CONCEPT ESTIMATE

August 2023

OSU MERRYFIELD HALL RENOVATION

1600 SW MONROE AVE, CORVALLIS, OR 97331 GLAS ARCHITECTS, LLC

Prepared For

GLAS Architects, LLC 115 West 8th Street Suite 285 Eugene, OR 97401

Submitted On

10 August 2023

Prepared By

Rider Levett Bucknall 1120 NW Couch Street Suite 730 Portland, OR 97209 **Our Ref**

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Project Number PDX21533

RLB Rider Levett Bucknall Concept Estimate



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1.00 Estimate Summaries

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LOCA	TION SUMMARY (DISTRIBUTED)		Rates		oss Floor Area At August 2023
Ref	Location		GFA SF	GFA \$/SF	Total Cost \$
Α	RENOVATION		8,706	508.04	4,423,036
В	SITEWORK				
B1	SITEWORK				675,718
B2	CONC MIXING AREA		1,187	329.84	391,518
B3	CANOE DISPLAY				78,718
		B - SITEWORK	1,187	965.42	1,145,954
ESTIN	IATED NET COST		9,893	562.92	5,568,990
MARC	GINS & ADJUSTMENTS				
Escala	ation to April 2025 - Construction Start Date	10.0 %			556,899
ESTIN	IATED TOTAL COST		9,893	619.21	6,125,889



LOCA	TION SUMMARY (UNDISTRIBUTED)	Rates	GFA: Gross Floor Area Rates Current At August 2023		
Ref	Location		GFA SF	GFA \$/SF	Total Cost \$
Α	RENOVATION		8,706	323.25	2,814,173
В	SITEWORK				
B1	SITEWORK				429,928
B2	CONC MIXING AREA		1,187	209.86	249,105
B3	CANOE DISPLAY				50,085
		B - SITEWORK	1,187	614.25	729,118
ESTIN	MATED NET COST		9,893	358.16	3,543,291
MARC	GINS & ADJUSTMENTS				
Phasi	ng & Temporary Work Allowance	1.0 %			35,433
Gene	ral Conditions - Assume 8 Months Duration as advised	22.0 %			787,319
Bonds	s and Insurance	2.7 %			120,066
Overh	ead and Profit	4.0 %			179,444
Desig	n Contingency	12.0 %			559,866
CM/G	C Contingency	5.0 %			261,271
Solar	and Green Energy Requirements Allowance	1.5 %			82,300
Escal	ation to April 2025 - Construction Start Date	10.0 %			556,899
ESTIN	MATED TOTAL COST		9,893	619.21	6,125,889



UNIFORMAT LEVEL 2 SUMMARY

Gross Floor Area: 9,893 SF Rates Current At August 2023

Ref	Description	%	GFA \$/SF	Total Cost \$
A10	Foundations	2.2 %	13.81	136,580
B10	Superstructure	1.3 %	8.10	80,146
B20	Exterior Enclosure	3.2 %	19.84	196,321
B30	Roofing	7.9 %	49.19	486,588
C10	Interior Construction	1.7 %	10.69	105,727
C30	Interior Finishes	4.1 %	25.33	250,615
D20	Plumbing	3.7 %	22.73	224,852
D30	HVAC	10.2 %	63.06	623,839
D40	Fire Protection	1.2 %	7.13	70,526
D50	Electrical	6.9 %	42.48	420,262
E10	Equipment	0.7 %	4.04	40,000
E20	Furnishings	2.0 %	12.38	122,511
F20	Selective Building Demolition	3.4 %	20.95	207,266
G10	Site Preparations	2.1 %	12.97	128,350
G20	Site Improvements	5.8 %	35.82	354,343
G30	Site Civil/Mechanical Utilities	0.2 %	1.16	11,500
G40	Site Electrical Utilities	1.4 %	8.48	83,865
ESTI	MATED NET COST	57.8 %	358.16	3,543,291
MAR	GINS & ADJUSTMENTS			
Phasi	ng & Temporary Work Allowance	1.0 %		35,433
Gene	ral Conditions - Assume 8 Months Duration as advised	22.0 %		787,319
Bonds	s and Insurance	2.7 %		120,066
Overh	nead and Profit	4.0 %		179,444
Desig	n Contingency	12.0 %		559,866
CM/G	C Contingency	5.0 %		261,271
	and Green Energy Requirements Allowance	1.5 %		82,300
	ation to April 2025 - Construction Start Date	10.0 %		556,899
ESTI	MATED TOTAL COST		619.21	6,125,889



UNIFORMAT LEVEL 3 SUMMARY

Gross Floor Area: 9,893 SF Rates Current At August 2023

Ref	Description	%	GFA \$/SF	Total Cost \$
A1010	Standard Foundations	0.5 %	3.29	32,505
A1030	Slab on Grade	1.7 %	10.52	104,075
B1020	Roof Construction	1.3 %	8.10	80,146
B2010	Exterior Walls	0.7 %	4.08	40,341
B2020	Exterior Windows	2.2 %	13.56	134,180
B2030	Exterior Doors	0.4 %	2.20	21,800
B3010	Roof Coverings	7.9 %	49.19	486,588
C1010	Partitions	0.4 %	2.53	25,015
C1020	Interior Doors	0.3 %	1.62	16,000
C1030	Specialties	1.1 %	6.54	64,712
C3010	Wall Finishes	1.0 %	6.40	63,283
C3020	Floor Finishes	1.6 %	9.72	96,206
C3030	Ceiling Finishes	1.5 %	9.21	91,126
D2010	Plumbing Fixtures	0.9 %	5.47	54,074
D2020	Domestic Water Distribution	0.7 %	4.40	43,530
D2030	Sanitary Waste	0.9 %	5.41	53,506
D2040	Rain Water Drainage	0.1 %	0.40	3,918
D2090	Other Plumbing Systems	1.1 %	7.06	69,824
D3020	Heat Generating Systems	0.1 %	0.39	3,850
D3030	Cooling Generating Systems	1.2 %	7.73	76,500
D3040	Distribution Systems	3.1 %	19.28	190,731
D3050	Terminal & Package Units	1.4 %	8.66	85,700
D3060	Controls & Instrumentation	1.3 %	7.92	78,354
D3070	Systems Testing & Balancing	0.1 %	0.57	5,659
D3090	Other HVAC Systems and Equipment	3.0 %	18.50	183,045
D4040	Sprinklers	0.8 %	5.02	49,625
D4090	Other Fire Protection Systems	0.3 %	2.11	20,901
D5010	Electrical Service & Distribution	2.3 %	14.12	139,659
D5020	Lighting & Branch Wiring	2.7 %	16.44	162,636
D5030	Communications & Security	1.5 %	9.28	91,849
D5090	Other Electrical Services	0.4 %	2.64	26,118
E1020	Institutional Equipment	0.7 %	4.04	40,000



Gross Floor Area: 9,893 SF Rates Current At August 2023

UNIFOF	RMAT LEVEL 3 SUMMARY			t August 2023
Ref	Description	%	GFA \$/SF	Total Cost \$
E2010	Fixed Furnishings	2.0 %	12.38	122,511
E2020	Moveable Furnishings			Excl.
F2010	Building Elements Demolition	2.5 %	15.23	150,677
F2020	Hazardous Components Abatement	0.9 %	5.72	56,589
G1010	Site Clearing	0.2 %	1.42	14,087
G1020	Site Demolition & Relocations	0.6 %	3.65	36,093
G1030	Site Earthwork	1.3 %	7.90	78,170
G2030	Pedestrian Paving	0.9 %	5.82	57,558
G2040	Site Development	3.7 %	23.12	228,680
G2050	Landscaping	1.1 %	6.88	68,105
G3010	Water Supply	0.1 %	0.51	5,000
G3020	Sanitary Sewer	0.0 %	0.15	1,500
G3030	Storm Sewer	0.1 %	0.51	5,000
G4010	Electrical Distribution	0.2 %	1.01	10,000
G4020	Site Lighting	1.2 %	7.47	73,865
G4030	Site Communication and Security			Excl.
ESTIMA	TED NET COST	57.8 %	358.16	3,543,291
MARGII	NS & ADJUSTMENTS			
Phasing	& Temporary Work Allowance	1.0 %		35,433
General	Conditions - Assume 8 Months Duration as advised	22.0 %		787,319
Bonds a	nd Insurance	2.7 %		120,066
Overhea	ad and Profit	4.0 %		179,444
Design	Contingency	12.0 %		559,866
	Contingency	5.0 %		261,271
	d Green Energy Requirements Allowance	1.5 %		82,300
	on to April 2025 - Construction Start Date	10.0 %		556,899
ESTIMA	TED TOTAL COST		619.21	6,125,889

Concept Estimate



2.00 Basis of Estimate



PROJECT DETAILS

Basis of Estimate

This Conceptual Design Estimate has been prepared at the request of GLAS Architecture and is to provide a probable construction cost for the proposed renovation to the East Wing of the (E) Merryfield Hall on the Oregon State University campus. The project is located at 1600 SW Monroe Ave, Corvallis, OR 97331. This estimate also includes sitework upgrades, a concrete canoe canopy, and a new concrete mixing area.

This Concept Estimate is based on the Conceptual Design set by GLAS Architecture dated July 25th, 2023.

Where information was insufficient, assumptions and allowances were made based wherever possible on discussions with the design team. This revised estimate includes revisions and comments from the design team.

RLB understands that the project will be completed using a CMGC procurement arrangement where the GC will be required to receive a minimum of three (3) to five (5) subcontract bids for each trade. It has been assumed that the GC will only be allowed to self-perform work for the project under competitive bidding circumstances. The estimate assumes that the GC and all subcontractors will be required to pay prevailing wage rates.

The estimate assumes that the GC and all subcontractors will be required to pay prevailing wage rates.

The estimate is for the sole use of providing budgets based on the Merryfield Hall East Wing Conceptual Design by GLAS Architecture dated July 25th, 2023.

The estimate is not to be used for comparison with actual bids received at any time. An updated estimate based on final construction documents will need to be provided for comparison with bids.

Pricing is based on August 2023 costs. As advised by the design team, the construction start date is assumed to be April 2025 with roughly 8 months duration. The Design / Estimating contingency has been included at 12% and CM/GC Contingency at 5%. Escalation is included to April 2025 at 10%. These markups can be found in the estimate summaries at the beginning of the report.

Items Specifically Included

ESTIMATE PRICING:

- Pricing is based on Construction Costs as of August 2023.
- Margins and Adjustments are included in the estimate.
- Items included or excluded are detailed in the estimate. Other assumptions, inclusions and exclusions are listed below.

GROSS FLOOR AREAS:

Building - 8,706 SF



PROJECT DETAILS

The following assumptions have been made in the preparation of this estimate:

- The project will be competitively bid amongst Contractors (at least 3).
- The works will be carried out during normal working hours.
- Resources are available locally.
- It is assumed that the project will be competitively bid by three (3) to five (5) General Contractors and that the awarded General Contractor and all Sub-contractors will be required to pay prevailing wage rates.
- This estimate includes an allowance of \$56,589 for hazardous material abatement. <u>This is a preliminary allowance only.</u> A hazardous material report should be pursued by a specialized consultant for further clarification on this scope.

ITEMS SPECIFICALLY INCLUDED:

Please note where allowances have been made, we would request the Design Team and Owner to review the sum to ensure the allowance meets their intent.

Sub-Contractors Overheads and Profit are included in the unit rates.

The following items have been specifically included in Margins and Adjustments:

- Phasing & Temporary Works (1%)
- General Conditions/General Requirements assumes 8 Months Duration (22%)
- Bonds & Insurance (2.75%)
- Overhead & Profit (4%)
- Design Contingency (12%)
- CMGC Contingency (5%)
- Solar & Green Energy Requirements Allowance (1.5%)
- Escalation to April 2025 construction start date (10%)

Items Specifically Excluded

ITEMS SPECIFICALLY EXCLUDED:

• Items marked as "Excl." in the estimate.



PROJECT DETAILS

- Shiftwork or overtime working or acceleration.
- Double handling of materials due to site access restrictions.
- Delays or working restrictions on the Contractor.
- Rock or concrete excavation.
- Hazardous soil abatement.
- Underground services encountered during excavation.
- Assumes disposal of materials to a local dump only.
- Improvements to existing site, other than that shown in estimate.
- Walls coverings besides that shown in estimate.
- Moveable furnishings.
- Interior landscaping.
- Loose furniture, FF&E & equipment, besides that included in estimate.
- The effects of potential unfair contract conditions which may affect bid pricing.
- Building & statutory industry fringe benefits.
- All building certification costs.
- Statutory authorities' charges, contributions (and compliance orders).
- The implications of proposed construction legislation which may occur during the construction period.
- Lack of competition amongst sub-contractors bidding the project.
- Unavailability of local resources to undertake specific trades & the effect on bid pricing from non-regional bidders.
- Uncompetitive bidding due to the complexity of the project sub-contractor workloads.
- Abnormal changes in market conditions affecting our assessment of escalation.
- Development soft costs including; land, financing and legal costs.
- Owner's contingency.
- Permits & plan review fees.
- Architectural, Engineering and other professional fees.
- Geotechnical, traffic and all other studies.



PROJECT DETAILS

- Special testing & inspections.
- Utility tap fees and charges.
- Escalation beyond that shown in estimate.
- Work outside the site boundaries, unless noted otherwise.

Documents

DESIGN DETAILS USED FOR THE ESTIMATE:

This estimate is based upon measured quantities and built-up rates prepared from the following information:

- Architectural Drawings, Sitework Drawings, and Narrative by GLAS Architecture
 - Conceptual Design Dated July 25th, 2023
- Electrical Drawings of West Hall by Benchmark Architectural Services (for reference)
 - Permit / Bid Set Dated May 31st, 2018
- Mechanical Drawings of West Hall by Benchmark Architectural Services (for reference)
 - Permit / Bid Set Dated May 31st, 2018

Where information was insufficient, assumptions and allowances were made based on conversations with the design team.

Concept Estimate



3.00 Estimate Detail



ESTIMATE DETAIL A RENOVATION

A RENOVATION Rates C					a August 2023
Ref	Description	Unit	Qty	Rate \$	Total Cost \$
A10	FOUNDATIONS				
A1010	Standard Foundations				
3	Misc. modifications to (E) footings as required due to slab demo / infill	SF	4,365	4.00	17,460
	 A1010 - Standard Foundations			2.01/SF	17,460
A1030	Slab on Grade				
7	Crushed aggregate base course, 8" depth	CY	108	60.00	6,480
10	Slab on grade, 6" depth complete incl. concrete, rebar and formwork - tie (N) reinfocement into (E) SOG	SF	4,365	15.00	65,475
11	Vapor barrier under slab - assumes required	SF	4,365	1.75	7,639
	 A1030 - Slab on Grade			9.14/SF	79,594
	A10 - FOUNDATIONS			11.15/SF	97,054
B10	SUPERSTRUCTURE				
B1020	Roof Construction				
12	Allowance for mini sub-structure as required to support bus ducts, cable trays, light fixtures, etc.	SF	8,706	3.00	26,118
13	Allowance for misc. strengthening / structural work, incl. steel channel at load bearing masonry wall along Grid B	SF	8,706	2.00	17,412
	 B1020 - Roof Construction			5.00/SF	43,530
	B10 - SUPERSTRUCTURE			5.00/SF	43,530
B20	EXTERIOR ENCLOSURE				
B2010	Exterior Walls				
16	Allowance to restore "hidden gutters" after roof replacement, incl. misc. modifications to exterior wall & framing (at North, East, and South sides)	LF	483	45.00	21,735
17	Misc. patch/repair & make good to (E) exterior walls as required	SF	5,316	3.50	18,606
				4.63/SF	40,341
B2020	Exterior Windows				
18	Restore (E) historic windows - Assume removal of (E) window, cleaning, (N) counter weights, cables, pulleys, tracks, weather seals, re-install	SF	2,402	50.00	120,100
19	Restore (E) skylights - Assume removal of (E) window, cleaning, (N) seals, re-install	SF	352	40.00	14,080
	B2020 - Exterior Windows			15.41/SF	134,180
B2030	Exterior Doors				
20	Door 108B - Remove (E) doors & frames, install (N) WD door & frame (historic) incl. hardware - to match (E) door	EA	4	4,250.00	17,000



ESTIMATE DETAIL A RENOVATION (continued)

Ref	Description	Unit	Qty	Rate \$	Total Cos
21	Door 109B - Remove & replace (E) hardware, paint door & frame (access control measured elsewhere)	EA	1	1,100.00	1,100
22	Door 110A - Remove & replace (E) hardware, paint door & frame (access control measured elsewhere)	EA	1	1,100.00	1,10
23	Door 111A - Remove & replace (E) hardware, paint door & frame (access control measured elsewhere)	EA	1	1,100.00	1,10
24	Misc. modifications to (E) frame, blocking, framing, etc as required	LS	1	1,500.00	1,50
	 B2030 - Exterior Doors			2.50/SF	21,80
	B20 - EXTERIOR ENCLOSURE			22.55/SF	196,32
B30	ROOFING				
B3010	Roof Coverings				
27	Roof replacement - Flashings, sealants, rough carpentry, bird netting, misc. gutters & downspouts, fall protection, etc.	SF	9,723	5.00	48,61
28	Roof replacement - Standing seam metal roof panels over self- adhered ice & water shield underlayment, 3" nail base insulation over 2" rigid insulation, vapor barrier, & plywood sheathing	SF	9,723	39.50	384,05
	 B3010 - Roof Coverings			49.70/SF	432,67
	B30 - ROOFING			49.70/SF	432,67
C10	INTERIOR CONSTRUCTION				
C1010	Partitions				
29	Infill partition at door removal	SF	65	50.00	3,25
30	Misc. patch/repair & make good to (E) partitions to remain	SF	8,706	2.50	21,76
	 C1010 - Partitions			2.87/SF	25,01
C1020	Interior Doors				
31	Door 107A - Single WD door & frame w/ half-vision glazing incl. hardware and installation	EA	1	2,700.00	2,70
32	Door 108A - Paired WD doors & frame w/ half-vision glazing incl. hardware	Pair	1	5,400.00	5,40
33	Door 109A - Paired WD doors & frame w/ half-vision glazing incl. hardware	Pair	1	5,400.00	5,40
34	Door 109C - Single HM door & frame w/ half-vision glazing incl. hardware	EA	1	2,500.00	2,50
	 C1020 - Interior Doors			1.84/SF	16,00
	Specialties				
C1030	opeciairies				



ESTIMATE DETAIL A RENOVATION (continued)

Ref 36 37 38 20	Description Allowance for misc. specialties incl. corner / wall protection, fire extinguisher cabinets, first aid specialties, trash / recycling	Unit SF	Qty	Rate \$	Total Cost \$
37 38	extinguisher cabinets, first aid specialties, trash / recycling	SF	9 706		
38	stations, etc		8,706	2.00	17,412
	Allowance for paper towel dispensers & soap dispensers - OFCI	LS	1	300.00	300
20	Code / wayfinding / room signage	SF	8,706	1.00	8,706
39	Industrial metal lockers, full-height	EA	25	750.00	18,750
40	Welding curtains, incl. tension rod	LF	106	65.79	6,974
	 C1030 - Specialties			7.43/SF	64,712
	C10 - INTERIOR CONSTRUCTION			12.14/SF	105,727
C30	INTERIOR FINISHES				
C3010	Wall Finishes				
41	Allowance for misc. acoustic treatment incl. baffles, acoustic panels, etc Rooms 107, 108, 110	SF	7,183	2.75	19,753
42	Misc. wall finishes incl. graphics, wainscot, decorative finish at video wall, etc per GFA	SF	8,706	2.00	17,412
43	Paint (E) walls to remain - per GFA	SF	8,706	3.00	26,118
	 C3010 - Wall Finishes			7.27/SF	63,283
C3020	Floor Finishes				
44	Polished concrete	SF	4,657	8.00	37,256
45	Resilient sheet flooring incl. floor prep/leveling	SF	4,050	14.00	56,700
46	Rubber wall base	LF	750	3.00	2,250
	 C3020 - Floor Finishes			11.05/SF	96,206
C3030	Ceiling Finishes				
47	Acoustic tile ceiling, incl. grid	SF	4,055	9.50	38,523
48	Allowance for "sensitive cleaning" at exposed roof structure to remove (E) paint finish and restore to original finish - Assume sanding, brushing, and sealer	SF	4,652	10.00	46,520
49	Misc. ceiling features incl. soffits, bulkheads, moulding, etc.	SF	4,055	1.50	6,083
	 C3030 - Ceiling Finishes			10.47/SF	91,126
	C30 - INTERIOR FINISHES			28.79/SF	250,615
D20	PLUMBING				
D2010	Plumbing Fixtures				
50	Interior hose bib	EA	8	120.00	960
51	Materials lab utility sinkTwo compartment, two faucet, assume stainless steel free-standing	EA	2	3,250.00	6,500
52	Plumbing drains and specialties allowance	SF	8,706	0.65	5,659



ESTIMATE DETAIL A RENOVATION (continued)

Ref	Description	Unit	Qty	Rate \$	Total Cost \$
53	Plumbing Equipment Allowance	SF	8,706	۰ 0.85	♀ 7,400
54	Plumbing FixturesHose ReelAir, water, power	EA	8	1,440.00	11,520
55	Plumbing FixturesLab Sink Self rimming counter mounted, dual paddle handled gooseneck faucet	EA	1	1,250.00	1,250
56	Trench drain trap primer, electronic, includes access panel	EA	3	825.00	2,475
57	Trench Drainincludes installation	LF	58	295.00	17,110
58	Washer/dryer utility boxIncludes dryer discharge to outside	EA	1	1,200.00	1,200
	 D2010 - Plumbing Fixtures			6.21/SF	54,074
D2020	Domestic Water Distribution				
59	Allowance for domestic water pipework, includes hangers, insulation, valves and accessories	SF	8,706	5.00	43,530
60	Point of use deionized water system	LS	1		Excl.
	D2020 - Domestic Water Distribution			5.00/SF	43,530
D2030	Sanitary Waste				
61	Allowance for SWV pipe work(CINH) with standard flexible band couplings); Includes excavation/backfill	SF	8,706	2.70	23,506
62	Small HVAC equipment condensate drain to nearest air gap	EA	25	1,200.00	30,000
	 D2030 - Sanitary Waste			6.15/SF	53,506
D2040	Rain Water Drainage				
63	Rainwater leaders/storm pipeworkAssume gutter and downspouts	SF	8,706	0.45	3,918
64	Rainwater reclamation system	LS	1		Excl.
	 D2040 - Rain Water Drainage			0.45/SF	3,918
D2090	Other Plumbing Systems				
65	Compressed air branch and drop to outlet, includes pipe, isolation valve and supports	EA	10	1,425.00	14,250
66	Compressed air equipmentCompressor/receiver/dryer with manifoldused Quincy QGS	EA	1	12,000.00	12,000
67	Minor demolition for enabing-allowance	SF	8,706	2.00	17,412
68	Permits	SF	8,706	0.65	5,659
69	Pipework1"-1/2" CA, Compressed Air150LB Blk, TE, Screwed fittings. Hangers included	LF	250	35.00	8,750
70	Plumbing general requirements, documentation, commissioning and supervision	SF	8,706	0.85	7,400
71	Testing	SF	8,706	0.50	4,353
	D2090 - Other Plumbing Systems			8.02/SF	69,824
	D20 - PLUMBING			25.83/SF	224,852



ESTIMATE DETAIL A RENOVATION (continued)

	TION (continued)			t August 202	
Ref	Description	Unit	Qty	Rate \$	Total Cost \$
D30	HVAC				
D3020	Heat Generating Systems				
72	VRF distribution box and accessories	LS	1	3,850.00	3,850
	 D3020 - Heat Generating Systems			0.44/SF	3,850
D3030	Cooling Generating Systems				
73	HVAC systemcoolingRSL/LL Refrigerant Lines in-line sets	LF	1,700	45.00	76,500
	D3030 - Cooling Generating Systems			8.79/SF	76,500
D3040	Distribution Systems				
74	Allowance for HVAC distributionrectangular, circular, oval and/or flexible ductwork, lining, hangers and testing	SF	8,706	11.50	100,119
75	Duct SpecialtiesFlues, dampers, grills and diffussers	SF	8,706	2.00	17,412
76	HVAC EquipmentAir Handler Units purchase/install	CFM	8,000	9.15	73,200
	D3040 - Distribution Systems			21.91/SF	190,731
D3050	Terminal & Package Units				
77	HVAC EquipmentFancoil units	LS	1	39,500.00	39,500
78	HVAC EquipmentHeat pumps	Т	21.00	2,200.00	46,200
	D3050 - Terminal & Package Units			9.84/SF	85,700
D3060	Controls & Instrumentation				
79	DDC Controls - Sole source	SF	8,706	9.00	78,354
	D3060 - Controls & Instrumentation			9.00/SF	78,354
D3070	Systems Testing & Balancing				
80	Balancing Testing and Commissioning Includes coordination with the subcontractor	SF	8,706	0.65	5,659
	 D3070 - Systems Testing & Balancing			0.65/SF	5,659
D3090	Other HVAC Systems and Equipment				
81	HVAC BIM/Autocad/Revit	SF	8,706	1.25	10,883
82	HVAC demolition for enabing-allowance	SF	8,706	4.00	34,824
83	HVAC Permit, As Builts and O&MsAllowance	SF	8,706	0.85	7,400
84	HVAC Site Supervision	SF	8,706	2.25	19,589
85	Laboratory fume hoods/exhaust	LS	1		Excl.
86	Penetrations and fire sealants	SF	8,706	0.65	5,659
87	Wall mounted exhaust fan with architectural louver, automatic damper, interlock and switch	CFM	1,200	4.70	5,640
88	Welding exhaust extractor boom with center pivot and mounting bracket	LS	2	6,000.00	12,000



ESTIMATE DETAIL A RENOVATION (continued)

Ref	Description	Unit	Qty	Rate \$	Total Cost
89	Woodshop dust collection system	LS	1	ب 87,050.00	¥ 87,050
	 D3090 - Other HVAC Systems and Equipment			21.03/SF	183,045
	D30 - HVAC			71.66/SF	623,839
D40	FIRE PROTECTION				
D4040	Sprinklers				
90	Allowance for Fire Suppression Systems including heads, (painted) pipework and specialties (high work)	SF	8,706	5.25	45,707
91	Fire suppression contractorsupervision, drawings and design buildAllowance	SF	8,706	0.45	3,918
	D4040 - Sprinklers			5.70/SF	49,625
D4090	Other Fire Protection Systems				
93	Demo existing fire protection	SF	8,706	1.50	13,059
	D4090 - Other Fire Protection Systems			1.50/SF	13,059
	D40 - FIRE PROTECTION			7.20/SF	62,684
D50	ELECTRICAL				
D5010	Electrical Service & Distribution				
94	Conduit and wire to outlets and low voltage devicesallowance	SF	8,706	1.50	13,059
95	Electrical panels and power equipment	SF	8,706	2.00	17,412
96	Electrical power- bus duct	LF	254	225.00	57,150
97	Grounding	SF	8,706	0.30	2,612
98	Mechanical connections - Fans, pumps, motors, heaters etc.	SF	8,706	1.35	11,753
99	Misc. Testing/Permits/Commallowance	SF	8,706	1.85	16,106
100	Outlets and other low voltage devicesallowance	SF	8,706	2.00	17,412
	D5010 - Electrical Service & Distribution			15.56/SF	135,504
D5020	Lighting & Branch Wiring				
101	Conduit and wire to light fixtures and controlsallowance	SF	8,706	1.80	15,670
103	LED classroom lighting	SF	3,225	14.00	45,150
104	LED Shop lighting	SF	5,485	12.00	65,820
105	Lighting controlsallowance for all areas	SF	8,706	2.25	19,589
106	Temporary lighting	SF	8,706	0.85	7,400
	 D5020 - Lighting & Branch Wiring			17.65/SF	153,629
D5030	Communications & Security				
107	Allowance for a complete fire alarm system	SF	8,706	3.50	30,471
108	Allowance for audio visual systemsbackbone only	SF	8,706	1.00	8,706
109	Allowance for distributed antenna system	SF	8,706	0.85	7,400



ESTIMATE DETAIL A RENOVATION (continued)

Ref	Description	Unit	Qty	Rate \$	Total Cos
110	Allowance for grounding and bonding - equipment, IT racks, cabinets, cable tray etc.	SF	8,706	0.30	2,612
111	Allowance for security systemIncludes CCTV and access control	SF	8,706	2.25	19,589
112	Allowance for telecommunications scope	SF	8,706	2.65	23,072
	 D5030 - Communications & Security			10.55/SF	91,849
D5090	Other Electrical Services				
113	Electrical demolition for enabling	SF	8,706	3.00	26,11
	D5090 - Other Electrical Services			3.00/SF	26,11
	D50 - ELECTRICAL			46.76/SF	407,10
E10	EQUIPMENT				
E1020	Institutional Equipment				
114	Allowance for AV equipment at Video Wall - Allowance includes (9) LCD screens, mounts, speakers, mic, touch panel, mouse, keyboard, etc.	LS	1	40,000.00	40,000
	 E1020 - Institutional Equipment			4.59/SF	40,00
	E10 - EQUIPMENT			4.59/SF	40,00
E20	FURNISHINGS				
E2010	Fixed Furnishings				
115	Allowance for misc. undesigned / undocumented casework	SF	8,706	2.25	19,58
116	Casework @ welding - island casework	LF	25	650.00	16,25
117	Casework @ wood shop - island casework	LF	22	650.00	14,30
118	Casework @ wood shop - standard casework	LF	40	525.00	21,000
119	Collab storage cart - OFOI, Excluded	EA	4		Exc
120	Roller shades, manual	SF	1,098	14.00	15,37
121	Storage wall - assume full-height durable lockers	LF	40	900.00	36,00
	 E2010 - Fixed Furnishings			14.07/SF	122,51
E2020	Moveable Furnishings				
122	Movable furnishings incl. tables, chairs, desks, chairs, sofa lounges, etc assume F.F.& E by Owner - Excluded	Item			Exc
	 E2020 - Moveable Furnishings				Exc
	E20 - FURNISHINGS			14.07/SF	122,51 ⁻
F20	SELECTIVE BUILDING DEMOLITION				
F2010	Building Elements Demolition				
123	Allowance for misc. demo, incl. equipment, signage, furniture, etc per GFA	SF	8,706	1.50	13,059



ESTIMATE DETAIL A RENOVATION (continued)

					II August 2020
Ref	Description	Unit	Qty	Rate \$	Total Cost \$
124	Allowance for misc. shoring & bracing as required	SF	8,706	1.50	13,059
125	Demo & remove (E) casework	LF	219	9.00	1,971
126	Demo & remove (E) concrete staircase	LS	1	600.00	600
127	Demo & remove (E) door, per leaf	EA	9	150.00	1,350
128	Demo & remove (E) floor finishes	SF	4,567	1.00	4,567
129	Demo & remove (E) floor over-framing at Room 109A, assume WD	SF	513	3.00	1,539
130	Demo & remove (E) hard lid ceiling & joists	SF	3,427	2.00	6,854
131	Demo & remove (E) partitions	SF	1,499	2.50	3,748
132	Demo & remove (E) roofing, to structure	SF	9,723	4.50	43,754
133	Demo & remove (E) SOG - Room 110 plus misc. allowance at other areas	SF	4,365	10.00	43,650
134	Demo & remove (E) steel platform at (E) storage, incl. stairs	SF	216	13.00	2,808
135	Demo & remove (E) suspended ceilings	SF	4,596	1.25	5,745
136	Demo & remove (E) wall finishes - per GFA	SF	8,706	0.80	6,965
137	Demo portion of (E) partition for (N) opening, incl. misc. blocking	SF	63	16.00	1,008
	F2010 - Building Elements Demolition			17.31/SF	150,677
F2020	Hazardous Components Abatement				
138	Hazardous material abatement, assumed interior only - PRELIMINARY ALLOWANCE ONLY - Further investigation required by abatement consultant	SF	8,706	6.50	56,589
	- F2020 - Hazardous Components Abatement			6.50/SF	56,589
	F20 - SELECTIVE BUILDING DEMOLITION			23.81/SF	207,266
RENOVA	TION			323.25/SF	2,814,173



ESTIMATE DETAIL

Ref	Description	Unit	Qty	Rate \$	Total Cost \$
G10	SITE PREPARATIONS			•	·
G1010	Site Clearing				
139	Allowance for protection of (E) site elements/structures to remain, incl. tree protection fencing, signage, buildings, utilities, etc.	LS	1	10,000.00	10,000
140	Clear and grub site	SF	20,433	0.20	4,087
	 G1010 - Site Clearing				14,087
G1020	Site Demolition & Relocations				
141	Allowance for misc. site demo incl. cap / cut utilities as required	LS	1	10,000.00	10,000
142	Demo & remove (E) bench seat walls, incl. footings	LF	43	20.00	860
143	Demo & remove (E) covered bike parking, incl. canopy & bike racks	SF	1,232	7.00	8,624
144	Demo & remove (E) hardscapes, incl. base course, curbs, etc.	SF	6,354	1.40	8,896
145	Demo & remove (E) railing at concrete ramp	LF	33	10.00	330
146	Demo & remove (E) softscapes, incl. grasses, soils, shrubs, irrigation, etc.	SF	10,972	0.60	6,583
147	Demo & remove (E) tree, incl. stump	EA	1	800.00	800
	G1020 - Site Demolition & Relocations				36,093
G1030	Site Earthwork				
148	Erosion control - allowance	Item			20,000
149	Excavation - Allowance for misc. earthwork, assume limited haul-off, small equipment only (18" depth avg)	CY	886	30.00	26,580
150	Fine grading incl. compaction at (N) building pad	SF	1,187	2.50	2,968
151	Fine grading incl. compaction for paving & other hardscapes (small equipment only)	SF	5,748	1.50	8,622
152	Mobilization	LS	1	20,000.00	20,000
	G1030 - Site Earthwork				78,170
	G10 - SITE PREPARATIONS				128,350
G20	SITE IMPROVEMENTS				
G2030	Pedestrian Paving				
153	Concrete pedestrian paving, assume 4" depth incl. formwork & scoring	SF	5,748	8.50	48,858
154	Crushed aggregate base course, assume 4" depth	CY	71	60.00	4,260
155	Premium for sloped ADA ramp, incl. add'l soil, cheek walls, etc.	SF	222	20.00	4,440



ESTIMATE DETAIL B SITEWORK

Ref	Description	Unit	Qty	Rate \$	Total Cos
G2040	Site Development			Ť	
156	Allowance for misc. site furnishings incl. waste receptacles, signage, curbs, etc.	LS	1	10,000.00	10,000
158	CIP concrete seat walls, complete incl. formwork, reinforcement, finish, etc (assume no footing required)	LF	169	275.00	46,47
159	CIP concrete table, assume 24"H	SF	65	85.00	5,52
162	Guardrail w/ handrail at sloped ramps	LF	53	350.00	18,55
	 G2040 - Site Development				80,55
G2050	Landscaping				
170	Allowance for misc. landscaping incl. mow strips, lawn edging, root barriers, landscape boulders, etc.	LS	1	10,000.00	10,00
171	Irrigation, assume tie into (E) system	SF	11,052	1.75	19,34
172	Planting areas, incl. shrubs & groundcover - assume 30% of landscape area	SF	3,316	7.00	23,21
173	Seeded lawn - assume 70% of landscape area	SF	7,736	0.75	5,80
174	Trees	EA	13	750.00	9,75
	G2050 - Landscaping				68,10
	G20 - SITE IMPROVEMENTS				206,21
3 0	SITE CIVIL/MECHANICAL UTILITIES				
G3010	Water Supply				
175	Misc. modifications to (E) water supply as required due to (N) site layout	LS	1	5,000.00	5,00
	G3010 - Water Supply				5,00
G3020	Sanitary Sewer				
176	Misc. modifications to (E) sanitary sewer as required due to (N) site layout	LS	1	1,500.00	1,50
	G3020 - Sanitary Sewer				1,50
G3030	Storm Sewer				
177	Misc. modifications to (E) storm sewer as required due to (N) site layout	LS	1	5,000.00	5,00
	G3030 - Storm Sewer				5,00
	G30 - SITE CIVIL/MECHANICAL UTILITIES				11,50



ESTIMATE DETAIL B SITEWORK

B1 SITEWO	RK (continued)		Ra	ites Current A	t August 2023
Ref	Description	Unit	Qty	Rate \$	Total Cost \$
G40	SITE ELECTRICAL UTILITIES				
G4010	Electrical Distribution				
178	Misc. modifications to (E) electrical distribution as required due to (N) site layout	LS	1	10,000.00	10,000
	G4010 - Electrical Distribution				10,000
G4020	Site Lighting				
179	Bollards, illuminated, OSU standard	EA	27	1,645.00	44,415
180	Pedestrian light poles, historic, OSU standard - Incl. footing	EA	5	5,890.00	29,450
	G4020 - Site Lighting				73,865
G4030	Site Communication and Security				
181	Allowance for telecom service - Assumes not required	Item			Excl.
	G4030 - Site Communication and Security				Excl.
	G40 - SITE ELECTRICAL UTILITIES				83,865
SITEWOR	κ				429,928



ESTIMATE DETAIL B SITEWORK

Ref	Description	Unit	Qty	Rate \$	Total Cos
A10	FOUNDATIONS				
A1010	Standard Foundations				
1	Continuous footings; complete incl. concrete, rebar, formwork	CY	15	800.00	12,000
2	Imported structural fill	CY	6	75.00	450
5	Structural excavation, incl. haul off	CY	15	60.00	90
	 A1010 - Standard Foundations			11.25/SF	13,35
A1030	Slab on Grade				
6	Allowance for thickened slab edge; complete, incl. concrete, rebar, formwork	CY	3	500.00	1,50
7	Crushed aggregate base course, 8" depth	CY	30	60.00	1,80
8	Premium for sloped ADA ramp, incl. add'l soil, cheek walls, etc.	SF	243	20.00	4,86
9	Slab on grade, 5" depth complete incl. concrete, rebar and formwork	SF	1,187	12.00	14,24
11	Vapor barrier under slab - assumes required	SF	1,187	1.75	2,07
	 A1030 - Slab on Grade			20.62/SF	24,48
	A10 - FOUNDATIONS			31.87/SF	37,83
B10	SUPERSTRUCTURE				
B1020	Roof Construction				
14	Concrete mixing cover - Cellular decking	SF	1,307	8.00	10,45
15	Concrete mixing cover - Steel structure, incl. steel columns, steel purlins, steel trusses - assume 5psf	Т	3.27	8,000.00	26,16
	B1020 - Roof Construction			30.85/SF	36,61
	B10 - SUPERSTRUCTURE			30.85/SF	36,61
B30	ROOFING				
B3010	Roof Coverings				
25	Concrete mixing cover - Flashings, sealants, rough carpentry, gutters, downspouts, bird netting, etc.	SF	1,307	9.00	11,76
26	Concrete mixing cover - Standing seam metal roof panels over high-temp ice & water shield underlayment, vapor barrier, & coverboard	SF	1,307	32.25	42,15
	B3010 - Roof Coverings			45.42/SF	53,91
	B30 - ROOFING			45.42/SF	53,91

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ESTIMATE DETAIL

	/IXING AREA (continued)		Ra	ates Current A	t August 20
Ref	Description	Unit	Qty	Rate \$	Total Cos
D40	FIRE PROTECTION				
D4090	Other Fire Protection Systems				
92	Allowance for dry type fire protection at canopy	SF	1,307	6.00	7,84
	D4090 - Other Fire Protection Systems			6.61/SF	7,84
	D40 - FIRE PROTECTION			6.61/SF	7,84
D50	ELECTRICAL				
D5010	Electrical Service & Distribution				
94	Conduit and wire to outlets and low voltage devicesallowance	SF	1,187	1.50	1,78
100	Outlets and other low voltage devicesallowance	SF	1,187	2.00	2,37
	D5010 - Electrical Service & Distribution			3.50/SF	4,15
D5020	Lighting & Branch Wiring				
101	Conduit and wire to light fixtures and controlsallowance	SF	1,187	1.80	2,13
102	LED Canopy lighting	SF	1,145	6.00	6,87
	 D5020 - Lighting & Branch Wiring			7.59/SF	9,00
	D50 - ELECTRICAL			11.09/SF	13,16
G20	SITE IMPROVEMENTS				
G2040	Site Development				
162	Guardrail w/ handrail at sloped ramps	LF	81	350.00	28,35
164	Paired gate at screen wall - 7'H x 6'W total, to match adjacent metal panel incl. hardware	Pair	1	5,000.00	5,00
165	Screen wall - Brick 2-wythe masonry wall, 4'6"H avg. incl. grout & reinforcement (assumes 12" below ground)	SF	404	84.00	33,93
166	Screen wall - Metal panel infill, assume 3'6"H avg.	SF	314	35.00	10,99
167	Screen wall - Misc. flashings, sealants, anti-graffiti coating, etc.	SF	628	5.00	3,14
168	Screen wall - Precast concrete wall cap	LF	90	60.00	5,40
169	Screen wall - Steel frame @ 4'OC to 7'H AFF, incl. support connections, tied into footings (8'H total)	SF	718	18.00	12,92
	 G2040 - Site Development			84.03/SF	99,74
	G20 - SITE IMPROVEMENTS			84.03/SF	99,74
	XING AREA			209.86/SF	249,10



ESTIMATE DETAIL B SITEWORK

B3 CANOE DISPLAY

B3 CANOE	DISPLAY		Ra	tes Current A	t August 202
Ref	Description	Unit	Qty	Rate \$	Total Cost \$
A10	FOUNDATIONS				
A1010	Standard Foundations				
2	Imported structural fill	CY	1	75.00	75
4	Spread footings for canoe canopy - dimensions assumed	CY	2	750.00	1,500
5	Structural excavation, incl. haul off	CY	2	60.00	120
	A1010 - Standard Foundations	;			1,695
	A10 - FOUNDATIONS	;			1,695
G20	SITE IMPROVEMENTS				
G2040	Site Development				
157	Canoe mount - Allowance	LS	1	2,500.00	2,500
160	Concrete canoe - Allowance for install in display	EA	1	500.00	500
161	Covered canoe display, incl. integral lighting - Duo-Gard Sleekline Monolithic Canopy	SF	266	165.00	43,890
163	Misc. finishes, sealers, etc. to canoe canopy	LS	1	1,500.00	1,500
	G2040 - Site Development	t			48,390
	G20 - SITE IMPROVEMENTS	;			48,390
CANOE D	ISPLAY				50,085

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