# Lake Union Naval Reserve Building Evaluation for Future Renovation UPDATED REPORT

December 20, 2007 (Revised 2/19/08)

Prepared for:

## **Seattle Parks and Recreation Department**

Planning and Development Division 800 Maynard Avenue South, 3rd Floor Seattle, Washington 98134-1336

Ron Wright & Associates/Architects, P.S. 2003 Western Avenue, Suite 300 Seattle, Washington 98121



February 19, 2008

Toby Ressler Seattle Parks and Recreation Department 800 Maynard Avenue South – 3rd Floor Seattle, Washington 98134-1336

RE: South Lake Union Armory Feasibility Study (WC2224-05)

Agreement No. PR07-045 Final Report (revised 2/19/08)

Dear Toby,

Enclosed is our final report (revised to incorporate the recently prepared addendum within the report) which provides updated cost projections for renovations to the existing South Lake Union Armory Building.

This report provides three options: renovation of the building to accommodate a Community Center use (Option 1), renovation of the building to accommodate a Special Events Center (Option 2), and maintaining the existing use without extensive changes in operations (Option 3). Plan diagrams are provided showing a rough conceptual design for Options 1 and 2.

We project the overall project cost for Option 1 to be \$18,888,090.

We project the overall project cost for Option 2 to be \$21,261,267.

We project the overall project cost for Option 2 to be \$1,691,302.

Please contact us if any clarification is necessary.



## Lake Union Naval Reserve Building Updated Evaluation for Future Renovations

The intent of this report is to provide updated information regarding our previous report, dated May 6, 2004.

The referenced report provided three options for renovation of building, ranging from minimal life safety and maintenance improvements to a complete renovation to accommodate a community center. Since our earlier report, the following work has been completed on the building:

Structural/Seismic Improvements, including new plywood sheathing at the upper roof, new lateral-load-resistant trusses, installation of fiberwrap reinforcing at interior columns at the second floor, and reinforcement of existing high hollow-clay tile walls.

New upper roof with R-30 rigid insulation.

Removal of existing HVAC equipment at the north end of the building, and replacement of the roof in this area.

All interior finishes affected by the work were restored to match existing finishes and trim.

For this updated report, we have provided the probable renovation costs for two options, and a cost summary for a third "stay as-is" option:

## Option 1: City of Seattle Parks Department Community Center

This scope of work is for a complete renovation of the building to accommodate a Community Center facility operated by the Parks Department. Because of the size of the building, the location of the building, and the adjacency to the South Lake Union Park, the proposed facility would likely operate in support of the park functions, and would be renovated to accommodate a wide range of flexibility in it's use – including offices, restrooms, meeting rooms, and large assembly gatherings.

### **Option 2: Special Events Center Alternative**

This scope of work is also for a complete renovation of the building to accommodate a special events center. The proposed renovations are similar to those of Option 1, except with more focus on creating more meeting and conference spaces – together with a full service kitchen to accommodate catering.

### **Option 3: Continue Existing Operations**

This option provides a base number for capital improvements for simply maintaining the existing use of the facility as-is. The primary capital cost associated with continuing the existing use is the need for the installation of an automatic fire sprinkler system.

Our estimates for probable renovation costs for each option including the following assumptions:

The existing interior walls are constructed with hollow clay tile (HCT). Testing has also confirmed the presence of lead-based paint. After reviewing a number of options, it was decided the most cost effective and efficient method for renovation would be to remove the HCT walls and replace them with traditional metal stud wall construction. This method will also allow for a new electrical distribution system (outlets, etc.) to be easily installed. All existing trim would be replicated. In general, this methodology allows for most flexibility in the configuration of rooms within the perimeter spaces of the building.

The proposed design also includes the removal of the acoustical ceiling system in the drill hall space, and the removal of the wood framed ceilings at the perimeter office spaces.

In both options, the western portion of the first floor is configured with spaces that would support the Park, including a café, offices, and restrooms that would be accessible from the exterior.

Access to the existing third and fourth floors would be limited to service use only.

The building's windows were installed in 1984. Our earlier report noted a number of instances where the sealed double-pane glazing

units have failed. As part of the future repairs for the building, we recommend the complete replacement of the glazing units.

The existing boiler heating system is proposed to be abandoned – to be replaced with a new HVAC system that conforms to current energy and ventilation codes.

The electrical distribution system (outlets, etc.) would be replaced entirely.

The plans include the installation of new automatic fire sprinkler system and fire alarm system.

The improvements will be conducted as public works projects, subject to the typical wage and reporting requirements associated with public works projects.

The improvements will, to the greatest extent possible, incorporate LEED Incentive Program elements in conformance with the City of Seattle 2000 Sustainable Building Policy. The estimate provides for a green type roof replacement at the lower perimeter roof.

And finally, all work shall conform to the historic covenant incorporated as part of the transfer of the property from the federal government to the City of Seattle. This covenant mandates any improvements to the building be approved by the Washington State Historic Preservation Officer (SHPO).

## **Cost Projections**

Using the various criteria identified above, we have prepared, with assistance from Turner Construction, estimates of the probable construction costs for each option. The summary of these estimates is attached.

The projected total cost for Option 1 – Community Center is \$18,888,090.

The projected total cost for Option 2 – Special Events Center Alternative is \$21,261,267.

The projected total cost for Option 3 – Continuing Existing Operations is \$1,691,302.

## Lake Union Naval Reserve Building December 20, 2007 (revised 2/19/08)

### Attachments:

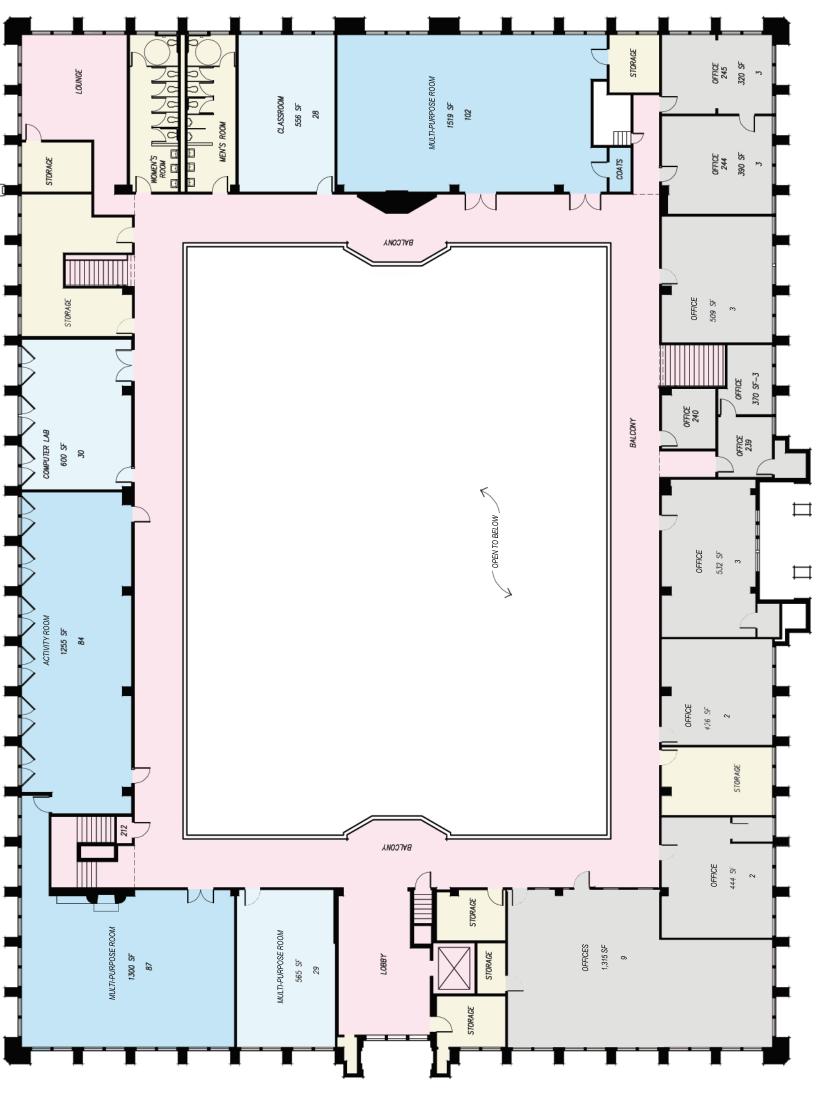
- A Option 1 First and Second Floor Plans
- B Option 1 Estimate of Probable Construction Costs
- C Option 2 First and Second Floor Plans
- D Option 2 Estimate of Probable Construction Costs
- E Option 3 Estimate of Probable Construction Costs



Lake Union Naval Reserve: Community Center

(206) 728-4248 FAX (206) 728-4272 12.20.07 гмаа

1,519 sf	102 people
1,300 sf	87 people
1,235 sf	84 people
600 sf	30 people
556 sf	28 people
509 sf	3 people
532 sf	3 people
426 sf	2 people
444 sf	2 people
565 sf	3 people
320 sf	3 people
390 sf	3 people
370 sf	3 people
280 sf	6 fixtures
280 sf	6 fixtures
	1,300 st 1,235 sf 600 sf 556 sf 532 sf 444 sf 565 sf 320 sf 370 sf 280 sf 280 sf



# option 1

Ron Wright & Associates /
Architects, PS
2003 Western Ave., Ste. 300
Seattle, Washington
98121-2161
(206) 728-4248
FAX (206) 728-4272

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Lake Union Naval Reserve: Community Center

# Lake Union Naval Reserve Renovation OPTION 1 - Community Center

Estimate of Probable Construction Costs 20-Dec-07

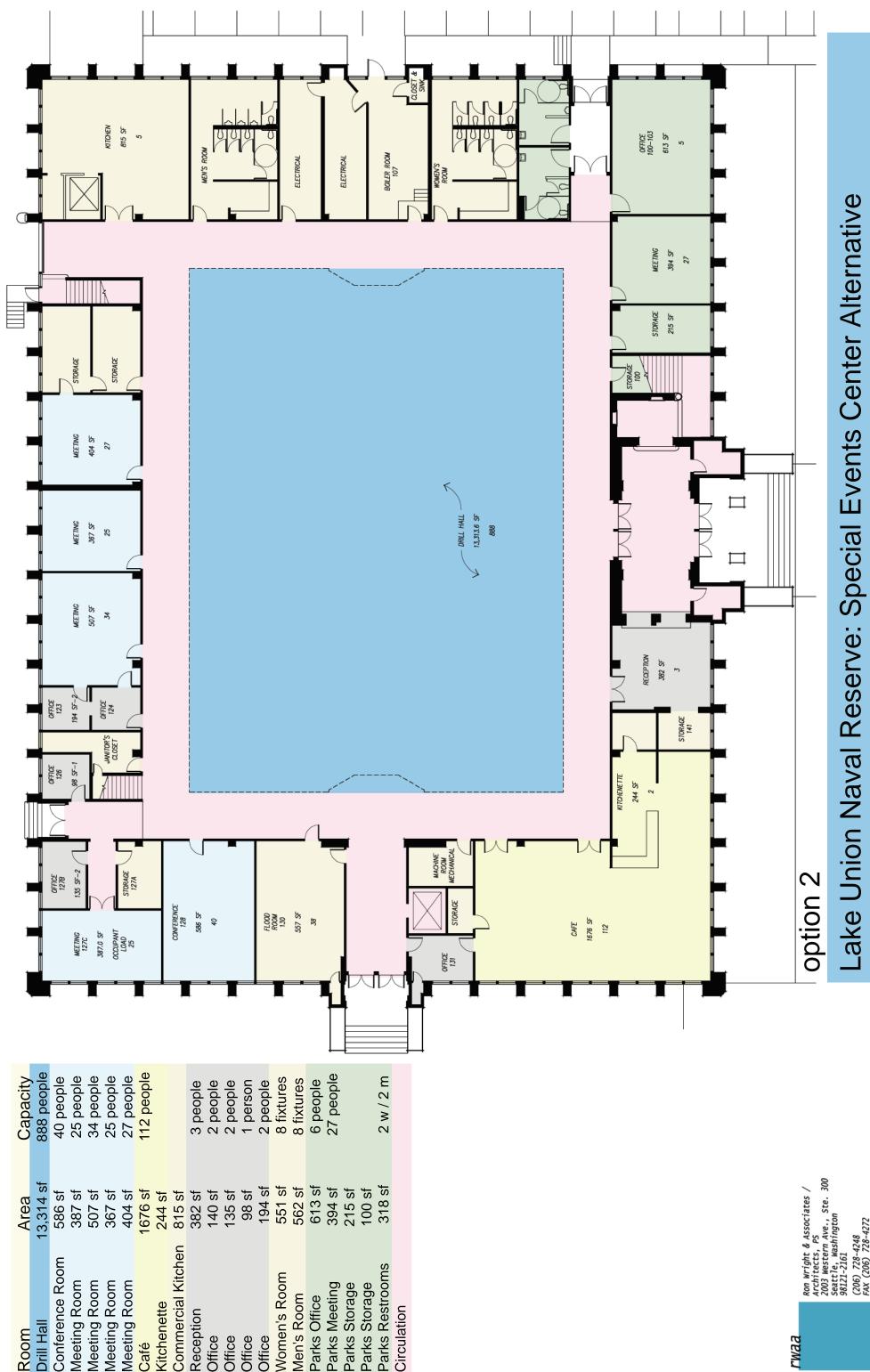
SITE IMPROVEMENTS:  1 Underground Existing Power Lines & Structures 2 Install new 6" DC \ FDC (fire sprinkler) 3 Install new 6" Fire Lateral (fire sprinkler) 4 Landscape Repair Allowance 5 Pathway Lighting and Signage to Building 6 Demo Existing S.W. Ramp 7 New raised entry plaza with ADA ramp 8 Architectural Site Lighting Allowance 9 Storm Drainage Allowance 10 Soils remediation SW Corner Allowance  BUILDING IMPROVEMENTS - EXTERIOR:	1 Is 1 ea 50 If 1 Is 1 Is 1 Is 1 Is 1 Is 1 Is	x x x x x	\$ 15,000.00 \$ 15,000.00 \$ 1,000.00 \$ 85,000.00 \$ 25,000.00 \$ 20,000.00 \$ 50,000.00	= 9 = 9 = 9 = 9 = 9 = 9 = 9	40,000 4,250 15,000 15,000 1,000 85,000 25,000 50,000	\$ 380,250	1
<ol> <li>Prep. \ Paint Building Exterior</li> <li>Replace 100% of Perimeter Exterior Dual Pane Glass</li> <li>Allowance for floor slab repair (from underside)</li> <li>3" Foam R-9 Rigid Insulation Under Exp Struct. Slab</li> </ol>	28,575 sf 8,460 sf 1 ls 7,420 sf	X X	\$ 75.00 \$ 30,000.00	= \$	634,500	\$ 824,908	
BUILDING IMPROVEMENTS - INTERIOR: Perimeter Spaces (offices, meeting rooms, etc.)  1 Selective Demolition 2 New improvements (walls, trim, doors, etc.)	24,385 sf 24,385 sf			9	5 170,695 5 1,121,710	\$ 1,292,405	
Common Areas  1 1st Floor Men's \ Women's Bathrooms 2 2nd Floor Men's \ Women's Bathrooms 3 Entry Reception Area 4 Remove Existing ACT in Drill Hall 5 New acoustical treatment at Drill Hall 6 Misc restoration, improvements 7 Paint Drill Hall Joist & Girder System 8 Selective Demolition 9 Drill Hall Floor Protection	1 ls 15,456 sf	x x x x x x	\$105,000.00 \$ 25,000.00 \$ 2.25 \$ 25,000.00	= 9 = 9 = 9 = 9 = 9 = 9 = 9 = 9 = 9 = 9	5 147,000 6 18,900 6 16,692 7 105,000 8 25,000 8 34,776 9 25,000	\$ 622,368	
Roof Upgrades  1 Polyiso Insulation Board, Tapered - R30  2 Two Ply Modified Bituminious Roofing @ Low Roof  3 Reconnect \ Modify Roof Drains  4 Sheet Metal Reglet & Counterflashing  5 Green Roof Allowance	29,605 sf 16,000 sf 16 ea 1,360 lf 29,605 sf	x x x	\$ 18.00 \$ 1,850.00 \$ 12.50	= 9	288,000 29,600 17,000	\$ 734,268	
Structural Upgrades 1 Misc improvements associated with renovations	1 ls	x	\$ 10,000.00	= \$	10,000	\$ 10,000	
Hazardous Material Abatement - Owner Allowance 1 Hazmat Report(s) 2 Remove Flooring @ Perimeter Office Areas 3 Remove Glued Ceiling Tiles @ Perimeter Office Areas 4 Remove Existing Light Ballasts 5 Allowance for asbestos pipe wrap and lining 6 Miscellaneous removal (i.e. unknown conditions)	24,385 sf 270 ea 1 Is	X X X		= 9 = 9 = 9	37,797 47,551 8,100 45,000	\$ 178,448	
Fire Protection 1 Install PIV \ Backflow \ Riser 2 Install Fire Protection Overhead	1 ea 49,187 sf		\$ 12,500.00 \$ 6.50	= \$		\$ 332,216	
Mechanical 1 General Mechanical Upgrade - NEW - Ventilation System	49,187 sf	х	\$ 26.00	= \$	5 1,278,862	\$ 1,278,862	2

# Lake Union Naval Reserve Renovation OPTION 1 - Community Center (cont.)

Electrical							
1 Install 2000 AMP UGPS	1 ls		\$ 29,000.00		29,000		
2 Install Main Switch Gear 1,200 AMP	1 ls		\$ 25,500.00		25,500		
3 Electrical Upgrades 4 Install 400W HID Lighting in Drill Hall	1 ls 40 ea		\$532,781.00 \$ 1,500.00		532,781 60,000		
5 Specialty Lighting	40 ea 1 Is	X X			45,000		
6 Security \ Fire Alarm & Life Safety - Office	27,337 sf	X			176,324		
7 Security \ Fire Alarm & Life Safety - Common	20,830 sf	X			119,773		
8 Perimter Spaces and Reception Area Data Cabling	24,805 sf	Х			111,623	\$ 1,100,000	
Elevator Addition:							
1 Elevator Housing (includes structural allowance)	1 ls	Х	\$225,000.00	=	\$ 225,000		3
2 Elevator Equipment and Installation - 3000 lb Holeless	1 ls		\$ 90,000.00		90,000		
3 Elevator Cab Finish Allowance	1 ls	Х	\$ 8,000.00	=	\$ 8,000	\$ 323,000	
MISC.:							
1 General Cleaning	49,187 sf	Х	\$ 0.75	=	\$ 36,890		
2 Café Area	2,120 sf	Х	\$ 85.00	=	\$ 180,200	\$ 217,090	
General Conditions	12 mo	x	\$ 45,000.00	=	\$ 540,000	\$ 540,000	4
Design Contingency					20%	\$ 1,566,763	
			SUBTOTAL			\$ 9,400,577	
	General Contrac	tor's	s O & P & Bond		9.5%	\$ 893,055	
General	Contractor's Ta	xes	and Insurance		1.50%	\$ 154,404	
			SUBTOTAL			\$ 10,448,036	
Associated Direct Project	Costs (permits	, fe	es, taxes, etc.)		62.5%	\$ 6,530,023	
TOTA	L ESTIMATED	PR	OJECT COSTS			\$ 16,978,059	
	ESCALLA1	IOI	N TO MID-2009		11.25%	\$ 1,910,032	5
			TOTAL			\$ 18,888,090	

#### Notes

- 1 Allowance is included to provide roof drainage system that complies with current standard environmental practices.
- 2 New ventilation system to conform to ventilation code requirements for assembly spaces.
- 3 Assumes two-stop elevator. No access planned for third and fourth floors.
- 4 General Conditions includes Division 0 items and in general, direct costs associated with operating the project, including but not limited to, project management, project supervision, temporary offices, temporary utilities, periodic cleaning, transporation, hauling, and disposal expenses not normally covered by sub-contractors, dust control, temporary fencing, etc.
- 5 Escallation to Mid-2009 based upon projected 8% inflation for 2008, 6% for 2009.



Parks Restrooms

Circulation

Women's Room

Office Office

Men's Room Parks Office

Parks Meeting Parks Storage Parks Storage

Meeting Room Meeting Room Meeting Room Meeting Room

Drill Hall

Room

Kitchenette

Café

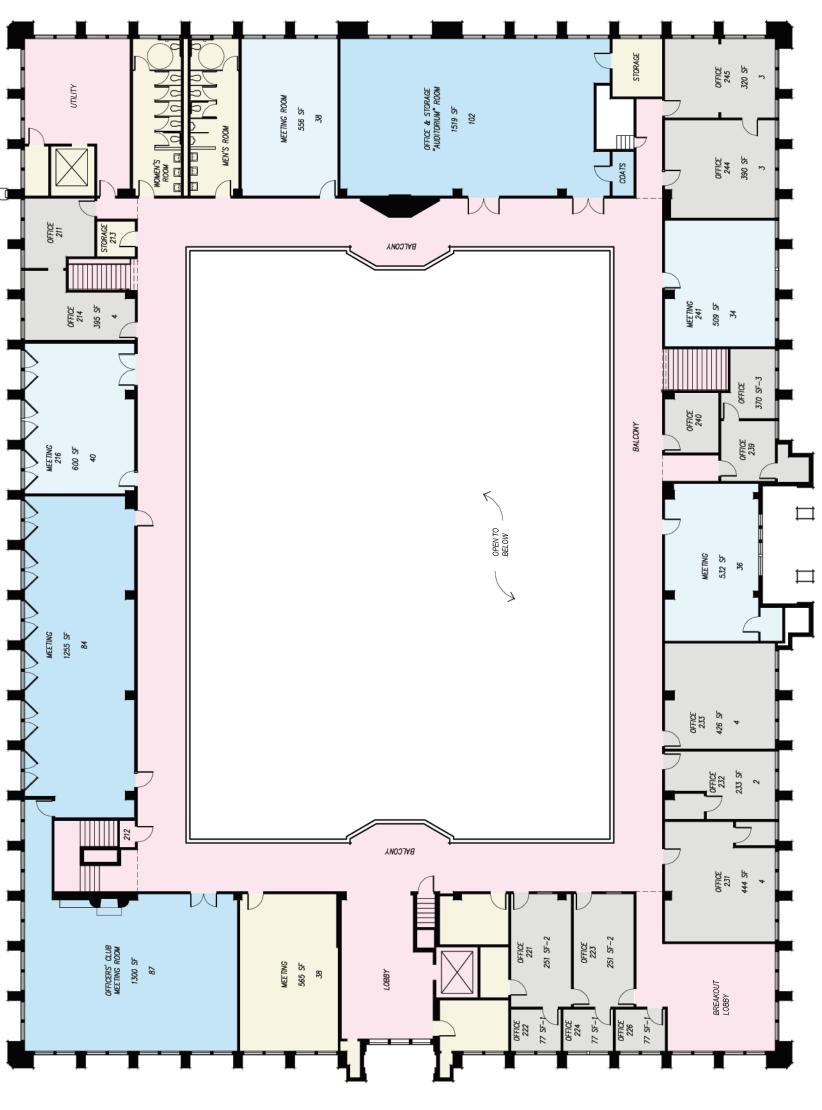
Reception

Office Office (206) 728–4248 FAX (206) 728–4272

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Room	Area	Capacity
Auditorium Room	1,519 sf	102 people
Officer's Club	1,300 sf	87 people
Meeting Room	1,235 sf	84 people
Meeting Room	900 st	40 people
Meeting Room	556 sf	38 people
Meeting Room	509 sf	34people
Meeting Room	532 sf	36 people
Office	395 sf	4 people
Office	320 sf	3 people
Office	390 sf	3 people
Office	370 sf	3 people
Office	426 sf	4 people
Offlice	233 sf	2 people
Office	444 sf	4 people
Office	251 sf	2 people
Office	77 sf	1 person
Office	77 sf	1 person
Office	77 sf	1 person
Office	251 sf	2 people
Women's Room	280 sf	6 fixtures
Men's Room	280 sf	6 fixtures
Circulation		



# option 2

Lake Union Naval Reserve: Special Events Center Alternative



# Lake Union Naval Reserve Renovation OPTION 2 - Special Events Center Alternative

Estimate of Probable Construction Costs 20-Dec-07

SITE IMPROVEMENTS:										
1 Underground Existing Power Lines & Structures	1 ls	Х	\$	125,000.00	=	\$	125,000			
2 Install new 6" DC \ FDC (fire sprinkler)	1 ea	Х	\$	40,000.00	=	\$	40,000			
3 Install new 6" Fire Lateral (fire sprinkler)	50 If	Х	\$	85.00	=	\$	4,250			
4 Landscape Repair Allowance	1 ls	Х	\$	15,000.00	=	\$	15,000			
5 Pathway Lighting and Signage to Building	1 ls	х	\$	15,000.00	=	\$	15,000			
6 Demo Existing S.W. Ramp	1 ls			1,000.00			1,000			
7 New raised entry plaza with ADA ramp	1 ls			85,000.00			85,000			
8 Architectural Site Lighting Allowance	1 ls			25,000.00			25,000			
9 Storm Drainage Allowance	1 ls			20,000.00			20,000			
10 Soils remediation SW Corner Allowance	1 ls			50,000.00			50,000	\$	380,250	
10 3013 Terriculation 3W corner Allowance	1 13	^	Ψ	30,000.00	_	Ψ	30,000	Ψ	300,230	
<b>BUILDING IMPROVEMENTS - EXTERIOR:</b>										
1 Prep. \ Paint Building Exterior	28,575 sf	¥	\$	3.42	=	\$	97,686			
2 Replace 100% of Perimeter Exterior Dual Pane Glass	8,460 sf						634,500			
3 Allowance for floor slab repair (from underside)				30,000.00			30,000			
4 3" Foam R-9 Rigid Insulation Under Exp Struct. Slab	7,420 sf						62,722	ф	824,908	
4.5 Foani K-9 Rigid Insulation Onder Exp Struct. Slab	7,420 SI	Х	Þ	0.43	_	Þ	02,722	Þ	024,900	
BUILDING IMPROVEMENTS - INTERIOR:										
Perimeter Spaces (offices, meeting rooms, etc.)										
	24 20E of	.,	4	7.00		ф	170 605			
1 Selective Demolition	24,385 sf					\$	•	_	1 202 405	
2 New improvements (walls, trim, doors, etc.)	24,385 sf	Х	\$	46.00		\$	1,121,710	\$	1,292,405	
Common Areas										
1 1st Floor Men's \ Women's Bathrooms	600 sf	~	ф	350.00	_	ф	210,000			
· ·							147,000			
2 2nd Floor Men's \ Women's Bathrooms	420 sf		- :				,			
3 Entry Reception Area	420 sf						18,900			
4 Remove Existing ACT in Drill Hall	15,456 sf						16,692			
5 New acoustical treatment at Drill Hall				105,000.00			105,000			
6 Misc restoration, improvements				25,000.00			25,000			
7 Paint Drill Hall Joist & Girder System	15,456 sf						34,776			
8 Selective Demolition				25,000.00	=	\$	25,000			
9 Drill Hall Floor Protection	10,000 sf	Х	\$	4.00	=	\$	40,000	\$	622,368	
De of Humana de o										
Roof Upgrades	20.605 -6		_	4.00		_	110 120			
1 Polyiso Insulation Board, Tapered - R30	29,605 sf	Х	\$	4.00			118,420			
2 Two Ply Modified Bituminious Roofing @ Low Roof	16,000 sf						288,000			
3 Reconnect \ Modify Roof Drains	16 ea						29,600			
4 Sheet Metal Reglet & Counterflashing	1,360 lf						,			
5 Green Roof Allowance	29,605 sf	Χ	\$	9.50	=	\$	281,248	\$	734,268	
Character of Hermander										
Structural Upgrades	4.1.		_	10 000 00		_	10.000	_	10.000	
1 Misc improvements associated with renovations	1 ls	Х	\$	10,000.00	=	\$	10,000	\$	10,000	
Harris dans Matarial Abatamant. Once Alleman										
Hazardous Material Abatement - Owner Allowance	4 1-		_	15 000 00		_	15.000			
1 Hazmat Report(s)				15,000.00			15,000			
2 Remove Flooring @ Perimeter Office Areas				1.55						
3 Remove Glued Ceiling Tiles @ Perimeter Office Areas	24,385 sf						47,551			
4 Remove Existing Light Ballasts	270 ea									
5 Allowance for asbestos pipe wrap and lining				45,000.00			•			
6 Miscellaneous removal (i.e. unknown conditions)	1 ls	Х	\$	25,000.00	=	\$	25,000	\$	178,448	
Fire Protection				10 500 05			40.500			
1 Install PIV \ Backflow \ Riser				12,500.00						
2 Install Fire Protection Overhead	49,187 sf	Χ	\$	6.50	=	\$	319,716	\$	332,216	
Madeautad										
Mechanical	40 40= -							_	4 770 700	
1 General Mechanical Upgrade - NEW - HVAC	49,187 sf	Х	\$	36.00	=	\$	1,770,732	\$	1,770,732	

#### Lake Union Naval Reserve Renovation OPTION 2 - Special Events Center Alternative (cont.)

Electrical  1 Install 2000 AMP UGPS  2 Install Main Switch Gear 1,200 AMP  3 Electrical Upgrades  4 Install 400W HID Lighting in Drill Hall  5 Specialty Lighting  6 Security \ Fire Alarm & Life Safety - Office  7 Security \ Fire Alarm & Life Safety - Common  8 Perimter Spaces and Reception Area Data Cabling	1 ls 1 ls 40 ea 1 ls 27,337 sf 20,830 sf 24,805 sf	х	\$ 6.45 \$ 5.75	= 9 = 9 = 9 = 9	5 25,500 5 532,781 6 60,000 6 65,000 6 176,324 119,773	\$ 1,132,402	
Elevator Addition:  1 Elevator Housing (includes structural allowance)  2 Elevator Equipment and Installation - 3000 lb Holeless  3 Elevator Cab Finish Allowance	1 ls 1 ls 1 ls	Х	\$225,000.00 \$ 90,000.00 \$ 8,000.00	= \$	90,000	\$ 323,000	2
MISC.: 1 General Cleaning 2 Café Area 3 Service Freight elevator 4 Kitchen Area - Allowance	49,187 sf 2,120 sf 1 ls 1 ls		•	= \$	180,200 110,000	\$ 677,090	3
General Conditions	12 mo	x	\$ 45,000.00	= \$	540,000	\$ 540,000	4
Design Contingency					20%	\$ 1,763,617	
			SUBTOTAL			\$ 10,581,704	
	General Contrac	tor's	s O & P & Bond		9.5%	\$ 1,005,262	
General	Contractor's Ta	xes	and Insurance		1.50%	\$ 173,804	
			SUBTOTAL			\$ 11,760,770	
Associated Direct Project	t Costs (permits	, fe	es, taxes, etc.)		62.5%	\$ 7,350,481	
TOTA	AL ESTIMATED	PR	OJECT COSTS			\$ 19,111,252	
	ESCALLAT	OI	N TO MID-2009		11.25%	\$ 2,150,016	5
			TOTAL			\$ 21,261,267	

#### Notes

- 1 Allowance is included to provide roof drainage system that complies with current standard environmental practices.
- 2 Assumes two-stop elevator. No access planned for third and fourth floors.
- 3 Provides freight access to second floor to facilitate catering operations.
- 4 General Conditions includes Division 0 items and in general, direct costs associated with operating the project, including but not limited to, project management, project supervision, temporary offices, temporary utilities, periodic cleaning, transporation, hauling, and disposal expenses not normally covered by sub-contractors, dust control, temporary fencing, etc.
- 5 Escallation to Mid-2009 based upon projected 8% inflation for 2008, 6% for 2009.

## Lake Union Naval Reserve Renovation OPTION 3 - Continue Existing Use

Estimate of Probable Construction Costs 7-Feb-08

					TOTAL				\$ 1,691,302	
	ESCA	LLA	OI	N T	O MID-2009			11.25%	\$ 171,031	2
TOTAL E	ESTIMA	TED	PR	OJ	ECT COSTS				\$ 1,520,271	
Associated Direct Project Co	osts (per	mits	, fe	es,	taxes, etc.)			62.5%	\$ 584,720	
					SUBTOTAL				\$ 935,552	
General Co	ntractor	's Ta	xes	an	d Insurance			1.50%	\$ 13,826	
Gen	neral Cor	itrac	tor's	s O	& P & Bond			9.5%	\$ 79,967	
					SUBTOTAL				\$ 841,759	
Design Contingency								20%	\$ 140,293	
General Conditions	3	mo	x	\$	25,000.00	=	\$	75,000	\$ 75,000	1
Electrical 1 Fire Alarm Upgrades	1	ls	x	\$	5.75	=	\$	150,000	\$ 150,000	
Fire Protection  1 Install PIV \ Backflow \ Riser  2 Install Fire Protection Overhead	1 49,187				12,500.00 6.50			12,500 319,716	\$ 332,216	
Hazardous Material Abatement - Owner Allowance  1 Hazmat Report(s)  2 Miscellaneous removal (i.e. unknown conditions)					15,000.00 25,000.00			15,000 25,000	\$ 40,000	
BUILDING IMPROVEMENTS - INTERIOR:  1 Selective Demolition for sprinkler installation  2 Patching (restoration of finishes as required)					25,000.00 50,000.00		\$ \$	20,000 40,000	\$ 60,000	
SITE IMPROVEMENTS: 2 Install new 6" DC \ FDC (fire sprinkler) 3 Install new 6" Fire Lateral (fire sprinkler)		ea If			40,000.00 85.00			40,000 4,250	\$ 44,250	

#### Notes

<sup>1</sup> General Conditions includes Division 0 items and in general, direct costs associated with operating the project, including but not limited to, project management, project supervision, temporary offices, temporary utilities, periodic cleaning, transporation, hauling, and disposal expenses not normally covered by sub-contractors, dust control, temporary fencing, etc.

<sup>2</sup> Escallation to Mid-2009 based upon projected 8% inflation for 2008, 6% for 2009.