	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	FY23-24
Actual (fall headcount)	3	4	11	15	11	12	7

Number of Graduates	Implementation Year: FY17-18	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	FY23-24
Actual	0	0	1	3	2	1	NA

Proposal Projections for Reference:

Progra	am Name	: Sports	Media Stu	idies							
Proje	ected Fal	l Term H Pro	eadcoun gram	t Enrollr	nent in	Proje	ected An	nual Num Pro	nber of G gram	iraduate	s From
FY18 (first year)	FY19	FY20	FY21	FY22	FY23	FY18 (first year)	FY19	FY20	FY21	FY22	FY23
10	15	25	30	40	50	0	0	3	4	5	7

	New Program Review
Institution:	Lewis-Clark State College
Program:	Secondary Education: Communication Arts
	BA/BS UG (405.32)

Elements for Report

1. Executive Summary of the program report

The number of Secondary Education: Communication Arts majors has been below the estimated/aspirational enrollments included in the original Secondary Education: Communication Arts BA/BS proposal submitted to the State Board of Education.

The average enrollment has been about 3.4 students per year. The major, however, is part of a larger Communication Arts program in the Division of Humanities, which had a Fall 2023 enrollment of 42 (as measured by head count upon Fall Census Day Report). The Secondary Education: Communication Arts BA/BS coursework also supports other majors, such as Business and Communication BA/BS UG (225), Communication Arts BA/BS UG (405), and numerous other education degree pathways, and vice versa. For example, the Communication Arts: Secondary Education requirements closely align with the requirements for the Communication Arts major and other secondary education majors. That means higher course enrollments for courses included in numerous programs, while giving flexibility to students interested in both communication arts and education.

Communication Arts faculty members have been expanding both synchronous and asynchronous online courses options, offering almost all COMM course requirements that are part of the Communication Arts: Secondary Education program either fully online or as virtual courses. The same is true for the Education course requirements for the program. This should increase future enrollment by making the degree more accessible to distance learners.

2. Brief overview of the program

As outlined in the 2023-2024 LC State catalog (http://catalog.lcsc.edu/academicprograms/humanities-division/baccalaureate-degrees/communication-arts-secondaryeducation-ba-bs/), the Secondary Teacher Education program at LC State prepares teacher candidates for certification in grades 6-12. It requires 27 credits of Education coursework in professional foundations and studies and 13 credits during internship. Students apply for admission to the program after successfully completing nine credits of Education coursework in professional foundations.

Secondary Teaching Certificates (6-12) are endorsed for subject areas according to Idaho Teacher Certification standards. All certificates require a minimum of 30 semester credits

for a major endorsement area and 20 semester credits for a minor endorsement area, or a minimum of 45 semester credits for a single endorsement.

Students in the Secondary Education Teacher Certification program are expected to provide evidence through performance that they have met Idaho's requirements for certification and become dedicated and knowledgeable professionals, content specialists, competent educational designers, capable educational facilitators, insightful educational evaluators, reflective professionals, and culturally responsive professionals before being recommended for secondary teacher certification.

The degree in Secondary Education: Communication Arts is part of both the Humanities Division and the Teacher Education and Mathematics Division. Students in this program have two academic advisors: one from the Humanities Division and one from the Teacher Education and Mathematics Division.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY17-18	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	FY23-24
Actual (fall headcount)	0	0	5	7	4	3	5

Number of Graduates	Implementation Year: FY17-18	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	FY23-24
Actual	0	0	0	0	0	0	NA

Proposal Projections for Reference:

Progra	m Name	: Second	ary Educa	ation: Con	mmunicati	ion Arts					
Proje	cted Fal	l Term H Pro	eadcoun gram	t Enrollr	nent in	Proje	ected An	nual Nun Pro	n <mark>ber</mark> of G gram	iraduate	s From
FY18 (first year)	FY19	FY20	FY21	FY22	FY23	FY18 (first year)	FY19	FY20	FY21	FY22	FY23
3	6	9	10	10	10	0	0	1	1	2	2

2 | Page Updated 10/14/21

New Program Review

Institution:Lewis-Clark State CollegeProgram:Psychology: Secondary Education BA/BS

Elements for Report

1. Executive Summary of the program report

The Psychology: Secondary Education BA/BS serves current and aspiring teachers who desire a Psychology endorsement. The major also provides a strong grounding in the field of Psychology.

The number of Psychology: Secondary Education majors has been below the estimated/aspirational enrollments included in the original Psychology: Secondary Education BA/BS proposal submitted to the State Board of Education (SBOE). The enrollment typically has been about two students per year between FY17-18 and FY23-24. However, the content coursework required for the Psychology: Secondary Education major is virtually identical to the content coursework required for the Psychology major. That major had an average enrollment of about 110 between FY17-18 and FY22-23. The required Secondary Education coursework for Psychology: Secondary Education is virtually identical to the coursework required for all other Secondary Education degrees (such as English: Secondary Education and Social Sciences-History: Secondary Education). As a result, the existence of the Psychology: Secondary Education major has helped boost Psychology and Secondary Education course enrollments.

2. Brief overview of the program

Psychology involves in the scientific study of the mind and behavior. The Psychology: Secondary Education BA/BS serves students interested in becoming teachers with an endorsement in Psychology as well as current teachers interested in pursuing an additional endorsement in this content area. By helping to prepare students to go into teaching, the degree is intended to address Idaho's ongoing teacher shortage.

The required Psychology courses are consistent with American Psychological Association (APA) guidelines. Thus, the Psychology: Secondary Education major provides a strong grounding in the field of Psychology, especially in the areas of Social Psychology and Research Methods. Students gain knowledge about human beings and how Psychology can help benefit people.

As with all LCSC Secondary Education majors, Psychology: Secondary Education requires 27 credits of Education course work and 12 internship (student teaching) credits. Students apply for admission to the program after successfully completing nine credits of Education course work in professional foundations.

The above is modified from the 2023-24 LCSC catalog descriptions for the Psychology BA/BS and the Psychology: Secondary Education BA/BS majors.

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- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation	FY_18-	FY_19-	FY_20-	FY_21-	FY_22-	FY_23-
	Year: FY_17-18	19_	20_	21	22	23	24
Actual (fall headcount)	0	4	2	3	2	1	4

Number of Graduates	Implementation:	FY_18-	FY_19-	FY_20-	FY_21-	FY_22-
	FY 17-18	19_	20_	21	22	23
Actual	0	0	0	0	0	0

Proposal Projections for Reference:

Progra	m Name	: Second	lary Educa	ation: Psy	chology						
Projected Fall Term Headcount Enrollment in Program				Projected Annual Number of Graduates From Program							
FY18 (first year)	FY19	FY20	FY21	FY22	FY23	FY19	FY20	FY21	FY22	FY23	FY19
6	12	18	21	21	21	1	1	1	2	2	2

New Program Review

Institution:	University of Idaho
Program:	Entomology BS.Ag.L.S.

Elements for Report

1. Executive Summary of the program report

The Entomology (B.S.) program within the Department of Entomology, Plant Pathology and Nematology is a small but growing part of the department. After low enrollment for several years, the program is growing in numbers, doubling from six students in FY23 to 13 students in FY24. Graduates often pursue graduate school at UI.

2. Brief overview of the program

The Entomology (B.S.) program within the Department of Entomology, Plant Pathology and Nematology is designed to provide an overall background in the discipline of Entomology. It stresses the importance of insects in agricultural and natural systems. Classwork focuses on introducing students to the discipline and focuses on economic and ecological aspects of insect biology. Classwork focuses on understanding insect ecology and management. The classes have both lecture and laboratory components. Students are encouraged to pursue independent projects mentored by departmental faculty.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY19	FY20	FY21	FY22	FY23	FY24
Actual (fall headcount)	First fall with enrollments was Spring 2018 5	6	7	8	6	13

Number of Graduates	Implementation: FY19	FY20	FY21	FY22	FY23	FY24
Actual	0	1	1	0	0	1

Propos	Proposed Program: Projected Enrollments and Graduates First Five Years											
Progra Educat	Program Name: Masters of Natural Resources: Science Communication & Environmental Education											
Projected Fall Term Headcount Enrollment in Program				Projected Annual Number of Graduates From Program					From			
FY18 (first year)	FY19	FY20	FY21	FY22	FY23	FY19 (first year)	FY20	FY21	FY22	FY23	FY24	
20	20	22	22	24	25	20	20	22	22	24	25	

New Program Review

Institution:University of IdahoProgram:Film and Television Studies BA

Elements for Report

1. Executive Summary of the program report

The Film and Television Studies program, renamed the Film and Television program in 2022-23, has degree offerings for a B.A. and a B.S. that have the same major course work requirements. The combined degree offerings have resulted in year-by-year gains in enrollment in all but one year during which enrollments stayed the same. Enrollments increased 700 percent in the six-year reporting period. Between FY 21 and FY 23, enrollment grew 22 percent. There are 56 primary majors in the B.A. and B.S. programs. Graduation rates for the programs have also risen year by year. Three years after implementation, there were 5 graduates, and this figure rose 180 percent to 14 in FY 23. Enrollments and graduation figures indicate a sustainable academic program.

2. Brief overview of the program

The Film and Television program is an interdisciplinary degree that prepares students for a variety of careers in cinema, television and video production. The degree blends film and television production coursework with screenwriting and film histories, theories and aesthetics, allowing students to build their own areas of specialization. Film and Television is taught using the film school model, whereby students will learn how to think critically and historically about film and culture while learning the fundamentals of film writing and filmmaking.

3. Enrollment and Graduates

a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY18	FY19	FY20	FY21	FY22	FY23
Actual (fall headcount)	3	8	13	11	12	22

Number of Graduates	Implementation: FY18	FY19	FY20	FY21	FY22	FY23
Actual	0	0	1	1	1	1

TAB 5 Page 30

New Program Review

Institution:University of IdahoProgram:Film and Television Studies BS

Elements for Report

1. Executive Summary of the program report

The Film and Television Studies program, renamed the Film and Television program in 2022-23, has degree offerings for a B.A. and a B.S. that have the same major course work requirements. The combined degree offerings have resulted in year-by-year gains in enrollment in all but one year during which enrollments stayed the same. Enrollments increased 700 percent in the six-year reporting period. Between FY 21 and FY 23, enrollment grew 22 percent. There are 56 primary majors in the B.A. and B.S. programs. Graduation rates for the programs have also risen year by year. Three years after implementation, there were 5 graduates, and this figure rose 180 percent to 14 in FY 23. Enrollments and graduation figures indicate a sustainable academic program.

2. Brief overview of the program

The Film and Television program is an interdisciplinary degree that prepares students for a variety of careers in cinema, television and video production. The degree blends film and television production coursework with screenwriting and film histories, theories and aesthetics, allowing students to build their own areas of specialization. Film and Television is taught using the film school model, whereby students will learn how to think critically and historically about film and culture while learning the fundamentals of film writing and filmmaking.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY18	FY19	FY20	FY21	FY22	FY23
Actual (fall headcount)	Fall 2017 – first year of enrolled students 4	14	28	33	35	34

Number of Graduates	Implementation: FY18	FY19	FY20	FY21	FY22	FY23
Actual	1	0	4	5	6	13

New Program Review

Institution:	University of Idaho
Program:	Horticulture and Urban Agriculture;
	Biotechnology and Plant Genomics; Crop
	Science; Crop Management; Crop Science &
	Management, BS.Pl.Sc

Elements for Report

1. Executive Summary of the program report

Horticulture and Urban Agriculture, Biotechnology and Plant Genomics, and Crop Science & Management (B.S. Plant Science) are the three current programs within the Department of Plant Sciences. Horticulture and Urban Agriculture and Biotechnology and Plant Genomics were both initiated in Fall 2017, at the same time as Crop Science and Crop Management were initiated. In Fall 2023 Crop Science and Crop Management were combined into one major, Crop Science and Management. From 2003 until 2017 a single program, Sustainable Landscape and Cropping Systems (B.S. Ag. L.S.) covered these programs (and others) as emphasis areas, during this time the B.S. Plant Science was inactive. Starting in FY 2018 enrollment in Plant Science programs increased yearly through FY 2022 nearly doubling over that time, with a small decrease in FY2023 and into FY 2024 (Table 1). It is widely believed that program names with readily identifiable names are attractive to students and are largely responsible of enrollment gains. The number of students completing a program have gradually increased since 2017 (Table 2). The last two years have seen significant efforts to rebuild faculty instructor numbers after a series of retirements. The department is currently negotiating a control environment agriculture faculty hire to attract students to the production of food in urban settings.

2. Brief overview of the program

Horticulture and Urban Agriculture, Biotechnology and Plant Genomics, and Crop Science & Management (B.S. Plant Science) are designed to provide basic and advanced topics in the areas of horticulture, biotechnology and crop science and management. Emphasis is on the importance of plants in agricultural systems. All three programs provide basic plant science background, while upper-level courses specialize in the three discipline areas. Upper-level courses include core agricultural systems in Idaho including potato, cereals, forage and vegetable crops. Students have the opportunity to select courses across disciplines allowing for customized curriculum. Many of the classes have both lecture and laboratory components. Students are required to obtain hands-on experience in the plant sciences prior to graduation.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Table 1. Undergraduates enrolled in Plant Science programs.

Enrollments	Implementation Year: FY18	FY20	FY21	FY22	FY23	FY24
Actual (fall headcount)	B.S. Plant Science was restarted in Fall 2017 19	56	69	95	88	89

NEW Table 1. Undergraduates enrolled in Plant Science programs.

Enrollments	Implementation Year: FY18	FY20	FY21	FY22	FY23	FY24
Actual (fall headcount)	B.S. Plant Science was restarted in Fall 2017 19	56	69	95	88	89
Biotechnology & Plant Genomics		10	14	19	17	19
Horticulture & Urban Agric		19	23	33	33	38
Crop Management		8	11	16	11	7
Crop Science		19	21	27	27	19
Crop Science and Management		-	-	-	-	6

Table 2. The number of graduates in Plant Science programs.

Number of Graduates	Implementation: FY18	FY19	FY20	FY21	FY22	FY23
Actual	0	13	11	10	21	19

NEW Table 2. The number of graduates in Plant Science programs.

Number of Graduates	Implementation: FY18	FY19	FY20	FY21	FY22	FY23
Actual	0	15	12	10	24	20
Biotechnology & Plant Genomics		1	1	2	4	2
Horticulture & Urban Agric		7	5	4	7	5
Crop Management		3	2	1	5	4
Crop Science		4	4	3	8	9

Propo	sed Prog	gram: Pro	ojected I	Enrolime	ents and	Graduat	tes First I	Five Year	rs		
Progra	am Name	e: Majors	s: Hortic	ulture &	Urban A	g, Crop	Science,	Biotech	& Plant	Genomic	s
Projected Fall Term Headcount Enrollment in Program				Projected Annual Number of Graduates From Program							
FY17 (first year)	FY18	FY19	FY20	FY21	FY22	FY17 (first year)	FY18	FY19	FY20	FY21	FY22
Hort. & Urb.	26	29	32	35	39	5	6	7	8	9	10

Ag 23											
Crop Sci. 15	16	17	19	20	22	4	5	5	6	6	7
Biotec. & Plt Geno- mics 7	8	9	10	12	14	1	2	2	3	3	4

Proposed Crop Management major:

Propos	ed Prog	gram: Pr	ojected	Enrollm	ents ar	nd Gradua	ates Firs	st Five Y	ears			
Program Name:												
Projected Fall Term Headcount Enrollment in Program				Projected Annual Number of Graduates From Program								
FY2017 (first year)	FY- 2018	FY- 2019	FY- 2020	FY- 2021	FY- 2022	FY2017 (first year)	FY- 2018	FY- 2019	FY- 2020	FY- 2021	FY- 2022	
8	12	20	30	40	60		-	4	8	10	15	

New Program Review

Institution:University of IdahoProgram:Medical Sciences BS

Elements for Report

1. Executive Summary of the program report

The Medical Sciences BS is currently one of four bachelor's degree majors within the Department of Biological Sciences at the University of Idaho. As of Fall 2023 semester, medical sciences majors constituted 58% of the students in these four programs. Enrollments in the Medical Sciences BS degree started relatively high in the first year due to enrolled students changing to the new major. Enrollments grew dramatically over the first two years and have remained stable over the past four years. While degree completions have varied year-to-year, the current 5-year graduation rate is 83%. According to the most recent senior survey data, 85% of Medical Sciences graduates were satisfied or very satisfied with the education they received within their field. In summary, the Medical Sciences BS is a rigorous and popular degree program in the Department of Biological Sciences. It supports the critical need for healthcare professionals in Idaho, which has the fewest physicians per capita in the U.S.

2. Brief overview of the program

The Medical Sciences Degree Program at the University of Idaho is a comprehensive and dynamic academic program designed to provide students with a solid foundation in the biomedical sciences. Rooted in a commitment to excellence in education, research, and service, this program prepares students for a variety of careers in the rapidly evolving field of healthcare. Students in the Medical Sciences program take a comprehensive range of coursework in fundamental concepts of biology and chemistry, critical thinking, leadership and professional conduct, psychology, global and cultural competence, and biomedical specialty areas. Recognizing the diverse career paths within the medical sciences, the program offers flexibility for students to tailor their coursework based on individual interests. This adaptability allows students to specialize in areas such as medical research, healthcare administration, or pre-professional tracks for advanced degrees in medicine or other allied health professions. Students have the opportunity to engage in cutting-edge research under the guidance of experienced faculty members. The program emphasizes hands-on laboratory experiences, fostering critical thinking and problem-solving skills essential for success in both academic and professional settings. The program recognizes the importance of practical experience in healthcare settings, and thus provides credits for internships in various healthcare-related settings.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY18	FY19	FY20	FY21	FY22	FY23
Actual (fall headcount) (primary majors)	First enrollees in Fall 2017 42	156	188	194	191	194

Number of Graduates	Implementation: FY18	FY19	FY20	FY21	FY22	FY23
Actual	1	4	15	36	45	25

New Program Review

Institution:University of IdahoProgram:Plant Pathology MS

Elements for Report

1. Executive Summary of the program report

The Plant Pathology (M.S.) program within the Department of Entomology, Plant Pathology and Nematology is a small but stable part of the department. After a slow initial year, the number of graduate students has remained steady for the past four years. EPPN does not currently have a Ph.D. program in Plant Pathology. This means that although they may be pursuing research in a sub-discipline of Plant Pathology and working with faculty in Plant Pathology, the students are frequently enrolled in other departments within the college. The program would benefit from the department having an active Ph.D. program, which is now being pursued and should be active starting in 2025.

2. Brief overview of the program

The Plant Pathology (M.S.) program within the Department of Entomology, Plant Pathology and Nematology is designed to provide an overall background within the field of Plant Pathology. Classwork focuses on introductory plant pathology and microbiology. Several disciplines are covered in these classes, while others are more specialized and include subdisciplines such as Bacteriology and Mycology. The research conducted by students is guided by faculty mentors with expertise in Nematology, Mycology and/or Bacteriology. The research component is primarily focused on agricultural systems, but projects are also be conducted in natural ecosystems.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY20	FY21	FY22	FY23	FY24	FY25
Actual (fall headcount)	First enrollments in Fall 2019 2	5	5	4	5	n/a

Number of Graduates	Implementation: FY20	FY21	FY22	FY23	FY24	FY25
Actual	1	0	5	0	1	n/a

TAB 5 Page 37

New Program Review

Institution:	University of Idaho
Program:	Soil and Water Systems BS

Elements for Report

1. Executive Summary of the program report

The Water Science and Management bachelor's degree, proposed before the establishment of the SWS department, began enrolling students in Fall 2018 and has since reached an enrollment of six students, with the first two graduating in 2022. The Covid pandemic impacted enrollment growth. The program, primarily attracting students from California and Idaho, has undergone faculty changes and adapted by increasing remote course offerings. Following State Board of Education recommendations, the degree's credit requirement was reduced from 128 to 120 to align with other programs. Continuous annual assessments have led to curriculum updates, specifically incorporating more math and engineering skills into the major's courses.

2. Brief overview of the program

The Water Science and Management degree (within the B.S.S.W.S.) prepares students for expertise in water resource management across agriculture, forestry, and rangeland ecosystems. This curriculum is designed to contribute to sustainable agricultural practices amidst water constraints, ensuring food and water security. It includes advanced mathematical and GIS-based mapping courses, equipping graduates for roles such as quantitative hydrologists, irrigation and precision agriculture technicians, and watershed management specialists. The program targets full-time students aiming for careers in soil and water quality protection, conservation, and management, responding to the growing demand for such professionals against a backdrop of anticipated water shortages and agricultural needs.

- 3. Enrollment and Graduates
 - a. In the tables below, show the **actual** enrollment in the program and number of graduates from the program. Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort). OSBE will provide projections from the institution's original proposal.

Enrollments	Implementation Year: FY19	FY20	FY21	FY22	FY23	FY24
Actual (fall headcount)	First year of enrollees in Fall 2018 2	2	4	5	3	6

Number of Graduates	Implementation: FY19	FY20	FY21	FY22	FY23	FY24
Actual	0	0	0	2	0	

TAB 5 Page 38

IDAHO DIGITAL LEARNING ACADEMY

SUBJECT

Annual Report

APPLICABLE STATUTE, RULE, OR POLICY

Idaho Code § 33-5501 IDAPA 08.04.01 Rules Governing the Idaho Digital Learning Academy

BACKGROUND/DISCUSSION

According to IDAPA 08.04.01 Rules Governing the Idaho Digital Learning Academy, dba Idaho Digital Learning Alliance (IDLA) an annual report is required to be submitted each year to the State Board of Education. This request is to meet the requirements as outlined in the rule. This report will include Accreditation, Acceptable Use, and an Idaho Digital Learning Alliance fee schedule in order to be in compliance with statute and State Board rule.

The 2002 Idaho Legislature created the Idaho Digital Learning Alliance as an online, school-choice learning environment (Title 33 Chapter 55, Idaho Code). Idaho Digital Learning Alliance is a statewide virtual school providing Idaho students and school districts with greater access to a diverse assortment of courses and opportunities. IDLA was created to address the educational needs of all Idaho students: traditional, home schooled, at-risk, and gifted learners and is a service to Idaho students and all Idaho School Districts. Rigorous online courses delivered by highly qualified Idaho faculty assists the state in preparing Idaho students to meet Idaho's high school graduation requirements, Idaho standards, and the increased demand from colleges and industry and Idaho's workforce.

IDLA's leadership team presented this report to the Planning, Policy and Governmental Affairs Committee on April 1, 2024.

IMPACT

Idaho Digital Learning Alliance served approximately 44,432 enrollments during academic year 2022-2023, which is a 1% increase from 2021-2022. Nearly 100% of high schools in Idaho participated in 2022-2023. The number one reason for taking Idaho Digital Learning Alliance courses is identified as "Classes not offered locally" with "Online Course Preference" taking the second position. Other reasons include scheduling conflicts; advanced placement; dual credit; early graduation; foreign languages; and credit recovery.

ATTACHMENTS

Attachment 1 – IDLA Annual Report

BOARD ACTION

This item is for informational purposes only.



P.O. Box 10017, Boise, ID 83707 208.342.0207 IdahoDigitalLearning.org

2023-2024 Idaho Digital Learning Alliance Fee Policy

Fees for Idaho Digital Learning Alliance: The fee schedule for 2023 -2024 is determined upon a per-enrollment basis. An "enrollment" is defined as one (1) student enrolled in one (1) Idaho Digital Learning Alliance course. Idaho Digital Learning Alliance enrollment fees outlined in this Fee Policy apply to all Idaho Digital Learning Alliance courses unless noted otherwise below.

Idaho Digital Learning Alliance Per-Enrollment Cost: The cost for one (1) enrollment is \$75 for Idaho students.

Advanced Placement/Dual Credit Courses: Courses designated as "Advanced Placement or Dual Credit" will not incur a per-enrollment cost unless courses are delivered in a custom session (see Custom Session Courses below). Schools cannot request Advanced Opportunity funding for Advanced Placement or Dual Credit classes that are delivered through a custom session.

In collaboration with Idaho Digital Learning Alliance, School Districts shall assist students with the obtainment of college credit, examinations, and materials such as textbooks (see Textbooks section in District MOU).

Advanced Opportunities: Idaho Digital Learning Alliance (IDLA) supports students that have access to Advanced Opportunities funds. IDLA does not invoice schools/students for courses marked for Advanced Opportunities funding. These courses are directly funded by the State Department of Education. IDLA will not process a payment or payment reversal of Advanced Opportunities outside of the fiscal year, July 1st through June 30th. If a course is marked in error for Advanced Opportunities and it is not funded, IDLA will invoice the school/district of enrollment directly.

Scholarships:

Qualifying students must be registered with an Idaho public school. Each student must be registered by their local school's Idaho Digital Learning Alliance site coordinator. The site coordinator must request a scholarship from the local Regional Coordinator. The scholarship is for \$50 of the \$75 Idaho Digital

Learning Alliance enrollment fee. Scholarships are limited; the remaining course fee balance of \$25 will be invoiced to the school/district for payment.

Scholarships can not be applied to:

- Students registered in Custom Session courses.
- Students registered for Advanced Opportunities funding.
- Students registered for AP/DC Courses Exams or textbooks.
- If a student fails to successfully complete a course for which a scholarship has been applied, the student is ineligible for a future scholarship until successfully completing one subsequent IDLA course.

Custom Session Courses: Any courses requested and implemented through Idaho Digital Learning Alliance's Custom Course program will incur costs based on the Custom Session Policy (see Idaho Digital Learning Alliance website for information and request form). This includes district requests for Hybrid Custom Sessions. All Custom Sessions require a **minimum of 12 students** and will incur costs based on the following fee structure:

Custom Session Fee Structure:

Elementary Launchpad ELA	Select Middle School Courses: Keyboarding, Pathways, 8th Grade Career Exploration, Computer Science Discoveries, STEM Careers, Everyone Can Create with iPads (8 unit / 4 unit)	Standard Cohort & Credit Recovery	AP and DC Courses	Hybrid (with live instruction)
\$30 each	\$30 - 8 Unit/\$15 - 4 Unit	\$75 each	\$75 each	\$75 each

Elementary Launchpad ELA, (Grade bands (k-2) and (3-5))

\$30/each student

Select Middle School Courses (Keyboarding, Pathways to Success, 8th Grade Career Exploration, Computer Science Discoveries, STEM Careers, and Everyone Can Create with iPads)

\$30/each: 8 unit version of courses listed above

\$15/each: 4 unit version of courses listed above

Standard Cohort, Credit Recovery, AP, and Dual Credit Courses

\$75/each student

Hybrid Courses (2 days live instruction)

\$75/each student

Reduced Fee Courses:

Idaho Digital Learning Alliance offers select courses at a reduced rate.

Reduced Fee	Courses
\$30 per enrollment	Elementary Launchpad ELA
\$30 per enrollment	Keyboarding - Middle School (8 unit) Pathways to Success - Middle School (8 unit) 8th Grade Career Exploration - Middle School (8 unit) Computer Science Discoveries - Middle School (8 unit) STEM Careers - Middle School (8 unit) Everyone Can Create with iPads - Middle School (8 unit)
\$15 per enrollment	Keyboarding - Middle School (4 unit) Pathways to Success - Middle School (4 unit) 8th Grade Career Exploration - Middle School (4 unit) STEM Careers - Middle School (4 unit)

Idaho Digital Learning Alliance reserves the right to modify the fee policy. Districts will be notified of any changes.

Idaho Digital Learning Alliance Refund Policy

Idaho Digital Learning Alliance requires that all drops are requested or confirmed by the Site Coordinator during the school year. Drop requests initiated by a parent or guardian will be accepted for summer courses only. For a course fee to be eligible for a refund and for a student to be exempt from a grade report, a drop must be initiated during the following times:

Orientation: If the student does not complete orientation, they will not be enrolled in classes and a full refund of fees will be granted.

All cohort and credit recovery sessions:

- **6, 9, or 10 weeks or Custom Sessions:** The Idaho Digital Learning Alliance Office must be notified by Friday of the 2nd week of class to receive a full refund and remove the student from the course.
- **16-week session:** The Idaho Digital Learning Alliance Office must be notified by Friday of the 3rd week of class to receive a full refund and remove the student from the course.

Flex sessions:

- The drop deadline for all flex classes is 14 days after the student gains course access.
- If a student is inactive in class for 14 consecutive days, the instructor may initiate a drop process. The Site Coordinator either confirms the drop or can request additional time for the student to become active in the course.

After the drop deadline:

- Grades will be reported for all students remaining in courses regardless of completion, and the full fee will be invoiced to the district.
- Exceptions to the drop deadline may be requested by the district for extenuating circumstances.

IDAHO DIGITAL LEARNING ALLIANCE ACCEPTABLE USE POLICY

Proper use and behavior in a distance learning environment will be determined by your school's existing guidelines covered in the district's Acceptable Use Policy (AUP) and the Idaho Digital Learning Alliance's Acceptable Use of Technology Policy. Idaho Digital Learning Alliance Acceptable Use of Technology Policy (AUP) Computers, computer networks, and the internet provide essential tools that support distance learning and Idaho Digital Learning Alliance. All students are expected to use Idaho Digital Learning Alliance and the resources provided to access Idaho Digital Learning Alliance for purposes appropriate to the education environment. You must refrain from any use that is not consistent with the policies, purposes, or objectives of either the hosting district or Idaho Digital Learning Alliance.

Prohibited uses of technology

- The use of communication tools (email, discussion boards, web pages, chat, and others) should not be used for any communication that is:
 - defamatory
 - inaccurate
 - abusive
 - rude
 - obscene
 - profane
 - sexually explicit
 - threatening
 - harassing
 - racially offensive
 - illegal
 - encouraging the use of illegal materials
 - inconsistent with the policies, purposes, or objectives of either the hosting district or the Idaho Digital Learning Alliance
- Impersonating another individual, including, but not limited to, the use of another user's login or password, communicating or completing work on behalf of another individual, or mocking others in a derogatory manner.
- Revealing personal or private information to others such as home address, age, gender, phone number, etc. You should also be cautious when releasing this information about yourself.
- The use of AI tools, such as ChatGPT, is allowed for the purpose of self-learning, ideation, and inspiration. However, direct plagiarism or copying and pasting of AI-generated work as student-generated work will be treated as plagiarism. Students are expected to use the tool in accordance with academic integrity guidelines and cite any text generated by the tool.

- Disrupting the use of technology by another user or service. This includes but is not limited to, attempts to harm or destroy data, uploading and/or creating computer viruses, uploading and/or downloading information without need, sending or receiving data with the intent to degrade network performance, etc.
- Violation of any local, state, or federal regulation or statute.
- You will not use Idaho Digital Learning Alliance resources to sell or offer to sell any goods or services without prior approval of both the hosting district Board and the Idaho Digital Learning Alliance board.

Security and Privacy Risks Associated with Personal Device Use

- Personal Device Use: Students using personal devices such as laptops, tablets, and smartphones to access distance learning resources should ensure that their devices have updated operating systems, antivirus software, and firewalls to protect against malware, viruses, and other online threats.
- Personal Information: Students should avoid sharing personal information such as their full name, address, phone number, email address, or any other sensitive information online. Unless directed to do so by the content or teacher, personal information should not be added to online tools or resources.
- Passwords: Where possible, students should use their Google or Microsoft accounts provided by their school for login. If passwords must be used, students should use strong passwords for their online accounts and avoid sharing them with others. They should also avoid using the same password for multiple accounts and change them frequently.
- Public Wi-Fi: Students should avoid using public Wi-Fi networks to access distance learning resources as they are often unsecured and can pose security risks. Instead, they should use a secure network or a personal hotspot.
- Screen Sharing: Students should be cautious when screen sharing during virtual meetings or sessions, especially if they are using personal devices. They should ensure that they are not sharing any personal or sensitive information unintentionally.
- Reporting Security Incidents: Students should report any security incidents, breaches, or suspicious activity to their teachers or administrators immediately. Idaho Digital Learning Alliance Rights and Responsibilities
- Idaho Digital Learning Alliance reserves the right to monitor all activity, and record voice, text, and video correspondence related to Idaho Digital Learning Alliance courses or sites.
- Idaho Digital Learning Alliance reserves the right to block or remove any material that is not consistent with the policies, purposes, or objectives of either the host district or Idaho Digital Learning Alliance.
- IDLA may require the enabling and use of a camera and microphone to assist in proctoring or live instruction to complete a course.

• Opinions, advice, services, and all other information expressed by Idaho Digital Learning Alliance staff, students, information providers, or instructors are those of the individual and do not represent the position of Idaho Digital Learning Alliance.

Discipline

Student discipline for violation of any part of the policies, rules, or procedures of Idaho Digital Learning Alliance shall be based on the severity of the infraction.

- If the Idaho Digital Learning Alliance teacher or monitor feels your behavior is not consistent with the policies, purposes, or objectives of the hosting district, or Idaho Digital Learning Alliance, the teacher will notify your site coordinator.
- The site coordinator is then responsible for bringing the matter before the appropriate school administrator(s) for disciplinary action.
- The teacher may also wish to hold a conference with you and your parents.
- The Idaho Digital Learning Alliance board of directors also reserves the right to enact additional disciplinary action including the ability to revoke the offending student's privilege of using Idaho Digital Learning Alliance.

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SUBJECT

Strategic Plans – Postsecondary Institutions and Agencies under the Board's Governance

REFERENCE

April 2021	The Board reviewed the institution, agency, and special and health programs FY2022-FY2026 strategic plans.
June 2021	The Board approved the institution and agency FY2022 – FY2026 strategic plans and delegated approval of the FY2022 – FY2026 special and health programs strategic plans to the Executive Director
October 2021	The Board was presented with the institution and agencies performance measure reports and progress toward meeting their FY2021-FY2025 strategic plan goals.
December 2021	The Board discussed changes to the K-20 FY2023- FY2027 Strategic Plan, including the addition of three postsecondary education focus areas.
February 2022	The Board approved changes to the K-20 FY2023- FY2027 Strategic Plan, including the addition of three postsecondary education focus areas.
April 2022	The Board discussed progress and priority areas for the institution FY2023-2027 Strategic Plans
October 2022	The Board was presented with the institution and agencies performance measure reports and progress toward meeting their FY2022-FY2026 strategic plan goals
December 2022	The Board discussed changes to the K-20 FY2024- FY2028 Strategic Plan
February 2023	The Board approved the K-20 Education FY2024- FY2028 Strategic Plan, including additional definition of some performance measures.
April 2023	The Board discussed institution and agency FY2024- FY2028 strategic plans.
June 2023	The Board approved the Institution and Agency Strategic Plans as submitted.

APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section I.M.1. Idaho Code §§ 67-1901 -67-1903

BACKGROUND/ DISCUSSION

The institutions and agencies under the oversight of the Board are required to submit an updated strategic plan each year. At a minimum, the plans must encompass the current year and four years going forward. The Board planning calendar schedules these plans to come forward annually at the April and June Board meetings. This timeline allows the Board to review the plans, ask questions

or request changes in April, and then have them brought back to the regular Board meeting in June with changes if needed, for final approval while still meeting the state requirement that the plans be submitted to the Division of Financial Management (DFM) by July 1 of each year. Once approved by the Board, the Office of the State Board of Education submits all of the plans to DFM.

Board policy I.M. sets out the minimum components that must be included in the strategic plans and defines each of those components. The Board's requirements are in alignment with DFM's guidelines, and the requirements set out in sections 67-1901 through 67-1903, Idaho Code. Each strategic plan must include:

- 1. A comprehensive mission and vision statement covering the major programs, functions and activities of the institution or agency. Institution mission statements must articulate a purpose appropriate for a degree granting institution of higher education, with its primary purpose to serve the interests of its students and its principal programs leading to recognized degrees. In alignment with regional accreditation, the institution must articulate its purpose in a mission statement, and identify core themes that comprise essential elements of that mission.
- 2. General goals and objectives for the major programs, functions and activities of the organization, including a description of how they are to be achieved.
 - i. Institutions (including Career Technical Education) shall address, at a minimum, instructional issues (including accreditation and student issues), infrastructure issues (including personnel, finance, and facilities), advancement (including foundation activities), and the external environment served by the institution.
 - ii. Agencies shall address at a minimum, constituent issues and service delivery, infrastructure issues (including personnel, finance, and facilities), and advancement (if applicable).
 - iii. Each objective must include at a minimum, one performance measure with a benchmark.
- 3. Performance measures must be quantifiable indicators of progress.
- 4. Benchmarks for each performance measure must be at a minimum, for the next fiscal year and include an explanation of how the benchmark level was established.
- 5. Identification of key factors external to the organization that could significantly affect the achievement of the general goals and objectives.

- 6. A brief description of the evaluations or processes to be used in establishing or revising general goals and objectives in the future.
- 7. Institutions and agencies may include strategies at their discretion.

Board policy I.M. also requires each plan to be submitted in a consistent format. The Planning, Policy and Governmental Affairs committee established the current template for strategic plan submittal and the Board adopted it at the April 2017 Board meeting.

In addition to the goals, objectives and performance measures chosen by each institution and agency, the Board has historically required a set number of uniform "systemwide" postsecondary performance measures. At the December 2017 Regular Board meeting, the Board discussed and approved the current systemwide performance measures. These systemwide performance measures are targeted toward measuring outcomes that are impacted by the implementation of the Complete College America Game Changers. The systemwide performance measures measures are required by the Board to be reported consistently across institutions. While each institution is required to include the systemwide performance measures in their strategic plans and performance measures reports, each institution currently sets their own benchmarks. In addition to these systemwide performance measures, systemwide performance measures in the Board's K-20 Education Strategic Plan that are dependent on data from the postsecondary institutions are required by the Board to be reported consistently between all eight postsecondary institutions.

The postsecondary systemwide performance measures set by the Board are:

Timely Degree Completion

- I. Percent of undergraduate, degree-seeking students completing 30 or more credits per academic year at the reporting institution
- II. Percent of first-time, full-time, freshmen graduating within 150% of time
- III. Total number of certificates/degrees produced, broken out by:
 - a) Certificates of at least one academic year
 - b) Associate degrees
 - c) Baccalaureate degrees
- IV. Number of unduplicated graduates, broken out by:
 - a) Certificates of at least one academic year
 - b) Associate degrees
 - c) Baccalaureate degrees

Remediation Reform

V. Percent of undergraduate, degree-seeking students taking a remediation course completing a subsequent credit bearing course (in the area identified as needing remediation) within a year with a "C" or higher

Math Pathways

VI. Percent of new degree-seeking freshmen completing a gateway math course within two years

Guided Pathways

VII. Percent of first-time, full-time freshmen graduating within 100% of time

In addition to including the systemwide performance measures, the Board has consistently requested the benchmarks contained within the strategic plans be aspirational benchmarks, not merely a continuation of the "status quo."

All of the strategic plans are required to be in alignment with Idaho's K-20 Education strategic plan, approved by the Board in February.

IMPACT

OSBE Staff will proceed with submitting Board-approved strategic plans to DFM on behalf of the institutions, agencies, and special and health programs by the DFM deadline of July 1, 2023.

ATTACHMENTS

Attachment 01 -Boise State UniversityAttachment 02 -College of Eastern IdahoAttachment 03 -College of Southern IdahoAttachment 04 -Idaho Division of Career Technical EducationAttachment 05 -College of Western IdahoAttachment 06 -Idaho Public TelevisionAttachment 07 -Idaho State UniversityAttachment 08 -Lewis-Clark State CollegeAttachment 09 -North Idaho CollegeAttachment 10 -Idaho Department of EducationAttachment 11 -University of IdahoAttachment 12 -Idaho Division of Vocational Rehabilitation

BOARD STAFF COMMENTS AND RECOMMENDATIONS

The Board reviewed the attached strategic plans during the April meeting work session.

Board staff has discussed with the Division of Financial Management the requirement that the Special and Health programs also submit strategic plans. At this time, the Division of Financial Management staff have agreed that these plans will not need to be submitted this year. Based on this approval, only the postsecondary institution and agency strategic plans will be brought forward for approval by the Board at the June 2023 Board meeting. The Special Programs and Health Programs have submitted strategic plans to the Board Office, should Board members wish to review them. If they are required to be submitted to the Division of Financial Management this year, Board staff will include delegation of their approval to the Executive Director.

Staff recommends that the Board approve the institution and agency strategic plans as presented in Attachments 3-15.

BOARD ACTION

I move to approve the institution and agency strategic plans as presented in Attachments 3-15.

Moved by ______Seconded by _____Carried Yes _____No _____



BOISE STATE UNIVERSITY

FY2024 THROUGH FY2029

MISSION STATEMENT VISION STRATEGIC PLAN MAPPING OF STRATEGIC PLAN TO THE SBOE STRATEGIC PLAN KEY EXTERNAL FACTORS

Blueprint for Success 2021 - 2028

ATTACHMENT 1 Boise State University Strategic Plan: Update to OSBE March 2024

Boise State University Strategic Plan

Mission

Boise State University provides an innovative, transformative, and equitable educational environment that prepares students for success and advances Idaho and the world.

Vision

To be a premier student-success driven research university innovating for statewide and global impact.

STRATEGIC PLAN GOALS AND OBJECTIVES

Goal 1: Improve Educational Access and Student Success

Enhance the comprehensive student experience with a focus on student success and post-graduate outcomes.

Objective A: Create and enact a comprehensive, strategic enrollment and student success plan, including components related to supporting the whole student, recruitment, retention, graduation, and addressing equity gaps.

Performance Measures:

Unduplicated number of graduates	FY	FY	FY	FY	FY	Tar	get
(distinct by award level) ¹	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Undergraduate Certificate	413	515	629	590		625	700
>Associate	109	132	127	184		265	410
>Baccalaureate	3,525	3,754	3,947	3,858		4,125	4,600
>Graduate Certificate	184	166	174	130	Available	150	180
>Master's	954	1,075	1,063	1,028	Sept.	1,050	1,100
>Education Specialist	24	23	16	15	2024	20	25
>Doctoral	53	50	58	60		64	75
Total Distinct Graduates	4,760	5,126	5,313	5,231		5,512	6,204

¹ SBOE required metric: timely degree completion. Distinct graduates by award level per year (summer, fall, and spring terms) as reported to IPEDS. Note that these totals cannot be summed to get the overall distinct graduate count due to some students earning more than one award (e.g., graduate certificate and a master's) in the same year.

ATTACHMENT 1

Boise State University Strategic Plan: Update to OSBE March 2024

	Fall	Fall	Fall	Fall	Fall	Tai	rget
	2019	2020	2021	2022	2023	F2024	F2028
First year retention rate ²	cohort	cohort	cohort	cohort	cohort	cohort	cohort
>Percent of first-time, full-time freshmen	77.8%	76.0%	79.2%	77.8%		79.5%	81.0%
retained							
-Resident, Pell-Eligible only	70.6%	67.0%	67.5%	67.4%		73.7%	76.5%
-Resident, Not Pell-Eligible only	75.1%	70.3%	76.8%	75.3%	Available	77.4%	78.3%
-Non-Resident, Pell-Eligible only	75.6%	71.1%	76.3%	72.0%	Oct. 2024	76.9%	77.8%
-Non-Resident, Not Pell-Eligible only	83.7%	83.9%	84.4%	86.1%		85.0%	85.8%
>Percent full-time transfers retained or							
graduated	78.4%	77.8%	78.4%	78.2%		79.0%	80.0%

						Tai	rget
	Fall	Fall	Fall	Fall	Fall	Fall	Fall
	2016	2017	2018	2019	2020	2021	2025
4-year graduation rate ³	cohort	cohort	cohort	cohort	cohort	cohort	cohort
> % of first-time, full-time freshmen who	38.2%	39.7%	41.4%	42.7%		44.0%	47.0%
graduated							
-Resident, Pell-Eligible only	20.5%	26.3%	27.8%	28.4%	Available	31.5%	36.0%
-Resident, Not Pell-Eligible only	30.7%	33.1%	34.1%	36.4%	Sept.	35.6%	37.6%
-Non-Resident, Pell-Eligible only	38.4%	34.1%	41.1%	38.3%	2024	42.6%	44.6%
-Non-Resident, Not Pell-Eligible only	56.0%	53.5%	54.7%	55.9%		56.0%	58.0%
>% of full-time transfers who graduated	54.2%	57.7%	57.6%	61.5%		63.0%	65.0%

						Tar	get
	Fall	Fall	Fall	Fall	Fall	Fall	Fall
	2014	2015	2016	2017	2018	2019	2023
6-year graduation rate ⁴	cohort	cohort	cohort	cohort	cohort	cohort	cohort
> % of first-time, full-time freshmen who	54.1%	53.0%	59.1%	61.2%		62.0%	65.1%
graduated							
-Resident, Pell-Eligible only	42.5%	40.1%	41.8%	47.8%	Available	48.3%	55.3%
-Resident, Not Pell-Eligible only	50.7%	52.6%	56.1%	57.0%	Sept.	57.1%	59.1%
-Non-Resident, Pell-Eligible only	56.5%	55.5%	57.3%	61.1%	2024	58.3%	62.0%
-Non-Resident, Not Pell-Eligible only	71.6%	68.2%	73.1%	72.4%		74.1%	76.1%
>% of full-time transfers who graduated	56.9%	59.7%	60.4%	63.2%		64.0%	66.0%

² SBOE required metric: Retention measured as the percent of a cohort returning to enroll the subsequent year. Transfer retention reflect the percent of the full-time baccalaureate-seeking transfer cohort that returned to enroll the following year or graduated. Northwest Commission on Colleges and Universities (NWCCU) 2020 Standard 1.D.2 asks student achievement data to be disaggregated to measure and close equity gaps.
³ SBOE required metric: guided pathways. % of first-time, full-time freshman graduating within 100% of time. NWCCU 2020 Standard 1.D.2 asks student achievement data to be disaggregated to measure and close equity gaps.

⁴ SBOE required metric: timely degree completion. % of first-time, full-time freshman graduating within 150% of time. NWCCU 2020 Standard 1.D.2 asks student achievement data to be disaggregated to measure and close equity gaps.

ATTACHMENT 1

Boise State University Strategic Plan: Update to OSBE March 2024

						Tar	get
	FY20	FY21	FY22	FY23	FY24	Fall	Fall
Gateway math success of new degree-	(FA18	(FA19	(FA20	(FA21	(FA22	2023	2027
seeking freshmen ⁵	Cohort)	cohort)	cohort)	cohort)	cohort)	cohort	cohort
>% completed within two years	86.8%	85.9%	85.7%	85.4%	Available	85.0%	87.0%
					Sept. 2024		

	FY	FY	FY	FY	FY	Target	
Progress indicated by credits per year ⁶	2020	2021	2022	2023	2024	FY 2025	FY 2029
>% of undergraduate degree seeking	28.7%	28.3%	27.9%	29.6%	Available	30.0%	31.0%
students with 30 or more credits per year					July 2024		

Success in credit-bearing course (gateway)	FY	FY	FY	FY	FY	Target	
after remedial course ⁷	2020	2021	2022	2023	2024	FY 2025	FY 2029
>English	87.1%	84.8%	78.9%	80.8%	Available	83.0%	88.0%
>Mathematics	56.7%	59.6%	65.1%	63.5%	July 2024	65.0%	67.0%

						Та	rget
	FY	FY	FY	FY	FY	FY	FY
Degrees and Certificates Awarded ⁸	2020	2021	2022	2023	2024	2025	2029
>Undergraduate Certificate	411	515	629	604		625	700
>Associate	111	132	127	184		265	410
>Baccalaureate	3,680	3,929	4,080	3,874	Available	4,270	4,760
>Graduate Certificate	189	170	185	145	Sept.	158	189
>Master's	954	1,074	1,063	1,028	2024	1,050	1,100
>Education Specialist	24	23	16	15		20	25
>Doctoral	53	50	58	60		64	75

⁵ SBOE required metric: math pathways. Based on cohorts of incoming first-time bachelor degree seeking students (full- plus part-time) who complete a gateway course or higher within two years (e.g., students who entered in fall 2018 and completed a gateway math or higher by the end of summer 2020 are reported for FY20, etc.).

⁶ SBOE required metric: timely degree completion. Percent of undergraduate, degree-seeking students completing 30 or more credits across one year (defined as summer, fall, and spring terms). Based on end-of-term data. Degree-seeking status is determined as of fall semester unless the student was not enrolled in fall, in which case summer is used; spring term is used for those students enrolled only for the spring term. Excludes students who earned degrees during the reported year and who did not reach the 30-credit threshold. Includes students meeting the criteria regardless of full- or part-time status or the number of terms enrolled in that year. Students enrolled part-time or for a partial year, especially for only one term, would not be expected to complete 30 credits; thus, the denominator may be inflated resulting in a lower percentage reported.
⁷ SBOE required metric: reform remediation. Percent of undergraduate, degree-seeking students who took a remedial course and completed with a C- or above a subsequent credit-bearing gateway course (Math 123 or above, English 101P or above) within one year of taking the remedial course (e.g., students who took remedial course in fall 2019 and completed a subsequent course by the end of fall 2020). Math remediation defined as Math 025, 103, and 108 and English remediation defined as English 101P. The data shown for FY20 reflects students who took remedial during FY19 and completed the subsequent credit-bearing course by FY20.

⁸ SBOE required metric: degree completion. Reflects the number of awards by level (first plus second major as reported to IPEDS). This is greater than the distinct numbers of graduating students because some graduating students received multiple awards.
ATTACHMENT 1

Boise State University Strategic Plan: Update to OSBE March 2024

	FY	FY	FY	FY	FY	Tar	get
	2020	2021	2022	2023	2024		
Scholarship student-athlete graduation	(FY13	(FY14	(FY15	(FY16	(FY17	FY 2025	FY 2029
success rate	Cohort)	Cohort)	Cohort)	Cohort)	Cohort)		
NCAA Graduation Success Rate ⁹ – Boise	000/	0.5.0/	05%	070/	Not yet	02 50/10	02 5%
State University	69%	95%	95%	9770	available	95.5%	95.5%

NSSE ¹¹ High Impact Practice (HIP) ¹²	FY	FY	FY	FY	FY	Tar	get
Participation	2020	2021	2022	2023	2024	FY 2025	FY 2029
>% of seniors who participated in at least one HIP vs. Peer Institutions	NSSE	NSSE postponed	87% vs. 82% peers (+)	NSSE	NSSE	90%	90%
>% of seniors who participated in two or more HIPs vs. Peer Institutions	every three years	until Spring 2022	61% vs. 51% peers (+)	every three years	every three years	70%	70%

Objective B: Integrate career education and experiential learning opportunities into the curriculum and the student experience to improve career readiness and post-graduation outcomes.

Performance Measures:

Students participating in courses with	FY	FY	FY	FY	FY	Target	
service-learning component	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Number of baccalaureate graduates who participated in a course with a Service- Learning component	1,557	1,537	1,466	1,184 ¹³	Available	1,200	1,480
>Percent of baccalaureate students participating in service-learning course	44%	42%	38%	30%	July 2024	30%	37%

	FY	FY	FY	FY	FY	Tai	rget
Students participating in internships ¹⁴	2020	2021	2022	2023	2023	FY 2025	FY 2029
Number of students with internship credit	938	697	940	906	Available July 2024	1,000	1,200

¹⁴ Unduplicated number of students with internship credit in a given year; these include courses numerically identified as 293, 493, and 590.

⁹ All NCAA Division I Athletic Departments must report Federal and NCAA Graduation Success Rate annually. The NCAA Graduate Success Rate is based on graduation in 10 full-time semesters (or transferring to another institution on track for 10 semester graduation) for those on any athletic-related financial aid.

¹⁰ Target represents the 75th percentile of all NCAA Division I athletic departments.

¹¹ Boise State generally administers the National Survey of Student Engagement (<u>http://nsse.indiana.edu/</u>), or NSSE, every three years, with slight disruption in this schedule due to the global pandemic. NSSE gathers information from first-years and seniors on a variety of aspects of their educational experiences. Because NSSE is administered by a substantial number of institutions, Boise State is able to benchmark itself against peer institutions; peer institutions were selected based on a set of criteria to identify Urban Peers. The (+) and (–) symbols denote statistically higher and lower than peers, respectively, whereas (=) indicates that Boise State is statistically the same as peers.

¹² High Impact Practices (HIPs) are widely known to positively affect student learning and retention. HIPs include service-learning, internships, research with faculty, study abroad, learning communities, and capstone courses. Comparisons are made to a set of Urban Peer institutions.

¹³ Service-learning courses community experiences were impacted by the Covid-19 pandemic. Some high-enrollment courses removed their experiential component or moved to "field observation."

ATTACHMENT 1

Boise State University Strategic Plan: Update to OSBE March 2024

NSSE ¹⁵ % participation in internships or	FY	FY	FY	FY	FY	Tar	get
similar experiences and in research	2020	2021	2022	2023	2024	FY 2025	FY 2029
>% of seniors participating in internships and other applied experiences	NSSE every	NSSE postponed until	51%	NSSE every	NSSE every	54.0%	56.0%
>% of seniors participating in research with faculty members	three years	Spring 2022	21%	three years	three years	28.0%	30.0%

	FY	FY	FY	FY	FY	Tar	get
Post-graduation outcomes ¹⁶	2020	2021	2022	2023	2024	FY 2025	FY 2029
Percent of graduates with a primary activity after graduation of working full- or part- time for a business/organization or themselves, furthering their education, or serving the military or service organization	9.49/	820%	70%	770/	Available	970/	95%
>Undergraduate degree completers	0.0%	8270	95%	0.0/	Feb.	8270	0.00/
>Graduate degree completers	90%	89%	80%	85%	2025	88%	90%
Percent of graduates whose full-time work is related to the degree received >Undergraduate degree completers	78%	82%	83%	83%	Available Feb.	83%	85%
>Graduate degree completers	94%	94%	95%	94%	2025	95%	97%
Percent of graduates whose full-time work is related to their career goals >Undergraduate degree completers >Graduate degree completers	83% 95%	84% 97%	86% 96%	87% 96%	Available Feb. 2025	85% 97%	87% 98%
Percent of graduates working in Idaho of those working in the United States >Undergraduate degree completers >Graduate degree completers	71% 51%	70% 55%	71% 57%	71% 59%	Available Feb. 2025	72% 60%	75% 63%

¹⁵ Boise State generally administers the National Survey of Student Engagement (<u>http://nsse.indiana.edu/</u>), or NSSE, every three years, with slight disruption in this schedule due to the global pandemic.

¹⁶ Post-graduation outcomes are from our annual Graduating Student Survey (GSS) plus the Follow-up Survey of non-respondents six months after graduation. Note that only the Follow-up Survey was conducted with FY20 graduates due to disruptions of the global pandemic in spring 2020.

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Objective C: Expand educational access for all Idahoans through improved outreach, communication, financial aid, philanthropy, online resources and education

						Tar	get
Access for Underserved Groups identified	Fall						
by SERP ¹⁷ (inclusive of First-time and	2019	2020	2021	2022	2023	2024	2028
Transfer and of Full-time and Part-time)	cohort						
Cohort Size of Idaho Resident Students							
>Pell-eligible ¹⁸	996	901	886	951	1,047	1,050	1,080
>First Generation Rural	1,141	1,040	885	974	1,025	1,030	1,080
Cohort Size as a Percent of Cohort from							
Service Region 3 ¹⁹							
>Rural	12.9%	14.8%	14.1%	14.0%	13.7%	15.3%	17.3%
>Hispanic/Latinx	15.2%	14.9%	15.5%	16.7%	17.5%	17.5%	18.1%

	FY	FY	FY	FY	FY	Та	rget
Dual / concurrent enrollment ²⁰	2020	2021	2022	2023	2024	FY 2025	FY 2029
Number of credits produced	33,100	28,756	29,920	32,849	Available July 2024	34,000	37,500
Distinct number of students served	7,062	6,318	6,543	7,117	Available July 2024	7,500	9,000

	FY	FY	FY	FY	FY	Tar	get
Enrolled Idaho Students (Fall enrollment)	2020	2021	2022	2023	2024	FY 2025	FY 2029
Number of enrolled degree-seeking resident undergraduates	10,689	10,309	9,729	9,667	10,057	10,200	10,800
Number of enrolled non-degree seeking resident undergraduates (includes dual enrollment)	5,982	3,773	5,316	5,935	6,402	7,500	9,000
Total number of enrolled resident undergraduates (degree- and non-degree seeking)	16,671	14,082 ²¹	15,045	15,602	16,459	17,350	19,000
Number of new First-time degree-seeking students who are Idaho residents	1,630	1,441	1,517	1,831	1,959	2,040	2,200
Number of new Transfer degree-seeking students who are Idaho residents	901	894	843	862	866	880	955

 ¹⁷ Boise State's Strategic Enrollment and Retention Plan (SERP) specifies targets for access and progression for four groups identified as traditionally underserved: Rural, Hispanic/Latinx, First Generation, and Pell-eligible. The access measures are focused on bachelor's degree-seeking students.
 ¹⁸ Pell-eligible is defined as Pell-eligible at the time of entry to the university. Given the changes in the Federal calculation for Pell eligibility, we will continue to monitor and adjust these targets as needed.

¹⁹ Achievement of targets will, in five years, close by half the gap between the composition of Boise State cohorts and the percent in Service Region 3's population as of the 2020 census. In the case of Hispanic/Latinx, the Service Region 3 population is limited to individuals 18 to 24 years old.
²⁰ Dual/concurrent enrollment credits and students are measures of activity that occur over the entire year at multiple locations using various delivery methods. When providing measures of this activity, counts over the full year (instead of by term) provide the most complete picture of the number of unduplicated students enrolled and the numbers of credits earned. Reflects data from the annual Dual Credit report to the Board.
²¹ Decline in resident student enrollment in FY 2021 is mostly in non-degree seeking undergraduate student numbers (including the dual enrollment) and was largely due to the impacts of the global pandemic.

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Number of graduates with high impact on	FY	FY	FY	FY	FY	Tar	get
Idaho's college completion rate	2020	2021	2022	2023	2024	FY 2025	FY 2029
Baccalaureate graduates from							
underrepresented groups							
>Rural Idaho ²²	459	505	544	491	Available	550	750
>Hispanic/Latinx ²³	459	518	542	551	Sept. 2024	650	800
>First-generation ²⁴	1,476	1,570	1,623	1,498		1,700	2,000
>Pell eligible ²⁵	1,041	1,027	1,001	893		1,050	1,100
Baccalaureate graduates who are Idaho	2 200	2 201	2 260	2 155	Available	2 500	2 750
residents	2,200	2,204	2,209	2,155	Sept. 2024	2,500	2,750
Baccalaureate graduates of non-traditional	017	010	970	010	Available	1 050	1 200
age (30 and up)	047	020	879	015	Sept. 2024	1,050	1,500
Baccalaureate graduates who began as	112	161	100	107	Available	500	700
transfers from Idaho community college ²⁶	442	401	485	437	Sept. 2024	500	700

	FY	FY	FY	FY	FY	Та	rget
True Blue Scholarship	2020	2021	2022	2023	2024	FY 2025	FY 2029
Dollars awarded through need-based True Blue Promise Scholarship	\$637,185	\$671,478	\$860,858	\$1,085,741	Available Oct. 2024	\$1.5M	\$1.9M

Objective D: Cultivate a commitment to high quality, new and innovative learning experiences in all courses, curricula and co-curricula.

Students participating in courses with	FY	FY	FY	FY	FY	Target	
service-learning component	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Number of baccalaureate graduates who participated in a course with a Service- Learning component	1,557	1,537	1,466	1,184 ²⁷	Available July 2024	1,200	1,480
>Percent of baccalaureate students participating in service-learning course	44%	42%	38%	30%		30%	37%

²² Distinct number of graduates who began college as residents from a rural area in Idaho. The definition for this measure was updated in 2020 to align with Boise State's new efforts to serve rural communities in Idaho. Rural is defined as all places outside of "Urban Areas and their Places" as specified by the U.S. Census Bureau.

²³ Distinct number of graduates who are Hispanic/Latino.

²⁴ First-generation is defined as students whose parents/guardians have not completed bachelor's degrees.

²⁵ Denotes students who were Pell eligible during any point of their enrollment at Boise State.

²⁶ Includes baccalaureate recipients in transfer cohorts whose institution prior to their initial Boise State enrollment was one of the four Idaho community colleges.

²⁷ Service-learning courses community experiences were impacted by the Covid-19 pandemic. Some high-enrollment courses removed their experiential component or moved to "field observation."

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Enrollment in programs delivered online	FY	FY	FY	FY	FY	Та	rget
(Fall enrollment) ²⁸	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Undergraduate	1,911	2,294	2,282	2,271	2,441	2,500	2,800
>Graduate	1,310	1,418	1,511	1,476	1,415	1,500	1,715
>Total	3,221	3,712	3,793	3,747	3,856	4,000	4,515

NSSE ²⁹ Indicators: For Freshmen Only		FY	FY	FY	FY	Та	rget
(% of peer group rating)	FY 2020	2021	2022	2023	2024	FY 2025	FY 2029
Academic Challenge							
>Higher-order learning		NSSE	100% (=)		NSSE	100%	105%
>Reflective & integrative learning	NSSE every	postpon od until	102% (=)	NSSE every	every	105%	105%
Learning with Peers	three years	Sprina		unce years	vears		
>Collaborative learning		2022	100% (=)		,	107%	107%
>Discussions with diverse others			103% (=)			103%	105%

NSSE ³⁰ Indicators: For Seniors Only	FY	FY	FY	FY	FY	Targ	get
(% of peer group rating)	2020	2021	2022	2023	2024	FY 2025	FY 2029
Learning with Peers >Collaborative learning >Discussions with diverse others Experiences with faculty >Student-faculty interaction >Effective tooching practices	NSSE every three years	NSSE postponed until Spring 2022	96% (-) 97% (-) 98% (=) 102% (=)	NSSE every three years	NSSE every three years	105% 100% 103%	105% 102% 105%
>Effective teaching practices			102% (=)			100%	102%

Sponsored Projects funding and awards for	FY	FY	FY	FY	FY	Та	rget
Instruction and Training	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Total Funding	\$5.9M	\$2.3M	\$3.8M	\$1.6M	Available	\$3M	\$5M
># of Awards	29	19	23	11	Feb 2025	25	30

²⁸ Indicates the number of officially enrolled students in a major or certificate that is delivered online.

²⁹ Boise State generally administers the National Survey of Student Engagement (<u>http://nsse.indiana.edu/</u>), or NSSE, every three years, with slight disruption in this schedule due to the global pandemic. The (+) and (–) symbols denote statistically higher and lower than peers, respectively, whereas (=) indicates that Boise State is statistically the same as peers.

³⁰ Boise State generally administers the National Survey of Student Engagement (<u>http://nsse.indiana.edu/</u>), or NSSE, every three years, with slight disruption in this schedule due to the global pandemic. The (+) and (–) symbols denote statistically higher and lower than peers, respectively, whereas (=) indicates that Boise State is statistically the same as peers.

Goal 2: Innovation for Institutional Impact

Expand and implement leading-edge innovations to provide access to integrated high-quality teaching, service, research and creative activities.

Objective A: Create an enduring culture of innovation.

Performance Measures:

Vertically Integrated Projects ³¹ (VIPs)	FY	FY	FY	FY	FY	Та	rget
	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Number of students enrolled in VIP credit	184	182	252	260	Available	275	350
>Number of VIP teams	21	23	33	37	July 2024	37	40

Percent of research grant awards that are	FY	FY	FY	FY	FY	Та	rget
Interdisciplinary vs. single discipline ³²	2020	2021	2022	2023	2024	FY 2025	FY 2029
>% of research grant awards that have PIs					Available		
and Co-PIs in two or more academic	24.7%	16.9%	24.2%	21.4%		25.0%	30.0%
departments (i.e., interdisciplinary)					July 2024		

Objective B: Build scalable university structures and align philanthropic and strategic investments that support innovation in all aspects of the university with a special focus on academic and athletic programming.

Performance Measures:

Advancement funding	EV	EV	EV	EV	EV	Та	rget
	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Total gift income (outright gifts and	\$15.5M	\$21.1M	\$25.8M	\$30.2M	Available	\$30M	\$40M
previous pledge payments)					January		
>Total Endowment Value	\$121.2M	\$161.4M	\$141.2M	\$149.2M	2025	\$160M	\$190M

Objective C: Establish individual and collective opportunity and accountability for innovation.

Inventions, Patents and Licenses (from the	FY	FY	FY	FY	FY	Та	rget
Office of Technology Transfer)	2020	2021	2022	2023	2024	FY 2025	FY 2029
> Inventions Disclosure	22	16	13	10		20	28
> Patents Issued	5	1	8	8	N/A	5	10
> Licenses / Options / Letters of Intent	19	22	32	51	.,	50	60

³¹ The Vertically Integrated Projects (VIPs) initiative unites students with faculty research in a team-based context. Students earn credit for participation, however, not all student participants sign up for credit. Only those students who are enrolled in VIP for credit are reported. Boise State is a member of the VIP national consortium that includes more than 20 universities and is hosted by Georgia Tech.

³² Excludes no-cost extensions. Includes new grants only within "research-basic" or "research-applied" types. Represents per-grant, not per-person grant dollars. A new protocol for calculating these measures was implemented in fall 2019 and all data provided reflect this method.

Goal 3: Advance Research and Creative Activity

Advance the research and creative mission of the university community by fostering transformational practices, and supporting faculty, staff, and student excellence in these pursuits.

Objective A: Provide the physical space, policies, information systems, technology, budgetary and human resources to sustain and grow research and creative activities.

						Та	rget
Total Research & Development	FY	FY	FY	FY	FY	FY	FY
Expenditures	2020	2021	2022	2023	2024	2025	2029
Expenditures as reported to the National Science Foundation	\$43.3M	\$46.1M	\$47.6M	Available April 2024	Available April 2025	\$50M	\$55M

Sponsored Projects funding: # of Awards	FY	FY	FY	FY	FY	Tar	get
by Purpose	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Research	255	265	225	267		275	350
>Instruction/Training	30	19	23	11	Available	25	30
>Other Sponsored Activities	126	141	172	137	February	150	200
>Total	411	425	420	415	2025	420	440

Sponsored Projects funding: Dollars	FY	FY	FY	FY	FY	Tar	get
awarded by purpose	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Research	\$38.5M	\$43.9M	\$36.9M	\$50.9M		\$50M	\$60M
>Instruction/Training	\$6.1M	\$2.3M	\$3.8M	\$1.6M	Available	\$3M	\$5M
>Other Sponsored Activities	\$13.7M	\$19.1M	\$27.1M	\$38.5M	February	\$40M	\$45M
>Total	\$58.2M	\$65.3M	\$68M	\$91M	2025	\$90M	\$110M

						Ta	arget
Publications of Boise State authors and citations of those publications over 5-year period	CY 2015-19	CY 2016-20	CY 2017-21	CY 2018-22	CY 2019-23	CY 2020-24	CY 2024-28
>Number of peer-reviewed publications by	2,479	2,704	2,941	2,533	3,187	3,200	4,200
Boise State faculty, staff, students ³³ >Citations of peer-reviewed publications authored by Boise State faculty, staff, students ³⁴	14,711	17,550	19,217	22,390	24,144	25,000	27,500

³³ Number of publications over five-year span with Boise State listed as the institution for one or more authors, collected from Web of Science. It is important to note that this source captures publications of a limited portion of our faculty, leaving out certain types of publications or creative activities especially by faculty in Arts and Humanities.

³⁴ Total citations, during the listed five-year span, of peer-reviewed publications published in that same five-year span; limited to those publications with Boise State listed as the institution for at least one author; from Web of Science. Excludes self-citations. It is important to note that this source captures citations from a limited portion of our faculty, leaving out certain types of publications especially by faculty in Arts and Humanities.

Objective B: Develop an integrated, transdisciplinary, and accessible research ecosystem dedicated to student excellence and success.

Performance Measures:

			Target				
NSSE ³⁵ % of senior participating in	FY	FY	FY	FY	FY	FY	FY
research	2020	2021	2022	2023	2024	2025	2029
>% of students participating in research w/faculty members	NSSE every three years	NSSE postponed until Spring 2022	21%	NSSE every three years	NSSE every three years	28.0%	30.0%

						Та	get
	FY	FY	FY	FY	FY	FY	FY
Number of doctoral graduates	2020	2021	2022	2023	2024	2025	2029
Distinct graduates completing doctoral degrees (PhD, DNP, EdD)	53	50	58	60	Available Sept. 2024	64	75

	FY	FY	FY	FY	FY	Tai	rget
Carnegie Foundation Ranking ³⁶	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Basic Classification	R2						
	(Research:						
	High)						

Objective C: Invest in a Grand Challenges initiative to propel a transdisciplinary model for research and creative activity.

Percent of research grant awards and						Tar	get
awarded grant \$\$ that are Interdisciplinary	FY	FY	FY	FY	FY	EV 2025	EV 2020
vs. single discipline	2020	2021	2022	2023	2024	FT 2025	FT 2029
>Percent of research grant awards that have							
PIs and Co-PIs in two or more different	24.7%	16.9%	24.2%	21.4%		25.0%	30.0%
academic departments (i.e., are							
interdisciplinary)					Available		
>Average \$\$ per grant award for					2024		
interdisciplinary grants	\$293,228	\$333,321	\$461,166	\$827,570	2024	\$500,000	\$600,000
>Average \$\$ per grant award for single-							
discipline grants	\$227,654	\$181,531	\$147,401	\$168,295		\$200,000	\$300,000

³⁵ Boise State generally administers the National Survey of Student Engagement (<u>http://nsse.indiana.edu/</u>), or NSSE, every three years, with slight disruption in this schedule due to the global pandemic.

³⁶ Definitions of the classifications show are as follows: R2: Doctoral Universities – Higher research activity; R3: Doctoral Universities – Moderate research activity (as of 2018, Carnegie no longer has the R3 category, implementing a new Doctoral/Professional Universities category instead).

Goal 4: Foster Thriving Community

Promote and advance a fair, equitable, and accessible environment to enable all members of the campus community to make a living, make a life and make a difference.

Objective A: Advance a learning and working environment dedicated to the flourishing, sense of belonging, and freedom of expression among all students, faculty, staff, alumni, and friends of the university.

NSSE ³⁷ : Student ratings of administrative						Tai	rget
offices							
(% of peer group rating; for seniors only;	FY	FY	FY	FY	FY	FY 2025	FY 2029
higher score indicates better interaction)	2020	2021	2022	2023	2024		
>Quality of interaction with academic							
advisors			105% (+)				
>Quality of interaction with student services	NSSE	NSSE	103%(+)	NSSE	NSSE	102%	105%
staff (career services, student activities,	every	postpone d until	102% (+)	every	every		
housing, etc.)	three	Spring	10378 (+)	three	three	102%	105%
>Quality of interaction with other	years	2022	102% (+)	years	years		
administrative staff and offices (registrar,			10370 (+)			105%	105%
financial aid, etc.)							

						Tai	rget
NSSE ³⁸ Indicators: For Seniors Only (% of peer group rating)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
Experiences with faculty >Student-faculty interaction Campus Environment	NSSE every three	NSSE postponed until	98% (=)	NSSE every three	NSSE every three	103%	105%
>Quality of interactions >Supportive environment	years	Spring 2022	104% (+) 91% (-)	years	years	103% 95%	105% 100%

³⁷ Boise State generally administers the National Survey of Student Engagement (<u>http://nsse.indiana.edu/</u>), or NSSE, every three years, with slight disruption in this schedule due to the global pandemic. The (+) and (–) symbols denote statistically higher and lower than peers, respectively, whereas (=) indicates that Boise State is statistically the same as peers.

³⁸ Boise State generally administers the National Survey of Student Engagement (<u>http://nsse.indiana.edu/</u>), or NSSE, every three years, with slight disruption in this schedule due to the global pandemic. The (+) and (–) symbols denote statistically higher and lower than peers, respectively, whereas (=) indicates that Boise State is statistically the same as peers.

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						Та	rget
	FY	FY	FY	FY	FY	FY	
National College Health Assessment ³⁹	2020	2021	2022	2023	2024	2025	FY 2029
> Response to statement: "I feel that I	00.2%		01 00/	97 00/		92%	>95%
belong at my college/university" (% agree)	90.2%		04.070	07.9%			
> Response to statement: "Students' health					Survev		
and well-being is a priority at my	95 70/	Survey	<u>⁄ە</u> ت دە	96 10/	conducted	90%	>95%
college/university" (% agree)	03.770	every 2 years	02.770	00.1/0	every 2		
> Response to statement: "The campus					years		
climate encourages free and open discussion	80.6%		02 00/	96 5%		90%	>95%
about students' well-being" (% agree)	09.0%		02.070	00.5%			

						Tai	rget
	FY		FY	FY	FY	FY	FY
Human Resources Survey ⁴⁰	2020	FY 2021	2022	2023	2024	2025	2029
> Response to statement: "I can bring my							
whole authentic self to work" (% agree)			NIA			80%	85%
> Response to statement: "My unique			INA				
attributes, traits, characteristics, skills,						82%	85%
experience and background are valued at			NΔ				
work" (% agree)	Survey	Survey		Survey	Survey		
> Response to statement: "I would refer	conducted	conducted		conducted	conducted		
someone to work at Boise State" (%	every 3-5	every 3-5		every 3-5	every 3-5		
agree/yes)	ycurs	years	82%	years	years	85%	90%
>Response to statement: I feel valued in							
my job (% agree)			72%			80%	90%
> My supervisor is responsive to my ideas,						0.50/	0.001
requests, and suggestions (% agree)			81%			85%	90%

³⁹ Boise State conducts the National College Health Assessment through the American College Health Association. The survey is conducted on a regular cycle, typically every two years. The survey instrument changed in 2019-20, so prior comparisons are not available. Response rates were 14.9% in FY20 (MoE +/- 3.5%) and 12.0% in FY22 (MoE +/- 3.9%).

⁴⁰ Boise State Human Resources conducted a campus-wide Listening Tour Survey in 2019 and a Work Well Survey in 2022. Some questions were updated or changed between the two surveys, and the survey is subject to ongoing improvements.

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Objective B: Create a comprehensive, whole-employee experience that aligns university resources and is designed to enhance employee well-being and career growth at the university.

National Faculty & Staff Health	FY	FY	FY	FY	FY	Та	rget
Assessment ⁴¹	2020	2021	2022	2023	2024	FY 2025	FY 2029
 > Response to statement: "My college/university cares about my health and well-being" (% agree) > Response to statement: "My college/university promotes a culture of wellness" (% agree) > Response to statement: "The health and well-being of university staff and faculty impacts student success and learning" (% agree) 	Survey conducted on a cycle	75.9% 75% 97.8%	Survey conducted on a cycle	Survey conducted on a cycle	Survey being conducted Spring 2024	80% 80% >95%	85% 85% >95%

						Tai	rget
	FY	FY	FY	FY	FY	FY	FY
Faculty and Staff Turnover ⁴²	2020	2021	2022	2023	2024	2025	2029
>Classified	19.7%	18.4%	27.5%	36.8%	Available	25%	18%
>Professional	15.3%	16.0%	17.4%	21.1%	January	18%	12%
>Faculty	5.4%	7.1%	7.6%	7.8%	2025	6.5%	6.5%

⁴¹ Boise State conducts the National Faculty & Staff Health Assessment through the American College Health. The survey cycle is being adjusted in FY23 and the survey will resume in FY24The response rates were as follows: 2021 was 24.5% (MoE +/- 3%); 2019 was 28.4% (MoE +/- 3%). ⁴² Turnover is defined as the total number of separations in a fiscal year (7/1-6/30) divided by the average employee count (averaging the count at the first of each quarter [1/1, 4/1, 7/1, 10/1]). Includes only benefit-eligible employees - professional, classified, and faculty.

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Objective C: Create a transparent, centralized business operations model that responsibly uses university resources, supports collaboration, furthers academic-athletic connections, and promotes consistency across individual campus units.

Expense per EWA-weighted Student	FY	FY	FY	FY	FY	Tai	rget
Credit Hour (SCH) ⁴³	2020	2021	2022	2023	2024	FY 2025	FY 2029
\$ per Resident Undergraduate SCH						Very low	Very low
>Inflation-adjusted \$\$ (base FY19)	\$349.44	\$335.67	\$334.81	\$369.78	Available	increase	increase
>Unadjusted	\$352.89	\$357.17	\$386.62	\$440.57	January	(1-3%) in	(1-3%) in
					2025	inflation	inflation
						adj \$\$	adj \$\$
Ş per Resident Undergraduate & Graduate						Very low	Very low
SCH					Available	increase	increase
>Inflation-adjusted \$\$ (base FY19)	\$307.09	\$292.32	\$286.92	\$317.10	January	(1-3%) in	(1-3%) in
>Unadjusted	sted \$310.12 \$311.04 \$331.32 \$377.81	2025	Inflation	Inflation			
¢ nor Total Undergraduate SCU44						auj şş	auj şş
S per Total Undergraduate SCH	6272 54	¢252.07	60.44 OF	6254.07	Ausilahla	incrosso	incroaso
>Inflation-adjusted \$5 (base FY19)	\$273.51	\$253.97	\$241.05	\$254.07	Available	(1-3%) in	(1-3%) in
>Unadjusted	\$276.21	Ş270.24	\$278.35	\$315.82	2025	inflation	inflation
						adi \$\$	adi \$\$
\$ per Total Undergraduate & Graduate SCH						Very low	Very low
>Inflation-adjusted \$\$ (base FY19)	\$254.02	\$235.96	\$223.14	\$245.61	Available	increase	increase
>Unadiusted	\$256.52	\$251.07	\$257.67	\$292.63	January	(1-3%) in	(1-3%) in
	<i>+</i> == 0.0 =	<i>+</i> == = ,	<i>+</i>	<i>+</i> == =	2025	inflation	inflation
						adj \$\$	adj \$\$

Cost of Education ⁴⁵ (resident						Та	rget
undergraduate with 15 credit load per	FY	FY	FY	FY	FY	EV 2025	EV 2020
semester; tuition and fees)	2020	2021	2022	2023	2024	FT 2025	FT 2029
>Boise State	\$8,068	\$8,060	\$8,060	\$8,364	\$8,782		
>> Inflation adjusted (base FY19)	\$7,924	\$7,839	\$7,440	\$7,114	\$7,240	Romain la	cc than the
>WICHE average	\$8,934	\$9,154	\$9,305	\$9,588	\$9 <i>,</i> 840		
>> Inflation adjusted (base FY19)	\$8,775	\$8,903	\$8,589	\$8,155	\$8,112	WICHE state average	
>Boise State as % of WICHE	90.3%	88.0%	86.6%	87.2%	89.2%		

 ⁴³ Expense information is from the Cost of College study, produced yearly by Boise State's controller office. Includes the all categories of expense: Instruction/Student Services (Instruction, Academic Support, Student Services, Library), Institutional/Facilities (Cultural, Religious Life and Recreation, Museums, Gardens, etc., Net Cost of Intercollegiate Athletics, Net Cost of Other Auxiliary Operations, Plant Operations, Depreciation: Facilities, Depreciation: Equipment, Facility Fees Charged Directly to Students, Interest, Institutional Support), and Financial Aid. "Undergrad only" uses Undergrad costs and the sum of EWA weighted SCH for remedial, lower division, upper division. "Undergrad and Graduate" uses undergraduate and graduate expenses, and includes EWA weighted credit hours from the undergraduate and graduate levels. "EWA-resident weighted SCH" refers to those credits not excluded by EWA calculation rules, which exclude non-residents paying full tuition and WUE students that exceed the cap. Inflation adjustment is made using a CPI Calculator (<u>https://www.bls.gov/data/inflation_calculator.htm</u>) with FY19 as the base year.
 ⁴⁴ Expense information as in previous footnote. "EWA-resident Total SCH" refers to all credits, residents, and nonresident, weighted using standard

EWA calculation rules. Inflation adjustment is made using the CPI Calculator with FY19 as the base year ⁴⁵ WICHE average from Table 1a of annual Tuition and Fees report. We use the unweighted average without California. A typical report can be found at <u>http://www.wiche.edu/pub/tf</u>.

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	FY	FY	FY	FY	FY	Tar	get
Graduates per FTE	2020	2021	2022	2023	2024	FY 2025	FY 2029
Baccalaureate graduates per undergraduate FTE ⁴⁶	22.1	23.8	24.7	23.9		25.0	26.5
Baccalaureate graduates per junior/senior FTE ⁴⁷	42.5	43.7	47.2	46.5	Available Sept.	48.0	50.0
Graduate degree graduates per graduate FTE ⁴⁸	45.3	48.5	47.9	50.0	2024	50.0	52.0

Objective D: Foster a sustainable campus that is both environmentally and socially responsible as well as economically feasible.

						Та	rget
STARS (The Sustainability Tracking, Assessment & Rating System)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
"STARS is intended to engage and recognize the full spectrum of higher education institutionsIt encompasses long-term sustainability goals for already high-achieving intuitions, as well as entry points of recognition for institutions taking first steps toward sustainability." ⁴⁹	Program Participant	Program Participant	Silver Award Recognition	Silver Award Recognition	Silver Award Recognition	Silver Award Recognition	Gold Award Recognition

⁴⁶ Includes the unduplicated number of annual baccalaureate degree graduates divided by the IPEDS annual undergraduate FTE. It should be noted that IPEDS includes the credits taken by degree seeking and non-degree seeking students in calculating FTE.

⁴⁷ Includes the unduplicated number of annual baccalaureate degree graduates divided by the fall semester FTE of juniors and seniors. FTE are determined using total fall credits of juniors and seniors divided by 15. This measure depicts the relative efficiency with which upper-division students graduate by controlling for full and part-time enrollment.

⁴⁸ Includes unduplicated number of annual graduate certificates and master's and doctoral degree graduates divided by the IPEDS annual graduate FTE. It should be noted that IPEDS includes credits taken by degree seeking and non-degree seeking students in calculating FTE. ⁴⁹ Additional information on the STARS program may be found at <u>https://stars.aashe.org/about-stars/</u>

Goal 5: Trailblaze Programs and Partnerships

By partnering with industry, government, and community organizations, enhance and foster path breaking interdisciplinary programs and activities that transcend traditional fields of study.

Objective A: Leverage existing partnerships and programs and develop new opportunities with Idaho employers and private partnerships to address workforce, research, educational, service, and athletic needs.

Carnegie Foundation Community						Та	arget
Engagement Classification recognizing							
community partnerships and curricular	FY	FY	FY	FY	FY	FY 2025	FY 2029
engagement	2020	2021	2022	2023	2024		
"Community engagement describes collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity. " ⁵⁰	Carnegie Fo Electi Community E Classifi	ve ngagement afton	Boise Sta recipients o awarding of classificati	ate was one f the 2006 ir this designa on was rene 2024.	of 76 naugural tion. The wed in	Ren Com Enga Classifica	ewal of munity gement tion in 2032

						Tar	get
Partnerships through Research & Economic Development ⁵¹	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
Total Distinct Number of Partners		301	743	881			
Classified by organizational type							
> Industry		58	460	504	Available	Increase	Increase
> Government	N/A	124	118	134	May	number	number of
> Non-Profit		34	58	65	2025	partners	partners
> Higher Education		85	107	156			
> Other		N/A	N/A	22			

	FY	FY	FY	FY	FY	Та	rget
Student-athlete community engagement ⁵²	2020	2021	2022	2023	2024	FY 2025	FY 2029
Opportunities provided to student-athletes to engage with community organizations	25	35	121	220	N/A	250	300

⁵⁰ Additional information on the Carnegie Foundation Community Engagement Classification may be found at http://nerche.org/index.php?option=com_content&view=article&id=341&Itemid=618#CECdesc.

⁵¹ Partnerships are characterized as collaborations for the mutually beneficial exchange of knowledge and resources with entities external to the university. Partner organizations may include any type of public, non-profit, or private organization; each organization is counted once even if multiple engagements exist.

⁵² Helper-Helper platform used to track volunteerism and other student-athlete development opportunities. Opportunities include volunteer hours at local K-12 schools, assisting individuals with special needs, and mental health and wellness programming. Data represents opportunities provided; 81% of 350 student-athletes participated in 4 or more events.

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Student-athlete career exploration and	EV	EV	EV	FY 2023	FY 2024	Target	
development – BroncoLife Connect ⁵³	2020	2021	2022			FY 2025	FY 2029
Local Companies	42			64	58	60	75
Business Professionals	67	N/A	N/A	107	125	130	150
Student Participation	140			155	205	215	230

Objective B: Expand partnerships across Idaho to ensure rural communities have access to high-quality educational programming that fits their needs.

	FY	FY	FY	FY	FY	Та	rget
Community Impact Program Participants ⁵⁴	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Community Impact Program participants		16	28	34	10	45	75
(new starts) >Professional development participants	NA	NA	35	17	28	35	50
>Academic certificates issued and percent of new starts		11 (69%)	24 (86%)	32 (94%)	8 (80%)	36 (86%)	65 (86%)

Number of graduates with high impact on	FY	FY	FY	FY	FY	Та	rget
Idaho's college completion rate	2020	2021	2022	2023	2024	FY 2025	FY 2029
Baccalaureate graduates from underrepresented groups >Rural Idaho ⁵⁵	459	505	544	491	Available Sept. 2024	550	750
Baccalaureate graduates who began as transfers from Idaho community college ⁵⁶	442	461	483	437	Available Sept. 2024	500	1,000

⁵³ BroncoLife CONNECT provides student-athletes an opportunity to learn about career paths while networking with employers and industry business professionals.

⁵⁴ Boise State's Community Impact Program launched in fall 2020 and is focused on rural communities. The program is offered through a hybrid format and engages communities in McCall, Mountain Home, and Payette.

⁵⁵ Distinct number of graduates who began college as residents from a rural area in Idaho. The definition for this measure was updated in 2020 to align with Boise State's new efforts to serve rural communities in Idaho. Rural is defined as all places outside of "Urban Areas and their Places" as specified by the U.S. Census Bureau. Data for all reported years reflect the new definition and goals.

⁵⁶ Includes baccalaureate recipients in transfer cohorts whose institution prior to their initial Boise State enrollment was one of the four Idaho community colleges.

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Objective C: Create interdisciplinary structures to facilitate meaningful connections and experiences for students, faculty, and staff.

Performance Measures:

Vertically Integrated Projects ⁵⁷ (VIPs)	FY	FY	FY	FY	FY	Та	rget
	2020	2021	2022	2023	2024	FY 2025	FY 2029
>Number of students enrolled in VIP credit	184	182	252	260	Available	275	350
>Number of VIP teams	21	23	33	37	July 2024	37	40

Percent of research grant awards and						Tar	get
awarded grant \$\$ that are Interdisciplinary	FY	FY	FY	FY	FY	FV 2025	FV 2029
vs. single discipline	2020	2021	2022	2023	2024	112025	11 2025
>Percent of research grant awards that have							
PIs and Co-PIs in two or more different	24.7%	16.9%	24.2%	21.4%		25.0%	30.0%
academic departments (i.e., are					A		
interdisciplinary)					Available		
>Average \$\$ per grant award for					2024		
interdisciplinary grants	\$293,228	\$333,321	\$461,166	\$827,570	2024	\$500,000	\$600,000
>Average \$\$ per grant award for single-							
discipline grants	\$227,654	\$181,531	\$147,401	\$168,295		\$200,000	\$300,000

Key External Factors

A wide variety of factors affects Boise State University's ability to implement the strategic plan. Here we present five factors that we regard as impediments to progress, the first two of which can be influenced by the state government and its agencies, and one external factor that may help accelerate our progress.

Higher education budget funding and tuition. Lack of consistent funding for the Enrollment Workload Adjustment (EWA) while the university experienced substantial enrollment growth has resulted in a substantial per-student EWA-weighted funding deficit relative to the average of the other three public four-year institutions. Boise State University has \$8.9 million in cumulative unfunded EWA. Although Boise State observed decreases in weighted resident student credit hours over the last two years, we had an overall increase in unweighted resident credit hours between FY22 and FY23. The decreases in weighted more heavily than lower division credits (where we observed increases); (2) large cumulative increases in our numbers of undergraduate degree completers—i.e., approximately 200 more bachelor's degree graduates from FY21 to FY22, and 200 plus increases from FY19 to FY20 and FY20 to FY21 – meaning that we had fewer seniors in our pipeline as students are completing their degree programs more efficiently; (3) some decreases in credit hours in heavily weighted fields such as health, business, and education (likely due to

⁵⁷ The Vertically Integrated Projects (VIPs) initiative unites students with faculty research in a team-based context. Students earn credit for participation, however, not all student participants sign up for credit. Only those students who are enrolled in VIP for credit are reported. Boise State is a member of the VIP national consortium that includes more than 20 universities and is hosted by Georgia Tech.

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lingering effects of the pandemic). Moreover, our inflation-adjusted tuition has been declining in the last five years, negatively influencing our ability to implement our new strategic plan, *Blueprint for Success*. The FY24 published tuition of \$8,783 for undergraduate full-time for Idaho residents is \$7,372 when inflation-adjusted to the FY19 base year, thus, making the inflation-adjusted tuition approximately 9 percent *lower* than the published rate of \$8,060 in FY19.

Compliance and Administrative oversight. Increases in state and federal compliance requirements are a growing challenge in terms of cost and in terms of institutional effectiveness and efficiency. Boise State University is subject to substantial administrative oversight through the State of Idaho Departments o440.57f Administration and Human Resources as well as other Executive agencies. Significant operational areas subject to this oversight include capital projects, personnel and benefit management, and risk and insurance. The additional oversight results in increased administrative and project costs due to multiple layers of review. The current system places much of the authority with the Department of Administration and the other agencies, but funding responsibility and ultimate accountability for performance with the State Board of Education and the University. As a result, two levels of monitoring and policy exist, which is costly, duplicative, and compromises true accountability.

Global Pandemic. The global pandemic, which created large new expenses and lost revenues in higher education, continues to affect our operations. Mental distress and burnout among students, faculty and staff remain. New cohorts of college students are more likely to have experienced learning loss while in high school (due to remote education and other stressors of the pandemic), which impacts their academic success in the university.

Effects of the economy and the market conditions. Increasing inflation, in particular the increases in cost of housing in the Boise metro area, and insufficient increases in state salaries are negatively impacting our ability to recruit and retain staff and faculty. This is impacting morale and well-being of our community, and these increased costs are exceeding our ability to offset our current revenue streams. In addition, a strong job market with higher entry-level wages and lower employment in the State affecting the college-going rates as fewer high school graduates are choosing to enroll in college.

Financial Aid Impacts: There are several recent changes to Financial Aid that may impact our enrollment in unpredictable ways. The Idaho Launch Scholarship program is in its first year and while we hope many of the Idaho students will choose to enroll at Boise State, this scholarship may help students see other possibilities around post high school plans that we cannot predict. Changes to the Free Application for Federal Student Aid (FAFSA) have proven difficult and unpredictable for students and parents. The financial aid application data is yet to be provided to schools which is months behind past years' schedule and leads to delayed aid offers to students. This will result in families having a shorter time frame for making enrollment decisions. The Federal Government also made changes to the Pell Grant eligibility; it is anticipated that more students will qualify for the Pell grant but we are still unclear of its impacts on the Boise State student population.

Positive External Factor: Increasing collaborations among universities and colleges, and with industry / community partners. Presidents of all universities have been committed to working together and expanding both collaborative academic and research programming across institutions. In addition, expanded efforts to

collaborate with industry and community partners will increase applied research opportunities and allow for the development of programming with expected high community impact.

Evaluation Process

Boise State reviews its strategic plan and considers amendments to the Blueprint for Success through an annual review of divisional strategic plan reporting. The six vice presidents of the university receive reports from every unit within their division that detail progress to date on the Blueprint for Success and their plans and recommendations for the coming year. Each division compiles these unit-level reports and provides an executive-level summary to the University Strategic Planning Council (USPC), a group composed of representatives from across all divisions in the university. In turn, the USPC provides a comprehensive summary for the President and Executive Team detailing progress and achievements on the strategic plan from across the institution.

Parallel to this process, a strategic planning data group tracks and assesses progress made on the metrics for the plan. In addition, feedback and ideas are always welcome "off cycle" through communication with the USPC or divisional teams. This process allows every level of the institution to chart their progress, provide feedback, and offer new directions for the plan. This information provides the basis for changes or amendments to the plan, something ultimately finalized at the Executive Team level.

ATTACHMENT 1

		Boise Sta	te University Strateg	ic Plan Goals	
	Goal 1: Improve	Goal 2: Innovation	Goal 3: Advance	Goal 4: Foster thriving	Goal 5: Trailblaze
	educational access	for institutional	research and creative	community	programs and
	and student success	impact	activity		partnersnips
Institution/Agency					
Goals and Objectives					
GOAL 1: EDUCATIONAL READINESS: Provide a rigorou their community and postsecondary and workforce or	s, uniform, and thorough e portunities by assuring th	education that empower ey are ready to learn at t	s students to be lifelong le the next educational level	arners and prepares all stud	lents to fully participate in
Objective A: Literacy - Provide effective literacy instruction across grades K-3.					
Objective B: Mathematics - Provide effective mathematics instruction across grades 6-8.					
Objective C: Graduation - Increase Idaho's high school graduation rate.					
GOAL 2: EDUCATIONAL ACCESS - Increase access to lo	daho's robust educational	system for all Idahoans,	regardless of socioecono	mic status, age, or geograpi	hic location.
Objective A: Advanced Opportunities – Increase high-school student participation in advanced opportunities.	~	~		~	✓
Objective B: Student Engagement - Increase high- school student engagement in exploring postsecondary opportunities.	~	\checkmark		\checkmark	\checkmark
Objective C: College-Going - Increase the rate at which high school graduates pursue postsecondary opportunities.	\checkmark	✓		~	\checkmark
GOAL 3: EDUCATIONAL ATTAINMENT (opportunity) – through a greater numbers of student completing cer	Idaho's public colleges ar tificates and/or degrees,	nd universities and caree including workforce crea	r technical education prog lentials.	grams fuel a strong workfor	ce pipeline evidenced
Objective A: First-Year Student Retention - Increase the retention rate of first-year students into the second year.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Objective B: Timely Degree Completion – Increase on-time degree completion.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Objective C: Educational Attainment – Increase completion of certificates and degrees through Idaho's educational system.	~	\checkmark	\checkmark	✓	✓

Boise State Cybersecurity Report to the State Board of Education

February 2024

Executive Order 2017-02 requires Boise State University to incorporate the NIST Cybersecurity Framework (CSF) into our IT Risk Management frameworks and also to implement CIS Critical Security Controls (CSC) 1- 6 across the University's critical network infrastructure systems.

CSF is just one component of Boise State's IT Risk Management framework. To measure our Security Effectiveness we partner with BitSight to provide real-time feedback on University systems CSF maturity. Average BitSight maturity is an A, immediately mitigating issues on the report that impact scoring, whereas the higher education industry has maintained a D average. CSC Controls have been documented and on a maturity scale we are a level 2 with work left to do. Critical Security Controls 1-6 will be an ongoing process as we strive towards a level 3 maturity.

In the past 12 months we have:

- Reviewed, updated, and published revised versions of OIT Policies:
 - 8020 Server Administration
 - 8030 Desktop, Laptop, and Tablet PC Computing Standards
 - 8050 Software Patch Management
 - 8060 Information Privacy and Data Security
 - 8090 Telephone Services
 - 8120 Identity Theft Prevention Program
 - 8150 Information Technology Governance
 - 8180 Information Technology Change Management
- Conducted external penetration test and review of critical systems
- Implemented new endpoint protection solution, shifting from JAMF Protect to Microsoft Defender

In the next 12 months we plan:

- Continuing maturity growth of CSF and CSC as outlined by State, reevaluating maturity based on CSCv8 controls
- Reduce attack surface by removal of unused student accounts
- Implementation of new Endpoint Detection and Response (EDR) and Cloud Application Security Broker (CASB) tooling
- Implementation of new university data-retention policies
- Revision of data classification policies

Additional Relevant Strategic Plans Supporting *Blueprint for Success*

IDAHO SMALL BUSINESS DEVELOPMENT

Mission

Accelerating business success

Vision

Be the most influential driver of Idaho business success

Goal 1: Network Reach

Focus time on clients with the highest potential for creating economic impact.

Objective A: Develop long-term relationships with potential and existing growth and impact clients.

Capital Raised by Clients	FY	FY	FY	FY	FY	T	arget
	2020	2021	2022	2023	2024	FY 2025	FY 2029
> millions of dollars ⁵⁸	\$79.9	\$55.8	\$28.2	\$56.6	N/A	\$56.1	\$68.2

⁵⁸ The reported numbers differ from those reported previously due to a correction, which resulted in adjustments to the data.

TECHHELP

Mission

TechHelp will be a respected, customer-focused, industry recognized organization with strong employee loyalty, confidence of its business partners and with the resources and systems in place to achieve the following sustained annual results in 2024:

- 100 manufacturers reporting \$120,000,000 economic impact
- 500 jobs created and retained
- > \$20,000 and < \$50,000 Net Income

Vision

TechHelp is Idaho's Manufacturing Extension Partnership (MEP) center. Working in partnership with the state universities and the Idaho Manufacturing Alliance (IMA), we provide assistance to manufacturers, food and dairy processors, service industry and entrepreneurs to grow their revenues, to increase their productivity and performance, and to strengthen their global competitiveness.

"Our identity is shaped by our results."

<u>Goal 1:</u> Economic Impact on Manufacturing in Idaho

Deliver a quantifiable positive return on both private business investments and public investments in TechHelp by adding value to the manufacturing client and the community.

Objective A: Offer technical consulting services and workshops that meet Idaho manufacturers' product and process innovation needs, resulting in new and retained jobs and economic impact in the form of sales, savings, and investment.

Client reported economic impacts	FY	FY	FY	FY	FY	Та	arget
resulting from projects	2020	2021	2022	2023	2024	FY 2025	FY 2029 ⁵⁹
> sales, cost savings and investments (millions of dollars)	\$182.9	\$114.4	\$207.4	\$206.3M	\$175.1M	\$120	\$120
> new and retained jobs	885	1144	497	348	313	500	500

⁵⁹ Target is based on current and projected resources and established best practices based on those resources.



College of Eastern Idaho

Strategic Plan 2025-2029

June 1, 2024



FY2025-2029

Strategic Plan

MISSION STATEMENT

To provide open-access to affordable, quality education that meets the needs of students, regional employers, and community.

VISION STATEMENT

Our vision is to be a superior community college. We value a dynamic environment as a foundation for building our college into a nationally recognized community college role model. We are committed to educating all students through progressive and proven educational philosophies. We will continue to provide high quality education and state-of-the-art facilities and equipment for our students. We seek to achieve a comprehensive curriculum that prepares our students for entering the workforce, articulation to advance their degree, and full participation in society. We acknowledge the nature of change, the need for growth, and the potential of all challenges.

STATE PERFORMANCE METRICS:

Timely Degree Completion

I. Percent of undergraduate, degree-seeking students completing 30 or more credits per academic year at the institution reporting (Source: PMR State Measure 50)

					Benchmark	
	FY2020	FY2021	FY2022	FY2023	2025	2029
Percentage	6%	4%	10%	12%	13%	14%

II. Percent of first-time, full-time, freshmen graduating within 150% of time¹ (State Performance Measure II) (Source: Graduation Rates IPEDS)

					Benchmark	
	FY2020	FY2021	FY2022	FY2023	2025	2029
Grad Rate 150% IPEDS	56%	46%	44%	35%	37%	41%

- III. Total number of certificates/degrees produced, disaggregated (Source: Completions IPEDS)
 - a) Certificates of less than one year
 - b) Certificates of at least one academic year
 - c) Associate degrees

					Benchmark	
	FY2020	FY2021	FY2022	FY2023	2025	2029
Certificates <1 year	8	23	3	1	3	6
Certificates >1 year	112	96	106	116	116	140
Associate Degrees	166	229	276	278	304	364

- IV. Number of unduplicated graduates/completers
 - a) Certificates of less than one year
 - b) Certificates of at least one academic year
 - c) Associate degrees

					Benchr	nark
	FY2020	FY2021	FY2022	FY 2023	2025	2029
Completers of	8	21	3	1	3	6
Certificates<1 year	0	21	5	1	5	0
Completers of	104	06	103	115	121	126
Certificates>1 year	104	90	103	115	121	120
Completers of	164	222	263	263	276	280
Degrees	104		203	203	270	209

Reform Remediation

V. Percent of undergraduate, degree-seeking students taking a remediation course completing a subsequent credit bearing course (in the area identified as needing remediation) within a year with a "C" or higher.

					Benchmark	
	FY2020	FY 2021	FY2022	FY2023	2025	2029
Students	53%	57%	66%	66%	69%	73%

Math Pathways

VI. Percent of new degree-seeking freshmen completing a gateway math course within two years

					Benchmark	
	FY2020	FY 2021	FY2022	FY2023	2025	2029
Students	53%	61%	53%	70%	73%	77%

Guided Pathways

VII. Percent of first-time, full-time freshmen graduating within 100% of time. (Source: PMR State Measure 180)

					Benchmark	
	FY2020	FY2021	FY2022	FY2023	2025	2029
FTFT Completers 100%	49%	39%	39%	24%	25%	27%

Dual Credit Graduates (State Performance Measure VIII)

VIII. Percent of dual credit students who graduate from high school with an associate's degree (Source: Internal Reporting)

					Bencl	nmark
	FY2020	FY 2021	FY2022	FY2023	2025	2029
Percent of dual credit graduates	0.2%	0.5%	1.1%	1.7%	1.8%	1.9%

GOAL 1: INCREASE EDUCATIONAL READINESS, ENSURING THAT CEI PROVIDES A RIGOROUS, UNIFORM, AND THOROUGH EDUCATION TO EMPOWER ITS STUDENTS TO BE LIFELONG LEARNERS WHO ARE PREPARED FOR OUR REGION'S WORKFORCE OPPORTUNITIES.

<u>Objective A</u>: Increase Idahoans prepared for the regional workforce's needs. (Source: Internal Reporting)

					Benchmark	
	FY2020	FY2021	FY 2022	FY2023	2025	2029
Workforce Training Headcount, duplicated	16,461	12,140	17,494	20,068	21,071	22,075
Percentage of change from previous fiscal year	+56.0%	-26.2%	+44%	+14.7%	+5%	+10%

<u>Objective B</u>: Increase total annual credit-seeking enrollment (Source: PSR Annual)

					Bench	mark
	FY2020	FY 2021	FY 2022	FY2023	2025	2029
Annual Credit- seeking Enrollment Headcount	2,402	2,627	3,225	3,468	3,641	3,815
Total percentage of change from previous fiscal year	+17.8%	+9.4%	+22.7%	+7.4%	+5%	+10%

GOAL#2: INCREASE EDUCATIONAL ACCESS TO AN AFFORDABLE, QUALITY EDUCATION College of Eastern Idaho ensures that it increases access to quality, affordable education for all Idahoans, regardless of socioeconomic status, age, or geographic location.

<u>Objective A</u>: Increase the annual number of students who have a state-funded or foundationfunded scholarship to ensure that aspiring professionals of all economic means can access stellar education. (Source: Internal Reporting)

					Bench	mark
	FY2020	FY2021	FY 2022	FY2023	2025	2029
State Funded	86	81	86	96	91	95
Foundation Funded	278	194	211	260	273	286

<u>Objective B</u>: Increase the numbers and percentage of degree/certificate seeking students who received a Pell grant, which shows that CEI its commitment to providing accessible education for those with substantial financial challenges. (Source: Student Financial Aid IPEDS)

					Bench	nmark
	FY2020	FY2021	FY2022	FY2023	2025	2029
Number of students awarded a Pell grant	624	664	640	625	656	688
Percentage of all degree/certificate seeking students awarded federal Pell grants	39%	37%	30%	47%	49%	52%

<u>Objective C</u>: Increase the go-on rate, as evidenced by the percentage of entering CEI students who enroll in CEI programs during the first year after high school graduation: (Source: Internal Reporting)

					Benc	hmark
	EV 2020	EV 2021	FY	FY	2025	2029
	FY2020	FY2021	2022	2023	2023	
Percentage of Annual						
Enrollment who entered CEI	27.4%	31.3%	35.0%	43.9%	46%	48%
within 1 year of High School						

<u>Objective D</u>: Increase the percentage of degree-seeking students taking at least one course with a distance education component to ensure CEI is serving place bound, employed, and other students with diverse learning needs. (Source: IPEDS 12-month enrollment)

					Bench	ımark
	FY2020	FY2021	FY2022	FY2023	2025	2029
Percentage of Students taking a Distance Ed course	31%	57%	49%	46%	48%	50%

<u>Objective E</u>: Increase the percentage of males in annual credit-seeking enrollment to increase equitable access to the state's educational and vocational resources. (Source: IPEDS 12-month enrollment).

					Bencl	nmark
	FY2020	FY2021	FY2022	FY2023	2025	2029
Percentage of Males in annual enrollment	36.8%	33.1%	39.5%	41%	43%	45%

<u>Objective F</u>: Increase the number of applicants/students receiving Center for New Direction services (CND) (Source: Internal Reporting)

					Benchmark	
	FY 2020 ⁴	FY 2021	FY2022	FY 2023	2025	2029
CND Clients Served	294	318	264	266	300	350

GOAL 3: INCREASE STUDENT ATTAINMENT

College of Eastern Idaho fuels a strong workforce pipeline evidenced through a greater number of students completing certificates and/or degrees, including workforce credentials.

<u>Objective A</u>: Increase the number of students prepared to enter collegiate training or workforce. (Source: Internal reporting.)

- I. Increase the number of students enrolled in GED who are Idaho residents (not including ESL)
- II. Increase the number of students who complete their GED
- III. Increase the number of students who achieve at least one educational functioning level improvement (Source: Internal reporting)

					Benchmark	
	FY2020	FY2021	FY2022	FY2023	2025	2029
Enrolled	370	246	214	227	240	250
Completed	55	37	42	20	25	40
Gained educational	Not	71	0.8	117	122	120
level	availab le	/ 1	90	11/	125	129

<u>Objective B</u>: Increase the number of CEI completers at all certificate and degree levels. (Source: IPEDS Completions)

					Benchmark	
	FY2020	FY2021	FY 2022	FY2023	2025	2029
All completers	272	330	363	368	386	405

<u>Objective C</u>: Increase career technical education graduates placed into their desired careers. (Source: Placement Rates)

					Bench	mark
	FY2020	FY2021	FY2022	FY2023	2025	2029
Positive Placement of Career Technical Education Completers	94%	96%	99%	97%	98%	98%

<u>Objective D</u>: Increase number of skilled employees available to meet regional economic needs.

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					Benchmark	
	FY2020	FY2021	FY2022	FY2023	2025	2029
Headcount	12,140	16,768	17,494	20,068	21,071	22,075

Key External Factors

1. Increased need for a more flexibly educated workforce

CEI has the largest workforce program in the state and a fifty-year history of providing employerdriven, market-responsive education. Institutional sustainability demands that workforce and credit-bearing programs purpose fully collaborate. Credit-bearing students need more short-term credentials to prove their performance on key industry requirements, and workforce students need clear pathways and stackable credentials that re-invite them back as lifelong learners. We are purpose fully developing bridges across the silos in program review, data collection, educational pathways, and others. We are also developing cross marketing on and off campus, so all stakeholders know the full range of our educational resources.

2. Inflation and population growth pressure

Inflation, supply chain complications, and job market pressure require extraordinary care to ensure that our resources are best allocated to achieve mission fulfillment. CEI is a human-centric organization. Employees are our greatest resource and investing in their success will ensure effective recruiting and retention. We will continue to identify ways to minimize expenses, develop public-private partnerships, and develop alternate revenue sources to ensure that we can always move the mission forward.

3. Greater need for nimble educational programming

CEI is committed to increasing stakeholder guidance, both on- and off-campus. We know that those closest to the problems will have the most specific answers, and our administration needs open, supported pathways to get unfiltered feedback. To strengthen on-campus channels, administration clarified reporting pathways, and it seeks bilateral communication through the Senates, committees, and campus-wide strategic conversations. We established facultyinclusive/led committees that will deepen our academic freedom, academic integrity, professional development programs, prior learning assessment, and others. Overseen by the Academic Standards Committee, these committees will be working through an organized, shared process that identifies key research, develops published processes, evaluates their efficacy, and shares results throughout our community. Off campus, our administrators have set a goal to strengthen our K-12, advisory boards & community outreach. We use our Futuring Summits and other venues to discuss those expansions, share insights, and use that knowledge to create pragmatic, measurable priorities.

4. Careful conservation and growth of stakeholder investment

Our administration has used a futuring process since CEI's inception. Futuring is an evolutionary process that combines regular conversations and collaborative research to assess our strategic position. We identify current and emerging patterns, trends, and expectations to define our future direction, and we determine the most effective measures to evaluate each developmental stage. Futuring allows us to continually realign our mission, planning, and intended outcomes of our programs and services to meet market needs and stakeholder expectations. We review our achievement indicators, which prompt new research questions. Each investigation clarifies short-term goals that lead us to our desired future.

Each year, administration invites a broad range of content experts to a futuring summit to study economic trends, industry trends, and stakeholder expectations. We are developing a researchbased, data-driven development process that develops those identified trends into actionable tasks. This will allow us to best leverage our limited material and human resources, while minimizing risk.

5. Greater proof of higher education's value to its stakeholders

We have clear, published course-level and program-level outcomes. We are consciously developing the program-level outcomes to create a comprehensive, connected, and cohesive curriculum that is aligned with market needs. As a new institution, we are only just building enough student populations to expand our range of consistent credit-bearing programs. Even the definition of a program is receiving careful evaluation. Our faculty are researching widely to ensure that we build enough pathways that students can transfer easily into their program of choice. That is being balanced against the need for broadly available course offerings that can be completed on a clear track, on time, and with guidance on price-to-earnings implications.

ATTACHMENT 2

INFORMATIONAL APRIL 17-18, 2024

		NIEGO
SBC	DE GOAL I: EDUCATIONAL REAL	PINESS
CEI GO AL 1	: INCREASE EDUCATIONAL REA	DINESS
Objective A: Increase Idahoans prepared for the regional workforce's needs	Objective B: Increase total annual credit- seeking enrollment	
Measure: WTCE Headcount	Measure: Credit-seeking headcount	
SBO E	GOAL 2: EDUCATIONAL ACCES	S
CEIGOAL	2: INCREASE EDUCATIONAL AC	CESS
Objective A: Increase annual number of students who have a scholarship.	Objective B: Increase numbers of Pell grant recipients Metric: Number and student	Objective C: Increase the go- on rate Metric: Annual enrollment of
Metric: State & Foundation scholarships	body percentage of recipients	CEI students within 1 year of high school graduation
Objective D: Increase distance education enrollees. Metric: Percentage taking a course with distance components	Objective E: Increase percentage of males Metric: Percentage of males in annual enrollment	Objective F: Increase students leveraging support services Metric: CND clients served
SBOE G	OAL 3: EDUCATIONAL ATTAINM	ENT
CEIGOAL 3:	INCREASE EDUCATIONAL ATTA	INMENT
Objective A: Increase the progress of College & Career Readiness enrollees	Objective B: Increase number of CEI completers Metric: Unduplicated count of	Objective C: CTE students place into chosen careers. Metric: Placement rate
Metrics: Enrollment, GED completion, Educational level gain	completers at all certificate & degree levels	
Objective D: Increase workforce training and community education's annual headcount.		
Metric: Annual duplicated headcount of WTCE enrollees		



COLLEGE OF SOUTHERN IDAHO 2024-2028 (FY2025-FY2029) STRATEGIC PLAN

OUR MISSION

To provide quality educational, social, cultural, economic, and workforce development opportunities that meet the diverse needs of the communities we serve.

OUR VISION

To improve the quality of life of those impacted by our services.

OUR VALUES

- **Community:** The College of Southern Idaho, the Magic Valley's community college, commits to effectively serving the educational, intellectual, cultural, and economic needs of the communities we serve.
- **Equity:** The College of Southern Idaho recognizes and embraces the value that people of diverse backgrounds and perspectives offer us all. As such, the College is a place of fairness, diversity, civility, and collegiality, and celebrates the benefits of learning and growth that come from a commitment to equity.
- **Innovation:** The College of Southern Idaho exemplifies a spirit of innovation that positions the College as an educational and community leader throughout our service area.
- **Quality:** The College of Southern Idaho ensures that offerings meet or exceed the level of quality demanded by stakeholders, and honor the substantial investment that users make in the College.

OUR STRATEGIC PLAN

Guided by the values of <u>community</u>, <u>equity</u>, <u>innovation</u>, <u>and quality</u>, the College of Southern Idaho pursues the following Strategic Goals, as established by the College of Southern Idaho Board of Trustees, and the President of the College of Southern Idaho.

STRATEGIC GOAL 1: STUDENT ACCESS

Strategy #1: The College of Southern Idaho will provide quality and innovative educational programs that align with student needs, workforce demands, and employment opportunities.

Objective 1.1: Collaborate with K-12 partners to increase participation in higher education.

Performance Measures:

1.1.1 Grow dual credit enrollment at a rate that matches or exceeds the growth of Region IV school districts (Source: State Board of Education Dual Credit Report)

	FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benchmark	
					FY 2025	FY 2029
Headcount	7,648	7,472	8,866	9,682	9,682	TBD [#]
Credits	42,805	42,793	51,897	57,488	57,488	TBD#

Benchmark: Maintain current enrollment levels, despite slight contraction of Region IV K-12 enrollment 1 (by 2025)

1.1.2 Increase the Region IV high school immediate and three-year "college-going" rates (Source: State Board of Education and CSI)

	FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benchmark	
					FY 2025	FY 2029
Fall Immediate	44%	43%	45%	42%	47%	60%*
Within 3 Years	61%	64%	64%	57%	67%	80%*
Subset of "Fall Immediate" attending CSI	57%	59%	54%	51%	65%	70%

Benchmark: 47% immediate, 67% within 3 years, and 65% attending CSI; some historical data has been updated for FY20, FY21, and FY22 ² (by 2025)

Objective 1.2: Collaborate with local employers to provide education and training opportunities that meet community workforce needs.

Performance Measures:

1.2.1 Increase Workforce Development enrollment (Source: Workforce Development and Training Report)

	FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benchmark	
					FY 2025	FY 2029
Total Enrollments	5,034	7,992	6,459	7,190	8,700	9,950

Benchmark: 8,700 (by 2025) 3

Objective 1.3: Increase participation in higher education by offering programs and services that meet the educational needs of the communities we serve.

Performance Measures:

1.3.1 Increase CSI unduplicated headcount of non-dual credit students (Source: PSR 1 Fall Snapshot Report)

FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	FY24 (2023-2024)	Benchmark	
				FY 2025	FY 2029
3,987	3,883	3,905	3,958	4,100	4,500

Benchmark: 4,100 ₄ (by 2025)

1.3.2 Increase CSI full time equivalency (FTE) enrollment for all credit-bearing students (Source: PSR 1 Fall Snapshot Report)

FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	FY24 (2023-2024)	Benchmark	
				FY 2025	FY 2029
3,476	3,590	3,702	3,963	4,200	4,500

Benchmark: 4,200 5 (by 2025)
STRATEGIC GOAL 2: STUDENT RETENTION

Strategy #2: The College of Southern Idaho will provide high-impact learning and student support systems that provide a sense of belonging for our diverse student population and that enhance persistence and retention.

Objective 2.1: Establish robust systems and processes that support student retention.

Performance Measures:

2.1.1 Increase the percentage of new first-time, full-time, degree seeking students retained or graduated the following year (excluding death or permanent disability, military, foreign aid service, and mission) (Source: IPEDS)

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benchmark	
				FY 2025	FY 2029
61%	66%	60%	64%	67%	75%**
Development CZ0/	(h., 2025), 750/ (h., 2020)				

Benchmark: 67% 6 (by 2025); 75% 6 (by 2029)

Objective 2.2: Offer instructional programs and support systems that help underprepared students move into college-level coursework rapidly and successfully.

Performance Measures:

2.2.1 Increase the percentage of degree seeking students taking a remedial math course who complete a subsequent credit bearing course with a C or higher within one year of remedial enrollment (Source: CSI) *Statewide Performance Measure*

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benc	hmark
				FY 2025	FY 2029
43%	48%	51%	44%	F.0%/	F.09/
(339/785)	(484/1,012)	(384/759)	(231/525)	50%	50%

Benchmark: 50% 7 (by 2025/2029)

2.2.2 Increase the percentage of degree seeking students taking a remedial English course who complete a subsequent credit bearing course with a C or higher within one year of remedial enrollment (Source: CSI) *Statewide Performance Measure*

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benchmark	
				FY 2025	FY 2029
73%	71%	69%	71%	70%	70%
(185/255)	(151/214)	(115/168)	(72/101)	70%	70%

Benchmark: 70% 7 (by 2025/2029)

2.2.3 Increase the percentage of first-time degree seeking students completing a gateway math course within two years of enrollment (Source: CSI) *Statewide Performance Measure*

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benc	hmark
				FY 2025	FY 2029
48%	50%	50%	52%	EE%	60%
(499/1044)	(517/1030)	(597/1183)	(641/1225)	55%	60%

Benchmark: 55% 7 (by 2025); 60% 7 (by 2029); historical data has been updated for FY22 due to a previous rounding error

STRATEGIC GOAL 3: STUDENT SUCCESS

Strategy #3: The College of Southern Idaho will provide instructional and student support services that allow students to successfully and efficiently complete their educational goals.

Objective 3.1: Increase the rate of college completion by removing barriers, providing targeted support measures, and creating multiple pathways to completion.

Performance Measures:

3.1.1 Match or exceed our peer institutions in the percentage of first-time, full-time degree/certificate seeking students who graduate within 150% of time (Source: IPEDS) *Statewide Performance Measure*

	FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benc	hmark
					FY 2025	FY 2029
CSI	35%	36%	44%	43%		
Peer Institutions	NA	34%	34%	35%	45%	50%**

Benchmark: 45% ₈ (by 2025); 50% ₈ (by 2029)

3.1.2 Increase the percentage of first-time, full-time degree/certificate seeking students who graduate within 100% of time (Source: IPEDS) *Statewide Performance Measure*

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benc	hmark
				FY 2025	FY 2029
22%	31%	31%	34%	NA	30%**
Benchmark: NA 。					

Benchmark: NA 8

3.1.3 Increase the number of associate degrees and certificates of one year or more produced annually (Source: IPEDS Completions) *Statewide Performance Measure*

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benchmark	
				FY 2025	FY 2027
1,076	1,094	1,143	1,132	1,262	1,342

Benchmark: 195 Certificates/1067 Degrees 9 (by 2025) (SBOE)

3.1.4 Increase the number of unduplicated graduates with associate degrees and/or certificates of one year or more produced annually (Source: IPEDS Completions) *Statewide Performance Measure*

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benchmark	
				FY 2025	FY 2029
962	979	1,027	1,023	NA	NA

Benchmark: NA 9; data has been updated from previous plans to reflect final numbers rather than preliminary numbers

3.1.5 Increase the percentage of students completing 30 or more credits per academic year (Source: CSI) *Statewide Performance Measure*

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benchmark	
				FY 2025	FY 2029
15%	13%	13%	13%	15%	20%

Benchmark: 15% 10 (by 2025)

3.1.6 Reduce the median credits earned at graduation (Source: CSI)

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benc	hmark
				FY 2025	FY 2029
73	72	69	68	69	69

Benchmark: 69 11 (by 2025); data has been updated from previous plans to reflect final numbers rather than preliminary numbers

Objective 3.2: Ensure that instructional and student support services provide an equitable environment for all.

Performance Measures:

3.2.1 Increase the retention and graduation rates of entering students with high school GPAs of 3.0 or lower (Source: College of Southern Idaho)

Metric	FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benc	hmark
					FY 2025	FY 2029
Fall-to-Fall Retention	50%	58%	46%	54%	60%	75%**
150% of Time Graduation	21%	19%	22%	25%	28%	50%**

Benchmark: Eliminate Gap by 2029 12; data has been updated from previous plans to reflect final numbers rather than preliminary numbers

Objective 3.3: Provide a quality education that prepares graduates for post-graduation success.

Performance Measures:

3.3.1 Placement of Career Technical Education Completers (Source: Idaho CTE Follow-Up Report)

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benc	hmark
				FY 2025	FY 2029
98%	98%	99%	93%	97%	97%

Benchmark: Maintain placement at or above the average for the previous four years (97%) 13 (by 2025)

3.3.2 Transfer rates of non-CTE CSI graduates within 3 years of CSI graduation (Source: CSI)

FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	Benchmark	
				FY 2025	FY 2029
63%	66%	67%	58%	67%	67%
(2016-2017 Graduates)	(2017-2018 Graduates)	(2018-2019 Graduates)	(2020-2021 Graduates)	0778	07/8

Benchmark: 67% 14 (by 2025)

[#] FY 2029 benchmarks have not yet been set by the college for these metrics and/or cannot be set due to the benchmark being reliant on data from previous years.

** This benchmark has been established by the Idaho State Board of Education.

KEY EXTERNAL FACTORS:

There are numerous external factors that could impact the execution of the College of Southern Idaho's Strategic Plan. These include, but are not limited to:

- Changes in the unemployment rate which has been shown to significantly impact enrollment.
- Changes in local, state, and/or federal funding levels.
- Changes to accreditation requirements.
- Circumstances of and strategies employed by our partners (e.g., K-12, higher education institutions, local industry).
- Emergencies (pandemics, natural disasters, etc.).
- Legal and regulatory changes.

INFORMATIONAL - PPGA

EVALUATION PROCESS:

The College of Southern Idaho Strategic Plan is evaluated annually by its locally elected Board of Trustees. Benchmarks are established and evaluated throughout the year by the college employees. The college reports on achievement of benchmarks annually to the College of Southern Idaho Board of Trustees and to the Idaho State Board of Education.

NOTES:

¹The college has set a benchmark for dual credit growth that matches the growth rate of student enrollment in K-12 school districts in Region IV of the State of Idaho (Region IV Enrollment vs CSI Dual Enrollment report). This measure is updated annually and supports the Idaho State Board of Education's Goal 2.A.I (90% or more of high school graduates are funded for one or more advanced opportunity). Region IV enrollment growth source: https://www.sde.idaho.gov/finance/#attendance.

² The college is working to increase the immediate Region IV "go on" rate in general, as well as the proportion who attend CSI. This benchmark has been set based upon Utah's pre-pandemic "go on" rate. This measure supports the Idaho State Board of Education's Goals 2.C.I and 2.C.II (60% or more of HS graduates attend college within 1 year; 80% or more within 3 years). Data has been updated from FY20, FY21, and FY22 due to updated "go on" data being released by the Idaho State Board of Education.

³ Growth rates have been established based upon a current uptick in interest in the trades and Idaho Launch marketing and funding. Following this initial jump in enrollment, a more sustainable 3% growth rate has been established.

⁴ The college has established a goal of enrolling 4500 non-dual credit students per semester by 2029. This measure supports the Idaho State Board of Education's Goals 2.C.I and 2.C.II (60% or more of HS graduates attend college within 1 year; 80% or more within 3 years).

⁵ The college has established a goal of increasing FTE to 4,500 in the fall of 2029. This measure supports the Idaho State Board of Education's Goals 2.C.I and 2.C.II (60% or more of HS graduates attend college within 1 year; 80% or more within 3 years).

⁶ The benchmark for first-time, full-time, degree seeking students for FY25 has been set as a stretch benchmark considering several college initiatives focused on retaining students, and in line with Amarillo College (TX), a CSI's established peer comparator institutions that is exemplary in this area. The FY29 benchmark reflects the Idaho State Board of Education's established goal for this metric. This measure supports the Idaho State Board of Education's Goal 3.A.I (75% or more of students retained to the second year). The most recent data reflects an entry cohort one year prior to FY date. For example, FY23 data reflects a Fall 2021 entry cohort.

⁷ English and math remediation and subsequent completion benchmarks reflect the decreasing populations of students being placed into remediation. The gateway math completion metric reflects ongoing work in this area. The FY25 benchmark demonstrates CSI's continued commitment to helping students complete a gateway math course as quickly as possible, while the FY29 benchmarks match the State Board of Education's previous state goal.

⁸This benchmark has been established considering recent positive trends in this area and several initiatives the college has undertaken to increase completion rates. The benchmark also aligns with the exemplary success rates shown at Hutchinson Community College, a CSI's established benchmark institution. The full group of CSI peer institutions has an average 150% of time graduation rate of 35%. This measure supports the Idaho State Board of Education's Goal 3.B.I (50% per year). The college has chosen to set a benchmark for the 150% of time completion rate, but not for the 100% of time completion rate. This is due to the lack of availability of comparison data for peer institutions at the 100% time to completion rate. However, the college does recognize the Idaho State Board of Education's Goal of 30% in this area and has already exceeded that target.

⁹ Benchmarks reflect targets previously established by the Idaho State Board of Education. Benchmarks have been set for the numbers of certificates and degrees completed each year, rather than for the number individual graduates.

¹⁰ In recognition of data showing that students who complete 30 or more credits per year have more long-term success in college than students who do not and are more likely to complete a certificate or degree, the college is working to encourage students to enroll in 30 or more credits per year. This measure supports the Idaho State Board of Education's Goal 3.A.II (55% or more per year).

¹¹ The college has worked to reduce the number of credits earned at graduation through advising and the use of focused graduation plans.

¹² Research at CSI has revealed that the most significant predictor of college success for entering students is high school grade point average. Further, data show that males, and students who self-identify as Hispanic, tend to arrive at CSI with lower high school grade point averages than other populations. With the goal of addressing equity issues within college completion, CSI has elected to track the success of students who arrive at CSI with a low high school grade point average, and to strategically direct services toward them in order to close achievement gaps between those students and students who enter with a grade point average of 3.0 or higher.

¹³This benchmark has been established based upon an average of the past four years of placement. (Source: Idaho CTE Follow-Up Report)

¹⁴ The college is working to better support students who intend to transfer after graduation. (Most recent data reflects an entry cohort three years prior to FY date. For example, FY23 data reflects fall 2019 entry cohort.)

ATTACHMENT 3

Alignment with Idaho State Board of Education FY2025-2029 Strategic Plan	State Board of Education Goals		
	Goal 1: EDUCATIONAL READINESS	Goal 2: EDUCATIONAL ACCESS	Goal 3: EDUCATIONAL ATTAINMENT
College of Southern Idaho Goals and Objectives			
GOAL #1: STUDENT ACCESS			
Strategy #1: The College of Southern Idaho will provide quality and innovative educational programs that align with student needs, workforce demands, and employment opportunities.			

Objective 1.1: Collaborate with K-12 partners to increase participation in higher education.



Strategic Plan

FY2025 - FY2029

Strategic plan

Mission statement

The mission of Idaho's career technical education (CTE) system is to prepare Idaho's youth and adults for high-skill, in-demand careers.

Vision statement

The vision of Idaho Division of Career Technical Education (IDCTE) is to be:

- 1. A premiere educational opportunity for students and adults to gain relevant workforce and leadership skills in an applied setting;
- 2. A gateway to meaningful careers and additional educational opportunities; and
- 3. A strong talent pipeline that meets Idaho business workforce needs.

Goal 1

Educational system alignment

Ensure that all components of the educational system are integrated and coordinated to maximize opportunities for all students.

<u>Objective A:</u> Alignment of CTE programs between the technical colleges and ensure that secondary program standards align to those postsecondary programs.

Performance Measure:

I. Percent of secondary programs that have been reviewed and revalidated to meet current industry standards.

Baseline data/Actuals: Baseline FY23 - begin work

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY25	FY29
N/A	N/A	<u>6 of 55 =</u> <u>11%</u>		15% annually	20% annually

Benchmark: Align 20% of programs by FY2029.

<u>Objective B:</u> Technical assistance and support for CTE programs — Provide timely, accurate, and comprehensive support to CTE programs that meets the needs of administrators and instructors at both the secondary and postsecondary levels.

Performance Measure:

I. The overall satisfaction levels of respondents with the support and assistance provided by CTE.

Baseline data/Actuals: Initial Survey 2016

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
3. 47	3.59			Maintain 3.5 or higher	Maintain 3.5 or higher

Benchmark: Maintain overall satisfaction levels of 3.5 or higher.⁴

<u>Objective C:</u> Data informed improvement — Develop quality and performance management practices that will contribute to system improvement, including current research, data analysis, and strategic and operational planning.

Performance Measures:

I. Design and develop a career technical education data management system to encompass program and educator data.

Baseline data/Actuals: 2022 development began

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
n/a	Gap analysis completed			Select vendor	Data system fully implemented

Benchmark: By FY2024, define required outputs of new data system.#

II. Secondary program quality, performance and technical assistance visits. Baseline data/Actuals: FY2022 – Resume program quality visits.

FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	FY24 (2023-2024)	Benchmark FY25	Benchmark FY29
n/a	125 of 933 = 13%	336 of 945 = 36%		45% over five years	60% over five years

Benchmark: All secondary programs are subject to a visit on a 5-year rotation.

<u>Objective D:</u> Funding Quality Programs Secondary and postsecondary programs will include key components that meet the definition of a quality program and are responsive to the needs of business and industry.

Performance Measure:

I. Develop and implement a secondary program assessment model that clearly identifies the elements of a quality program.

Baseline data/Actuals: FY2017: Develop a plan for program assessment.

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
Used stakeholder feedback used to develop Program Quality Measures. Piloted model.	Program review documents were piloted and final documents included feedback. Programs (25) started			Implement in FY2023	Fully implemented

using new documents.		
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Benchmark: Identify schedule to comprehensively assess high quality secondary CTE programs with qualitative and quantitative review. This Program Quality Initiative is a subset of the Division's overall secondary program review process.

<u>Objective E:</u> Create systems, services, resources, and operations that support high performing students in high performing programs and lead to positive placements.

Performance Measures:

I. Secondary student pass rate for Technical Skills Assessment (TSA). Baseline data/Actuals: Baseline FY17 – 56

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
65.6	67.6			68.3	TBD

Benchmark: 68.3 pass rate by FY2024.₩

II. Positive placement rate of secondary concentrators (includes postsecondary education, advanced training, military, service program or employment). Baseline data/Actuals: Baseline FY15 94.1

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
87.9	95.0			95	95

Benchmark: Maintain placement rate at or above 95 percent.*

III. Implementation of competency-based SkillStack® microcredentials for all relevant programs of study.

Baseline data/Actuals: Baseline FY16 - 0

FY21	F Y22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
54 of 54 = 100%	51 of 55 = 93%			100%	100%

Benchmark: By FY2025, implement SkillStack® for 100 percent of programs.*i

IV. Number of programs that align with industry driven standards and outcomes. Baseline data/Actuals: FY2017 Actual – 37

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
54 of 54 = 100%	55 of 55 = 100%			100%	100%

Benchmark: Align 100 percent of programs by FY2024.

Goal 2

Educational readiness

Provide a rigorous, uniform, and thorough education that empowers students to be lifelong learners and prepares all students to fully participate in their community, and postsecondary and workforce opportunities by assuring they are ready to learn at the next educational level.

Objective A: Increased retention of qualified career technical education instructors.

Performance Measure:

I. <u>Number and percent of instructors with limited occupation specialist certificates earning</u> their standard occupational specialist certificate within three years or based on cohort year. *Baseline data/Actuals:* TBD

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28

Benchmark: TBD (New Measure)

<u>Objective A:</u> Workforce Training – Non credit training will provide additional support in delivering skilled talent to Idaho's employers.

Performance Measure:

I. The percent of Workforce Training students who complete their short-term training. Baseline data/Actuals: FY2018 Identify Baseline

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
90	92	89		90	90

Benchmark: 90 percent average completion.**

<u>**Objective B:**</u> Adult Education programs will assist adults in becoming literate and obtaining the knowledge and skills necessary for employment and economic self-sufficiency.

Performance Measure:

 Percent of participating students making measurable improvements in basic skills necessary for employment, college, and training (i.e. - literacy, numeracy, English language, and workplace readiness).
Baseline data/Actuals: FY2016 – 23

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY25	FY29
22%	32%	37%		TBD- negotiated in the spring	TBD

Benchmark: By FY2025, xx% of participating students make measurable progress.viii

<u>Objective C: Centers for New Directions (CND)</u> – CNDs will help foster positive student outcomes, provide community outreach events and workshops, and collaborate with other agencies.</u>

Performance Measure:

I. Percent of positive outcomes/retention that lead to completing a CTE program of study, entering employment or continuing their training. Baseline data/Actuals: FY 2016 – 89

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
58	67			67	69

Benchmark: 67% positive outcome rate annually.ix

Goal 3

Educational attainment

Idaho's public colleges and universities will award enough degrees and certificates to meet the education and forecasted workforce needs of Idaho residents necessary to survive and thrive in the changing economy.

<u>Objective A:</u> Talent Pipelines/Career Pathways — CTE students will successfully transition from postsecondary education to the workplace through a statewide career pathways model.

Performance Measures:

I. Positive placement rate of postsecondary program completers (includes additional postsecondary education, advanced training, military, service program or employment). Baseline data/Actuals: Baseline FY15 84.7

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
91.0	92.0	93.2		95	95

Benchmark: Maintain placement rate at or above 95 percent.*

II. The percent of secondary CTE concentrator graduates who enroll in a postsecondary institution.

Baseline data/Actuals: Baseline FY17 - 35.5

FY21	FY22	FY23	FY24	Benchmark	Benchmark
(2020-2021)	(2021-2022)	(2022-2023)	(2023-2024)	FY24	FY28
49.0	50.0	48.1		60	60

Benchmark: 60 percent by FY2024.*i

Objective B: Increase completion of microcredentials.

Performance Measure:

I. Total number of microcredentials earned/awarded for non-secondary students.

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Baseline data/Actuals: FY2020 – Identify Baseline

FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	FY24 (2023-2024)	Benchmark FY25	Benchmark FY29
280	360	879		1,099 (25% Improvement)	1,319 (50% Improvement)

Benchmark: By FY2029, 50% improvement of non-secondary students earning microcredentials.xii

Goal 4

Workforce Readiness

The educational system will provide an individualized environment that facilitates the creation of practical and theoretical knowledge leading to college and career readiness.

Objective A: CTE concentrators will demonstrate college and career readiness.

Performance Measure:

I. Percent of secondary concentrators who meet workforce readiness and CTE diploma requirements.

Baseline data/Actuals: Baseline FY22 - 25%

FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	FY24 (2023-2024)	Benchmark FY25	Benchmark FY29
n/a	1,685 of 6,806 = 25%	2,394 of 7,035 = 34%		40%	60%

Benchmark: 60% of secondary concentrators earn workforce readiness and CTE diploma by 2029.xiii

<u>**Objective B:**</u> Increase use of microcredential platform by CTE instructors for tracking student progress for pathway completion.

Performance Measure:

I. Percent of secondary CTE concentrator teachers that actively track student progress through the microcredential platform.

Baseline data/Actuals: FY2020 - Identify Baseline

FY21 (2020-2021)	FY22	FY23	FY24	Benchmark	Benchmark
	(2021-2022)	(2022-2023)	(2023-2024)	FY25	FY29
147/426= 35%	202/430= 47%	252/453= 56%		75%	90%

Benchmark: 90% of secondary CTE concentrator instructors track progress by 2029.

Key external factors

- Lack of knowledge, perceptions, and stigma regarding career opportunities available through career technical education. As the labor market and overall economic conditions improve, fewer students are expected to enroll in postsecondary CTE programs.
- Policies, practices, legislation, and governance external to IDCTE.
- Ability to attract and retain qualified instructors, particularly those who are entering teaching from industry.

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• Timely access to relevant, comprehensive, and accurate data from external reporting sources affects the ability of IDCTE to conduct statewide data analyses.

Evaluation process

Objectives will be reviewed at least annually (more frequently if data is available). The IDCTE Leadership Team will review the data in terms of its alignment with objectives and assess progress toward reaching benchmarks. As necessary, the team will identify barriers to success, strategies for improvement, and any additional resources necessary to make measurable progress. As appropriate, IDCTE will make requests through its budget and legislative requests to support the agency's goals and objectives.

⁺Based on survey results intended to improve communication and feedback with secondary and postsecondary stakeholders. FY20 results only include a response from secondary stakeholders.

[#]Based on IDCTE goal to improve data accuracy and reduce reporting burden on districts.

[#]Based on IDCTE goal to improve program assessment process. Counts do not include program reviews conducted during desk audits. Visits include the following approved programs: clusters, pathways, middle school and individualized occupational training.

* Federally negotiated benchmark. Five year benchmark unavailable due to federal timeline.

* Based on IDCTE goal to ensure high placement rates for CTE programs. Based on students who participated in follow up survey.

** IDCTE goal to coincide SkillStack® rollout with the completion of program alignment and standard setting. ** Based on goal to ensure high completion rate for short term training and to better meet workforce needs by increasing the talent pipeline.

viii Federally negotiated benchmark. Results lower due to COVID-19. Five-year benchmark unavailable due to federal timeline.

* Based on goal of continuing current outcome rates. Results lower due to COVID-19.

* Based on IDCTE goal to ensure high placement rates for CTE programs. Based on students who participated in follow up survey.

* Based on goal to improve positive placement rate at the secondary level and to better meet workforce needs by increasing the talent pipeline. Data includes students identified through National Clearinghouse data. This matches OSBE methodology.

xⁱⁱ Non-secondary students include those associated with workforce training centers, Idaho Department of Correction/Juvenile Corrections and other educational entities outside of secondary programs.

xiii Numbers are reported by the districts and include duplicate students if students belong to more than one pathway and earn criteria for the diploma in multiple pathways.

Updated March 2024

College of Western Idaho Strategic Plan 2025 – 2029

STATUTORY AUTHORITY

This plan has been developed in accordance with Northwest Commission on Colleges and Universities (NWCCU) and Idaho State Board of Education standards. The statutory authority and the enumerated general powers and duties of the Board of Trustees of a junior (community) college district are established in Sections 33-2101, 33-2103 to 33-2115, Idaho Code.

MISSION STATEMENT

College of Western Idaho is committed to empowering students to succeed by providing affordable and accessible education to advance the local and global workforce.

VISION STATEMENT

The College of Western Idaho will be a best-in-class community college that provides quality, affordable, and accessible education by delivering innovative and cost-effective programming that empowers students, leads to economic and social mobility, and meets evolving community needs.

GOAL 1: Student Success

CWI values its students and is committed to supporting their success in reaching their educational and career goals.

Objective 1A: Advance Student Success by Optimizing the Student Lifecycle

Performance Measures:

FY19 (2018-FY20 (2019-FY21 (2020-FY22 (2021-**Benchmark** FY23 (2022-2019) 2020) 2021) 2022) 2023) **FY25 FY29** Degrees 906 956 951 1,037 991 >=1,000 >=1,121 Certificates of at least 1 year 324 302 347 332 277 >=300 >=350 (1,164 w/Gen. (538 w/Gen. (1.286 w/Gen. (1.327 w/Gen. (1.148 w/Gen. Ed awards) Ed awards) Ed awards) Ed awards) Ed awards)

I. Number of degrees/certificates produced annually (IPEDS Completions)

Benchmark (state-wide performance measure): Number of degrees produced annually (IPEDS completions) will meet or exceed 1,121 degrees by 2029. The benchmark was established based on past years' performance and with the intent of being a stretch goal that is specific, measurable, attainable, relevant, and time-bound (SMART).

Benchmark (state-wide performance measure): Number of certificates of at least one year produced annually (IPEDS completions) will be meet or exceed 350 certificates by 2029. The benchmark was established based on past years' performance and with the intent of being a stretch goal that is specific, measurable, attainable, relevant, and time-bound (SMART).

n. number								
FY19 (2018-	FY20 (2019-	FY21 (2020-	FY22 (2021-	FY23 (2022-	Ben	chmark		
2019)	2020)	2021)	2022)	2023)	FY25	FY29		
			Degrees					
880	924	920	1,009	962	>=970	>=1,087		
		Certificate	s of at least 1 ye	ear				
268	287	261	241	227	>=240	>=280		
(481 w/Gen. Ed	(1,218 w/Gen.	(1,090 w/Gen.	(1,260 w/Gen.	(1,096 w/Gen.				
awards)	Ed awards)	Ed awards)	Ed awards)	Ed awards)				

II. Number of unduplicated graduates (IPEDS Completions)

Benchmark (state-wide performance measure): Number of unduplicated graduates with degrees (IPEDS completions) will be greater than or equal to 1,087 by 2029. The benchmark was established based on past years' performance and with the intent of being a stretch goal that is specific, measurable, attainable, relevant, and time-bound (SMART).

Benchmark (state-wide performance measure): Number of unduplicated graduates with certificates of at least one year (IPEDS completions) will be greater than or equal to 280 by 2029. The benchmark was established based on past years' performance and with the intent of being a stretch goal that is specific, measurable, attainable, relevant, and time-bound (SMART).

III. Percentage of students completing 30 or more credits per academic year

FY19 (2018-	FY20 (2019-	FY21 (2020-	FY22 (2021-	FY23 (2022-	Benc	hmark
2019)	2020)	2021)	2022)	2023)	FY25	FY29
5%	4%	4%	4%	4%	>=5%	>=7%

Benchmark (state-wide performance measure): Percentage of students completing 30 or more credits per academic year will meet or exceed 7% by 2029. The benchmark was established based on past years' performance and with the intent of being a stretch goal that is specific, measurable, attainable, relevant, and time-bound (SMART).

IV. Percentage of first-time, full-time degree/certificate seeking students who graduate within 150% of time (IPEDS Graduation Rates)

FY19 (2018-	FY20 (2019-	FY21 (2020-	FY22 (2021-	FY23 (2022-	Benchmark	
2019)	2020)	2021)	2022)	2023)	FY25	FY29
Fall Cohort	>=30%	>=33				
2016	2017	2018	2019	2020		
22%	23%	25%	27%	27%		

Benchmark (state-wide performance measure): Percentage of first-time, full-time degree/certificate seeking students who graduate within 150% of time (IPEDS Graduation Rates) will meet or exceed 33% by 2029. The benchmark was established based on past years' performance and with the intent of being a stretch goal that is specific, measurable, attainable, relevant, and time-bound (SMART).

V .	Percentage of first-time, full-time degree/certificate seeking students who graduate within
	100% of time (IPEDS Graduation Rates)

FY19 (2018-	FY20 (2019-	FY21 (2020-	FY22 (2021-	FY23 (2022-	Benchmark	
2019)	2020)	2021)	2022)	2023)	FY25	FY29
Fall Cohort	Fall Cohort	Fall Cohort	Fall Cohort	Fall Cohort	>=20% >=23%	
2017	2018	2019	2020	2021		
13%	14%	16%	15%	19%		

Benchmark (state-wide performance measure): Percentage of first-time, full-time degree/certificate seeking students who graduate within 100% of time (IPEDS Graduation Rates) will meet or exceed 23% by 2029. The benchmark was established based on past years' performance and with the intent of being a stretch goal that is specific, measurable, attainable, relevant, and time-bound (SMART).

VI. Percentage of degree seeking students taking a remedial course who complete a subsequent credit bearing course with a C or higher within one year of remedial enrollment

FY19 (2018-	FY20 (2019-	FY21 (2020-	FY22 (2021-	FY23 (2022-	Benchmark	
2019)	2020)	2021)	2022)	2023)	FY25	FY29
English: 70% Math: 23%	English: 74% Math: 27%	English: 70% Math: 25%	English: 64% Math: 25%	English: 65% Math: 30%	English: >=70% Math:	English: >=74% Math:
					>=35%	>=39%

Benchmark (state-wide performance measure): Percentage of degree seeking students taking a remedial course who complete a subsequent credit bearing course with a C or higher within one year of remedial enrollment will meet or exceed 74% for English and 39% for Math by 2029. The benchmark was established based on past years' performance and with the intent of being a stretch goal that is specific, measurable, attainable, relevant, and time-bound (SMART).

VII. Percentage of first-time degree seeking students completing a gateway math course within two years of enrollment

FY19 (2018-	FY20 (2019-	FY21 (2020-	FY22 (2021-	FY23 (2022-	Benchmark	
2019)	2020)	2021)	2022)	2023)	FY25	FY29
24%	27%	31%	30%	32%	>=34%	>=38%

Benchmark (state-wide performance measure): Percentage of first-time degree seeking students completing a gateway math course within two years of enrollment will meet or exceed 38% by 2029. The benchmark was established based on past years' performance and with the intent of being a stretch goal that is specific, measurable, attainable, relevant, and time-bound (SMART).

Key External Factors

There are a number of key external factors that can have significant impact on CWI's ability to fulfill the mission and institutional priorities in the years to come. Some of these include:

- Continued revenue. 36% of CWI's total revenue comes from State of Idaho provided funds (General Fund, CTE, and Liquor Fund). Maintaining parity with the state's other community colleges is a stated objective within our strategic plan. Ongoing state funding is vital to the continued success of CWI.
- Enrollment. CWI is actively engaged in recruiting and retention efforts in all areas of student enrollment. With nearly 30% of revenue generated from student tuition and fees, it is critical that CWI reach out in meaningful ways to its service area to support ongoing learning opportunities for the community and maintain fiscal stability for the college.

Evaluation Process

The College of Western Idaho is currently operating in its Comprehensive Strategic Plan for 2024-2026 and created associated performance metrics and benchmarks. Evaluations are initiated at regular intervals, the scope and timing of which are determined by the lifecycle of the necessary processes and the impact to our students and institution.

When improvements are determined to be necessary, scope and impact to the student or business processes are then evaluated, desired outcomes are determined, and a stated goal is formulated and then measured against existing goals or strategies to determine if it can be incorporated into existing structure or would be stand alone in nature. Once a new goal is incorporated, an evaluative process will be created, benchmarking will be established and recurring evaluations made.



FY 2025-2029 STRATEGIC PLAN

MISSION STATEMENT

We harness the power of public media to encourage lifelong learning, connect our communities, and enrich the lives of all Idahoans. We tell Idaho's stories.

VISION STATEMENT

Inspire, enrich and educate the people we serve, enabling them to make a better world.

SBoE GOAL 1: EDUCATIONAL READINESS (student-centered)

Provide a rigorous, uniform, and thorough education that empowers students to be lifelong learners and prepares all students to fully participate in their community and postsecondary and workforce opportunities by assuring they are ready to learn at the next educational level.

IdahoPTV Objective:

Objective: Be a relevant, educational and informational resource to all citizens.

Performance Measures:

I. Number of educational outreach and training events for teachers, students and parents.¹

I	FY20	FY21	FY22	FY23	FY24	Benchmark	
	(2019-	(2020-	(2021-	(2022-	(2023-		
	2020)	2021)	2022)	2023)	2024)	FY25	FY29
	101	58	135	97		120	150

II. Average number per month during the school year of local unique users utilizing PBS learning media.²

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-		
2020)	2021)	2022)	2023)	2024)	FY25	FY29
7,137	9,997	7,567	7,059		7,000	7,000

SBoE Goal 2: EDUCATIONAL ACCESS

Increase access to Idaho's robust educational system for all Idahoans, regardless of socioeconomic status, age, or geographic location.

IdahoPTV Objectives:

<u>Objective A:</u> Maintain a digital statewide infrastructure in cooperation with public and private entities.

Performance Measures:

. Number of L	Number of DTV translators. ³										
FY20 FY21 FY22 FY23 FY24 Benchmark											
(2019-	(2020-	(2021-	(2022-	(2023-							
2020)	2021)	2022)	2023)	2024)	FY25	FY29					
46	46	46	46		46	46					

II. Percentage of Idaho's population within our signal coverage area.⁴

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-		
2020)	2021)	2022)	2023)	2024)	FY25	FY29
98.8%	98.8%	98.9%	98.9%		98.9%	98.9%

<u>Objective B:</u> Nurture and foster collaborative partnerships with other Idaho state entities and educational institutions to provide services to the citizens of Idaho.

Performance Measure:

Number of partnerships with other Idaho state entities and educational institutions.⁵

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-		
2020)	2021)	2022)	2023)	2024)	FY25	FY29
41	55	68	129		50	75

<u>Objective C:</u> Provide access to IdahoPTV new media content to citizens, anywhere, that supports participation and education.

Performance Measures:

I. Number of visitors to our websites.⁶

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-		
2020)	2021)	2022)	2023)	2024)	FY25	FY29
1,635,238	1,979,811	857,687	880,086		600,000 600,000	

II. Number of visitors to IdahoPTV/PBS video player.⁷

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-		
2020)	2021)	2022)	2023)	2024)	FY25	FY29
504,332	915,331	1,900,128	1,925,505		1,500,000	1,500,000

III. Number of alternative delivery platforms and applications on which our content is delivered.⁸

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-		
2020)	2021)	2022)	2023)	2024)	FY25	FY29
12	13	14	15		16 16	

<u>Objective D:</u> Broadcast educational programs and provide related resources that serve the needs of Idahoans, which include children, ethnic minorities, learners, and teachers.

Performance Measure:

Г		aucast nours	or educationa	ai programmi	ig. ²		
	FY20	FY21	FY22	FY23	FY24	Bench	mark
	(2019-	(2020-	(2021-	(2022-	(2023-		
	2020)	2021)	2022)	2023)	2024)	FY25	FY29
	24,853	24,918	23,835	23,228		22,000	22,000

Number of broadcast hours of educational programming.⁹

Objective E: Contribute to a well-informed citizenry.

Performance Measure:

Number of broadcast hours of news, public affairs and documentaries.¹⁰

FY20	FY21	FY22	FY23	FY24	Bench	mark
(2019-	(2020-	(2021-	(2022-	(2023-		
2020)	2021)	2022)	2023)	2024)	FY25	FY29
11,947	12,329	11,876	11,628		12,000	12,000

Objective F: Provide relevant Idaho-specific information.

Performance Measure:

Number of broadcast hours of Idaho-specific educational and informational programming.¹¹

FY20	FY21	FY22	FY23	FY24	Bench	mark
(2019-	(2020-	(2021-	(2022-	(2023-		
2020)	2021)	2022)	2023)	2024)	FY25	FY29
1,393	2,431	1,592	1,552		1,600	1,600

Objective G: Provide high-quality, educational television programming and new media content.

Performance Measure:

Number of awards for IdahoPTV media and services.¹²

FY20 (2019-	FY21 (2020-	FY22 (2021-	FY23 (2022-	FY24 (2023-	Bench	mark
2020)	2021)	2022)	2023)	2024)	FY25	FY29
68	81	67	73		55	55

Objective H: Operate an effective and efficient organization.

Performance Measures:

I. Total FTE in content delivery and distribution.¹³

FY20 (2019-	FY21 (2020-	FY22 (2021-	FY23 (2022-	FY24 (2023-	Bench	mark
2020)	2021)	2022)	2023)	2024)	FY25	FY29
18	18	16.8	17.8		<24	<24

II. Successfully comply with FCC policies/PBS programming, underwriting and membership policies/CPB guidelines.¹⁴

	FY20 (2019-2020)	FY21 (2020-2021)	FY22 (2021-2022)	FY23 (2022-2023)	FY24 (2023	Benc	hmark
	、 , ,	, , ,	· · · ·	· · · ·	`_ 2024)	FY25	FY29
ľ	Yes/Yes/Ye	Yes/Yes/Ye	Yes/Yes/Ye	Yes/Yes/Ye		Yes/Yes/Ye	Yes/Yes/Ye
	S	S	S	S		S	S

KEY EXTERNAL FACTORS

Funding – Idaho Public Television's funding depends upon a combination of State General Funds; an annual grant from the Corporation for Public Broadcasting that receives its revenue from Congress; Federal grants; and private donations from individuals, corporations and foundations. All four of these sources are subject to changes in economic conditions, political considerations, and competition from other non-profits and government entities. Historically the largest portion of funding for Idaho Public Television comes from voluntary private contributions. Idaho Public Television ranks in the top one-third of Public Broadcasting Service (PBS) stations nationwide for overall donor revenue and donor retention. Average contribution per donor is \$152.29 per year. Philanthropic giving is directly affected by many external factors such as global events, federal and state charitable giving laws, and inflated cost-of-living factors that diminish discretionary giving budgets. In FY 2024 IdahoPTV received funding for infrastructure projects from the Idaho Permanent Building Fund Advisory Council to replace aging transmitters and antennas at four of five of our hilltop sites around the state. Although these funds are helpful and are used to replace vital infrastructure projects for broadcasting content they also assist with public safety aspects of our work.

Regulatory Changes – With the greatest portion of Idaho Public Television funding coming from private contributions, the changes to federal tax policy have the distinct potential to negatively impact charitable giving. In addition, Idaho Public Television operates under numerous other rules and regulations from entities such as the Federal Aviation Administration, Federal Communications Commission, Department of the Interior, Department of Agriculture, Department of Education, Department of Homeland Security, and others. Changes to those policies and regulations could impact operations.

Broadband/New Media Devices – As viewers increasingly obtain their video content via new devices (computers, tablets, smartphones, smart TVs, etc.), in addition to traditional broadcast, cable and satellite, Idaho Public Television must invest in the technology to meet our viewers' needs and to make sure our content and services are available when and where viewers want to access them. The ability of public television stations to raise private contributions and other revenue via these new platforms continues to be a significant challenge.

ATSC 3.0 – Recently, the FCC adopted standards for a new, improved television technology. Like the move from analog to digital, this new standard will make all previous television equipment obsolete for both the broadcaster and the consumer. Currently, adoption of this new standard is voluntary, but we expect that eventually it will become mandatory. Planning for this new standard is already underway; and as equipment is replaced, every effort is being made to ensure it is upgradable to the new standard. Significant new funding will need to be obtained to

make this technology change happen. There will be small competitive federal grants to assist stations to transition equipment to this new standard, which is tied to public safety.

Political Environment – In 2022 the Idaho GOP drafted and passed a resolution encouraging "the Idaho Legislature to divest the State of Idaho from Idaho Public Television in such a way that allows continued operation in the private sector AND does not hinder State-originated EAS service to the public." While this may pose a challenge at some point in the future, it also provides IdahoPTV with an opportunity to educate and inform legislators on the importance of IdahoPTV's role in the statewide Emergency Alert System (EAS).

Aging Equipment and Public Safety – Much of the equipment in our statewide broadcast network has been depreciated, and the expected lifespan has been surpassed. A long-range plan and funding strategy have been developed, and we are looking at avenues in state government, private and federal grants, as well as other private funds, to support capital replacement. IdahoPTV is working closely with the Idaho Military Division-Public Safety Communications to ensure that digital microwave connectivity for our signal and that of first responders is available. We work with Idaho Office of Emergency Management to build upon existing strategies and explore emerging technologies in emergency communication, an area of mutual interest. This effort seeks to leverage best practices and technological advances to ensure that within their shared service areas, the public is provided with vital emergency information and crisis related communication such as: providing live broadcast and media pool coverage of disaster related events; transmission of mandatory national alerts via the Emergency Alert System, including geo-targeted Amber Alerts, weather and emergency information distributed to all broadcast markets in the state; the backup alert signals for wireless carriers in the state called Wireless Emergency Alerts (WEA), which is currently delivered using PBS' Warning, Alert and Response Network (WARN) and IdahoPTV's infrastructure.

EVALUATION PROCESS

Idaho Public Television uses the following methods to evaluate our services:

We are a member of the Organization of State Broadcasting Executives (OSBE), an association of chief executive officers of state public broadcasting networks, whose members account for almost half of the transmitters in the public television system. OSBE gathers information, keeps years of data on file, and tracks trends. OSBE members are represented on the policy teams for our national organizations, including PBS, America's Public Television Stations, and National Educational Telecommunications Association.

We have a statewide advisory Friends board, currently 28 directors and 16 emeritus directors, with broad community and geographic representation. This board meets formally on a quarterly basis. It serves as a community sounding board to provide input.

Through Nielsen data, Google Analytics, Domo Business Analytics (in partnership with PBS analytics) and other research information, we have access to relevant metrics to make informed and successful marketing and programming decisions. Viewership helps determine which content is most relevant to the community we serve and how to best serve the people of Idaho. We also receive feedback from the community regarding our work. Our production team ascertains issues in the community and uses this information to plan local program productions. We prepare and post on the FCC website lists of programs we air that provide the station's most

significant treatment of community issues. We are also required to submit to the FCC and public all sponsors that appear on our air.

IdahoPTV continues to do qualitative and quantitative research on existing programs. Surveys have been conducted and research has been executed by external entities to design content, define platform use, and metrics for success. It has proved a useful tool to launch a new series or re-engineer an existing one. External groups have provided surveys and analytics, demographic data, environmental scans, content audits and communications plans. We have also used surveys and other analytical tools to look at what our education department is doing for Idaho communities and how people see our work. We see this as a way to better understand and serve all Idahoans on all platforms.

- 3. Benchmark is based on industry standard and the need to reach as many Idahoans as possible via all the content and video technologies.
- 4. Benchmark is based on industry standard and the need to reach as many Idahoans as possible via all the content and video technologies.

^{1.} Benchmark is based on an analysis of historical trends combined with desired level of achievement.

^{2.} Benchmark is based on an analysis of historical trends combined with desired level of achievement.

^{5.} Benchmark is based on an analysis of historical trends combined with desired level of achievement.

^{6.} Benchmark is based on agency research and the need to reach as many Idahoans as possible via all the content and video technologies and to reach younger demographics.

^{7.} Benchmark is based on agency research and the need to reach as many Idahoans as possible via all the content and video technologies and to reach younger demographics.

^{8.} Benchmark is based on agency research and the need to reach as many Idahoans as possible via all the content and video technologies and to reach younger demographics.

^{9.} Benchmark is based on an analysis of historical trends combined with desired level of achievement.

^{10.} Benchmark is based on an analysis of historical trends combined with desired level of achievement.

^{11.} Benchmark is based on an analysis of historical trends combined with desired level of achievement.

^{12.} Benchmark is based on industry standard combined with desired level of achievement.

^{13.} Benchmark is based on industry standard combined with analysis of workforce needs.

^{14.} Benchmark is based on industry standard of best practices.

INFORMATIONAL							
	/	APRIL 17-18, 2024 ATTACHMENT					
	Goal 1: EDUCATIONAL READINESS	Goal 2: EDUCATIONAL ACCESS	Goal 3: EDUCATIONAL ATTAINMENT	Goals Goal 4:	Goal 5:		
Institution/Agency Goals and Objectives							
GOAL 1: EDUCATIONAL READINESS (student- centered) – Provide a rigorous, uniform, and thorough education that empowers students to be lifelong learners and prepares all students to fully participate in their community and postsecondary and workforce opportunities by assuring they are ready to learn at the next educational level.							
Objective: Be a relevant, educational and informational resource to all citizens.	\checkmark						
GOAL 2: EDUCATIONAL ACCESS – Increase access to Idaho's robust educational system for all Idahoans, regardless of socioeconomic status, age, or geographic location.							
Objective A: Maintain a digital statewide infrastructure in cooperation with public and private entities.		\checkmark					
Objective B: Nurture and foster collaborative partnerships with other Idaho state entities and educational institutions to provide services to the citizens of Idaho.		\checkmark					
Objective C: Provide access to IdahoPTV new media content to citizens, anywhere, that supports participation and education.		\checkmark					
Objective D: Broadcast educational programs and provide related resources that serve the needs of Idahoans, which include children, ethnic minorities, learners, and teachers.		\checkmark					
Objective E: Contribute to a well-informed citizenry.		\checkmark					

	APRIL 17-18, 2024	ATTACHMENT 6
Objective F: Provide relevant Idaho-specific information.	✓	
Objective G: Provide high-quality, educational television programming and new media content.	✓	
Objective H: Operate an effective and efficient organization.	✓	
GOAL 3: EDUCATIONAL ATTAINMENT – Idaho's public colleges and universities and career technical education programs fuel a strong workforce pipeline evidenced through a greater numbers of student completing certificates and/or degrees, including workforce credentials.		

CHMENT 7



STRATEGICPLAN 2025-2029

INFORMATIONAL - PPG

TAB 7 Page 1

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Vision

We inspire a passion for knowledge and discovery.

Mission

We engage students through learning and research opportunities that improve the intellectual vigor, cultural vitality, and health of our communities.

Strategic Plan Goals and Objectives

Goal I: Increase Student Access, Opportunity, Retention, and Success

Objective IA: Increase access and enrollment using targeted recruitment efforts

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benc	hmark
						FY2025	FY2029
Fall degree-seeking student e	enrollment						
All students	9,281	9114	9,115	9,087	9,447	9,600	9,800
First-generation students	1,725	1,622	1,570	1,480	1,593	1,650	1,800
Rural Idaho students	2,501	2,485	2,505	2,493	2,642	2,750	2,850
Percent of cost of attendance covered by grant or scholarship aid ^Δ	28%	30%	32%	32%	36%	36%	38%

Objective IB: Improve student retention by strengthening students' ISU experience

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benc	hmark
						FY2025	FY2029
First-time, full-time bachelor degree-seeking student fall to fall retention ^{* Δ}	64%	63%	67%	71%	74%	75%	75%

Objective IB: Improve student retention by stree	gthening students' ISU experience (continued)
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Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benchmark	
						FY2025	FY2029
Percent of undergraduate, degree-seeking students completing 30 or more credits per academic year at the institution reporting *	26%	24%	24%	22%	Available August 2024	28%	32%
Percent of new degree- seeking freshmen completing a gateway math course within two years ⁽⁾	68%	71%	73%	76%	Available August 2024	75%	80%
Percent of undergraduate, degree-seeking students taking a remediation course completing a subsequent credit-bearing course within a year with a "C" or higher *	22%	29%	38%	47%	Available August 2024	50%	54%

Objective IC: Improve ISU's graduation rate

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benchmark	
						FY2025	FY2029
Number of degrees and certificates awarded* ^Δ	2,462	2,756	2,737	2,804	Available August 2024	2,850	3,100
% of total credentials conferred that are STEM field *	15%	15%	13%	14%	Available August 2024	18%	25%
Percent of first-time, full- time freshman graduating within 100% of time *	19%	24%	20%	22%	Available August 2024	25%	30%
Percent of first-time, full- time freshman graduating within 150% of time * [△]	33%	36%	34%	35%	Available August 2024	40%	50%

Goal 2: Strengthen Programmatic Excellence

Objective 2A: Attract, support, ar	d retain outstanding faculty and staff
------------------------------------	--

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benc	hmark
						FY2025	FY2029
Percent of faculty and staff who express satisfaction with Idaho State University as their employer ⁽¹⁾	Not available	74%	Not available	72%	Not available	76%	79%
Professional staff employee retention relative to peers	Not available	6.5%	3.5%	5.6%	Available August 2024	>2%	>4%
Faculty employee retention relative to peers	Not available	9.3%	(.2%)	.2%	Available August 2024	>2%	>4%

 $\hat{\Phi}$ ISU's employee survey is administered biennially.

Objective 2B: Enhance ISU's infrastructure

Performance Measure	FY2020 FY2021	FY2022	FY2023	FY2024	Benchmark		
						FY2025	FY2029
Deferred maintenance expenditures	\$4.8M	\$7.9M	\$7.0M	In process	Available August 2024	\$15.0M	\$24.0M

Objective 2C: Align ISU's programs with community, regional, and national needs

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benc	hmark
						FY2025	FY2029
Number of certificates and other stackable "microcredentials" awarded at Idaho State University	252	327	378	359	Available August 2024	365	385

Objective 2C: Align ISU's programs with community, regional, and national needs (continued)

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benchmark FY2024	
						FY2025	FY2029
Number of ISU graduates with degrees that align with Idaho Department of Labor "Hot Jobs" list	736	759	758	821	Available August 2024	851	883
Percentage of KDHS programs where the first- time pass rate is 80% or higher on national exams	94%	75%	76%	In process	Available August 2024	92%	95%

Goal 3: Cultivate External Partnerships

Objective 3A: Maximize the impact of new and existing regional partnerships in support of ISU's mission

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Bend	chmark
						FY2025	FY2029
Number of external entities providing student education funding Φ				In developr	ment		
Percentage of off- campus Career Path Internship placements	18%	17%	30%	32%	Available August 2024	35%	40%

 $^{\oplus}$ We are in the process of developing a method for collecting this data and establishing benchmarks.

Objective 3B: Expand collaborations with K-12 and post-secondary educational institutions

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benc	hmark
						FY2025	FY2029
Transfer rates from Idaho Community Colleges to Idaho State University	196	224	225	245	Available August 2024	250	280
Early College program enrollment	3,810	3,485	3,769	4,042	Available August 2024	4,200	4,500

Goal 4: Expand Research, Clinical, and Creative Activities

Objective 4A: Enhance faculty's ability to initiate research and innovative projects

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benchmark	
						FY2025	FY2029
F&A distributed to colleges, researchers, and PIs	\$1.0M	\$1.0M	\$1.2M	\$1.5M	Available August 2024	\$1.9M	\$2.8M
Three-year rolling average of external grant proposals submitted.	338	336	296	286	Available August 2024	320	340

Objective B: Increase productivity in research, scholarly, and creative activities

Performance Measures	FY2020 FY2021	FY2022	FY2023	FY2024	Benchmark		
						FY2025	FY2029
Total annual research expenditures [△]	\$15.2M	\$15.7M	\$17.2M	In process	Available August 2024	\$18.0M	\$19.0M

Objective C: Engage students in Interprofessional Educational and/or clinical research

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benchmark	
						FY2025	FY2029
Percent of KDHS students that participate in interprofessional education/clinical research opportunities	41%	84%	92%	83%	Available August 2024	94%	96%
Percent of KDHS faculty that participate in interprofessional education/clinical research opportunities	89%	84%	85%	78%	Available August 2024	90%	92%

Objective D: Enhance ISU student research, clinical, and creative opportunities

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Bend	chmark
						FY2025	FY2029
Number of ISU students participating in undergraduate or graduate research/creative activity symposia/events	81	96	116	In process	Available August 2024	150	180
Number of theses and dissertations completed $\hat{\Phi}$				In developr	nent		

 igodol We are in the process of collecting this data and establishing benchmarks.

Goal 5: Energize the Bengal Community

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benchmark	
						FY2025	FY2029
Student employment FTE							
Career Path Internship	105.1	95.0	89.5	86.6	Available	88.0	95.0
College Work Study	11.6	9.2	7.9	7.5	August	9.0	10.0
Graduate Assistant	81.8	80.5	87.6	89.6	2024	90.0	92.0
Other Student Employment	<u>179.9</u>	<u>130.6</u>	<u>130.6</u>	<u>136.6</u>		<u>138.0</u>	<u>140.0</u>
Total	378.4	315.3	315.6	320.3		325.0	337.0
Number of students who participate in student events and activities [®]	In development						

Objective A: Enhance student life and engagement

 $^{\oplus}$ We are in the process of developing a method for collecting this data and establishing benchmarks.

Objective B: Increase faculty and staff connection, e	engagement, an	recognition
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Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benchmark FY2024	
						FY2025	FY2029
Number of faculty and staff nominees for the Be a Bengal Program	113	64	78	82	Available August 2024	120	140
ISU employee contributions to Bengal Giving Day	Not available	Not available	239	253	Available April 2024	275	300
Employee attendance at University Town Halls $^{\oplus}$	In development						
ISU Today open rates $^{\hat{\mathbb{O}}}$	In development						

 $^{\hat{\Phi}}$ We are in the process of developing a method for collecting this data and establishing benchmarks.

Objective C: Increase alumni connections to and participation with ISU

Performance Measures	FY2020 FY2021 FY2022	FY2021	FY2021	FY2020 FY2021	FY2022	FY2022	FY2023	FY2023 FY2024	Benchmark	
						FY2025	FY2029			
Foundation fundraising - cash and new commitments, excluding government entities and anomalous gifts (greater than \$1 million)	\$13.5M	\$9.3<	\$11.0M	\$12.9M	Available August 2024	\$14M	\$20M			
Alumni participation in ISU events	12,743	14,891	24,692	In process	Available August 2024	26,000	28,000			

Objective D: Increase ISU's impact on its communities

Performance Measures	FY2020	FY2021	FY2022	FY2023	FY2024	Benchmark 124	
						FY2025	FY2029
Number of ISU Clinics and Pharmacy clients served**	46,175	44,204	50,784	50,460	Available August 2024	51,500	53,000
Continuing Education and Workforce Training enrollment ^Δ	8,327	16,317	21,413	23,657	Available August 2024	25,000	30,000
Key External Factors

Several external factors affect Idaho State University's ability to achieve strategic plan goals, to include:

- Extraordinary inflation in wages, materials, and services and unfunded CEC have been outpacing state support levels for several years
- Idaho's low go-on rates and increasing external competition for Idaho students
- Increased compliance, reporting, and administrative burdens

Evaluation Process

Idaho State University has implemented a new <u>Planning and Institutional Effectiveness Framework</u>, designed to support and further ISU's mission. The integrated framework forms the basis for ongoing and systematic assessment, adaptation, and improvement.

Throughout FY2024, the Planning and Institutional Effectiveness Steering Committee has reviewed and streamlined elements of the framework to support our accreditation and strategic plan more seamlessly. As part of this effort, we have identified nine high-level "Mission Fulfillment Measures" and developed online dashboards that show longitudinal progress toward established thresholds. We have also updated our strategic plan objectives and performance measures to 1) align with Mission Fulfillment Measures, 2) reflect State Board of Education system-wide measures, and 3) focus on measurable outcomes.

On an annual basis, the Planning and Institutional Effectiveness Steering Committee reviews progress toward mission fulfillment and strategic plan goals and objectives, reports on progress to Administrative Council, Leadership Council, and the campus community, and recommends priority actions to address performance gaps and opportunities.

Appendix A: Alignment with State Board of Education Goals

	Stat	e Board of Education G	oals						
	Goal I: Educational Readiness	Goal 2: Educational Access	Goal 3: Educational Attainment						
Idaho State University									
Goal I: Increase student access, opportun	ity, retention, and succe	SS							
Increase access and enrollment using targeted recruitment efforts		X							
Improve student retention by strengthening students' ISU experience		x	Х						
Improve ISU's graduation rate			х						
Goal 2: Strengthen programmatic excellence									
Attract, support, and retain outstanding faculty and staff			Х						
Enhance ISU's infrastructure		x	x						
Align ISU's programs with community, regional, and national needs		×	Х						
Goal 3: Cultivate external partnerships									
Maximize the impact of new and existing relationships and partnerships to support ISU's mission		x	X						
Expand collaborations with K-12 and post-secondary educational institutions		х	Х						
Goal 4: Expand research, clinical, and crea	itive activities								
Enhance faculty's ability to initiate research and innovative projects			Х						
Increase productivity in research, scholarly, and creative activities			X						
Engage students in Interprofessional Education and/or clinical research		X	X						

ATTACHMENT 7

	State Board of Education Goals								
	Goal I: Educational Readiness	Goal 2: Educational Access	Goal 3: Educational Attainment						
Idaho State University									
Goal 4: Expand research, clinical, and creative activities (continued)									
Enhance ISU student research, clinical, and creative opportunities		×	Х						
Goal 5: Energize the Bengal community									
Enhance student life and engagement		×	х						
Increase faculty and staff connection, engagement, and recognition			х						
Increase alumni connections to and participation with ISU		×	x						
Increase ISU's impact on its communities		x	Х						

Appendix B: Special Appropriations Strategic Plans

Idaho Dental Education Program

Vision

The Idaho Dental Education Program envisions an elite educational program; graduating competent and ethical dentists who benefit the residents of Idaho as professionals.

Mission

The Mission of the Idaho Dental Education Program is to provide Idaho residents with access to quality educational opportunities in the field of dentistry. We provide Idaho with outstanding dental professionals through a combination of adequate access for residents and the high quality of education provided. The graduates of the Idaho Dental Education Program will possess the ability to practice today's dentistry. Furthermore, they will have the background to evaluate changes in future treatment methods as they relate to providing outstanding patient care.

Goal I: Provide access to a quality dental education for qualified Idaho residents

Performance Measures	FY2020 FY2021		FY2022	FY2023	FY2024	Benchmark	
						FY2025	FY2029
Contract for 4-year dental education for at least 8 Idaho residents	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of students enrolled in the program	8	8	8	8	8	9	10

Objective A: Access - Provide dental education opportunities for Idaho residents

Department of Family Medicine

Vision

To improve lives by serving on the forefront of healthcare and education.

Mission

Through interprofessional clinical education we develop compassionate, skilled healthcare providers who better lives and communities.

Goal I: Expand to a new facility

Objective A: Establish an expanded, modern interprofessional healthcare training facility.

Performance Measures	FY2020 FY202		I FY2022	FY2023	FY2024	Benchmark		
						FY2025	FY2029	
Identification of new site	N/A	N/A	In progress	In progress	In progress	Site identified	N/A	
Completion of new site	N/A	N/A	N/A	N/A	N/A	N/A	Complete	

Idaho Museum of Natural History

Vision

To shape the future by understanding Idaho's natural history and creating unforgettable educational experiences.

Mission

Inspire appreciation and curiosity for Idaho's natural history through its exploration and preservation.

Goal I: Demonstrate the IMNH's essential value

Objective A: Increase the museum's audience and engagement with customers, collaborators, and partners.

Performance Measure	FY2020	FY2021	021 FY2022	FY2023	FY2024	Benchmark	
						FY2025	FY2029
Annual museum visitors	6,085*	6,575*	8,117	8,619	Available August 2024	9,350	10,000

* COVID impacts

Appendix C: Objective and Performance Measure Updates

In FY2024, ISU's Planning and Institutional Effectiveness Steering Committee updated strategic plan objectives and performance measures to 1) align with Mission Fulfillment Measures, 2) reflect State Board of Education system-wide measures, and 3) focus on measurable outcomes. We also removed goals and time horizons from indicator language as these are reflected in benchmarks. These updates are reflected in the following redline.

Goal I: Increase student access, opportunity, retention, and success.

Objective I.I.A: Increase access and enrollment using targeted recruitment efforts

Measures:

1.1.a. Increase by 7% the total number of enrolled degree-seeking students by FY2028.

- I.A.I Fall degree-seeking student enrollment: all students Rationale: Clarified that these enrollment data are for fall term, removed goals and time horizons from indicator language as they are reflected in benchmarks
- 1.1.b. Increase by 7.5% first-generation student enrollment rates by FY2028
- 1.A.2 Fall degree-seeking student enrollment: first-generation students Rationale: Clarified that these enrollment data are for fall term, removed goals and time horizons from indicator language as they are reflected in benchmarks
- 1.1.c Increase by 5% the enrollment rate of the number of undergraduate students from rural Idaho by FY28
- 1.A.3 Fall degree-seeking student enrollment: rural Idaho students Rationale: Clarified that these enrollment data are for fall term, removed goals and time horizons from indicator language as they are reflected in benchmarks
- 1.A.4 Percent of cost of attendance covered by grant or scholarship aid (New) Rationale: This is a Mission Fulfillment measure and correlates to access and retention (enrollment).

Objective 1.2 B: Improve student retention by strengthening student's ISU experience

- 1.2.a Increase by 7% the fall-to-fall, full-time, first-first time bachelor degree-seeking retention rate by FY28
- I.B. I First-time, full-time bachelor degree-seeking student fall to fall retention Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks. Aligned indicator language with Mission Fulfillment and State Board of Education language.

- 1.2.b Increase by 7% the percent of new degree-seeking freshmen completing a gateway math course within two years by FY28
- 1.B.2 Percent of undergraduate, degree-seeking students completing 30 or more credits per academic year at the institution (new)

Rationale: Moved up from Objective C (Graduation Rate)

- 1.B.3 Percent of new degree-seeking freshmen completing a gateway math course within two years Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.
- 1.2.c Increase to 75% the percentage of students who register for the next semester prior to leaving on a break by FY28

Rationale: Struck this measure as it is more of a tactic than a performance outcome.

1.B.4 Percent of undergraduate, degree-seeking students taking a remediation course completing a subsequent credit-bearing course within a year with a "C" or higher. (New) Rationale: Required state reporting measure; indicates success of remedial education strategies.

Objective 1.3 C: Improve ISU's graduation rate

- I.C.I Number of degrees and certificates awarded (New) Rationale: Mission fulfillment and required state reporting measure.
- 1.C.2 % of total credentials conferred that are STEM field (New) Rationale: Required state reporting measure.
- 1.C.3 Percent of first-time full-time freshman graduating within 100% of time Rationale: Required state reporting measure.
- 1.3.a Increase by 9% the percent of first-time, full-time freshmen graduating within 150% of time by FY2028
- 1.3.b Increase by 5% the percentage of undergraduate and graduate degrees awarded by FY28. Rationale: Reflected in measure 1.C.1
- 1.3.c Increase by 16% the percent of undergraduate, degree-seeking students completing 30 or more credits per academic year by FY28.

Rationale: Moved to Objective B: Improve student retention.

- 1.3.d Increase by 8% the percent of first-time, full-time bachelor degree-seeking freshmen graduating within 150% of time.
- 1.C.4 Percent of first-time, full-time freshman graduating within 150% of time Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks. Aligned indicator language with Mission Fulfillment and State Board of Education language.

Goal 2: Strengthen Programmatic Excellence

Objective 2.1 A: Attract, support, and retain outstanding faculty and staff

- 2.1.a Increase by 5% the percentage of faculty and staff who feel satisfied with Idaho State University as their current employer by FY28
- 2.A.I Percent of faculty and staff who express satisfaction with Idaho State University as their employer

Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.

- 2.1.b Improve employee retention, so retention is higher than peer group for staff by FY28
- 2.A.2 Professional staff employee retention relative to peers Rationale: Clarified this measure is related to professional staff. Removed goals and time horizons from indicator language as they are reflected in benchmarks.
- 2.1.c Improve faculty retention so retention is at or above peer comparison for faculty by FY28
- 2.A.3 Faculty employee retention relative to peers Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks. Separated out professional staff and faculty to better understand trends and opportunities.
- 2.1.d Create at least 10 "career ladder" opportunities that allow staff to progress in the roles by FY28 Rationale: Struck this measure as it is more of a tactic than a performance outcome.

Objective 2.2 B: Enhance ISU's infrastructure

- 2.2.a Improve the quality of ISU campus buildings by reducing deferred maintenance by \$24M by FY28
- 2.B. I Deferred maintenance expenditures Rationale: Clarified measure language. This measure directly impacts ISU's age of facilities, fiscal sustainability, and bond rating.
- 2.2.b Remodel 55 classrooms to meet the new classroom technology standard and adhere to a central repair and replacement schedule FY28

Rationale: Struck as this is more of a specific strategy than a strategic performance measure.

2.2.c To support effective governance, evaluate 100% of ISU's existing policies by FY28 Rationale: Struck as this is not an outcome-focused measure related to infrastructure.

Objective 2.3: Increase the number of nationally recognized programs

- 2.3.a Increase by ###% the number of nationally recognized top 100 programs by FY28
- 2.3.b Increase by 7% the number of ISU students completing a capstone/senior project by FY28
- 2.3.c Increase by 3% the percentage of ISU's KDHS programs that meet or exceed the first-time pass rate measured against the national average by FY28

Rationale: Struck this objective as there is no validated data source and we want to focus more on outcomes than volume.

Objective 2.4 C: Align ISU's programs with community, regional, and national needs

- 2.4.a Increase by 65 the number of certificates and other stackable "microcredentials" offered at ISU by FY8
- 2.C.I Number of certificates and other stackable "microcredentials" awarded at Idaho State University Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.
- 2.4.b Increase by 7.5% the number of ISU students graduating with degrees that align with Idaho Department of Labor "Hot Jobs" list.
- 2.C.2 Number of ISU graduates with degrees that align with Idaho Department of Labor "Hot Jobs" list Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.
- 2.C.3 Percentage of KDHS programs where the first-time pass rate is 80% or higher on national exams (moved)

Rationale: Clarified language. Removed goals and time horizons from indicator language as they are reflected in benchmarks. Pass rates reflect quality of programs and alignment with workforce and industry needs.

2.4.c By 2028, 90% of college's programs will complete alumni graduate surveys to identify changing trends in employer skill development Rationale: Struck because this is more of a strategy than an outcome-based measure.

Goal 3: Cultivate External Partnerships

Objective 3.1: Increase the number of relationships with corporate, non-profit, and government entities

- 3.1.a Increase by 100 the number of corporate donors providing student education funding by FY28
- 3.1.b Increase by ##% the number of new/existing ISU partnerships resulting in CPIs/Internships and/or clinical opportunities for ISU students.
- 3.1.c Increase by ##% the perception of regional partners that ISU provides its graduates with the skills needed to succeed in their organizations by FY28

Rationale: Struck this objective as there is no validated data source and we want to focus more on outcomes than volume (see maximize objective below).

Objective 3.2 A: Maximize the impact of new and existing regional partnerships to support ISU's mission.

3.A.1 Number of external entities providing student education funding (revised from prior measure 3.1.a).

Rationale: We want to include all external education funding to include corporations, agencies, and other organizations as a reflection of our work cultivating external partnerships.

3.2.a Increase by #% the number of student competitions, workshops, and other professional development events sponsored by or in partnership with corporate, non-profit, or governmental partners by FY28.

Rationale: Struck because there is not a valid data source, and this is more volume- than outcomeoriented.

- 3.2.b Increase to 40% the number of off-campus CPI by FY28
- 3.A.2 Percentage of off-campus Career Path Internship placements Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.
- **3.2.c** Increase by ##% the number of VIP visits from existing and new partners to ISU in a year by FY28 Rationale: Struck because this is not tracked and is not an outcome-based performance measure.

Objective 3.3 B: Expand collaborations with K-12 and post-secondary educational institutions

3.3.a Increase by 59 transfer rates from Idaho community colleges to ISU by FY28

- 3.B.1 Transfer rates from Idaho Community Colleges to Idaho State University Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.
- 3.3.b Improve by 12 the number of university collaborations that result in establishing 4+1 and 3+2 degree options by FY28

Rationale: Struck because this does not represent the breadth of pathway partnerships. We are reviewing options for a more comprehensive measure.

3.3.c Facilitate outreach programs that bring 60 high school counselors to one of ISU's campuses by FY28

Rationale: Struck because this is more of a strategy than an outcome-based measure.

3.B.2 Early College program enrollment (New) Rationale: This measure speaks to the effectiveness of our relationships with K-12 partners and directly impacts student access and success.

Goal 4: Expand research, clinical, and creative activities

Objective 4.1 A: Enhance the faculty's ability to initiate research and innovative projects

- 4.1.a Office for Research will host 5 workshops/meetings per year that educate faculty and researchers on compliance or other research issues by FY28 Rationale: Struck as this is more of a tactic than a performance outcome.
- **4.1.b** Engage 2 first-time proposal submitters per year to receive grant writing help Rationale: Struck as this is more of a tactic than a performance outcome.
- 4.1.c Increase by 1 per year the number of faculty/researchers that apply for Office for Research Internal grants by FY28 Rationale: Struck as this is more of a tactic than a performance outcome.
- 4.A.I F&A distributed to colleges, researchers, and Pls (New) Rationale: This correlates to university support for initiating research and innovative projects.

4.A.2 Three-year rolling average of eternal grant proposals submitted (New) Rationale: This correlates to the impact of university support for initiating research and innovative projects. Reformatted from prior measure 4.2.b.

Objective 4.2 B: Increase productivity in research, scholarly, and creative activities

- 4.2.a Increase by 15% ISU's total dollar amount of IPEDs reported research expenditures by FY28
- 4.B.I Total annual research expenditures Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks. Aligned language with Mission Fulfillment measure.
- 4.2.b 10% increase to the three-year rolling average number of external grant proposals submitted by FY28

Rationale: Moved to 4.A.2 as it better aligns with that objective.

4.2.c Increase by 3 per year the number of faculty members who submit external grant proposals through the Office for Research. Rationale: This is captured in 4.A.2

Objective 4.3: Capitalize on ISU clinical services as a source for clinical research Objective C: Engage students in Interprofessional Education and/or clinical research *Rationale: Reworded for clarity*

- 4.3.a Increase by 12% the percentage of KDHS students that participate in interprofessional education/clinical research opportunities by FY28
- 4.C.I Percent of KDHS students that participate in interprofessional education/clinical research opportunities

Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.

- 4.3.b Increase by 10% the percentage of KDHS faculty that participate in interprofessional educational/clinical research opportunities by FY28
- 4.C.2 Percent of KDHS faculty that participate in interprofessional education/clinical research opportunities Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.
- 4.3.c Increase by # the number of faculty workload hours assigned to clinical services research by FY28

Rationale: Struck as there is not a valid data source, and this is not an outcome-based measure.

- Objective 4.4 D: Enhance ISU student research, clinical, and creative opportunities
- 4.4.a Increase by 75% the number of graduate students participating in Graduate School research/creative activity symposium/3MT by FY28
- 4.4.b Increase by 25 the number of students who participate in the ISU undergraduate research symposium by FY28

4.D.1 Number of ISU students participating in undergraduate or graduate research/creative activity symposia/events

Rationale: Collapsed graduate and undergraduate participation for more reliable data

4.4.c Increase by 9% the number of undergraduate degree-seeking students enrolled in course-based undergraduate research by FY28

Rationale: Struck as we do not have a valid data source for this measure.

4.D.2 Number of theses and dissertations completed (New) Rationale: This is directly correlated to student research success.

Goal 5: Energize the Bengal community

Objective 5.1 A: Enhance student life and engagement

- 5.1.a Increase by 74 the number of students participating in career-related internships/practica by FY28
- 5.A.I Student Employment FTE disaggregated by Career Path Internship, College Work Study, Graduate Assistant, and Other Student Employment Rationale: We want to capture all types of student employment as they are directly correlated to student engagement and student success.
- 5.1.b ###% of students living in ISU's housing score the quality of their accommodations a four or higher out of a total of five by FY28

Rationale: Stuck because it is narrow and subjective.

- 5.1.c Increase by 777 the number of students who actively participate in formal mentoring programs with other students, faculty and staff, and ISU alumni by FY28. Rationale: Stuck because there is not a valid data source.
- 5.A.2 Number of students who participate in student events and activities (New) Rationale: This is a direct measure of student engagement.

Objective 5.2 B: Increase faculty and staff connection, engagement, and recognition

5.2.a Increase by 20% faculty attendance in workshops, panels, and other events hosted by ISU's Program for Instructional Effectiveness by FY28 Rationale: Stuck because there is not a valid data source, and the Program for Institutional Effectiveness does not encapsulate all faculty development and engagement activities. We are exploring alternate measures.

5.2.b Increase by 9% the overall faculty/staff pride in working for ISU by FY28 Rationale: Struck because this is subjective and loosely correlated with the objective. We are capturing the percent of faculty and staff who express satisfaction with Idaho State University as their employer in measure 2.A. I.

- 5.2.c Increase by 47% the number of faculty and staff nominees in the "Be a Bengal" program.
- 5.B.I Number of faculty and staff nominees for the Be a Bengal Program Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.

- 5.B.2 ISU employee contributions to Bengal Giving Day (New) Rationale: Participation in Bengal Giving Day reflects employee connection and engagement.
- 5.B.3 Employee attendance at University Town Halls (New) Rationale: Town Halls are a primary mechanism for facilitating university-wide dialog and discussion.
- 5.B.4 ISU Today Open Rates (New) Rationale: ISU Today provides bi-weekly updates, information, and announcements; open rates reflect interest, connection, and engagement.

Objective 5.3 C: Increase alumni connections to and participation with ISU.

- 5.3.a Increase by 20% the value of endowed scholarships funded by alumni during the scholarship campaign.
- 5.C.I Foundation Fundraising Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks. Aligned with Mission Fulfillment measure.
- 5.3.b Increase by 3,300 the number of ISU alumni participants attending campus events by FY28
- 5.C.2 Alumni participation in ISU events Rationale: Removed goals and time horizons from indicator language as they are reflected in benchmarks.
- 5.3.c Increase by 60% the number of alumni that attend alumni homecoming events by FY28 Rationale: Struck as this is included in 5.C.2 and the objective is not specific to homecoming.

Objective 5.4 D: Increase ISU's impact on its communities

- 5.4.a Increase by ###% the number of community events ISU participates in by FY28 Rationale: Stuck as there is not a valid data source and this is a volume rather than outcome-based measure.
- 5.4.b Increase by 21% the percentage of students participating in course-based community-engaged learning by FY28

Rationale: Stuck as there is not a valid data source.

5.4.c Increase by 10% attendance at ISU athletic events

Rationale: Stuck as there is not a valid data source and this is a volume rather than outcome-based measure.

- 5.D.1 Number of ISU Clinics and Pharmacy clients served (New) Rationale: This is a Mission Fulfillment measure and directly speaks to ISU's health mission.
- 5.D.2 Continuing Education and Workforce Training enrollment (New) Rationale: This is a Mission Fulfillment measure and reflects the relevancy and alignment of our non-credit offerings with community needs

ATTACHMENT 8

Lewis-Clark State College Strategic Plan

Office of Institutional Research & Effectiveness FY 2025 – FY 2029



INFORMATIONAL - PPG



Connecting Learning to Life

STRATEGIC PLAN FY 2025 - 2029



Submitted March, 2024

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MISSION STATEMENT

Lewis-Clark State College prepares students to become successful leaders, engaged citizens, and lifelong learners.

VISION STATEMENT

Idaho's college of choice for an educational experience that changes lives and inspires a commitment to Idaho's learning and civic engagement.

Goal 1: Strengthen and Optimize Instructional and Co-curricular Programming

Objective A: Optimize course and program delivery options

Performance Measure 1: Number of online and evening/weekend programs.

Definition: The number of degrees or certificates offered online or during evening or weekend hours.

Benchmark: Based upon current planning processes, LC State anticipates adding online degrees/certificates and evening & weekend programs of study beginning with the FY21 academic year forward. Note that LC State's relative percentage of fully online offerings is planned to remain at approximately 20% of the overall program mix.

Course Delivery Methods	FY 19 (2018- 19)	FY 20 (2019- 20)	FY 21 (2020- 21)	FY 22 (2021- 22)	FY 23 (2022- 23)	FY 24 (2023- 24)	FY 25 (2024- 25)	FY 29 (2028- 29)
Online ¹	36	40	42	49	57	61		
Benchmark		37	42	42	42	42	42	42
Achievement		MET	MET	MET	MET	MET		
Evening/ Weekend ²	0	7	7	7	7	7		
Benchmark		2	6	7	7	7	7	7
Achievement		MET	MET	MET	MET	MET		

¹ List of online programs available here: <u>http://catalog.lcsc.edu/programs/#filter=.filter_42</u>

² The following programs/credentials are offered during evenings &/or weekends: Web Design & Development (cert., AAS, BAS), Business Administration (BA/BS), & Interdisciplinary Studies (BA/BS). A portion of these programs is available through weekend and evening delivery and number of the courses are offered online. Liberal Arts and Business Administration Associates degrees moving towards evening/weekend delivery.

Performance Measure 2: Proportion of courses in which course content is delivered online

Definition: The proportion of courses in which course content (e.g., syllabi & student grades) is delivered using an online learning management system (LMS).

Benchmark: One hundred percent (100%) of courses have content available to students through the LMS.

Web Enhanced Courses	FY 19 (2018-19)	FY 20 (2019-20)	FY 21 (2020-21)	FY 22 (2021-22)	FY 23 (2022-23)	FY 24 (2023-24)	FY 25-29 (2024-25 thru 2028- 29)
% Sections	Inventory	69% ³	79%	89%	97%	99%	
Benchmark	current courses content on LMS		100%	100%	100%	100%	100%
Achievement			NOT MET	NOT MET	NOT MET	NOT MET	

³ Seventy one percent (71%) of sections were reviewed. Metric shows the proportion of sections reviewed with course content posted on LMS.

Objective B: Ensure high quality program outcomes

Performance Measure 1: Licensing & certification

Definition: The proportion of LC State test takers who pass, or their average test scores, on professional licensure or certification exams.

Benchmark: Meet or exceed national or statewide averages.

	Licensing/Cert. Exams		FY 19 (2018- 19)	FY 20 (2019- 20)	FY 21 (2020- 21)	FY 22 (2021- 22)	FY 23 (2022- 23)	FY 24 (2023- 24)	FY 25-29 (2024-25 thru 2028-29)
	NCLEX	LC State	94%	95%	94%	91.4%	96%	Not Vet	(at Exceed
	Registered Nurse ⁴	Benchmark: Nat'l Ave.	86%	87%	85%	79.4%	90%	Avail-	National
		Achievement	MET	MET	MET	MET	MET	able	Average
	NCI FX Practical	LC State	91%	100%		Excood			
	Nurse ⁴	Benchmark: Nat'l Ave.	85%	86%	Not A	National			
S		Achievement	MET	MET					Average
Degree	ARRT Radiology	LC State	89%	76%	86%	90%	73%		Exceed National
		Benchmark: Nat'l Ave.	89%	88%	84%	83.5%	84%	Not Yet Avail- able	
ssional		Achievement	MET	NOT MET	MET	MET	NOT MET		Average
rofe	55 4 / / 0	LC State⁵	170	171	166	166	165		
Ъ	PRAXIS Teacher	Benchmark: State Ave.	168	170	168	167	168	Not Yet Avail-	Meet State Average
	Education ⁵	Achievement	MET	MET	MET	NOT MET	NOT MET	able	Scores
		LC State	57%	86%	77%				
	ASWB	Benchmark: Nat'l Ave.	67%	69%	69%	Not Yet Available		Exceed National	
Social W	Social Work	Achievement	NOT MET	MET	MET	NOT TEL AVAIIABLE			Average

⁴ FY 18-21 test results for first time test takers reported for April through March. FY 22 test results are for the 2021-2022 fiscal year.

Licensing/Certification Exams		FY 19 (2018-19)	FY 20 (2019-20)	FY 21 (2020-21)	FY 22 (2021-22)	FY 23 (2022-23)	FY 24 (2023-24)	FY 25-29 (2024-25 thru 2028- 29)	
	HVAC Apprentice	LC State	100%	100%	50%	50%	90% ⁶		
		Benchmark: State Ave.	67%	75%	73%	63%	Net	Not Yet Avail- able	Exceed State
ing		Achievement	MET	MET	NOT MET	NOT MET	Not Available		Average
e Trair	Plumbing	LC State	100%	83%	No Students	100%	90% ⁶	Not Yet	Exceed
forc	Apprentice	Benchmark: State Ave.	76%	71%	72%	74%	Not	Avail- able	State Average
Vork		Achievement	MET	MET		MET	Available		
5	Electrical	LC State	100%	91%	89%	91%	89% ⁶	Not Vet	Exceed
	Apprentice- ship Idaho	Benchmark: State Ave.	75%	77%	78%	77%	Not	Avail- able	State
	Journeyman	Achievement	MET	MET	MET	MET	Available		Average

Objective C: Optimize curricular & co-curricular programming through *Connecting Learning to Life* initiative

Connecting Learning to Life has been verified as a curricular component of LC State 2- and 4-year degree programs, making experiential and applied learning a signature hallmark of an LC State education. 'Connecting' experiences fall under *applied learning*⁷ or *experiential learning*⁸. Defined broadly to include internships, practica, apprenticeships, service learning, research, co-curricular engagement, etc., students complete applied or experiential learning within their chosen majors; and /or may reach outside their major for hands-on, co-curricular experiences. Performance measures are added or modified when plans result in measurable outcomes.

⁵ Excludes tests 5003, 5004, and 5005, which are required for elementary certification, but which test background subject area content that is not taught in the Division of Teacher Education programs or majors connected to certification.

⁶ Preliminary figure: LC State has not received test results back from Idaho Division of Licensing for its program assessment.

⁷ Applied learning = hand's on application of theory.

⁸ Experiential learning = the process through which students develop knowledge, skills, and values from direct experiences outside a traditional academic setting.

Performance Measure 1: Curricular programing of applied and experiential learning opportunities

Definition: Courses, programs of study, majors, minors and certificates that serve as avenues of applied or experiential learning opportunities.

Benchmark: All programs of study offer graduates opportunities for applied &/or experiential learning. Long-term goals include expanding the development of signature certificates (currently LC State has three: Cybersecurity, Writing for the Web and Social Media, and Entrepreneurship) and new, interdisciplinary degree options through which "academic" and career-technical courses may be woven together.

Curricular Applied & Experiential Learning	FY 19 (2018-19)	FY 20 (2019-20)	FY 21-22 (2020-21 thru 2021- 22)	FY 23 (2022-23)	FY 24 (2023-24)	FY 25-29 (2024-25 thru 2028-29)
Apprenticeships				Continue to emr	hacizo	
Directed Study	Developed inventory	Developed Signature Certificates that knit together academic and Career & Tech. Edu (CTE) coursework	s Marketed availability of <i>Signature</i> <i>Certificates</i> k	experiential lear	100% of LC State graduates	
Field Experiences	of applied & experiential learning: Identified Courses & Programs of Study/Majors, Minors, Certificates. No gaps were identified: All programs of study included curricular applied and experiential learning.			curriculum by:		
'Hands-on' courses				certificates		
courses Internships, Practica & Clinicals Performance Arts Service Learning Undergraduate Research				Building internship/pr credits into d Promoting Pr Assessment c working adult Working with Employment to promote ir experiences.	actica/clinical egree programs. ior Learning opportunities for ts Student & Career Center nternship	graduates participate in applied &/or experiential learning via curricular <u>or</u> co-curricular experiences.

Performance Measure 2: Co-Curricular programing of applied and experiential learning opportunities

Definition: Co-curriculum programming engaging students in applied &/or experiential learning outside of their chosen program's curriculum. Examples displayed in the table below. Micro-credentials, now measurable, identified in table below.

Benchmark: 100% of LC State graduates participate in applied &/or experiential learning.

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Co- Curricular Applied & Experiential Learning	FY 19 (2018-19)	FY 20 (2019-20)	FY 21 (2020-21)	FY 22 (2021-22)	FY 23 (2022-23)	FY 24 (2023-24)	FY 25-29 (2024-25 thru 2028- 29)
Micro-	Leadership Certif	icate Awardees		4	5		
Credentials ⁹	Career Readiness	Certificate Award	dees	2	6		
Intramural athletics				Career Fair		Job fair offerings	
Intercollegiate athletics	Developed inventory of	veloped Expanded entory of peer mentor curricular program. In fall 2019, 22	Co-curricular transcript	offered in a live format. Attendance of students & businesses increased from prior year. Exploring the possibility of including programming for regional	Increase of micro credentials planned for coming year. Expanded job fair offerings to meet healthcare needs in spring 2023 semester. Invested in menu of outdoor	now include one for healthcare	
Club Sports	co-curricular		transcript, integrated			industries and another located at Coeur d'Alene	
Leadership in clubs or organizations	experiential learning	peer mentors assisted new	with the <u>Do</u> <u>More App</u> , made functional.				100% of LC State graduates participate in applied &/or experiential learning via curricular <u>or</u>
Peer mentorship	Reprioritized/	students.	Expanded student clubs, organizations and in-person leadership			Hosted	
Reserve Officer Training Corps (ROTC)/Military Education	resources & staff to support co- curricular	& Elements of co-curricular transcript &				interactive sessions between students & employers	
Residence life leadership	programming : Center of	tracking software were	opportunities Career	students. Special		and onsite visits for	co-curricular experiences.
Student government	Student Leadership	launched with minor delay.	Readiness micro- credential	breakout sessions connecting	recreation programming	their fields of interest.	
LC Work Scholars	Student Employment & Career Center	Continued to expand	unveiled in spring 2021	regional high	experiential	Outdoor recreation,	
Work study/experience including tutoring		functionality of software.	semester.	students and employers were	learning	club and intramural sports programs	
Study abroad				conducted.		expanded	

⁹ Anticipated completions for FY24.

Goal 2: Optimize Student Enrollment, Retention and Completion

Objective A: Increase the college's degree-seeking student enrollment

Performance Measure 1: Direct from high school enrollment

Definition: The FTE of undergraduate degree-seeking, entering college students (measured at fall census) who graduated from high school the previous spring term.

Benchmarks derived from financial modeling of institutional viability and expansion¹⁰. Based upon financial modeling of campus viability, LC State would like to be 3,000 total FTE or experience a growth of 10% from current FTE by FY 25, necessitating a 1.6 percent increase annually. How that campus-wide goal extrapolates to direct high school enrollment is articulated in the table below.

Direct from High School Enrollment	FY 19 (Fall '18)	FY 20 (Fall '19)	FY 21 (Fall '20)	FY 22 (Fall '21)	FY 23 (Fall '22)	FY 24 (Fall '23)	FY 25 (Fall '24)	FY 29 (Fall '28)
FTE	422	420	407	382	393	353	Available Fall '24 Census	Available Fall '28 Census
Benchmark		429	436	442	449	456	463	483
Achievement	New Measure	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET		

¹⁰ More information on LC State's financial modeling of institutional viability and expansion can be found here: <u>https://www.lcsc.edu/budget/budget-office-resources</u>

Performance Measure 2: Adult enrollment

Definition: The FTE of degree-seeking students (measured at fall census) who are above the age of 24.

Benchmarks derived from financial modeling of institutional viability and expansion¹⁰. Based upon financial modeling of campus viability, LC State would like to be 3,000 total FTE or experience a growth of 10% FTE by FY25, necessitating a 1.6 percent increase annually. How that campus-wide goal extrapolates to adult enrollment is articulated in the table below.

Adult Learner (>24) Enrollment	FY 19 (Fall '18)	FY 20 (Fall '19)	FY 21 (Fall '20)	FY 22 (Fall '21)	FY 23 (Fall '22)	FY 24 (Fall '23)	FY 25 (Fall '24)	FY 29 (Fall '28)
FTE	631	608	618	541	517	530	Available	Available
2 nd Chance Pell					9	33	Fall '24 Census	Fall '28 Census
Benchmark	New	641	651	661	671	681	691	721
Achievement	Measure	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET		

Performance Measure 3: Online Headcount

Definition: The headcount of degree-seeking students (measured at fall census) who are taking courses online (both entirely online and partly online schedule of courses).¹¹

Benchmarks derived from financial modeling of institutional viability and expansion¹⁰. Based upon financial modeling of campus viability, LC State would like to be 3,000 total FTE or experience a growth of 10% FTE by FY 25, necessitating a 1.6 percent increase annually. How that campus-wide goal extrapolates to online headcount is articulated in the table below¹².

Online Headcount	FY 19 (Fall '18)	FY 20 (Fall '19)	FY 21 (Fall '20)	FY 22 (Fall '21)	FY 23 (Fall '22)	FY 24 (Fall '23)	FY 25 (Fall '24)	FY 29 (Fall '28)
НС	1,483	1,368	1650	1596	1471	1,504 ¹³	Available Fall '24 Census	Available Fall '28 Census
Benchmark	D.L	1,507	1,531	1,555	1,578	1,602	1625	1,697
Achievement	Measure	NOT MET	MET	MET	NOT MET	NOT MET		

¹¹ Same definition as that used on the IPEDS Fall Enrollment Survey.

¹² This benchmark assumes that a 10% growth in FTE would also equate a 10% growth in headcount.

¹³ Figure is preliminary.

Performance Measures 4: Direct transfer enrollment

Definition: The FTE of degree-seeking, entering transfer students (measured at fall census) who attended another college the previous spring or summer terms.

Benchmarks derived from financial modeling of institutional viability and expansion¹⁰. Based upon financial modeling of campus viability, LC State would like to be 3,000 total FTE or experience a growth of 10% FTE by FY 25, necessitating a 1.6 percent increase annually. How that campus-wide goal extrapolates to direct transfer enrollment is articulated in the table below.

Direct Transfer Enrollment	FY 19 (Fall '18)	FY 20 (Fall '19)	FY 21 (Fall '20)	FY 22 (Fall '21)	FY 23 (Fall '22)	FY 24 (Fall '23)	FY 25 (Fall '24)	FY 29 (Fall '28)
FTE	149	171	168	163	156	146		
Idaho Community Colleges					63	62	Available Fall '24 Census	Available Fall '28 Census
Co-Enrollment ¹⁴					4.5	4		
Benchmark	Now	151	174	177	179	181	184	191
Achievement	Measure	MET	NOT MET	NOT MET	NOT MET	NOT MET		

¹⁴ Co-enrollment agreements exist with College of Western Idaho, College of Eastern Idaho, College of Southern Idaho, North Idaho College, Walla Wall Community College.

Performance Measure 5: Nonresident enrollment

Definition: The FTE of degree-seeking students (measured at fall census) who are not residents of Idaho.

Benchmarks derived from financial modeling of institutional viability and expansion¹⁰. Based upon financial modeling of campus viability, LC State would like to be 3,000 total FTE or experience a growth of 10% FTE by FY 25, necessitating a 1.6 percent increase annually. How that campus-wide goal extrapolates to nonresident enrollment is articulated in the table below.

Nonresident Enrollment	FY 19 (Fall '18)	FY 20 (Fall '19)	FY 21 (Fall '20)	FY 22 (Fall '21)	FY 23 (Fall '22)	FY 24 (Fall '23)	FY 25 (Fall '24)	FY 29 (Fall '28)
Asotin Co. Resident FTE ¹⁵	150	149	136	129	142	141	Available Fall '24 Census	Available Fall '27 Census
Benchmark	New	152	155	157	160	162	165	172
Achievement	Measure	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET		
Nonresident FTE	329	319	326	351	367	345	Available Fall '24 Census	Available Fall '27 Census
Benchmark:	Nerve	334	339	344	350	355	340	376
Achievement	New Measure	NOT MET	NOT MET	MET	MET	NOT MET		

Objective B: Increase credential output

Performance Measure 1: Certificates and degrees¹⁶

Definition: The count of degrees/certificates awarded at each degree-level.¹⁷

¹⁵ Asotin County residents pay a unique tuition & fee rate. More information about tuition & fees as they pertain to residency status available here: <u>https://www.lcsc.edu/student-accounts/tuition-and-fees</u>

¹⁶ State Board of Education postsecondary system wide measure.

¹⁷ Consistent with IPEDS Completions Survey definitions.

ATTACHMENT 8

Benchmarks developed to align with the Idaho State Board of Education's K-20 Strategic Plan¹⁸ and achieve 1,050 total completions by AY 2035-36.¹⁹

Certificates & Degrees	FY 19 (2018- 19)	FY 20 (2019- 20)	FY 21 (2020- 21)	FY 22 (2021- 22)	FY 23 (2022- 23)	FY 24 (2023-24)	FY 25 (2024-25)	FY 29 (2028-29)	
Certificates	15	26	51	62	83	Available Summer '24	Available Summer '25	Available Summer '29	
Benchmark:	21	21	28	23	24	25	26	27	
Achievement	NOT MET	MET	MET	MET	MET				
Associates	347	365	218	204	314	Available Summer '24	Available Summer '25	Available Summer '29	
Benchmark:	430	436	442	256	262	269	275	295	
Achievement	NOT MET	NOT MET	NOT MET	NOT MET	MET				
Baccalaureates	626	505	599	579	554	Available Summer '24	Available Summer '25	Available Summer '29	
Benchmark:	594	646	666	496	509	521	534	571	
Achievement	MET	NOT MET	NOT MET	MET	MET				
Graduate Certificates				2	1	Available Summer '24	Available Summer '25	Available Summer '29	
Benchmark:		Nowbord	hmarkma	thodology	will be set	tablished once h	acolino is ostabl	lished	
Achievement	New benchmark methodology will be established once baseline is established.								

¹⁸ Goal 3, Objective A, Performance Measure I: "Total number of certificates/degrees conferred, by institution per year".

¹⁹ Benchmarks re-aligned in FY22 to current version of Idaho State Board of Education's K-20 Strategic Plan assuming peer comparable retention and completion rates.

Performance Measures 2: Graduates²⁰

Definition: The unduplicated count of graduates by degree-level.²¹

Benchmarks developed to align with the Idaho State Board of Education's K-20 Strategic Plan¹⁷ and achieve 1,050 total completions by AY 2035-36.¹⁸

Graduates	FY 19 (2018- 19)	FY 20 (2019- 20)	FY 21 (2020- 21)	FY 22 (2021- 22)	FY 23 (2022- 23)	FY 24 (2023-24)	FY 25 (2024-25)	FY 29 (2028-29)	
Certificates	15	25	42	54	75	Available Summer '24	Available Summer '25	Available Summer '29	
Benchmark:	20	20	30	23	24	25	26	27	
Achievement	NOT MET	MET	MET	MET	MET				
Associates	325	357	206	192	282	Available Summer '24	Available Summer '25	Available Summer '29	
Benchmark:	415	420	424	256	262	269	275	295	
Achievement	NOT MET	NOT MET	NOT MET	NOT MET	MET				
Baccalaureates	616	491	589	571	545	Available Summer '24	Available Summer '25	Available Summer '29	
Benchmark:	580	622	628	496	509	521	534	571	
Achievement	MET	NOT MET	NOT MET	MET	MET				
Graduate Certificates		New		2	1	Available Summer '24	Available Summer '25	Available Summer '29	
Benchmark:		Nowborg	hmarkma	thodology	will be set	tablished once h	acolino is ostabl	lished	
Achievement	New benchmark methodology will be established once baseline is established.								

²⁰ State Board of Education postsecondary system wide measure.

²¹ Graduates of multiple degree-levels are counted once in each category of degree/certificate level.

Performance Measures 3: Graduation Rate - 150% normative time to degree attainment²²

Definition: The proportion of first-time, full-time entering students who attain a degree or certificate within 150% normative time to degree²³.

Benchmarks developed to align with the Idaho State Board of Education's K-20 Strategic Plan¹⁷ and achieve 1,050 total completions by AY 2035-36.¹⁸

First-Time Full-Time Cohorts	Attainment w/in 150% Time	FY 19 (2013 Cohort)	FY 20 (2014 Cohort)	FY 21 (2015 Cohort)	FY 22 (2016 Cohort)	FY 23 (2017 Cohort)	FY 24 (2018 Cohort)	FY 25-29 (2019-23 Cohorts)
Entered	Васс.	32%	31%	32%	29%	37%	Available Spring 2025	
as Bacc	Benchmark:	25%	33%	34%	39%	39%	39%	39%
Seeking	Achievement	MET	NOT MET	NOT MET	NOT MET	NOT MET		
All First-	Bacc., Assoc, & Certificates	38%	36%	37%	35%	45%	Available Spring 2025	
Time, Full- Time	Benchmark:	30%	39%	40%	38%	38%	38%	38%
Students	Achievement	MET	NOT MET	NOT MET	NOT MET	MET		

²² State Board of Education postsecondary system wide measure.

²³ One hundred and fifty percent (150%) normative time to degree is six years for baccalaureate degrees, three years for associate degrees, and one and a half years for a one year certificate. Calculations used IPEDS definitions.

Performance Measure 4: Graduation Rate - 100% normative time to degree attainment²⁴

Definition: The proportion of first-time, full-time entering baccalaureate-seeking students who achieved a baccalaureate, associate, or certificate within 100% normative time to degree.

Benchmarks developed to align with the Idaho State Board of Education's K-20 Strategic Plan¹⁷ and achieve 1,050 total completions by AY 2035-36.¹⁹

First-Time Full-Time Cohort	Attainment w/in 100% Time	FY 19 (2015 Cohort)	FY 20 (2016 Cohort)	FY 21 (2017 Cohort)	FY 22 (2018 Cohort)	FY 23 (2019 Cohort)	FY 24 (2020 Cohort)	FY 25-29 (2021-25 Cohorts)
Entered as	Bacc. ²⁵	21%	20%	23%	22% ²⁶	21% ²⁶		
Bacc Seeking	Cert. & Assoc.	1%	3%	4%	5%	8%		
Benchmark		23%	24%	23%	23%	23%	23%	23%
Achievement		NOT MET	NOT MET	MET	MET	MET		

²⁴ State Board of Education postsecondary system wide measure.

²⁵ Consistent with IPEDS Graduation Rates Survey definitions.

²⁶ Figure is preliminary: State policy has been interpreted to mean institutions are required to report data out of cadence with federal reporting.

Performances Measure 5: Retention rates

Definitions:

The retention or proportion of **first-time**, **full-time**, **baccalaureate-seeking students** who start college in summer or fall terms and re-enroll by the following fall term of the subsequent academic year.

The retention of the **entire degree-seeking student body**. The proportion of the total degree-seeking headcount of the prior academic year²⁷ who graduated or returned to attend LC State by the following fall of the subsequent academic year.

Benchmarks developed to align with the Idaho State Board of Education's K-20 Strategic Plan¹⁷ and achieve 1,050 total completions by AY 2035-36.¹⁸

Retention	FY 19 (2018 -19)	FY 20 (2019- 20)	FY 21 (2020- 21)	FY 22 (2021- 22)	FY 23 (2022- 23)	FY 24 (2023- 24)	FY 25 (2024- 25)	FY 29 (2028- 29)
First-Time, Full- Time, Baccalaureate- Seeking, Students	60%	61%	63%	63%	64% ²⁶	Available Fall 2024	Available Fall 2025	Available Fall 2029
Benchmark:	61%	63%	65%	66%	67%	68%	68%	68%
Achievement	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET			
All Degree- Seeking Students	75%	76%	74%	76%	77%	Available Fall 2024	Available Fall 2025	Available Fall 2029
Benchmark:	77%	79%	81%	82%	83%	84%	84%	84%
Achievement	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET			

²⁷ Those enrolled as degree-seeking students on census day (October 15th for fall terms and March 15th for spring terms).

Performance Measure 6: 30 to Finish²⁸

Definition: Percent of undergraduate, degree-seeking students, who started their attendance in the fall (or prior summer) term, completing 30 or more credits per academic year, excluding those who graduated midyear and those students who started their enrollment during spring semester.

Benchmarks derived from financial modeling of institutional viability and expansion¹⁰. Based upon financial modeling of campus viability, LC State would like to be 3,000 total FTE or experience a growth of 10% FTE by FY 25, necessitating a 1.6 percent increase annually. How that campus-wide-goal extrapolates to degree-seeking student credit load is articulated in the table below.

30+ credits per AY	FY 19 (2018 -19)	FY 20 (2019- 20)	FY 21 (2020- 21)	FY 22 (2021- 22)	FY 23 (2022- 23)	FY 24 (2023- 24)	FY 25 (2024- 25)	FY 29 (2028- 29)
%	31%	33%	29%	26%	26%			
Benchmark	30%	32%	33%	35%	36%	38%	39%	40%
Achievement	MET	MET	NOT MET	NOT MET	NOT MET			

²⁸ State Board of Education postsecondary system wide measure.

Performance Measure 7: Remediation²⁹

Definition: Percent of degree-seeking students who took a remedial course and completed a subsequent credit bearing course (in the area identified as needing remediation) within a year with a "C" or better.

Benchmarks developed to align with the Idaho State Board of Education's K-20 Strategic Plan¹⁸. Analysis conducted by the Chief Research Officer identified the number of associates and baccalaureate degrees as needing to grow by eight percent by 2025, necessitating a one percent increase annually³⁰.

Remediation	FY 19 (Fall 2017- Spring 2019)	FY 20 (Fall 2018- Spring 2020)	FY 21 (Fall 2019- Spring 2021)	FY 22 (Fall 2020- Spring 2022)	FY 23 (Fall 2021- Spring 2023)	FY 24 (Fall 2022- Spring 2024)	FY 25 (Fall 2023- Spring 2025)	FY 29 (Fall 2027- Spring 2029)
%	43%	57%	52%	56%	52%			
Benchmark	43%	52%	53%	54%	55%	57%	58%	61%
Achievement	MET	MET	NOT MET	MET	NOT MET			

Performance Measure 8: Math Pathway²⁹

Definition: Percent of new, degree-seeking freshmen who started in fall (or preceding summer) term and completed a gateway math course³¹ within two years.

Benchmarks developed to align with the Idaho State Board of Education's K-20 Strategic Plan¹⁸. Analysis conducted by the Chief Research Officer identified the number of associates and baccalaureate degrees as needing to grow by eight percent by 2025 necessitating a one percent increase annually.³⁰

Math Pathways	FY 19 (Fall 2018- Su 2020)	FY 20 (Fall 2019- Su 2021)	FY 21 (Fall 2020- Su 2022)	FY 22 (Fall 2021- Su 2023)	FY 23 (Fall 2022- Su 2024)	FY 24 (Fall 2023- Su 2025)	FY 25 (Fall 2024- Su 2026)	FY 29 (Fall 2028- Su 2030)
%	49%	36%	44%	52%	55%			
Benchmark:	53%	54%	56%	57%	58%	59%	60%	62%
Achievement	NOT MET							

²⁹ State Board of Education postsecondary system wide measure.

³⁰ Exact amount of growth required to remain in alignment with statewide goals is 1.14%, annually.

³¹ Gateway math is defined institutionally as Math 123 and above.
Performance Measure 9: Workforce training enrollment

Definition: Duplicated headcounts of students enrolled in Workforce Training programs at LC State.

Benchmarks set by Director of Workforce Training accounting for regional market demand and worker demographics.

Workforce Training Enrollments	FY 19 (2018-19)	FY 20 (2019-20)	FY 21 (2020-21)	FY 22 (2021-22)	FY 23 (2022-23)	FY 24 (2023-24)	FY 25-29 (2024-25 thru 2028- 29)
Duplicated Headcount	3,699	2,893	2,513	2,737	2,199		
Benchmark:	3,600	3,650	3,700	3,750	3,800	3,800	3,800
Achievement	MET	NOT MET	NOT MET	NOT MET	NOT MET		

Performance Measure 10: Workforce training completion

Definition: Completions of LC State's Workforce Training courses³².

Benchmarks are a proportion of the enrollments each fiscal year (FY) and set to maintain the high proportion of completions observed historically.

Workforce Training Completions	FY 19 (2018-19)	FY 20 (2019-20)	FY 21 (2020-21)	FY 22 (2021-22)	FY 23 (2022-23)	FY 24 (2023-24)	FY 25-29 (2024-25 thru 2028- 29)
Duplicated Completions	3,468	2,756	2,362	2,596	1,908		
Benchmark: Maintain	94%	94%	94%	94%	94%	94%	94%
Achievement	MET	MET	MET	MET	NOT MET		

³² Completions measured by course because most Workforce Training offerings are designed as singular courses.

Goal 3: Foster and Support Campus Community Culture

Objective A: Connecting College to Community

Performance Measure 1: Number of participants in community enrichment activities

Definition: Duplicated headcount of attendees at events arts and cultural programming offered through LC State's Center for Arts & History.

Benchmark: Steady increase in community participation.

Community Participation	FY 19 (2018-19)	FY 20 (2019-20)	FY 21 (2020-21)	FY 22 (2021-22)	FY 23 (2022-23)	FY 24 (2023-24)	FY 25-29 (2024-25 thru 2028-29)
Duplicated Headcount	Plan: in programs following ye to be imp with prog	ventory to include ear. Tracking lemented ramming.	Impacted by pandemic protocols and personnel reductions. Tracking to be implemented when programming is recommenced.	4,239	2,929	2,543	Benchmark established once baseline is better understood

Goal 4: Increase and Leverage Institutional Resources to Support College's Mission

Objective A: Grow Foundation Support and Grant Funding

Performance Measure 1: New, ongoing revenue streams

Definition: New, revenue-generating initiatives.

Benchmarks: Implement new, annual giving initiatives (general and employee campaigns).

F	oundation Support	FY 19 (2018-19)	FY 20 (2019-20)	FY 21 (2020-21)	FY 22 (2021-22)	FY 23 (2022-23)	FY 24 (2023-24)	FY 25-29 (2024-25 thru 2028-29)
ition	Employee Giving Campaign ³³	39%	41%	35%	34%	36%	36%	45%
C State Founda	Annual Day of Giving	Plan	Piloted	Piloted Took Piloted May 2021		\$66,965 ³⁴	\$137,187	New College- wide Giving Day
	Foundation Fee		Implement 20	ted Jan. 1 st , 20	\$9,389	\$48,659 ³⁵	\$35,566 ³⁶	Goal: \$11,000

³³ One-year lag from measurement to reporting, therefore FY23 depicts results for FY22.

³⁴ Athletics only.

³⁵ \$40,000 from one large donation.

³⁶ July 1, 2023 – to date.

Performance Measure 2: Federal, state, local and private grant funding

Definition: Grant funding dollars.

Benchmark: \$100,000 growth annually, which is approximately 2% of the historical (four year) average.

Grants & Contract Funding	FY 19 (2018-19)	FY 20 (2019-20)	FY 21 (2020-21)	FY 22 (2021-22)	FY 23 (2022-23)	FY 24 (2023-24)	FY 25-29 (2024-25 thru 2028-29)
Federal	\$1,506,459	\$1,600,805	\$ 841,935	\$ 860,174	\$1,062,446		ter 4. Diversification
State & Local ³⁷	\$2,825,307	\$3,218,872	\$ 3,175,967	\$ 3,362,640	\$2,534,985		
Private	\$44,800	\$298,885	\$ 185,950	\$ 29,447	\$23,745		
Gifts ³⁸	\$1,337,379	\$2,361,794	\$ 2,886,613	\$ 3,483,723	\$1,298,932	Available after	
Total	\$5,713,945	\$7,480,356	\$7,090,465	\$ 7,735,984	\$4,920,108	July 1, 2024.	
Benchmark: +\$100,000 annually ³⁹	\$5,236,809	5,335,809	\$5,435,809	\$ 5,535,809	\$ 5,635,809		
Achievement	MET	MET	MET	MET	NOT MET		

Key External and Internal Factors

In terms of factors influencing strategic plan goals, enrollment-related external factors include a reduction in the Lewiston High School graduating class, a strong jobs market, and the recovery of business operations from the Coronavirus pandemic. As a consequence, LC State's achievement of some of its strategic plan goals has been impacted, both positively and negatively. Successes include online course and program offerings. These offerings swelled with students taking online coursework during FY's 21 & 22, and have since returned to pre-pandemic levels. Somewhat surprisingly, despite pandemic-related challenges and disruptions, the proportion of LC State freshmen who finished their bachelor's degree within 150% normative time (i.e., 6 years) increased significantly. These students started college in the fall of 2017, prior to pandemic operations and persisted at higher rates than observed historically. Moreover, by examining LC State's normative time to degree (100% time) graduation rates and credential output, students appear to be opting for short term credentialing (associates degrees and

³⁷ This item includes state scholarships awarded to the student, for the Opportunity Scholarship, and therefore may be resistant to change from institutional effort. FY 18 dollars include \$223k in state scholarships and \$625k in opportunity scholarships.

³⁸ Including grants that do not have restrictions or reporting requirements.

³⁹ Benchmark reflects \$100,000 above the baseline, which is the historical four-year average of total grant funds (\$5,135,809).

certificates) when they had initially sought to pursue a bachelor's degree. In these ways, LC State has improved its success rates and credential outputs. LC State, on the other hand, has struggled attracting an entering class composed of students coming directly from high school and directly from another institutional of higher education (i.e., direct transfer). These metrics are likely impacted by the shrinking graduating class size at LC State's primary 'feeder' school, Lewiston High School, and a strong jobs market. While the majority of LC State's remedial students succeeded in subsequent college-level coursework and completed gateway math classes early during their college attendance, performance on these metrics fell shy of LC State's rigorous performance goals. And finally, it was observed this year that professional credentialing associations and public licensing offices experienced delays communicating testing and licensing results to LC State. Therefore, recent outcomes in metrics assessing licensing and certification among completers in social work and workforce training programs of HVAC, plumbing and electrical apprenticeships were not available to report in this strategic plan.

The following assumptions about external and internal factors will continue to impact the institution as the FY 2025 Strategic Plan is implemented.

Lewis-Clark State College...

- 1. Will continue to be a modestly selective admission institution with a greater than 95% acceptance rate, serving a substantial number of first-generation students, admitting students with various degrees of college preparation.
- 2. Will serve both residential and non-residential students, including those who commute, take online courses, are place-bound (e.g., incarcerated), and are working adults.
- 3. LC State is maintaining its aspirational goal to serve 3,000 FTE, which is particularly challenging in, a post-pandemic world, punctuated by declining local, regional and national high school graduating classes.
- 4. Will continue to forge strategic partnerships with other institutions, agencies, businesses, and organizations and the community at large for mutual benefit particularly as it relates to LC State's graduate credentialling.
- 5. Will continue to promote its brand and share its successes with multiple audiences, including prospective students.
- 6. Will continue to recruit faculty, staff and students across a wide range of demographics.
- 7. Relies on ongoing efforts to maximize operational efficiencies (e.g., program prioritization and internal resource reallocation); and increasing and leveraging grants, private fundraising to complement tuition revenue and reduced state support.
- 8. Will continue to assess its programs and services (program performance program prioritization) to determine their efficacy and viability.
- Master planning was engaged. The plan updated, submitted and approved by the SBOE. The plan can be found at: <u>Microsoft Word - FY2021 Campus Master Plan - External - FINAL</u> (lcsc.edu).
- 10. Will advocate for increased per-capita investment in LC State via state funding in support of LC State's mission, strategic goals, position and role in Idaho's education ecosystem as a small school experience.

Evaluation Process

LC State's Strategic Plan was originally developed for the 2013-2018 timeframe. In light of the college's updated mission, the waning utility of the college's old strategic plan, and a successful NWCCU

accreditation evaluation, institutional goals and objectives were rewritten. A representative committee developed new strategies and objectives to guide the work of the college. The new goals and objectives were proposed in the 2018-2022 strategic plan, submitted for Board review during the March 2018 meeting and adopted during the June 2018 meeting. The current Strategic Plan document was modified and streamlined to reflect our post-pandemic realities. As presented in this plan report, the goals have been operationalized through relevant performance measures. System-wide performance measures are comingled among institutional performance measures to undergird LC State's commitment to "systemness". Institutional performance eview and subjective evaluation of the involved campus stakeholders.

Red Tape Reduction Act

Administrative Rules are promulgated through the State Board of Education and this information is contained in the State Board of Education's K-20 Strategic Plan.

Appendix 1: Crosswalk of State Board of Education Goals with Institutional Goals & Objectives

	State B	oard of Educatio	n Goals
Institutional Goals & Objectives	Goal 1: Educational System Alignment	Goal 2: Educational Attainment	Goal 3: Workforce Readiness
Goal 1: Strengthen & Optimize Instructional and Co-curricular Programming			
Objective A: Optimize course and program delivery options			\checkmark
Objective B: Ensure high quality program outcomes		\checkmark	
Objective C: Optimize curricular & co-curricular programming through <i>Connecting Learning to Life</i> initiative			\checkmark
Goal 2: Optimize Student Enrollment, Retention and Completion			
Objective A: Increase the college's degree-seeking student enrollment	\checkmark	\checkmark	
Objective B: Increase credential output	\checkmark	\checkmark	\checkmark
Goal 3: Foster and Support Campus Community Culture			
Objective A: Connecting College to Community	*K-20 Alignment & Coordination	*Lifelong Learning	
Goal 4: Increase and Leverage Institutional Resources to Support College's Mission			
Objective A: Grow Foundation Support and Grant Funding		\checkmark	

Table 1: The Idaho State Board of Education (SBOE) has four goals in its strategic plan, three of which are presented here in alignment with LC State's strategic plan goals and objectives. The goal missing in the above table from the SBOE plan is composed of measures entirely relating to K-12 education.



North Idaho College is in the process of a strategic plan revision which may result in changes to some elements of this plan, including benchmark targets.

MISSION STATEMENT

North Idaho College meets the diverse educational needs of students, employers, and the northern Idaho communities it serves through a commitment to student success, educational excellence, community engagement, and lifelong learning.

VISION STATEMENT

As a comprehensive community college, North Idaho College strives to provide accessible, affordable, quality learning opportunities. North Idaho College endeavors to be an innovative, flexible leader recognized as a center of educational, cultural, economic, and civic activities by the communities it serves.

GOAL 1: STUDENT SUCCESS

A vibrant, lifelong learning environment that engages students as partners in achieving educational goals to enhance their quality of life.

<u>Goal 1, Objective A: Provide innovative, progressive, and student-centered programs and services.</u> *Performance Measures*

I. Percentage of entering degree/certificate-seeking students who were awarded a degree or certificate, transferred, or are still enrolled at eight years after entry. *Source: IPEDS Outcome Measures Survey.* [CCM 257]

					Bench	nmark
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
51.2%	51.6%	54.4%	54.8%			
2012-2013 cohort followed through 8/31/2020	2013-2014 cohort followed through 8/31/2021	2014-2015 cohort followed through 8/31/2022	2015-2016 cohort followed through 8/31/2023	2016-2017 cohort data not yet available	52%	54%

Benchmark: 54% ¹ (by 2029)

II. Percentage of NIC Dual Credit students who participated in dual enrollment during any year of high school and matriculated at NIC within one year following their high school graduation. *Source: NIC Trends.* [CCM 227]

						Benchmark	
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029	
27.1% (329/1215) 2019 HS Grad Cohort	26.6% (329/1239) 2020 HS Grad Cohort	26.3% (317/1207) 2021 HS Grad Cohort	22.7% (254/1121) 2022 HS Grad Cohort	2023 HS Grad cohort data not yet available	26%	27%	

Benchmark: 27%² (by 2029)

III. Percentage of NIC Dual Credit students who participated in dual enrollment during any year of high school and matriculated at other institutions within one year following their high school graduation. *Source: NIC Trends.* [CCM 228]

					Bench	nmark
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
50.2% (610/1215) 2019 HS Grad Cohort	47.1% (583/1239) 2020 HS Grad Cohort	46.7% (564/1207) 2021 HS Grad Cohort	52.1% (584/1121) 2022 HS Grad Cohort	2023 HS Grad cohort data not yet available	47%	49%

Benchmark: 49%³ (by 2029)

IV. Total number of degrees/certificates produced, broken out by a) certificates of less than one year;
b) certificates of at least one year; and c) associate degrees. *Statewide Performance Measure. Source: NIC Trends.* [CCM 238]

						Benchmark	
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029	
a) 121 b) 620 c) 659 Total Awards: 1400	a) 96 b) 639 c) 734 Total Awards: 1469	a) 83 b) 568 c) 734 Total Awards: 1385	a) 119 b) 661 c) 743 Total Awards: 1523	FY 2024 data not yet available	a) 97 b) 645 c) 741 Total Awards: 1483	a) 98 b) 652 c) 749 Total Awards: 1499	

Benchmark: a) 98 b) 652 c) 749 4 (by 2029)

V. Number of unduplicated graduates broken out by a) certificates of less than one year; b) certificates of at least one year; and c) associate degrees. *Statewide Performance Measure. Source: NIC Trends.* [CCM 239]

						nmark
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
a) 105	a) 85	a) 68	a) 112		a) 86	a) 87
b) 604	b) 629	b) 550	b) 625	FY 2024	b) 635	b) 642
c) 619	c) 676	c) 681	c) 697	data not yet	c) 683	c) 690
Total overall	Total overall	Total overall	Total overall	available	Total overall	Total overall
unduplicated	unduplicated	unduplicated	unduplicated		unduplicated	unduplicated
count: 893	count: 921	count: 897	count: 952		count: 930	count: 939

Benchmark: a) 87 b) 642 c) 690⁵ (by 2029)

<u>Goal 1, Objective B: Engage and empower students to take personal responsibility and to actively participate in their educational experience.</u>

Performance Measures

I. Percentage of CTE Graduates that responded to a follow-up survey who achieved positive placement after leaving postsecondary education. *Source: NIC Trends.* [CCM 177]

					Bench	nmark
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
83.8% 2019-20 Graduates	85.1% 2020-21 Graduates	77.2% 2021-22 Graduates	** 2022-23 Graduates	FY 2024 data not yet available	85%	87%

Benchmark: 87% ⁶ (by 2029)

** Data not yet available, but coming soon. Follow-up surveys are currently in progress. Report is due to ICTE on April 30.

II. Percentage of non-remedial courses (duplicated student headcount) completed in the fall term with a C or better. *Source: NIC Trends.* [CCM 108]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
81.0% 12,854/15,873 Fall 2019	80.3% 11,777/14,666 Fall 2020	82.2% 11,764/14,315 Fall 2021	84.3% 11,187/13,278 Fall 2022	Fall 2023 cohort data not yet available	80%	82%

Benchmark: 82% ⁷ (by 2029)

<u>Goal 1, Objective C: Promote programs and services to enhance access and successful student</u> <u>transitions.</u>

Performance Measures

I. Persistence Rate: Full-time, first-time and new transfer-in students who persist to spring or receive an award that first fall as a percentage of that population. *Source: NIC Trends.* [CCM 155]

					Benchmark	
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
79.8% (604/757) Fall 2019 to Spring 2020	79.2% (568/717) Fall 2020 to Spring 2021	79.2% (563/711) Fall 2021 to Spring 2022	83.0% (508/612) Fall 2022 to Spring 2023	Fall 2023 cohort data not yet available	79%	80%

Benchmark: 80% 8 (by 2029)

II. Retention Rate: Full-time, first-time, degree/certificate-seeking student retention rates as defined by IPEDS. *Source: Integrated Postsecondary Education Data System (IPEDS).* [CCM 025]

					Bench	nmark
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
56.1% (361/644) Fall 2019 cohort	61.6% (366/594) Fall 2020 cohort	59.2% (363/613) Fall 2021 cohort	58.9% (308/523) Fall 2022 cohort (Preliminary)	Fall 2023 cohort data not yet available	61%	63%

Benchmark: 63%⁹ (by 2029)

III. Retention Rate: Part-time, first-time, degree/certificate-seeking student retention rates as defined by IPEDS. *Source: Integrated Postsecondary Education Data System (IPEDS).* [CCM 026]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
35.4% (86/243) Fall 2019 cohort	38.6% (101/262) Fall 2020 cohort	46.8% (118/252) Fall 2021 cohort	40.2% (84/209) Fall 2022 cohort (Preliminary)	Fall 2023 cohort data not yet available	36%	37%

Benchmark: 37% ¹⁰ (by 2029)

IV. Percent of undergraduate, degree/certificate-seeking students completing 30 or more credits per academic year at the institution reporting. *Statewide Performance Measure. Source: NIC Trends.* [CCM 195]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
9.9% (288/2920)	10.2% (284/2785)	10.3% (268/2605)	11.2% (259/2306)	FY 2024 data not yet available	11%	11%

Benchmark: 11%¹¹ (by 2029)

V. Percent of first-time, full-time, degree/certificate-seeking students graduating within 150% of time. *Statewide Performance Measure. Source: Integrated Postsecondary Education Data System (IPEDS).* [CCM 196]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
28.1%	28.3%	26.4%	35.7%	Fall 2021		
(188/668)	(194/686)	(170/644)	(212/594)	cohort data	28%	30%
Fall 2017	Fall 2018	Fall 2019	Fall 2020	not yet	2070	
Cohort	Cohort	Cohort	Cohort	available		

Benchmark: 30% ¹² (by 2029)

VI. Percent of first-time, full-time, degree/certificate-seeking students graduating within 100% of time. Statewide Performance Measure. Source: Integrated Postsecondary Education Data System (IPEDS). [CCM 199]

					Bench	nmark
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
18.7% (128/686) Fall 2018 Cohort	17.4% (112/644) Fall 2019 Cohort	25.4% (151/594) Fall 2020 Cohort	27.7% (170/613) Fall 2021 Cohort (Preliminary)	Fall 2022 cohort data not yet available	19%	20%

Benchmark: 20% ¹³ (by 2029)

GOAL 2: EDUCATIONAL EXCELLENCE

High academic standards, passionate and skillful instruction, professional development, and innovative programming while continuously improving all services and outcomes.

<u>Goal 2, Objective A: Evaluate, create and adapt programs that respond to the educational and training</u> <u>needs of the region.</u>

Performance Measures

I. Market Penetration: Unduplicated headcount of credit students as a percentage of NIC's total service area population. *Source: NIC Trends.* [CCM 037]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
2.7% 6,586/245,861	2.4% 6,098/253,227	2.2% 5,717/265,384	2.0% 5,478/272,719	FY 2024 data not yet available	2.3%	2.0%

Benchmark: 2.0% ¹⁴ (by 2029)

II. Market Penetration: Unduplicated headcount of non-credit students as a percentage of NIC's total service area population. *Source: NIC Trends.* [CCM 038]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
1.8% 4,471/245,861	1.9% 4,794/253,227	1.6% 4,189/265,384	1.7% 4,757/272,719	FY 2024 data not yet available	1.8%	1.7%

Benchmark: 1.7% ¹⁵ (by 2029)

III. Percent of undergraduate, degree/certificate-seeking students taking a remediation course completing a subsequent credit bearing course (in the area identified as needing remediation) within a year with a "C" or higher. Statewide Performance Measure. Source: NIC Trends. [CCM 203/204]

Math

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
27.5%	30.9%	30.6%	35.5%	22-23 cohort		
(145/528)	(146/473)	(129/422)	(138/389)	data not yet	33%	33%
18-19 cohort	19-20 cohort	20-21 cohort	21-22 cohort	available		

English

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
70.9%	60.7%	65.0%	69.7%	22-23 cohort		
(173/244)	(147/242)	(130/200)	(122/175)	data not yet	66%	66%
18-19 cohort	19-20 cohort	20-21 cohort	21-22 cohort	available		
(173/244) 18-19 cohort	(147/242) 19-20 cohort	(130/200) 20-21 cohort	(122/175) 21-22 cohort	data not yet available	66%	66%

Benchmark: Math 33%; English 66% ¹⁶ (by 2029)

IV. Percent of new degree/certificate-seeking freshmen completing a gateway math course within two years. *Statewide Performance Measure. Source: NIC Trends.* [CCM 198]

					Bench	nmark
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
59.4%	52.5%	52.3%	58.3%	21-22 cohort		
(326/549)	(294/560)	(274/524)	(297/509)	data not yet	55%	55%
17-18 cohort	18-19 cohort	19-20 cohort	20-21 cohort	available		

Benchmark: 55%¹⁷ (by 2029)

<u>Goal 2, Objective B: Engage students in critical and creative thinking through disciplinary and interdisciplinary teaching and learning.</u>

Performance Measures

I. Student perceptions of Student-Faculty Interactions. *Source: Community College Survey of Student Engagement (CCSSE).* [CCM 162]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
52.2	50.9	47.3	51.0	Spring 2025		
Spring 2017	Spring 2019	Spring 2021	Spring 2023	data not yet	N/A	50
Top Schools 58.5	Top Schools 60.1	Top Schools 60.7	Top Schools 61.9	avallable		

Benchmark: Standardized Benchmark Mean of 50¹⁸ (by 2029)

Note: Survey administered every other year so data points may not line up with FY headers.

II. Student perceptions of Support for Learners. *Source: Community College Survey of Student Engagement (CCSSE).* [CCM 165]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
44.2	48.6	42.2	46.0	Spring 2025		
Spring 2017 Top Schools 58.4	Spring 2019 Top Schools 60.9	Spring 2021 Top Schools 60.5	Spring 2023 Top Schools 61.1	data not yet available	N/A	50

Benchmark: Standardized Benchmark Mean of 50¹⁹ (by 2029)

Note: Survey administered every other year so data points may not line up with FY headers.

<u>Goal 2, Objective C: Strengthen institutional effectiveness, teaching excellence and student learning</u> through challenging and relevant course content, and continuous assessment and improvement.

Performance Measures

I. Percentage of Student Learning Outcomes Assessment (SLOA) goals met over 3-year plan. *Source: NIC Trends.* [CCM 114]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
81%	90%	90%	95%	FY 2024 data not yet available	90%	90%

Benchmark: At least 90% of SLOA goals are consistently progressing or met ²⁰ (by 2029)

II. Full-time to Part-time faculty ratio. *Source: NIC Trends.* [CCM 029]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
0.7:1.0 150FT & 213PT	0.8:1.0 144FT & 173PT	0.9:1.0 131FT & 153PT	0.7:1.0 114FT & 172PT	FY 2024 data not yet available	0.8:1.0	0.8:1.0

Benchmark: No less than 0.8:1.0²¹ (by 2029)

<u>Goal 2, Objective D: Recognize and expand faculty and staff scholarship through professional</u> <u>development.</u>

Performance Measures

I. Professional Development resources are disbursed through a competitive and peer-reviewed process annually. *Source: NIC Trends.* [CCM 115]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
\$89,267	\$59,345	\$103,502	\$132,122	FY 2024 data not yet available	Maintain or increase funding levels	Maintain or increase funding levels

Benchmark: Maintain or increase funding levels ²² (by 2029) Note: FY20 and FY21 decline due to COVID-related travel restrictions.

GOAL 3: COMMUNITY ENGAGEMENT

Collaborative partnerships with businesses, organizations, community members, and educational institutions to identify and address changing educational needs.

<u>Goal 3, Objective A:</u> Advance and nurture relationships throughout our service region to enhance the lives of the citizens and students we serve.

Performance Measures

I. Percentage of student evaluations of workforce training and community education courses with a satisfaction rating of above average. *Source: NIC Trends.* [CCM 054]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
98% (281/286)	96% (303/317)	99% (214/217)	97% (286/295)	FY 2024 data not yet available	96%	96%

Benchmark: 96% ²³ (by 2029)

<u>Goal 3, Objective B: Demonstrate commitment to the economic/business development of the region.</u> *Performance Measures:*

I. Licensure Pass Rates. Source: NIC Trends. [CCM 091]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
93%	96%	96%	93%	FY 2024 data not yet available	90%	90%

Benchmark: 90% ²⁴ (by 2029)

Goal 3, Objective C: Promote North Idaho College in the communities we serve.

Performance Measures

I. Dual Credit annual credit hours taught in the high schools as percentage of total dual credit hours taught. *Source: Idaho State Board of Education Dual Credit Report.* [CCM 020]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
7,721 credits 39.3% of total	6,218 credits 33.5% of total	6,857 credits 36.6% of total	6,809 credits 36.3% of total	FY 2024 data not yet available	34%	35%

Benchmark: 35% (by 2029)²⁵

II. Dual Credit annual credit hours as percentage of total credits. *Source: Idaho State Board of Education Dual Credit Report.* [CCM 019]

					Bench	nmark
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
19,658	18,534	18,722	18,743	FY 2024		
credits	credits	credits	credits	data not yet	20%	21%
21% of total	21% of total	22% of total	24% of total	available		

Benchmark: 21%²⁶ (by 2029)

III. Dual Credit unduplicated annual headcount and percentage of total. *Source: Idaho State Board of Education Dual Credit Report.* [CCM 017]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
1,970 30% of total	1,670 27% of total	1,636 29% of total	1,750 32% of total	FY 2024 data not yet available	27%	28%

Benchmark: 28%²⁷ (by 2029)

Goal 3, Objective D: Enhance community access to college.

Performance Measures

I. Distance Learning proportion of credit hours. *Source: National Community College Benchmarking Project (NCCBP).* [CCM 258]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
24.5% 11,099/45,355 Fall 2019	43.9% 18,828/42,874 Fall 2020	39.5% 16,399/41,517 Fall 2021	37.2% 14,320/38,535 Fall 2022	Fall 2023 cohort data not yet available	30%	30%

Benchmark: 30% of total student credit hours is achieved ²⁸ (by 2029)

GOAL 4: DIVERSITY

A learning environment that celebrates the uniqueness of all individuals and encourages cultural competency.

Goal 4, Objective A: Foster a culture of inclusion.

Performance Measures

I. Percentage of students enrolled from diverse populations. Source: NIC Trends. [CCM 105]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
					Maintain a	Maintain a
					diverse, or	diverse, or
77.8% White	77.9% White	77.4% White	73.7% White		more diverse	more diverse
14.5% Other	14.9% Other	15.1% Other	14.9% Other	FY 2024	population	population
7.7%	7.2%	7.5%	11.4%	auta not yet	than the	than the
Unknown	Unknown	Unknown	Unknown	uvulluble	population	population
					within NIC's	within NIC's
					service region	service region

Benchmark: Maintain a diverse, or more diverse population than the population within NIC's service region ²⁹ (by 2029)

Goal 4, Objective B: Promote a safe and respectful environment.

Performance Measures

I. Percentage of students surveyed that perceive NIC encourages contact among students from different economic, social, and racial or ethnic backgrounds. *Source: Community College Survey of Student Engagement (CCSSE).* [CCM 106]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
38.4%	50.1%	40.9%	51.5%	Spring 2025		
Spring 2017	Spring 2019	Spring 2021	Spring 2023	data not vet	NI/A	15%
National	National	National	National	available	N/A	4570
Average 55.1%	Average 56.2%	Average 57.3%	Average 59.4%	uvulluble		

Benchmark: 45% ³⁰ (by 2029)

Note: Survey administered every other year so data points may not line up with FY headers.

Goal 4, Objective C: Develop culturally competent faculty, staff and students.

Performance Measures

I. Number of degree/certificate-seeking students who met the proficiency outcomes for identified GEM 5 and GEM 6 diversity competencies. *Source: NIC Trends.* [CCM 174]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
88%	87%	88%	92% (Preliminary)	FY 2024 data not yet available	87%	90%

Benchmark: 90% of degree/certificate-seeking students ³¹ (by 2029)

GOAL 5: STEWARDSHIP

Economic and environmental sustainability through leadership, awareness, and responsiveness to changing community resources.

Goal 5, Objective A: Exhibit trustworthy stewardship of resources.

Performance Measures

I. Tuition revenue as a percentage of total revenue. Source: NIC Trends. [CCM 172]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
						Total tuition
				FY 2024		revenue not
23.1%	21.3%	21.3%	18.0%	data not yet	21%	to exceed
				available		33.3% of
						revenue

Benchmark: Total tuition revenue not to exceed 33.3% of revenue ³² (by 2029)

II. Tuition and Fees for full-time, first-time, in-district students, full academic year. Source: Integrated Postsecondary Education Data System (IPEDS). [CCM 130]

	Benchmark				
FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
\$3,396	\$3,396	\$3,396	FY 2024		
NIC Percentile	NIC Percentile	NIC Percentile	data not yet	73%	75%
Score 73%	Score 73%	Score 73%	available		
	FY 2021 \$3,396 NIC Percentile Score 73%	FY 2021FY 2022\$3,396\$3,396NIC PercentileNIC PercentileScore 73%Score 73%	FY 2021FY 2022FY 2023\$3,396\$3,396\$3,396NIC PercentileNIC PercentileNIC PercentileScore 73%Score 73%Score 73%	FY 2021FY 2022FY 2023FY 2024\$3,396\$3,396\$3,396\$3,396NIC PercentileNIC PercentileNIC PercentileAnot yet availableScore 73%Score 73%Score 73%	FY 2021FY 2022FY 2023FY 2024FY 2025\$3,396\$3,396\$3,396\$3,396FY 2024NIC Percentile Score 73%NIC Percentile Score 73%NIC Percentile Score 73%NIC Percentile Score 73%NIC Percentile Score 73%

Benchmark: 75th percentile ³³ (by 2029)

Note: Higher percentile scores represent lower costs. For example, data indicates that NIC is less expensive than 73% of the institutions in its peer comparison group. Benchmark/target is to reach 75%.

III. Auxiliary Services generates sufficient revenue (net income) to cover direct costs of operations. *Source: NIC Trends.* [CCM 170]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
(\$130,011)	(\$90,281)	\$206,258	\$381,459	FY 2024 data not yet available	Annual direct costs maintained	Annual direct costs maintained

Benchmark: Annual direct costs maintained ³⁴ (by 2029)

Goal 5, Objective B: Demonstrate commitment to an inclusive and integrated planning environment.

Performance Measures

 NIC will utilize the Postsecondary Data Partnership (PDP) Dashboards Benchmark: By 2024 Note: This target has been achieved; measure is currently under review.

Goal 5, Objective C: Explore, adopt, and promote initiatives that help sustain the environment.

Performance Measures

II. Energy consumption per gross square foot as determined by gas/electric costs. *Source: NIC Trends.* [CCM 192]

		Benchmark				
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2029
\$0.86	\$0.90	\$0.95	\$1.06			
per gross	per gross	per gross	per gross	FY 2024	\$0.90 per	\$0.90 per
square foot	square foot	square foot	square foot	data not yet	gross square	gross square
\$653,996/	\$683,073/	\$722,741/	\$823,293/	available	foot	foot
756,863 sq ft	756,863 sq ft	756,863 sq ft	776,863 sq ft			

Benchmark: \$0.90 per gross square foot ³⁵ (by 2029)

KEY EXTERNAL FACTORS

- North Idaho College is currently under an extended show-cause sanction imposed by the Northwest Commission on Colleges and Universities
- Changes in the economic environment, including the COVID-19 pandemic
- Changes in local, state, or federal funding levels
- Changes in local, state, or national educational priorities
- Changes in education market (competitive environment)

EVALUATION PROCESS

- Details of implementation
 - The Institutional Research Team, along with NIC's Provost, leads the President's Cabinet in an annual review and revision of the strategic plan. The strategic plan is organized to align with North Idaho College's core values. Together, the core values and the strategic plan guide NIC to mission fulfillment.
- Status of goals and objectives
 - North Idaho College's goals for the strategic plan are also the college's core values. The objectives to meet the goals are reviewed with the data collected to determine if benchmarks have been met. The review process often leads to the following questions:
 - Is the data we are collecting providing information related to goal attainment?
 - Is additional data needed to better understand goal attainment?
 - Do the objectives need revision to reach goal attainment?
 - There were no substantial changes made to the goals and objectives in the past academic year.

Footnotes

¹ Benchmark is set based on IPEDS data from comparator institutions combined with current institutional challenges the desired level of achievement. Numbers for those comparator institutions range between 59% and 63% (based on median of comparator group institutions, 2011-12 through 2014-15, latest available). Cohort includes first-time degree/certificate-seeking and new transfer degree/certificate-seeking students for the fiscal year. Includes students who received a degree/certificate, transferred, or are still enrolled after eight years. [CCM 257]

² Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. National Student Clearinghouse results were used to calculate these numbers. Numbers are as of 02/28/2024. Data refreshes nightly so prior year trends may have changed slightly. Students who graduate during a fall or winter term may not be fully represented. FY20-FY22 (2019 cohort-2021 cohort) updated March 2024 to reflect latest data available. [CCM 227]

³ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. National Student Clearinghouse results were used to calculate these numbers. Numbers are as of 02/28/2024. Data refreshes nightly so prior year trends may have changed slightly. Other Institutions excludes NIC. Students who graduate during a fall or winter term may not be fully represented. FY20-FY22 (2019 cohort-2021 cohort) updated March 2024 to reflect latest data available [CCM 228]

⁴ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Total awards by award level. Historical data has been revised to reflect current IPEDS definitions which reflect a change in methodology, effective October 2020. Data prior to FY21 may not reflect what was previously reported to IPEDS. [CCM 238]

⁵ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Counts are unduplicated by award level. Historical data has been revised to reflect current IPEDS definitions which reflect a change in methodology, effective October 2020. Data prior to FY21 may not reflect what was previously reported to IPEDS. [CCM 239]

⁶ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. This measure is currently under review due in part to methodology differences that exist between data collection processes. Positive placement includes employed and/or employed related to training. Percentages are calculated on respondents only. [CCM 177]

⁷ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. This measure represents the number of students (duplicated headcount) who completed non-remedial courses with a C or better (or P or S). Denominator is the duplicated count of students enrolled in non-remedial courses at the end of term. Does not include labs, incompletes, or audits. [CCM 108]

⁸ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. [CCM 155]

⁹ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Benchmark calculations exclude the outlier year. Anticipate FYE program to increase retention. This cohort represents a small percentage of NIC's total credit student population. FY23 numbers (Fall 2022 cohort) are pre-IPEDS submission and should be considered preliminary at this point. FY21-FY22 (Fall 2020 cohort-Fall 2021 cohort) updated March 2024 to reflect latest data available. [CCM 025]

¹⁰ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Benchmark calculations exclude the outlier year. Anticipate FYE program to

increase retention. This cohort represents a small percentage of NIC's total credit student population. FY23 (Fall 2022 cohort) numbers are pre-IPEDS submission and should be considered preliminary at this point. FY22 (Fall 2021 cohort) updated March 2024 to reflect latest data available. [CCM 026]

¹¹ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Based on a cohort of students that excludes non-degree/certificate-seeking, Dual Credit, and 100% audits. Includes registered credits and credits awarded through placement tests, Summer/Fall/Spring. Refreshed nightly so numbers may change slightly, i.e., incomplete grade changes. [CCM 195]

¹² Benchmark is set based on IPEDS data from comparator institutions combined with current institutional challenges and the desired level of achievement. [CCM 196]

¹³ Benchmark is set based on IPEDS data from comparator combined with current institutional challenges and the desired level of achievement. FY23 numbers (Fall 2021 cohort) are pre-IPEDS submission and should be considered preliminary at this point. [CCM 199]

¹⁴ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Benchmark factors in decrease in enrollment and increase in population. Service Area population numbers are based on latest United States Census Bureau estimates (2022). [CCM 037]

¹⁵ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. FY22 enrollment decline due to fewer Community Education courses now being offered. Benchmark factors in decrease in enrollment and increase in population. Service Area population numbers are based on latest United States Census Bureau estimates (2022). [CCM 038]

¹⁶ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. FY20-FY22 (18-19 cohort - 20-21 cohort, English) updated March 2024 to reflect latest data available. [CCM 203/204]

¹⁷ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Full year cohort, first-time degree/certificate-seeking, full- and part-time (IPEDS). Gateway courses include MATH 123, 130, 143, 147, 157, 160, 170, and 253. [CCM 198]

¹⁸ Benchmark is set based on the standardized mean of benchmark scores. Data points represent benchmark scores for the CCSSE Benchmark: Student-Faculty Interaction. Benchmarks are groups of conceptually related survey items that address key areas of student engagement. Benchmark scores are standardized to have a mean of 50 and a standard deviation of 25 across all respondents. Top Schools are those that scored in the top 10 percent of the cohort by benchmark. CCSSE is a survey administered to community college students across the nation. [CCM 162]

¹⁹ Benchmark is set based on the standardized mean of benchmark scores. Data points represent benchmark scores for the CCSSE Benchmark: Support for Learners. Benchmarks are groups of conceptually related survey items that address key areas of student engagement. Benchmark scores are standardized to have a mean of 50 and a standard deviation of 25 across all respondents. Top Schools are those that scored in the top 10 percent of the cohort by benchmark. CCSSE is a survey administered to community college students across the nation. [CCM 165]

²⁰ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Each action for the goals is rated on a scale of 1 to 3: 3 = Action Met, 2 = Consistently Progressing, or 1 = Not Attempted. N/A = future timeline for the goal. The mean score of all actions is calculated and the percentage is used to evaluate this measure. The goals are evaluated annually. [CCM 114]

²¹ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Counts include all active employees. FY22 revised March 2024. [CCM 029]

²² Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Reflects the total of the Faculty PIP, Staff PIP, and Professional Development Fund and all expenses in the staff development line item for the general fund departments. Does not include tuition waivers for NIC courses taken by NIC employees. FY20 and FY21 substantially lower than prior years due to COVID-related travel restrictions. [CCM 115]

²³ FY22 cohort of students is smaller due to a decrease in number of Community Education classes offered. Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. [CCM 054]

²⁴ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Percentages shown reflect the average pass rate of all programs. Programs may vary year to year. FY23 includes Medical Assistant, Medical Lab Technology, Physical Therapist Assistant, Practical Nursing, Radiography Technology, Registered Nursing, and Surgical Technology. In the evaluation of NIC's strategic plan, there is an additional benchmark that is considered aspirational and is extra-ordinary compared with similar institutions (peer groups). This component acknowledges that NIC has achieved a level of excellence on a particular measure and has little room for improvement, but should be encouraged to sustain this high level over time. Performance in the top third of the relevant comparator group is the threshold for sustained excellence for most measures. However, for any measure involving the performance of students on professional and occupational licensure tests, sustained excellence is considered to have been met with a passage rate of 90 percent or above. FY21 updated March 2024. [CCM 091]

²⁵ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. [CCM 020]

²⁶ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. [CCM 019]

²⁷ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. [CCM 017]

²⁸ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Data reflects the number of Distance Learning student credit hours out of number of both distance and non-distance student credit hours, end-of-term. Includes courses and programs in which ALL instructional portions can be completed remotely. Non-instructional, in-person requirements (e.g., orientation and testing) does not exclude a course or program from being classified as exclusively distance learning. This includes credit distance learning courses that are web-based, computer mediated, asynchronously AND synchronously via zoom, etc. in which the learner and learning resources can be generally separated by time and/or space. Does not include hybrid or other courses that require a portion to be done in person. [CCM 258]

²⁹ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Latest NIC Service Region comparison = 88.7% White, 9.3% Other, and 2.0% Unknown. (Source: U.S. Census Bureau Quick Facts, July 2022). [CCM 105]

³⁰ Benchmark is based on national comparators combined with the desired level of achievement. Represents the percentage of students who answered "quite a bit" or "very much" to one individual survey question. The Community College Survey of Student Engagement (CCSSE) is a survey administered to community college students across the nation. [CCM 106]

³¹ Proficiency outcomes were defined in the spring of 2021. GEM = General Education Requirements. GEM 5 = Humanistic & Artistic Ways of Knowing; GEM 6 = Social & Behavioral Ways of Knowing. Note: NIC started collecting proficiency outcome for all GEM courses in FY19. During the first year a limited number of courses were assessed. The college expects an increase in the number of courses assessed to increase as more faculty participate in the process. Consequently, the college is predicting a decrease in the percentage of students who meet the proficiency outcomes. Percentages represent the weighted average of GEM 5 and GEM 6. FY23 is currently under review and should be considered preliminary at this point. [CCM 174]

³² Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. FY21 decline due in part to CARES federal funding received. [CCM 172]

³³ Benchmark is set based on IPEDS data from comparator institutions combined with the desired level of achievement. Higher percentile scores represent lower costs. For example, data indicates that NIC is less expensive than 73% of the institutions in its peer comparison group. Benchmark/target is to reach 75%. [CCM 130]

³⁴ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. Auxiliary Services Operating Units include: Bookstore, Dining Services, Residence Hall, Student Union Operations, Financial Services, and the Student Wellness & Recreation Center. These Operating Units provide services to the students and the North Idaho College campuses that are not covered by tuition dollars and/or state fees. Continuing enrollment decline resulted in lower student fee generation, the primary source of funding for Student Union Operations and the Student Wellness & Recreation Center. FY23 Revenues from Sales and Operational Expenses are markedly higher than FY22 due the accounting treatment caused by a change to a Management Fee agreement with North Idaho College's food service provider, Sodexo America LLC. Debt-service for the Residence Hall was retired in FY22. Remaining debt-service attaches to the Student Wellness & Recreation Center, including principal and interest for FY23. Stewardship is displayed by leveraging resources to contribute to the economic viability of North Idaho College. [CCM 170]

³⁵ Benchmark is set based on an analysis of historical trends combined with current institutional challenges and the desired level of achievement. [CCM 192]

FY2025-FY2029 Idaho Department of Education Strategic Plan

MISSION STATEMENT

To support Idaho students, educators, and school leaders with the tools and resources needed to achieve academic excellence through strategic thought, leadership, and policy alignment.

VISION STATEMENT

All Idaho students have access to a high-quality education that prepares them for their future with skills and job readiness to become engaged, successful citizens.

GUIDING VALUES

Listen with intention.

Lean into collaboration.

Lead with integrity.

GOAL 1: MODERNIZE EDUCATION FUNDING

Objective A: Determine costs of providing K-12 education in Idaho and recommend equitable funding.

Performance Measures:

- I. Evaluate and report rural education costs vs. urban costs and define each. Target 12/1/25.
- II. Definitions. Target 7/22/25.
- III. Identify differences in rural and urban LEA costs through five-year historical comparisons of LEAs. Target 12/1/25.
- IV. Evaluate and report virtual vs. brick and mortar LEA expenditures. Target 12/1/25.
- V. Develop budget with increased discretionary funding flexibility. Target 12/1/25.
- VI. Explore changes to funding model that reflects contemporary needs. Budget accordingly. Target 12/31/25.
- VII. Compare assets and liabilities of 4 day vs. 5 day school weeks. Target 11/1/25.

Objective B: Stabilize Federal funding dependence without decreasing support for underserved students.

Performance Measures:

- I. Quantify school district dependence on federal funding for employees/programs. Target 11/1/25.
- II. Suggest alternatives to increased federal funding dependence. Target 11/1/25.
- III. Evaluate and report risk and rewards of stabilizing Federal funding to Idaho. Target 1/1/26.

Objective C: Reduce district dependency on school levies and bonds through increased responsibility of other stakeholders.

Performance Measures:

- I. Report Values of bonds and levies passed and failed (past 20+ years). Target 12/31/25.
- II. What are the reported uses of supplemental levies in Idaho? Regional Analysis? Target 12/31/25.
- III. Analyze the effect of 2023 funding increases and recommend adjustments. Target 12/1/25.
- IV. Explore additional state support that will reduce reliance on supplemental levies. Target 12/31/25.

- V. Analyze and recommend options for updating state support for facilities (e.g., revolving loan). Target 1/1/26.
- VI. Analyze and recommend options for state funded building construction. Target 1/1/26.

Objective D: Examine the value/roots/motivation/benefits of per pupil funding.

- I. Reevaluate unit calculation. Target 12/31/25.
- II. Reevaluate seat time calculation. Target 12/31/25.
- III. Review Title 33 for relevance. Target 12/31/25.

Objective E: Align funding with Idaho Department of Education Goals.

- I. Review existing line items and their alignment with Department goals. Target 9/1/25.
- II. Align Department administrative structure with Department goals. Target 12/31/25.

GOAL 2: STUDENT ACHIEVEMENT GOALS

Objective A: Improve Idaho student achievement growth.

Performance Measures:

- Directly train 3 Idaho schools in the 2023/24 SY in the Professional Learning Community process. Develop background for future development. Year 2: Target 10+ LEA's (same process). Target 7/30/26.
- II. Offer 4 early literacy, face-to-face professional development opportunities, with an emphasis on Dyslexia. Target 8/30/26.
- III. Staff will personally visit 3/4, about 135, of the LEAs and charter schools in SY 2023/24. Target 7/30/26.
- IV. SDE will assist in at least 10 school districts in the critique and selection of researchbased curricula, proven effective with Idaho students. Target 7/30/26.
- V. Visually clear (easy to read) student cohort data in reading and math. Target 7/1/26.
- VI. Establish statewide reading goals for "below basic" readers on IRI. Target 12/14/25.

Objective B: Improve the mental and behavioral health of Idaho students

Performance Measures:

- I. Work with education and community partners to identify existing resources.
- II. Identify, highlight, and replicate existing/ successful Idaho-based programs. Target 3/31/26.
- III. Identify gaps in mental health services for Idaho students. Target 12/30/26.

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- IV. Support advocacy for parents meeting with schools and assist with conflict resolution. Target 7/1/27.
- V. Support professional development for special education teachers and directors. Target 7/1/27.
- VI. Help general education teachers clearly understand the differences between mental health issues and special education needs. Target 7/1/27.

Objective C: Train education stakeholders in developing and implementing meaningful assessment tools

Performance Measures:

- I. Solicit stakeholder input around the state- required IRI assessment. Target 2/1/26.
- II. Develop an RFP for the Idaho Reading Indicator. Target 2/28/26.
- III. Solicit stakeholder input around the ESSA-required state assessment (ISAT). Target 2/1/27.
- IV. Develop an RFP for the Idaho Standards of Achievement Test (ISAT). Target 6/30/27.
- V. Solicit stakeholder input around the Idaho dyslexia screening tool. Target 2/1/27.
- VI. Develop an RFP for the Idaho dyslexia screening tool.6/30/27.
- VII. Solicit stakeholder input around the federally-required SDE report card. Target 2/1/26.

VIII. Develop an RFP for the federally- required SDE report card (idahoschools.org). Target 3/28/26.

Objective D: Identify essential standards for math and science

Performance Measures:

- I. Establish workgroup to identify essential standards for math. Target 4/30/26.
- II. Create SDE document identifying essential standards for math. Target 6/30/26.
- III. Establish workgroup to identify essential standards for ELA. Target 8/30/26.
- IV. Create SDE document identifying essential standards for ELA. Target 4/30/27.
- V. Establish workgroup to identify essential standards for science. Target 8/30/27.
- VI. Create SDE document identifying essential standards for science. Target 4/30/26.
- VII. Review and discuss ESSA-required summative assessment option with USDOE. Target 2/15/26.

GOAL 3: ATTRACT AND RETAIN LEADERS

Objective A: recruit new teachers and administrators to Idaho K-12 schools.

Performance Measures:

- I. Define measurability of recruitment and determine benchmark. Target 11/15/25.
- II. Provide incentives for teacher candidates in approved teacher prep programs. Target 12/1/25.
- III. Surrounding states starting salaries. Target 12/31/25.

Objective B: Retain Idaho's highest performing teachers

Performance Measures:

- I. Help Idaho's teachers feel appreciated and recognized. Create a culture of respect and value. Target 1/1/27.
- II. Support school districts in providing high quality mentorship for educators. Specifically for educators in their first three years. Target 6/30/26.
- III. Accumulate ideas for specifically defining mentoring in Idaho education. Target 2/15/26
- IV. Ensure that every district can access quality mentoring for their staff. Target 3/15/26.
- V. Support required training for school board members. Target 4/1/26.

Objective C: Retain Idaho's highest performing administrators

Performance Measures:

- I. Orientation training for new superintendents. Target 1/1/26.
- II. Training for all superintendents (Idaho superintendent's network). Target 1/1/26.
- III. SDE will assist education partners in school board training related to hiring and evaluating superintendents. Target 6/30/27.

Objective D: Hire and retain exceptional teammates at the Idaho Department of Education

Performance Measures:

- I. Define what exceptional teammate means. Target 7/1/26.
- II. Determine baseline retention rate for exceptional teammates. Target 8/1/26.
- III. Monitor retention rate. Target 7/1/28.

GOAL 4: PREPARE STUDENTS FOR LIFE

Objective A: Prepare students for all options following high school graduation

Performance Measures:

- I. Award grant monies from Idaho Career Ready Students. Target 12/31/25.
- II. Track Launch enrollment. Target 7/1/26.
- III. Idaho Career Ready Students granting council membership. Target 7/1/26.

Objective B: Improve Financial Literacy of Idaho Students

Performance Measures:

- I. Work towards a full credit for the required class. Target 6/1/27.
- II. Leverage free curriculums.

Objective C: Review and Update Graduation Requirements

Performance Measures:

I. Establish a committee to provide recommendation to SBOE. Target 6/30/26.

KEY EXTERNAL FACTORS

Movement toward meeting these goals is contingent on many factors outside the control of the Idaho Department of Education. Key to this is that K-12 funding is primarily provided by the Idaho Legislature. The Idaho Department of Education does not select this body.

Another factor outside the sphere of influence of the Department is the changing demographics of the state. A large number of immigrants, and retired, out of state residents have come to Idaho. They affect the political tenor of Idaho's politics.

A final external fact influencing the achievement of goals is the economy of Idaho. It influences money available, workforce needs, and more.



University of Idaho Strategic Plan and Process

FY25 – FY29

Base 10-year plan established for 2016 – 2025; approved by the SBOE June 2016 Reviewed and submitted March 2024 for FY25 – FY29

MISSION STATEMENT

The University of Idaho will shape the future through innovative thinking, community engagement and transformative education.

The University of Idaho is the state's land-grant research university. From this distinctive origin and identity, we will enhance the scientific, economic, social, legal, and cultural assets of our state and develop solutions for complex problems facing our society. We will continue to deliver focused excellence in teaching, research, outreach, and engagement in a collaborative environment at our residential main campus in Moscow, regional centers, extension offices and research facilities across Idaho. Consistent with the land-grant ideal, we will ensure that our outreach activities serve the state and strengthen our teaching, scholarly and creative capacities statewide.

Our educational offerings will transform the lives of our students through engaged learning and selfreflection. Our teaching and learning will include undergraduate, graduate, professional and continuing education offered through face-to-face instruction, technology-enabled delivery, and hands-on experience. Our educational programs will strive for excellence and will be enriched by the knowledge, collaboration, diversity and creativity of our faculty, students, and staff.

VISION STATEMENT

The University of Idaho will expand the institution's intellectual and economic impact and make higher education relevant and accessible to qualified students of all backgrounds.

GOAL 1: Innovate Scholarly and creative work with impact

Scholarly and creative products of the highest quality and scope, resulting in significant positive impact for the region and the world.¹

<u>Objective A:</u> Build a culture of collaboration that increases scholarly and creative productivity through interdisciplinary, regional, national and global partnerships.

Performance Measures:

I. Research Expenditures (\$ thousand)²

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
113,107	112,810	105,900	135,901	Available	114	116
				Later		

Objective B: Create, validate and apply knowledge through the co-production of scholarly and creative works by students, staff, faculty and diverse external partners.

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Performance Measures:

I. Terminal degrees in given field (PhD, MFA, etc.)

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-	(2028-2029)
					2025)	
242	322	403	386	Available	325	345
				Later		

II. Number of Postdocs, and Non-faculty Research Staff with Doctorates

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
103	106	122	202	Available	110	120
				Later		

III. Number of undergraduate and graduate students paid from sponsored projects (System wide metric)

FY20	FY21	FY22	FY23	FY24	Benchmark		
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29	
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)	
657 (UG)	660 (UG)	740 (UG)	725 (UG)	Available	675 (UG) &	700 (UG) &	
&	& 390 (GR)	& 336	& 342	Later	425 (GR)	500 (GR)	
418 (GR)	1,050	(GR)	(GR)		1,100 Total	1,200 Total	
1,075	Total	1,076	1,067				
Total		Total	Total				

IV. Percentage of students involved in undergraduate research (System wide metric)

FY20	FY21	FY22	FY23 (2022-	FY24	Benchmark	
(2019-	(2020-	(2021-	2023)	(2023-	FY25	FY29
2020)	2021)	2022)		2024)	(2024-2025)	(2028-
						2029)
60%	56%	53%	55%	Available	60%	65%
				Later		

Objective C: Grow reputation by increasing the range, number, type and size of external awards, exhibitions, publications, presentations, performances, contracts, commissions and grants.

Performance Measures

I. Invention Disclosures

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
35	29	20	12	Available	30	33
				Later		

GOAL 2: Engage Outreach that inspires innovation and culture

Suggest and influence change that addresses societal needs and global issues, and advances economic development and culture.

Objective A: Inventory and continuously assess engagement programs and select new opportunities and methods that provide solutions for societal or global issues, support economic drivers and/or promote the advancement of culture.

Performance Measures:

I. Go-On Impact³

FY20	FY21	FY22	FY23	FY24	Ben	chmark
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-	(2028-2029)
					2025)	
41.4%	41.4%	41.4%	41.4%	Available	42%	43%
				Later		

<u>Objective B:</u> Develop community, regional, national and/or international collaborations which promote innovation and use University of Idaho research and creative expertise to address emerging issues.

Performance Measures:

I. Percentage Faculty Collaboration with Communities (HERI)⁴

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
57%	57%	57%	57%	Available	60%	65%
				Later		

II. Economic Impact (\$ Billion)

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
1.10	1.01	1.01	1.01	Available	1.1	1.2
				Periodically		

<u>Objective C</u>: Engage individuals (alumni, friends, stakeholders and collaborators), businesses, industry, agencies and communities in meaningful and beneficial ways that support the University of Idaho's mission.

Performance Measures:

I. Number of Direct UI Extension Contacts

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
440,793	220,402	265,661	481,809	Available	350,000	430,000
				Later		

II. NSSE Mean Service Learning, Field Placement or Study Abroad

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
53%	53%	45%	45%	Available	55%	60%
				Later		

III. Alumni Participation Rate⁵

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
8.0%	7.4%	6.5%	4.6%	Available	8.5%	10%
				Later		

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
11,504 /	8,996 /	8,835 /	12,051 /	Available	11,500/2,370	12,500/2,660
2,371	1,886	1,868	2,506	Later		

IV. Dual credit (System wide metric) a) Total Credit Hours b) Unduplicated Headcount

GOAL 3: Transform Educational experiences that improve lives

Increase our educational impact.

Objective A: Provide greater access to educational opportunities to meet the evolving needs of society.

Performance Measures:

I. Enrollment

hmark	Benchmark		FY23	FY22	FY21	FY20
FY29 (2028-2029)	FY25 (2024-2025)	(2023- 2024)	(2022- 2023)	(2021- 2022)	(2020- 2021)	(2019- 2020)
13,000	11,750	11,849	11,507	11,303	10,791	11,926

Objective B: Foster educational excellence via curricular innovation and evolution.

Performance Measures:

I. **Ret**ention – New Students (System wide metric)

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
76.7%	74.3%	73.5%	75.0%	Available	80%	84%
Cohort	Cohort	Cohort	Cohort	Census		
2019-20	2020-21	2021-22	2022-23	Date		

nmark	Bencl	FY24	FY23	FY22	FY21	FY20
FY29	FY25	(2023-	(2022-	(2021-	(2020-	(2019-
(2028-2029)	(2024-2025)	2024)	2023)	2022)	2021)	2020)
84%	80%	Available	84.1%	79.6%	79.7%	82.9%
		Census	Cohort	Cohort	Cohort	Cohort
		Date	2022-23	2021-22	2020-21	2019-20

II. Retention – Transfer Students (System wide metric)

III. a)Graduates (All Degrees: IPEDS)⁶, b)Undergraduate Degree (PMR), c) Graduate / Prof Degree (PMR)

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
2,646	2,474	2,543	2,475	Available	2,500	3,000
1,675	1,568	1,507	1,457	Later	1,600	1,850
592/132	526/171	595/208	654/145		600/150	800/150

IV. NSSE High Impact Practices

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
77%	77%	70%	70%	Available	77%	80%
				Later		

V. Remediation a) Number, b) % of annual first time freshman from Idaho who need remediation in English/Reading

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
220/1,005	351/1,054	402/1,157	566/1,227	Avail	250/ 25%	142/ 12%
22%	33%	35%	46%	Later		

VI. Number of UG degrees/certificates produced annually (Source: IPEDS Completions 1st & 2nd Major) Statewide Performance Measure

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
Bachelors:	Bachelors:	Bachelors:	Bachelors:	Available	1,800	2,000
1,881	1,738	1,712	1,645	Later		

VII. Percentage of UG degree-seeking students taking a remedial course who complete a subsequent credit-bearing course with a C or higher within one year of remedial enrollment Statewide Performance Measure

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
Math	Math	Math	Math	Math	Math 54%	Math 56%
50.0%	52.4%	56.6.%	48.3%	40.7%	ENGL 70%	ENGL 77%
ENGL	ENGL	ENGL	ENGL	ENGL		
73.4%	69.0%	71.0%	65.1%	63.7%		

VIII. Percentage of first-time UG degree seeking students completing a gateway math course within two years of enrollment.* Statewide Performance Measure

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
59.1%	60.7%	59.3%	52.6%	Available	62%	74%
				Later		

* Course meeting the Math general education requirement.

IX. Percentage of students completing 30 or more credits per academic year. Statewide Performance Measure

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
6,641	6,288	6,368	6,659	Available	42%	44%
2,787	2,631	2,455	2,620	Later		
42%	41.8%	38.6%	39.3%			
100/00	j time. States					
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FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
40.7%	41.1%	42.9%	42.7%	Available	42%	44%
Cohort	Cohort	Cohort	Cohort	Later		
2016-17	2017-18	2018-19	2019-20			

X. Percentage of first-time, full-time UG degree/certificate seeking students who graduate within 100% of time. Statewide Performance Measure

XI. Percentage of first-time, full-time UG degree/certificate seeking students who graduate within 150% of time (Source: IPEDS). Statewide Performance Measure

	FY20	FY21	FY22	FY23	FY24	Benchmark	
((2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
	2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
	59.5%	59.1%	61.0%	60.8%	Available	60%	62%
(Cohort	Cohort	Cohort	Cohort	Later		
2	014-15	2015-16	2016-17	2017-18			

XII. Number of UG programs offering structured schedules.* Statewide Performance Measure

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-2029)
Retired by	Retired by	Retired by	Retired	Retired	155/155	155/155
SBOE	SBOE	SBOE	by SBOE	by SBOE		

*The definition of this metric was unclear, but all programs have an approved plan of study.

XIII. Number of UG unduplicated degree/certificate graduates. Statewide Performance Measure

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-	(2028-2029)
					2025)	
Bachelors:	Bachelors:	Bachelors:	Bachelors:	Available	1,650 ⁴	2,000 ⁴
1,675	1,568	1,507	1,457	Later		

<u>Objective C</u>: Create an inclusive learning environment that encourages students to take an active role in their student experience.

Performance Measures:

I. Equity Metric: First term GPA & Credits (% equivalent)

FY20	FY21	FY22	FY23	FY24	Ben	chmark
(2019-	(2020-2021)	(2021-	(2022-	(2023-	FY25	FY29
2020)		2022)	2023)	2024)	(2024-	(2028-2029)
					2025)	
62.5%/62.5	75%/75%	75%/87.5	100%/87.5	Available	90%/90%	90%/90%
%		%	%	Later		

GOAL 4: Cultivate A valued and diverse community

Foster an inclusive, diverse community of students, faculty and staff and improve cohesion and morale.

Objective A: Build an inclusive, diverse community that welcomes multicultural and international perspectives.

Performance Measures:

I. Multicultural Student Enrollment (head count)⁷

FY20	FY21	FY22	FY23	FY24	Benc	hmark
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-	(2028-2029)
					2025)	
2,613	2,406	2,607	2,690	2,740	2,750	3,305

II. International Student Enrollment (heads)

FY20	FY21	FY22	FY23	FY24	Benc	hmark
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-	(2028-2029)
					2025)	
662	475	526	648	683	500	750

III. Percentage Multicultural a) Faculty and b) Staff

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-	(2028-2029)
					2025)	
21.3% /	20.6% /	21.0% /	21.3% /	Available	22% / 14%	23% / 15%
13.2%	13.4%	14.6%	14.7%	Later		

Objective B: Enhance the University of Idaho's ability to compete for and retain outstanding scholars and skilled staff.

Performance Measures:

I. Chronicle Survey Score: Job Satisfaction⁸

chmark	Benchmark		FY23	FY22	FY21	FY20
FY29	FY25	(2023-	(2022-	(2021-	(2020-	(2019-
(2028-2029)	(2024-	2024)	2023)	2022)	2021)	2020)
	2025)					
Survey avg in	Survey avg	Available	Survey avg	Survey avg	Survey avg	Survey avg
the 4 th group	in the 4 th	Later	in the 3 rd	in the 3 rd	in the 3 rd	in the 2 nd
of 5	group of 5		group of 5	group of 5	group of 5	group of 5

II. Full-time Staff Turnover Rate⁹

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-
						2029)
23.5%	19.7%	30%	28%	Available	17%	15%
				Later		

Objective C: Improve efficiency, transparency and communication.

Performance Measures:

I. Cost per credit hour (System wide metric)

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-
						2029)
\$423	\$507	\$404	\$361	Available	\$500	\$400
				Later		

II. Efficiency (graduates per \$100K) (System wide metric)

FY20	FY21	FY22	FY23	FY24	Benchmark	
(2019-	(2020-	(2021-	(2022-	(2023-	FY25	FY29
2020)	2021)	2022)	2023)	2024)	(2024-2025)	(2028-
						2029)
0.97	0.88	1.06	1.07	Available	1.00	1.25
				Later		

Key External Factors

Factors beyond our control that affect achievement of goals

- The COVID pandemic, and its impact on enrollment, retention, and the go-on rate. •
- The general economy, tax funding and allocations to higher education. •
- The overall number of students graduating from high school in Idaho and the region.
- Federal guidelines for eligibility for financial aid.
- Increased administrative burden increasing the cost of delivery of education, outreach and research activities.

Evaluation Process

A brief description of the evaluations or processes to be used in establishing or revising general goals and objectives in the future.

The metrics will be reviewed annually to evaluate their continued appropriateness in assessing the various goals and processes. As the feedback from the annual review process is reviewed, the effectiveness of the processes will be refined. These feedback cycles are in place for Strategic Plan Metrics, Program Prioritization Metrics, and External Program Review Process. A continued examination of various elements of community need is conducted as well.

¹ Quality and scope will be measured via comparison to Carnegie R1 institutions with the intent of the University of Idaho attaining R1 status by 2025. See methodology as described on the Carnegie Foundation website (http://carnegieclassifications.iu.edu/).

² This was established as a means to achieve our end goal for enrollment and R1 status by 2025.

³ Measured via survey of newly enrolled students, For students who answered "Yes or No", "Somewhat No" or "Definitely no" to "In your high school junior year, were you already planning to attend college (UI or other)?" the percent that responded "Yes or No", "Somewhat Yes" or "Definitely Yes" to "Have the University of Idaho's information and recruitment efforts over the last year impacted your decision to go to college?"

⁴ Internally set standard to assure program quality.

⁵ Given data availability and importance for national rankings, percent of alumni giving is used for this measure.

⁶ The Integrated Postsecondary Education Data System (IPEDS) method for counting degrees and those used to aggregate the numbers reported on the Performance Measurement Report (PMR) for the State Board of Education (SBOE) use different methods of aggregation. As such the sum of the degrees by level will not match the total. ⁷ Based on a review of the Idaho demographic and a desire to have the diversity match or exceed that of the general state population.

⁸ Based on our desire is to reach the "Good" range (65%-74%), as established by the survey publisher.

⁹ Based on HR's examination of turnover rates of institutions nationally.

ATTACHMENT 11

	Appendix 2						
		State Board	of Education Goals				
\checkmark	Goal 1: EDUCATIONAL SYSTEM ALIGNMENT	Goal 2: EDUCATIONAL ATTAINMENT	Goal 3: WORKFORCE READINESS				
Institution/Agency							
Goals and Objectives							
GOAL 1: Innovate Scholarly and creative work with impact							
Scholarly and creative products of the highest quality and scope, resulting in significant positive impact for the region and the world							
Objective A: Build a culture of collaboration that increases scholarly and creative productivity through interdisciplinary, regional, national and global partnerships.		\checkmark	\checkmark				
Objective B: Create, validate and apply knowledge through the co-production of scholarly and creative works by students, staff, faculty and diverse external partners.	\checkmark		\checkmark				
Objective C: Grow reputation by increasing the range, number, type and size of external awards, exhibitions, publications, presentations, performances, contracts, commissions and grants.			\checkmark				
GOAL 2: Engage Outreach that inspires innovation and culture							
Suggest and influence change that addresses societal needs and global issues, and advances economic development and culture.							
Objective A: Inventory and continuously assess engagement programs and select new opportunities and methods that provide solutions for societal or global issues, support economic drivers and/or promote the advancement of culture.		\checkmark	\checkmark				
Objective B: Develop community, regional, national and/or international collaborations which promote innovation and use University of Idaho research and creative expertise to address emerging issues.		\checkmark	\checkmark				

ATTA	CHME	ENT 11
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	State Board of Education Goals				
\checkmark	Goal 1: EDUCATIONAL SYSTEM ALIGNMENT	Goal 2: EDUCATIONAL ATTAINMENT	Goal 3: WORKFORCE READINESS		
Objective C: Engage individuals (alumni, friends, stakeholders and collaborators), businesses, industry, agencies and communities in meaningful and beneficial ways that support the University of Idaho's mission.	\checkmark	\checkmark	\checkmark		
GOAL 3: Transform Educational experiences that improve lives Increase our educational impact.					
Objective A: Provide greater access to educational opportunities to meet the evolving needs of society.		\checkmark			
Objective B: Foster educational excellence via curricular innovation and evolution.		\checkmark	\checkmark		
Objective C: Create an inclusive learning environment that encourages students to take an active role in their student experience.		\checkmark			
GOAL 4: Cultivate A valued and diverse community Foster an inclusive, diverse community of students, faculty and staff and improve cohesion and morale.					
Objective A: Build an inclusive, diverse community that welcomes multicultural and international perspectives.		\checkmark	\checkmark		
Objective B: Enhance the University of Idaho's ability to compete for and retain outstanding scholars and skilled staff.		✓	✓		
Objective C: Improve efficiency, transparency and communication.	\checkmark				

Appendix 2

Metric and Data Definitions

Guiding principle for metric selection and use.

The core guiding principle used in selecting, defining and tracking the metrics used in the strategic plan is to focus on measures key to university success while remaining as consistent with the metrics used when reporting to state, federal, institutional accreditation other key external entities. The desire is to report data efficiently and consistently across the various groups by careful consideration of the alignment of metrics for all these groups where possible. The order of priority for selecting the metrics used in the strategic plan is a) to use data based in the state reporting systems where possible, and b) then move to data based in federal and/or key national reporting bodies. Only then is the construction of unique institution metrics undertaken.

Metrics for Goal 1 (Innovate):

- <u>Terminal Degrees</u> in given field is the number of Ph.D., P.S.M., M.F.A., M.L.A., M.Arch., M.N.R., J.D., D.A.T., and Ed.D. degrees awarded annually pulled for the IR Degrees Awarded Mult table used for reporting to state and federal constituents. This data is updated regularly and will be reported annually.
- Postdoctoral Researchers, and Non-faculty Research Staff with Doctorates as reported annually in the Graduate Students and Postdoctorates in Science and Engineering Survey (<u>http://www.nsf.gov/statistics/srvygradpostdoc/#qs</u>).
- 3.) <u>Research Expenditures</u> as reported annually in the Higher Education Research and Development Survey (<u>http://www.nsf.gov/statistics/srvyherd/</u>).
- 4.) <u>Invention Disclosures</u> as reported annually in the Association of University Technology Managers Licensing Activity Survey (<u>http://www.autm.net/resources-surveys/research-reports-databases/licensing-surveys/</u>).
- 5.) <u>Number of undergraduate and graduate students paid from sponsored projects</u>: This metric is a newly established State Board of Education (SBOE) metric. It is calculated by the Office of Research and reported annually.
- 6.) **Percent of students engaged in undergraduate research:** This is a metric from the Performance Measurement Report (PMR) for the SBOE. These PMR data are pulled from the Graduating Senior Survey annually.

Metrics for Goal 2 (Engage):

1.) Impact (UI Enrollment that increases the Go-On rate): The metric will rely on one or two items added to the Higher Education Research Institute's (HERI) Cooperative Institutional Research Program (CIRP) First Year Student Survey. We will seek to estimate the number of new students

who were not anticipating attending college a year earlier. As the items are refined, baseline and reporting of the results will be updated.

- 2.) <u>Extension Contacts</u>: Outreach to offices in relevant Colleges (College of Agricultural and Life Sciences, College of Natural Resources, College of Engineering, etc.) will provide data from the yearly report to the federal government on contacts. This reporting represents direct teaching contacts made throughout the year by recording attendance at all extension classes, workshops, producer schools, seminars and short courses.
- 3.) <u>Collaboration with Communities</u>: HERI Faculty Survey completed by undergraduate faculty where respondents indicated that over the past two years they had, "collaborated with the local community in research/teaching." This survey is administered every three to five years.
- 4.) National Survey of Student Engagement (NSSE) Mean Service Learning, Field Placement or Study Abroad: This is the average percentage of those who engaged in service learning (item 12 2015 NSSE), field experience (item 11a NSSE) and study abroad (item 11d) from the NSSE.
- 5.) <u>Alumni Participation Rate</u>: This is provided annually by University Advancement and represents the percentage of alumni that are giving to the University of Idaho (UI). It is calculated based on the data reported for the Voluntary Support of Education (VSE) report. (<u>https://www.case.org/resources/voluntary-support-education-survey</u>). It is updated annually.
- 6.) **Economic Impact:** This is taken from the EMSI (now Lightcast) UI report as the summary of economic impact. This report is updated periodically, and the data will be updated as it becomes available.
- 7.) **Dual Credit:** These data are pulled from the PMR which is developed for the SBOE annually.

Metrics for Goal 3 (Transform):

- 1.) <u>Enrollment:</u> This metric consists of headcounts from the data set used in reporting headcounts to the SBOE, Integrated Postsecondary Education Data System (IPEDS) and the Common Data Set as of census date. The data is updated annually.
- 2.) Equity Metric: This metric is derived from the census date data used for reporting retention and graduation rate which is updated annually. The analysis is limited to first-time full-time students. The mean first term Grade Point Average and semester hours completed for first-time full-time students is calculated for all students combined and separately for each IPEDS race/ethnicity category. The mean for the eight groups is compared to the overall mean. The eight groups identified here are American Indian or Alaska Native, Asian, Black or African American, Hispanic/Latino, International, Native Hawaiian or Other Pacific Islander, Two or More Races and White. If the mean for a group is below the overall mean by 1/3 or more of a standard deviation it is considered below expectations/equity. The percentage of these eight groups meeting the equity cut off is reported. For example, if six of the eight groups meet equity, it is reported as 75%. As there are groups with low numbers, the best method for selecting the cut off was based on the principle of effect size (i.e.,

https://researchrundowns.wordpress.com/quantitative-methods/effect-size/).

3.) <u>Retention:</u> This is reported as first-time full-time student retention at year 1 using the data reported to the SBOE, IPEDs and the Common Data Set. This is updated annually. The final goal was selected based on the mean of the 2015-16 year for the aspiration peer group for first-year

retention as reported in the Common Data Set. This group includes Virginia Tech, Michigan State University and Iowa State University.

- 4.) <u>Graduates (all degrees)</u>: This is reported from the annual data used to report for IPEDS and the Common Data Set for the most recent year and includes certificates.
- 5.) <u>Degrees by level</u>: Items (a) to (c) under Graduates are pulled from the PMR established by the SBOE. These numbers differ from IPEDs as they are aggregated differently, so the numbers do not sum to the IPEDs total.
- 6.) <u>NSSE High Impact Practices:</u> This metric is for overall participation of seniors in two or more High Impact Practices (HIPs). The national norms for 2015 from NSSE are saved in the NSSE folders on the IR shared drive. The norms for 2015 HIPs seniors places UI's percentage at 67%, well above R1/DRU (64%) and RH (60%) as benchmarks. The highest group (Bach. Colleges- Arts & Sciences) was 85%. The goal is to reach at least this level by 2025.
- 7.) **<u>Remediation</u>**: This metric comes from the PMR of the SBOE. It is updated annually.

Metrics for Goal 4 (Cultivate):

 <u>Chronicle Survey Score (Survey Average)</u>: This metric was baselined in spring 2016 and utilizes the "Survey Average" score. The desire is to reach the "Good" range (65%-74%), which is the 4th group of 5, or higher. The survey can be found here: https://groatcollegesprogram.com/participation.reports

https://greatcollegesprogram.com/participation-reports.

- 2.) <u>Multicultural Student Enrollment</u>: The headcounts used for this metric will be derived from the data set used to report to the SBOE at fall census date. This is based on the categories used by IPEDS and the Common Data Set. The census date data is updated annually.
- 3.) International Student Enrollment: The headcounts used for this metric are derived from the data set used to report to the SBOE at fall census date. This is based on the categories used by IPEDS and the Common Data Set. The census date data is updated annually.
- 4.) **Full-time Staff Turnover Rate** is obtained from UI Human Resources on an annual basis.
- 5.) <u>Percentage of Multicultural Faculty and Staff</u> is the percentage of full-time faculty and staff that are not Caucasian/Unknown from the IPEDS report. Full-time faculty is as reported in IPEDS Human Resources Part A1 for full-time tenured and tenure track. Full-time staff is as reported in IPEDS B1 using occupational category totals for full-time non-instructional staff.
- 6.) **Cost per credit hour:** This metric is from the PMR for the SBOE and is update annually.
- 7.) **Efficiency:** This metric is from the PMR for the SBOE and is updated annually.

ATTACHMENT 12

INFORMATIONAL

7/18

2024

Strategic Plan FY 2025-2029

Idaho Division of Vocational Rehabilitation



Idabo Division of Vocational Rebabilitation

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INFORMATIONAL - PPGA

TAB 7 Page 1

Content and Format

The Strategic Plan (Plan) is divided into three sections. The first two sections describe the programs administered under the Idaho Division of Vocational Rehabilitation (IDVR). Each program (Vocational Rehabilitation and the Council for the Deaf and Hard of Hearing), independently outline specific goals, objectives, performance measures, benchmarks and/or baselines for achieving their stated goals. The final section addresses external factors impacting the Division, and SBOE's strategic plan evaluation process.

This Plan covers State Fiscal Years (SFY) 2025 through 2029.

This is a new strategic plan for the Idaho Division of Vocational Rehabilitation. IDVR's federal funding agency, the Rehabilitation Services Administration, requires a major state plan revision every two years. Additionally, they require a triennial Comprehensive Statewide Needs Assessment (CSNA), both of which have been recently completed for the Division, necessitating a substantial revision of this strategic plan including goals, objectives, tasks, and measures. Changes to these goals, objectives, tasks, and performance measures are supported by the CSNA and IDVR's State Rehabilitation Council, as required by RSA.

The Division retains its mission and vision. The mission statement reflects the focus on the dual customer, individuals with disabilities and employers. Additionally, the agency has engaged in a major reorganization effort designed to improve performance across various major functions of the agency including new goals around Pre-Employment Transition Services (Pre-ETS) and business services. Some performance measures from the previous plan have been retained but may appear under newly established goals. Newly established performance measures may lack historical data.

Alignment with Idaho State Board of Education 2024 Strategic Plan

The Strategic Plan for Idaho Division of Vocational Rehabilitation is highly complementary with many goals and objectives contained in the SBOE plan (particularly for students aged 14 and up). The Division works closely at the intersection of students and youth transitioning into higher education or employment. Specifically, for SBOE goals 2 and 3, education access and educational attainment, IDVR can support up to 100 percent of costs for two-year, four-year, and graduate educational opportunities as well as apprenticeship opportunities for eligible Idahoans with disabilities transitioning from school into workforce age. The Division includes measures for credential attainment and measurable skill gains within its primary performance measure under Goal 1 Objective 1 Measure 1. Furthermore, Pre-Employment Transition Services (Pre-ETS), offered by the Division, help facilitate the transition of students from school to work through offering work-based learning experiences, counseling on post-secondary enrollment opportunities, work readiness training, self-advocacy, and job exploration counseling services the Division is federally required to provide to Idaho students with disabilities (along with similar services to youth).

Vocational Rehabilitation

Vision

An Idaho where all individuals with disabilities have the opportunity to participate in the workforce and employers value their contributions.

Mission

To prepare individuals with disabilities for employment and career opportunities while meeting the needs of employers.

Vocational Rehabilitation

Goal 1: Maximize the career potential of Idahoans with disabilities engaged with the Division.

Objective 1: Improve the quality of VR outcomes for IDVR customers.

- 1. Task: Improve access to and utilization of relevant local area LMI and Career Pathways to inform customer career choice and promote successful outcomes.
- 2. Task: Ensure customers have better job-ready/hire-ready skills through staff training and accessing IDOL workshops, tools, and resources.
- 3. Task: Increase access to relevant educational opportunities (vocational/technical/two-year/four-year/apprenticeships and other pathways to quality employment).

Performance Measure 1.1.1: Meet or exceed negotiated targets on the following five Primary Performance Indicators (PPIs).

Relation to Goal: These Federally required indicators are intended to gauge program performance and increases across these PPIs can be used to assess Goal 1 Objective 1 performance.

	Performance						Benchr	nark
	Measure	SY 2020	SY 2021	SY 2022	SY 2023	SY 2024	SY 2025	SY 2029
1.	Employment Rate – 2 nd Qtr after Exit	60.4%	60.2%	63.2%	65.2%	Avail July 2024	65.2%	66.7%
2.	Employment Rate – 4 th Qtr after Exit	57.4%	58.2%	57.3%	62.7%	Avail July 2024	62.7%	63.2%
3.	Median Earnings – 2 nd Qtr after Exit (per quarter)	\$4,025	\$4,125	\$4,456	\$4,944	Avail July 2024	\$4,945	\$5,150
4.	Credential Attainment	30.4%	41.9%	56.9%	61.1%	Avail July 2024	61.1%	62.5%
5.	Measurable Skill Gains	51.2%	55.7%	58.6%	57.1%	Avail July 2024	57.5%	58.0%

Benchmarks: All PPI benchmarks are negotiated with RSA for a two-year period in alignment with the Combined State Plan cycle. Benchmarks for SYs 23 & 24 were negotiated in April 2022 and are reflected in this plan¹. Benchmarks for SY 25 & 26 will be negotiated in May 2024. Benchmarks for SY 2025 and SY 2029 are projected.

Note: Data for SY 2023 for PPI's 1 & 3 above reflects RSA's cohort period 7/1/2021-6/30/2022 & data for PPI's 2 and 4 above reflects RSA's cohort period 1/1/2021–12/31/2021.

Performance Measure 1.1.2: Overall customer satisfaction rate.

Relation to Goal: Used as an indicator of overall quality directly informing progress on Goal 1, Objective 1.

					Bench	nmark
SY	SY	SY	SY	SY	SY	SY
2020	2021	2022	2023	2024	2025	2029
80.3%	80.7%	82.9%	81.4%	Available	90%	90%
				July 2024		

Benchmark: Greater than or equal to 90% for SY 25². This continues to be a stretch goal for the Division.

Objective 2: Strategically expand outreach, especially to underserved and growing populations.

1. Task: Increase customized outreach through community organizations, WIOA partners, and professionals that serve underserved, growing, and prioritized populations identified by the SRC and IDVR management (i.e., out-of-school youth, mental health, justice-involved, Hispanic)

Performance Measure 1.1.2: Number of applications for VR services.

Relation to Goal: Strategic outreach should result in an increase in overall applications to the VR program providing a measure for Goal 1 Objective 2.

					Benchmark	
SY	SY	SY	SY	SY		
2020	2021	2022	2023	2024	SY 2025	SY 2029
2881	2524	2464	3093	Available	3094	3250
				July 2024		

Benchmark: Greater than or equal to SY 2024 volume for SY 25³

Objective 3: Improve Community Rehabilitation Program (CRP) Service provision quality and quantity (including Supported Employment) for Idahoans with the Most Significant Disabilities.

- 1. Task: Complete rate methodology/recalibration. The new rates proposed are designed to be rates that support quality Community Rehabilitation Program Services. Task will be achieved once rates are issued.
- 2. Task: Implement newly revised CRP Monitoring Protocol designed to promote two-way data-driven continuous improvement conversations/increase feedback, relevance, and understanding between IDVR and Idaho's CRPs.

Performance Measure 1.3.1: Number of cases with CRP provided services (non-assessment) in the SY.

Relation to Goal: The tasks under Goal 1 Objective 3 are focused on increasing performance in employment stability, and customer satisfaction for core CRP services for Idahoans with Most Significant Disabilities. The following two measures are used to assess performance on Goal 1 Objective 3:

SY	SY	SY	SY	SY	Benchmark	
2020	2021	2022	2023	2024	SY 2025	SY 2029
772	681	370	519	Available July 2024	520	588

Benchmark: Greater than or equal to SY 2024 volume for SY 25⁴

Note: These are post Individualized Plan for Employment (IPE) services provided to VR participants.

Performance Measure 1.3.2: Overall customer satisfaction rate for those using CRP Services.

					Bench	nmark
SY	SY	SY	SY	SY	SY	SY
2020	2021	2022	2023	2024	2025	2029
77%	75%	80%	74%	Available	90%	90%
				Julv 2024		

Benchmark: Greater than or equal to 90% for SY 25⁵. This continues to be a stretch goal for the Division.

Objective 4: Hire and retain qualified employees to deliver quality vocational rehabilitation services.

1. Task: Continued efforts to expand FTE, maximize compensation, and other innovative approaches to increase employee satisfaction and retention.

Performance Measure 1.4.1: Percentage of counselors who meet Comprehensive System of Personnel Development (CSPD) compliance.

Relation to Goal: The Division maintains a CSPD plan with a focus on recruitment and retention of qualified counselors. The CSPD rate represents a percent of counselors who currently meet CSPD standards. Counselors meeting CSPD standards are more effective at serving Idahoans with disabilities. An increase in this measure leads to gains on Goal 1 Objective 4.

					Bench	nmark
SY	SY	SY	SY	SY		
2020	2021	2022	2023	2024	SY 2025	SY 2029
70.5%	70.8%	74.0%	66.7%	Available	85.0%	85.0%
				July 2024		

Benchmark: Greater than 85% for SY 25⁶. This continues to be a stretch goal for the Division.

Goal 2: Expand utilization and improve quality of Pre-Employment Transition Services (Pre-ETS) and similar services for youth.

Objective 1: Increase utilization of Pre-ETS services and similar services to youth to priority populations identified by the SRC and IDVR management.

- 1. Task 1: Increase outreach with schools, community organizations, and professionals that serve student, youth, and families.
- 2. Task 2: Increase outreach through WIOA umbrella partners that serve students and youth.

Performance Measure 2.1.1: Number of students receiving Pre-employment Transition Services (Pre-ETS).

Relation to Goal: The Division will engage in strategic outreach to populations identified by the SRC and IDVR management to increase utilization of Pre-ETS and similar services for youth. The following two measures are used to assess performance on Goal 2 Objective 1.

					Benchmark	
SY 2020	SY 2021	SY 2022	SY 2023	SY 2024	SY 2025	SY 2029
1012	1210	1968	2784	Available July 2024	2784	3000

Benchmark: Greater than or equal to SY 24 for SY 25⁷

Performance Measure 2.1.2: Number of youth applications for program participants under the age of 25.

					Benchmark	
SY 2020	SY 2021	SY 2022	SY 2023	SY 2024	SY 2025	SY 2029
586	496	496	653	Available July 2024	665	738

Benchmark: Greater than or equal to SY 24 for SY 25⁸

Goal 3: Improve outreach and engagement through individualized services to Idaho businesses.

Objective 1: Work with the business community to improve understanding and utilization of IDVR business services.

- 1. Task: Identify business groups (i.e., Chamber, Workforce Development groups, Society for Human Resource Management (SHRM)) that could benefit from networking with IDVR.
- 2. Task: Identify opportunities to provide education and training on the scope and availability of IDVR business services to provide customized business solutions.
- 3. Task: Expand business spotlights to each IDVR Center.
- 4. Task: Continue to improve IDVR website business page for useability and improved business content.

Performance Measure 3.1.1: Utilization of IDVR Business Services

Relation to Goal: Direct measure of business services provided; an increase will meet Goal 3 Objective 1.

					Bench	nmark
SY 2020	SY 2021	SY 2022	SY 2023	SY 2024	SY 2025	SY 2029
820	814	1552	1452	Available July 2024	1453	1600

Benchmark: Greater than or equal to SY 24 for SY 25⁹

Objective 2: Improved utilization of business engagement partnerships with the local workforce system.

1. Task: Continue efforts to align IDVR activities with the workforce development system, including aligned business engagement strategy at the state and local level.

Performance Measure 3.2.1: Retention rate with the same employer the 4th quarter after exit.

Relation to Goal: Evolution and continued improvement of teams should result in increased engagement with business services. Established relationships with business and VR should dispel myths and alleviate concerns of businesses promoting the hire and retention of individuals with disabilities.

					Benchmark	
SY 2020	SY 2021	SY 2022	SY 2023	SY 2024	SY 2025	SY 2029
*71.2%	*69.1%	*70.6%	72.4%	Available	72.5%	74.0%
				July 2024		

Benchmark: Greater than or equal to SY 24 for SY 25¹⁰

Note: Data for SY 2023 reflects RSA's cohort period 1/1/2021 – 12/31/2021. This measure continues to be a 'pilot' measure. The current benchmark is proxy until formal negotiation occurs.

*The rates for this measure were previously underreported, as the measure asks only for participants who were employed in both the 2nd and 4th quarters after exit in the denominator. This impacted previous Strategic Plan reporting for SYs 2020-2022. This report includes corrected performance data.

Council for the Deaf and Hard of Hearing (CDHH)

Role of CDHH

CDHH is an independent agency. This is a flow-through council for budgetary and administrative support purposes only with no direct programmatic implication for IDVR. The following is the Council for the Deaf and Hard of Hearing's Strategic Plan.

Mission

Dedicated to making Idaho a place where persons, of all ages, who are deaf or hard of hearing have an equal opportunity to participate fully as active, productive and independent citizens.

Vision

To ensure that individuals who are deaf, hard of hearing, or hearing impaired have a centralized location to obtain resources and information about services available.

Goal #1 – Work to increase access to employment, educational and socialinteraction opportunities for persons who are deaf or hard of hearing.

1. *Objective*: Continue to provide information and resources.

Performance Measure 1.1: Track when information and resources are given to consumers.

					Benc	hmark
SY 2020	SY 2021	SY 2022	SY 2023	SY 2024	SY 2025	SY 2029
43 Library loans 90 pkgs of info 108 FB posts 667 clear masks & 11,340 paper masks distributed	59 Library loans 40 pkgs of info 166 FB posts clear masks & 11,340 paper masks distributed	70 Library loans 80 pkgs of info 169 FB posts 14,578 people reached	50 Library loans 33 pkgs of info 2,136 FB posts 29 IG posts 19,382 people reached	Available July 2024	61 Library loans 42 pkgs of info 2,200 FB posts 100 IG posts	80 Library loans 60 pkgs of info 2,600 FB posts 300 IG posts

Benchmark: 2 or more new brochures or information packets created in SY 25¹¹

Goal #2 – Increase the awareness of the needs of persons who are deaf and hard of hearing through educational and informational programs.

1. **Objective:** Continue to increase the awareness.

Performance Measure 2.1: Deliver presentations and trainings to various groups through education and social media.

					Benchmark	
SY	SY	SY	SY	SY		SY
2020	2021	2022	2023	2024	SY 2025	2029
89	51	49	62	Available	65	70
				July 2024		

Benchmark: 49 or more presentation delivered in SY 25¹²

Goal #3 – Encourage consultation and cooperation among departments, agencies, and institutions serving the deaf and hard of hearing.

1. *Objective*: Continue encouraging consultation and cooperation.

Performance Measure 3.1: Track when departments, agencies, and institutions are cooperating (such as Department of Corrections and Health and Welfare).

					Benc	hmark
SY	SY	SY	SY	SY	SY	SY
2020	2021	2022	2023	2024	2025	2029
48	48	50	44	Available	45	60
				July 2024		

Benchmark: Present at 50 or more local, state and federal agencies in SY 25¹³

Goal #4 – Provide a network through which all state and federal programs dealing with the deaf and hard of hearing individuals can be channeled.

1. *Objective*: The Council's office will provide the network.

Performance Measure 4.1: Track when information is provided.

					Benc	hmark
SY 2020	SY 2021	SY 2022	SY 2023	SY 2024	SY 2025	SY 2029
5,777 calls	7,173 calls	5,299 calls/text 12,155	15,417 calls/text 29,380	Available July 2024	Track calls	Track calls

Benchmark: Track all calls in SY 25¹⁴

Goal #5 – Determine the extent and availability of services to the deaf and hard of hearing, determine the need for further services and make recommendations to government officials to ensure that the needs of deaf and hard of hearing citizens are best served.

1. *Objective*: The Council will determine the availability of services available.

Performance Measure 5.1: The Council will administer assessments and facilitate meetings to determine the needs.

					Benchmark	
SY	SY	SY	SY	SY	SY	SY
2020	2021	2022	2023	2024	2025	2029
Met	Met	Met	Met	Available	Meet	Meet
				July 2024	goal	goal

Benchmark: Meet goal in SY 25¹⁵

Goal #6 – To coordinate, advocate for, and recommend the development of public policies and programs that provide full and equal opportunity and accessibility for the deaf and hard of hearing persons in Idaho.

1. Objective: The Council will make available copies of policies concerning deaf and hard of hearing issues.

Performance Measure 6.1: Materials that are distributed about public policies.

					Benchmark	
SY	SY	SY	SY	SY	SY	SY
2020	2021	2022	2023	2024	2025	2029
Met	Met	Met	Met	Available	Meet	Meet
				July 2024	goal	goal

Benchmark: Meet goal in SY 25¹⁶

Goal #7 – To monitor consumer protection issues that involve the deaf and hard of hearing in the State of Idaho.

1. **Objective**: The Council will be the "go to" agency for resolving complaints from deaf and hard of hearing consumers concerning the Americans with Disabilities Act.

Performance Measure 7.1: Track how many complaints are received regarding the ADA.

						Benci	nmark
	SY	SY	SY	SY	SY	SY	SY
	2020	2021	2022	2023	2024	2025	2029
1	72 ADA	160 ADA	155 ADA	184 ADA	Available	Track	Track
	Issues	Issues	Issues	Issues	July 2024	Issues	Issues

Benchmark: Track all complaints in SY 25¹⁷

Goal #8 – Submit periodic reports to the Governor, the legislature, and departments of state government on how current federal and state programs, rules, regulations, and legislation affect services to persons with hearing loss.

1. Objective: The Council will submit reports.

Performance Measure 8.1: Reports will be accurate and detailed.

					Benc	hmark
SY	SY	SY	SY	SY	SY	SY
2020	2021	2022	2023	2024	2025	2029
Completed	Completed	Completed	Completed	Available	Pending	Pending
				July 2024		

Benchmark: Complete for SY 25¹⁸

External Factors Impacting IDVR

The field of Vocational Rehabilitation is dynamic due to the nature and demographics of the customers served and the variety of disabilities addressed. Challenges facing the Division include:

Recruitment and Retention of Qualified Personnel

IDVR is dedicated to providing the most qualified personnel to address the needs of the customers served by the organization. Challenges in staff recruitment and retention continue to be problematic and persistent over the past several years. Recruitment challenges continue due to lower wages as compared to the priviate sector, other Idaho state agencies, and neighboring states higher wages. The Division continues to evaluate and implement new strateiges in an effort to improve the recruitment and retention rates of qualified personnel (e.g., providing tuition assistance, opportunties for advancement, etc.). IDVR continues to develop relationships with universities specifically offering a Master's Degree in Rehabilitation Counseling, as well as engaging with related Bachelor Degree programs to help feed the talent pipeline. The agency is also experiencing a wave of retirements which represents a substantial risk to the ongoing institutional memory of the organization. The Division does have succession planning contingencies in place where possible. The Division is also engaged in an ongoing frontline efficiencies initiative designed to reduce the overall administrative burden on team members with the intention of reducing excessive pressures and improving overall job satisfaction.

Quality of Community Rehabilitation Provider (CRP) Services

IDVR's Comprehensive Statewide Needs Assessment indicated that CRPs continue to experience some of the same recruitment and retention challenges that IDVR is facing. The Division is currently engaged in a rate reevaluation study to recommend contemporary rates which will support quality employment outcomes that are sustainable for both IDVR and CRPs. Currently the low rate of unemployment in Idaho makes competitive hiring challenging for both the Division and vendors. An innovation and expansion activity is being considered in order to promote adequate resources and more qualified CRP staff to deliver and improve customer satisfaction with these services.

State and Federal Economic Climate

While Idaho has seen continuous and sustained improvement in its economic growth over the past several years there are a variety of influences which can affect progress. Individuals with disabilities continue to experience much higher unemployment rates, even in strong economic times (while the disability employment gap has seen slight improvement in recent years, more work remains to be done). IDVR recognizes this and strives to develop relationships within both the private and public sectors to increase employment opportunities and livable wages for its customers.

IDVR is impacted by decisions made at the federal level. The VR program continues to experience pressures added by the requirements of the Workforce Innovation and Opportunity Act (WIOA). The expanded customer base (potentially eligible students and serving Idaho businesses), and Idaho's population growth, along with additional data and reporting requirements has forced the agency to reevaluate the way work is accomplished and by who. The Division continues a major initiative to institute efficiencies including leveraging technology and unencumbering work processes to partially alleviate excessive pressures.

Serving students and youth with disabilities continues to be an essential goal and priority for the Division. WIOA mandates VR agencies reserve 15 percent of their budgets for the provision of Pre-employment Transition Services (Pre-ETS). This change has not only shifted the populations we serve, but also how we innovate to best serve them.

EVALUATION PROCESS

The State Board of Education Planning, Policy, and Governmental Affairs Committee reviews the Idaho Division of Vocational Rehabilitation strategic plan on an annual basis. Changes may be brought forward to the Board for consideration in future meetings. This review and re-approval take into consideration performance measure progress reported to the Board in the October meeting.

Footnotes:

¹Benchmarks are set based on federally negotiated targets for a two-year period (SY 2023 & 2024) for all five Primary Performance Indicators.

² Benchmarks are set based on an internal measure of performance and was established by the Division's SRC to gauge customer satisfaction with program services and identify areas for improvement. The benchmark of 90% has been traditionally utilized as a target for guality performance.

³Benchmarks are set based on service volume and recent trends in applications for services.

⁴ Benchmarks are set based on Community Rehabilitation Program service volume for IDVR customers engaged in an Individualized Plan for Employment with the Division.

⁵ Benchmarks are set based on an internal measure of performance and informed by the Division's SRC. The emphasis is on quality services provided by Community Rehabilitation Programs.

⁶Benchmarks are set based on an internal program measure and represents a commitment to the development of quality vocational rehabilitation counselors, meeting this standard ensures that individuals with disabilities in Idaho receive services through certified professionals and promotes more efficient, comprehensive, and quality services. The baseline is a percentage established by IDVR and is a stretch goal the agency aspires to achieve.

⁷Benchmarks are set based on an internal measure of performance (student applications) and informed by the Division's SRC. Services for students are a major focus under WIOA.

⁸Benchmarks are set based on an internal measure of performance (youth applications) and informed by the Division's SRC. Services for youth are a major focus.

⁹Benchmarks are set based on an internal measure of performance (business services volume) and informed by the Division's SRC. Services for businesses are a major focus under WIOA.

¹⁰Benchmarks will be established based on federally negotiated targets following formalization by RSA. This performance measure is useful in determining whether VR is serving employers effectively by improving the skills of customers and decreasing employee turnover.

¹¹Benchmarks are set based on an internal program measure to expand information to Idaho's deaf and hard of hearing population, to include brochures and information via electronic and social media. The Council is the only clearinghouse of information in Idaho about deaf and hard of hearing issues. This benchmark was established to adhere to Idaho statute 67, chapter 73.

¹²Benchmarks are set based on internal program measure to provide information about the needs of persons who are deaf or hard of hearing. The benchmark was created because the Council is the only state agency to provide this type of information. CDHH has hired a part time Communications and Outreach Coordination to increase awareness and make presentations throughout the state. This benchmark was established to adhere to Idaho statute 67, chapter 73.

¹³Benchmarks are set based on internal program measure to provide information about deaf and hard of hearing issues. CDHH partnered with JFAC to procure funding for a full-time interpreter and partnered with the Sexual Abuse/Domestic Violence Coalition. This benchmark was established to adhere to Idaho statute 67, chapter 73.

¹⁴The Council has historically been the organization where individuals and groups come for information concerning deaf and hard of hearing issues. The benchmark was created to continue tracking the information. This benchmark was established to adhere to Idaho statute 67, chapter 73.

¹⁵Benchmarks are set based on internal program measure to determine the need for public services for deaf and hard of hearing community and was established because there was a Task Force that met to determine the need of mental health services that need to be provided to deaf and hard of hearing individuals. This benchmark was established to adhere to Idaho statute 67, chapter 73.

¹⁶Benchmarks are set to provide information where interpreters can get information about current issues and has established a printed list of Sign Language Interpreters and also on the Council's website. This benchmark was established per the request of the Idaho Registry of Interpreters of the Deaf to support the legislation. This benchmark was established to adhere to Idaho statute 67, chapter 73.

¹⁷Benchmarks are set based to provide information, in collaboration with the Northwest ADA Center, about the Americans with Disability Act (ADA). The benchmark was established to continue that partnership and to adhere to Idaho statute 67, chapter 73.

¹⁸Benchmarks are set based on internal program measure to provide information about deaf and hard of hearing issues, this benchmark was established to adhere to Idaho statute 67, chapter 73.