



Port of Astoria Waterfront Master Plan

Port of Astoria Waterfront Master Plan

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Detailed Summary

	SF	Cost	Low	High
Plan Elements				
Plan Elements				
1. Demolish Riverwalk Inn Hotel	44,955	1,331,101	\$ 1,064,881	\$ 1,597,322
2. Demolish Chinook Building	7,425	231,272	\$ 185,018	\$ 277,527
3. Maritime Industrial Site Preparation	258,185	6,105,585	\$ 4,884,468	\$ 7,326,702
4. Port Tower	750	1,617,601	\$ 1,294,081	\$ 1,941,121
5. Pier 1 Walk	47,965	1,945,494	\$ 1,556,396	\$ 2,334,593
6. Cruise Passenger Transportation	37,605	359,274	\$ 287,420	\$ 431,129
7. Footbridge	4,000	1,306,285	\$ 1,045,028	\$ 1,567,542
8a. West Mooring Basin Boardwalk: Option 1, New Pier Structure	89,909	14,722,967	\$ 11,778,374	\$ 17,667,561
8b. West Mooring Basin Boardwalk: Option 2, Existing Pier Structure	89,909	6,085,288	\$ 4,868,230	\$ 7,302,345
8c. West Mooring Basin Boardwalk: Option 3, Reduced Footprint	78,016	5,405,438	\$ 4,324,351	\$ 6,486,526
9. Fishing Village	2,000	410,597	\$ 328,478	\$ 492,717
10a. Multi-Use Support Structure - Option 1, Enclosed	9,910	3,481,595	\$ 2,785,276	\$ 4,177,914
10b. Multi-Use Support Structure - Option 2, Open Canopy Structure	9,910	2,556,413	\$ 2,045,130	\$ 3,067,696
11. Industry Street	122,430	3,702,490	\$ 2,961,992	\$ 4,442,989
12. Riverwalk Trail Improvements	89,215	1,074,997	\$ 859,997	\$ 1,289,996
13. Relocated Trolley Stop	400	37,779	\$ 30,223	\$ 45,335
14a. Bay Street Connection Within Study Area	15,400	785,030	\$ 628,024	\$ 942,036
14b. Bay Street Connection Outside Study Area	6,500	102,126	\$ 81,701	\$ 122,552
15a. Basin Street Connection Within Study Area	10,220	470,610	\$ 376,488	\$ 564,732
15b. Basin Street Connection Outside Study Area	5,500	93,128	\$ 74,502	\$ 111,754
16a. Portway Street Connection Within Study Area	58,440	2,128,153	\$ 1,702,522	\$ 2,553,783
16b. Portway Street Connection Outside Study Area	5,500	398,238	\$ 318,590	\$ 477,885
17. T-Dock Electrical		454,097	\$ 363,277	\$ 544,916
18. Utility Infrastructure		1,745,738	\$ 1,396,591	\$ 2,094,886

Note: Cost ranges above are calculated in 2022 dollars

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Scope of Work

Project Scope Description

The project comprises cost planning site improvements for the Port of Astoria, Waterfront Master Plan located at 422 Gateway Ave, Ste 100, Astoria, OR 97103. The scope of work includes costing the Concept documents.

The cost report is a conceptual cost plan for budgetary purposes, based on conceptual illustrations and narrative descriptions provided by the consultant team. The report is reflective of the recommendations included in the Port of Astoria Waterfront Master Plan. Escalation, and permitting/consultant fees/planning/design/engineering costs are included.

Project Design

This cost report is base on the following plan sets including narrative documents and supplemental information: 220114 Cost Estimate Diagrams_r1, COA_2022.01.06 riverwalk wayfinding version 8, COA_2013 TSP extract 1, KPFF civil_20220114-EXH-Astoria-Util, 220114 Cost Estimate Diagrams_r2 received January 17, 2022, and communication with the consultant team.

Procurement

It is anticipated that the project will be delivered by traditional low bid with the potential of various JOC contracts. It is expected that the total project will be phased. Escalation is not included. If the project is delivered via alternative delivery methods, recommended budget modifications will be required.

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Basis of Estimate

Assumptions and Clarifications

This estimate is based on the following assumptions and clarifications:

- 1 The estimate is based on the drawings listed in the scope of work and conversations with the architects and engineers.
- 2 Standard working hours.
- 3 Prevailing wages apply.
- 4 Owners operational costs are not included per Port direction.
- 5 Escalation is not included.
- 6 Remediation is not included.
- 7 Permits and fees are included.
- 8 Sales tax not included.

General Conditions include:

- Project Management and supervision
 - Construction mobilization including trailers and temp power, lighting, and heating
 - Contractor vehicles, fuel, and maintenance
 - Small tools and consumables
 - Hoisting, forklifts, and tool storage
- Note: Trade equipment is included within the trade services unit rates

Further investigation of the structural components is necessary for complete cost accuracy and risk reduction. In the interim, we recommend that the Owner carry construction contingency for structural repairs if encountered during construction.

In preparing the cost models, multiple sources were used. The source information includes a perspective on current codes, technology, energy conservation, specific site elements, local general and sub construction markets and labor agreements, material costs and availability and labor efficiencies.

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Scope Outline

Item Description	Quantity	Unit	Rate	Total
1. Demolish Riverwalk Inn Hotel	44,955	SF		
Demolition				
Site protection - elements to remain, incl. dust control	44,955	SF	2.50	112,388
Structural	44,955	SF	6.50	292,208
Architectural systems	44,955	SF	4.25	191,059
Plumbing	44,955	SF	1.50	67,433
Mechanical	44,955	SF	2.00	89,910
Electrical	44,955	SF	2.50	112,388
Hazardous material abatement				<i>NIC</i>
Direct Construction Cost				865,384
Contingency - construction and design	10.0%			86,538
General conditions	7.0%			66,635
General requirements	7.5%			76,392
Contractor's overhead and profit or fee	4.5%			49,273
Bonds and insurance	1.5%			17,163
Soft Costs (permits and fees)	15.5%			169,717
Construction Cost Before Escalation	44,955	SF	29.61	1,331,101

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Item Description	Quantity	Unit	Rate	Total
2. Demolish Chinook Building	7,425	SF		
Demolition				
Site protection - elements to remain, incl. dust control	7,425	SF	2.50	18,563
Structural	7,425	SF	6.50	48,263
Architectural systems	7,425	SF	4.25	31,556
Plumbing	7,425	SF	2.50	18,563
Mechanical	7,425	SF	2.00	14,850
Electrical	7,425	SF	2.50	18,563
Hazardous material abatement				NIC
Direct Construction Cost	7,425	SF	20.25	150,356
Contingency - construction and design	10.0%			15,036
General conditions	7.0%			11,577
General requirements	7.5%			13,273
Contractor's overhead and profit or fee	4.5%			8,561
Bonds and insurance	1.5%			2,982
Soft Costs (permitting and consultant costs)	15.5%			29,488
Construction Cost Before Escalation	7,425	SF	31.15	231,272

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Item Description	Quantity	Unit	Rate	Total
3. Maritime Industrial Site Preparation	258,185	SF		
Renovation				
Dock demo and new construction - engineer estimate	9,400	SF	400.00	3,760,000
Site Utilities				
FS pipe - 8" dia., incl. trenching and backfill	1,560	LF	115.00	179,400
SW - modifications as required, allow	1	LS	30,000.00	30,000
Direct Construction Cost	258,185	SF	15.37	3,969,400
Contingency - construction and design	10.0%			396,940
General Conditions	7.0%			305,644
General Requirements	7.5%			350,399
Contractor's overhead and profit or fee	4.5%			226,007
Bonds and insurance	1.5%			78,726
Soft Costs (permitting and consultant costs)	15.5%			778,469
Construction Cost Before Escalation	258,185	SF	23.65	6,105,585

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Item Description	Quantity	Unit	Rate	Total
4. Port Tower	750	SF		
Site Prep, Demo, and Earthwork				
Site prep				
Erosion control	750	SF	0.17	128
Construction entrance	1	EA	5,000.00	5,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	6	MO	1,500.00	9,000
Street cleanup	6	MO	1,290.00	7,740
Temp facilities	6	MO	1,500.00	9,000
Site survey and layout	1	LS	10,000.00	10,000
Site demolition				
Demo - hardscape	750	SF	2.50	1,875
Site earthwork				
Excavation	28	CY	22.00	611
Grading	750	SF	0.50	375
Haul and dispose	28	CY	22.00	611
Base aggregates	14	CY	35.00	486
New Construction				
Foundations				
Pile supported structure	750	SF	150.00	112,500
Superstructure				
Floor construction - galvanized steel	9.0	TN	10,500.00	94,500
Floor decking - incl. topping slab	1,500	SF	13.50	20,250
Roof construction	3.2	TN	10,500.00	33,469
Exterior enclosure				
Columns and beams - galvanized steel	8.3	TN	10,500.00	86,625
Metal siding - elevator shaft	1,000	SF	35.00	35,000
Railings	230	LF	220.00	50,600
Roofing				
Metal roof - standing seam assembly	750	SF	40.00	30,000
Vertical Transportation				
Stairs - egress	3	FLT	25,000.00	75,000
Elevator - 10x10, glass cab	3	ST	85,000.00	255,000
Machine room	1	LS	75,000.00	75,000
Fire Protection				
Wet system	2,250	SF	6.50	14,625
Electrical				
Power supply - distribution and equipment	1	LS	75,000.00	75,000
Lighting and branch wiring	2,250	SF	15.00	33,750

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Item Description	Quantity	Unit	Rate	Total
Equipment				
Observation scope	2	EA	5,250.00	10,500
Direct Construction Cost	750	SF	1,402.19	1,051,645
Contingency - construction and design	10.0%			105,164
General conditions	7.0%			80,977
General requirements	7.5%			92,834
Contractor's overhead and profit or fee	4.5%			59,878
Bonds and insurance	1.5%			20,857
Soft Costs (permitting and consultant costs)	15.5%			206,246
Construction Cost Before Escalation	750	SF	2,156.80	1,617,601

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Item Description	Quantity	Unit	Rate	Total
5. Pier 1 Walk	47,965	SF		
Site Prep, Demo, and Earthwork				
Site prep				
Erosion control	47,965	SF	0.17	8,154
Construction entrance	1	EA	5,000.00	5,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	12	MO	1,500.00	18,000
Street cleanup	12	MO	1,290.00	15,480
Temp facilities	12	MO	1,500.00	18,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - hardscape	47,965	SF	2.50	119,913
Site earthwork				
Excavation	1,776	CY	22.00	39,083
Grading	47,965	SF	0.50	23,983
Haul and dispose	1,776	CY	22.00	39,083
Base aggregates	888	CY	35.00	31,088
Renovation				
Ped paving				
Concrete	36,708	SF	10.50	385,434
Curb	630	LF	30.00	18,900
Site development				
Bench	5	EA	2,750.00	13,750
Signage	1	LS	10,000.00	10,000
Landscape				
Topsoil	417	CY	45.00	18,758
Mulch	104	CY	40.00	4,169
Trees - 2" cal.	23	EA	500.00	11,255
Shrubs and groundcover - 1 gal., 24" O.C.	2,814	SF	11.50	32,358
Irrigation	11,255	SF	2.00	22,510

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Item Description	Quantity	Unit	Rate	Total
Site Electrical				
Pole light - incl. power outlet	22	EA	8,500.00	187,000
Conduit and wire - incl. trenching and backfill	1,485	LF	140.00	207,900
Direct Construction Cost	47,965	SF	26.37	1,264,817
Contingency - construction and design	10.0%			126,482
General conditions	7.0%			97,391
General requirements	7.5%			111,652
Contractor's overhead and profit or fee	4.5%			72,015
Bonds and insurance	1.5%			25,085
Soft Costs (permitting and consultant costs)	15.5%			248,053
Construction Cost Before Escalation	47,965	SF	40.56	1,945,494

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Item Description	Quantity	Unit	Rate	Total
6. Cruise Passenger Transportation	37,605	SF		
Site Prep, Demo, and Earthwork				
Site prep				
Erosion control	37,605	SF	0.17	6,393
Construction entrance	2	EA	5,000.00	10,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	3	MO	1,500.00	4,500
Street cleanup	3	MO	1,290.00	3,870
Temp facilities	3	MO	1,500.00	4,500
Site survey and layout	1	LS	5,000.00	5,000
Site demolition				
Demo - existing site	5,930	SF	2.50	14,825
Site earthwork				
Excavation	220	CY	22.00	4,832
Grading	5,930	SF	0.50	2,965
Haul and dispose	220	CY	22.00	4,832
Renovation				
Parking lot				
Asphalt - grind and overlay	31,675	SF	2.65	83,939
Landscape	5,930	SF		
Topsoil	220	CY	45.00	9,883
Mulch	55	CY	40.00	2,196
Trees - 2" cal.	12	EA	500.00	5,930
Shrubs and groundcover - 1 gal., 24" O.C.	1,483	SF	11.50	17,049
Irrigation	5,930	SF	2.00	11,860
Site development	4	EA	2,750.00	11,000
Signage	1	LS	25,000.00	25,000
Direct Construction Cost	37,605	SF	6.21	233,574
Contingency - construction and design	10.0%			23,357
General conditions	7.0%			17,985
General requirements	7.5%			20,619
Contractor's overhead and profit or fee	4.5%			13,299
Bonds and insurance	1.5%			4,633
Soft Costs (permitting and consultant costs)	15.5%			45,808
Construction Cost Before Escalation	37,605	SF	9.55	359,274

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Item Description	Quantity	Unit	Rate	Total
7. Footbridge	4,000	SF		
Site Prep, Demo, and Earthwork				
Site prep				
Erosion control	4,000	SF	0.17	680
Construction entrance	1	EA	5,000.00	5,000
Utility protection	8	MO	1,500.00	12,000
Street cleanup	8	MO	1,290.00	10,320
Temp facilities	8	MO	1,500.00	12,000
Site survey and layout	1	LS	20,000.00	20,000
Site demolition				
Prep work as required	1	LS	2,000.00	2,000
Site earthwork				
No work anticipated				NIC
New Construction				
Pedestrian bridge	4,000	SF		
Pier system - over-water reinforced	4,000	SF	100.00	400,000
Decking - prefab structure, metal grate	4,000	SF	52.50	210,000
Guardrail - steel	530	LF	250.00	132,500
Lighting - guardrail	530	LF	75.00	39,750
Signage	1	LS	5,000.00	5,000
Direct Construction Cost				
	4,000	SF	212.31	849,250
Contingency - construction and design	10.0%			84,925
General Conditions	7.0%			65,392
General Requirements	7.5%			74,968
Contractor's overhead and profit or fee	4.5%			48,354
Bonds and Insurance	1.5%			16,843
Soft Costs (permitting and consultant costs)	15.5%			166,553
Construction Cost Before Escalation				
	4,000	SF	326.57	1,306,285

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Item Description	Quantity	Unit	Rate	Total
8a. West Mooring Basin Boardwalk: Option 1, New Pier Structure	89,909	SF		
Site Prep, Demo, and Earthwork				
Site prep				
Erosion control	69,016	SF	0.17	11,733
Construction entrance	2	EA	5,000.00	10,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	12	MO	1,500.00	18,000
Street cleanup	12	MO	1,290.00	15,480
Temp facilities	12	MO	1,500.00	18,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - pier structures and deck	45,905	SF	30.00	1,377,150
Demo - on grade surfacing	44,004	SF	5.00	220,020
Site earthwork				
Excavation	1,630	CY	18.00	29,336
Grading	44,004	SF	0.50	22,002
Haul and dispose	1,630	CY	22.00	35,855
Ground improvement - deep soil mixing	1,630	CY	35.00	57,042
New Construction				
Boardwalk				
Structural steel piles and beams - new	25,012	SF	225.00	5,627,700
Timber deck	25,012	SF	28.50	712,842
CIP concrete	44,004	SF	12.50	550,050
Guardrail	1,065	LF	250.00	266,250
Site development				
Bench	10	EA	2,750.00	27,500
Signage	1	LS	20,000.00	20,000
Site mechanical				
Domestic water	475	LF	120.00	57,000
Sanitary sewer				
Stormwater management				
Site Electrical				
Power distribution	1,065	LF	160.00	170,400
Data - conduit and wire	1,065	LF	80.00	85,200

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Item Description	Quantity	Unit	Rate	Total
Pole light - incl. power outlet	16	EA	8,500.00	136,000
Conduit and wire	1,065	LF	65.00	69,225
Direct Construction Cost				9,571,785
Contingency - construction and design	10.0%			957,179
General conditions	7.0%			737,027
General requirements	7.5%			844,949
Contractor's overhead and profit or fee	4.5%			544,992
Bonds and insurance	1.5%			189,839
Soft Costs (permitting and consultant costs)	15.5%			1,877,196
Construction Cost Before Escalation				14,722,967

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Item Description	Quantity	Unit	Rate	Total
8b. West Mooring Basin Boardwalk: Option 2, Existing Pier Structure	89,909	SF		
Site Prep, Demo, and Earthwork				1,023,835
Site prep				
Erosion control		SF	0.17	
Construction entrance	2	EA	5,000.00	10,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	12	MO	1,500.00	18,000
Street cleanup	12	MO	1,290.00	15,480
Temp facilities	12	MO	1,500.00	18,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - pier structures and deck	18,770	SF	30.00	563,100
Demo - on grade surfacing	44,004	SF	5.00	220,020
Site earthwork				
Excavation	1,630	CY	18.00	29,336
Grading	44,004	SF	0.50	22,002
Haul and dispose	1,630	CY	22.00	35,855
Ground improvement - deep soil mixing	1,630	CY	35.00	57,042
New Construction				
Boardwalk	89,909	SF		
Structural steel piles and beams - repair	25,012	SF	50.00	1,250,600
Timber deck - repair	25,012	SF	12.00	300,144
CIP concrete	44,004	SF	12.50	550,050
Guardrail	1,065	LF	250.00	266,250
Site development				
Bench	10	EA	2,750.00	27,500
Signage	1	LS	20,000.00	20,000
Site mechanical				
Domestic water	475	LF	120.00	57,000
Sanitary sewer				
Stormwater management				
Site Electrical				
Power distribution	1,065	LF	160.00	170,400
Data - conduit and wire	1,065	LF	80.00	85,200

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Item Description	Quantity	Unit	Rate	Total
Pole light - incl. power outlet	16	EA	8,500.00	136,000
Conduit and wire	1,065	LF	65.00	69,225
Direct Construction Cost				3,956,204
Contingency - construction and design	10.0%			395,620
General conditions	7.0%			304,628
General requirements	7.5%			349,234
Contractor's overhead and profit or fee	4.5%			225,256
Bonds and insurance	1.5%			78,464
Soft Costs (permitting and consultant costs)	15.5%			775,881
Construction Cost Before Escalation				6,085,288

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Item Description	Quantity	Unit	Rate	Total
8c. West Mooring Basin Boardwalk: Option 3, Reduced Footprint	78,016	SF		
Site Prep, Demo, and Earthwork				1,481,095
Site prep				
Erosion control		SF	0.17	
Construction entrance	2	EA	5,000.00	10,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	12	MO	1,500.00	18,000
Street cleanup	12	MO	1,290.00	15,480
Temp facilities	12	MO	1,500.00	18,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - on grade surfacing	44,004	SF	5.00	220,020
Demo - pier structures and deck	34,012	SF	30.00	1,020,360
Site earthwork				
Excavation	1,630	CY	18.00	29,336
Grading	44,004	SF	0.50	22,002
Haul and dispose	1,630	CY	22.00	35,855
Ground improvement - deep soil mixing	1,630	CY	35.00	57,042
New Construction	78,016	SF	26.06	2,033,121
Boardwalk				
Structural steel piles and beams - repair	10,508	SF	50.00	525,400
Timber deck - repair	10,508	SF	12.00	126,096
CIP concrete	44,004	SF	12.50	550,050
Guardrail	1,065	LF	250.00	266,250
Site development				
Bench	10	EA	2,750.00	27,500
Signage	1	LS	20,000.00	20,000
Site mechanical				
Domestic water	475	LF	120.00	57,000
Sanitary sewer				
Stormwater management				
Site Electrical				
Power distribution	1,065	LF	160.00	170,400
Data - conduit and wire	1,065	LF	80.00	85,200

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Item Description	Quantity	Unit	Rate	Total
Pole light - incl. power outlet	16	EA	8,500.00	136,000
Conduit and wire	1,065	LF	65.00	69,225
Direct Construction Cost				3,514,216
Contingency - construction and design	10.0%			351,422
General conditions	7.0%			270,595
General requirements	7.5%			310,217
Contractor's overhead and profit or fee	4.5%			200,090
Bonds and insurance	1.5%			69,698
Soft Costs (permitting and consultant costs)	15.5%			689,200
Construction Cost Before Escalation				5,405,438

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Item Description	Quantity	Unit	Rate	Total
9. Fishing Village	2,000	SF		
Site Prep, Demo, and Earthwork				46,440
Site prep				
Erosion control	2,000	SF	0.35	700
Construction entrance	1	EA	5,000.00	5,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	6	MO	1,500.00	9,000
Street cleanup	6	MO	1,290.00	7,740
Temp facilities	6	MO	1,500.00	9,000
Site survey and layout	1	LS	10,000.00	10,000
Site demolition				
See boardwalk				<i>incl. above</i>
Site earthwork				
No work anticipated				<i>NIC</i>
New Construction				220,500
Site Structures				
Prefabricated structure	6	EA	36,750.00	220,500
SOG				<i>incl. above</i>
Standing seam metal roof				<i>incl. above</i>
Garage door - overhead				<i>incl. above</i>
HM door - single				<i>incl. above</i>
Direct Construction Cost				266,940
Contingency - construction and design	10.0%			26,694
General conditions	7.0%			20,554
General requirements	7.5%			23,564
Contractor's overhead and profit or fee	4.5%			15,199
Bonds and insurance	1.5%			5,294
Soft Costs (permitting and consultant costs)	15.5%			52,352
Construction Cost Before Escalation				410,597

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Item Description	Quantity	Unit	Rate	Total
10a. Multi-Use Support Structure - Option 1,Enclosed	9,910	SF		
Site Prep, Demo, and Earthwork				
Site prep				
Erosion control	9,910	SF	0.35	3,469
Construction entrance	1	EA	5,000.00	5,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	12	MO	1,500.00	18,000
Street cleanup	12	MO	1,290.00	15,480
Temp facilities	12	MO	1,500.00	18,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - see project #2				<i>incl. above</i>
Site earthwork				
No work anticipated				<i>NIC</i>
New Construction				
Foundations				
Reinforced pier system - see boardwalk				<i>incl. above</i>
Superstructure				
Floor construction - no work	12.0	TN	10,500.00	<i>NIC</i>
Roof construction	42.1	TN	10,500.00	442,234
Exterior enclosure				
Columns and beams - galvanized steel	29.2	TN	10,500.00	306,180
Metal panel - rain screen system	7,326	SF	45.00	329,670
Door - HM	2	EA	2,750.00	5,500
Door - 12x12 roll-up	3	EA	12,500.00	37,500
Roofing				
Metal roof - standing seam assembly	9,910	SF	40.00	396,400
Interior construction				
Support building - fitout	750	SF	40.00	30,000
Interior finishes				
Support building - fitout	750	SF	15.00	11,250
Restroom - fitout	2	EA	1,150.00	2,300
Plumbing				
Connection to existing	1	EA	5,000.00	5,000
Utility wash station	10	EA	3,500.00	35,000
Water closet	2	EA	2,000.00	4,000
Floor drains	10	EA	1,200.00	12,000
Vanity	2	EA	1,750.00	3,500
Drinking fountain	1	EA	4,850.00	4,850

Port of Astoria Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
WS pipe	875	LF	45.00	39,375
SS pipe	1,006	LF	50.00	50,313
Mechanical				
Heating - radiant	9,910	SF	6.50	64,415
Fire Protection				
Wet system	9,910	SF	6.50	64,415
Electrical				
Power supply - distribution and equipment	1	LS	75,000.00	75,000
Lighting and branch wiring	9,910	SF	15.00	148,650
Communications & security	9,910	SF	6.50	64,415
PV - infrastructure only	9,910	SF	2.10	20,811
Equipment				
Observation scope	3	EA	5,250.00	15,750
Direct Construction Cost				2,263,476
Contingency - construction and design	10.0%			226,348
General conditions	7.0%			174,288
General requirements	7.5%			199,808
Contractor's overhead and profit or fee	4.5%			128,876
Bonds and insurance	1.5%			44,892
Soft Costs (permitting and consultant costs)	15.5%			443,907
Construction Cost Before Escalation				3,481,595

Port of Astoria

Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
10b. Multi-Use Support Structure - Option 2, Open Canopy Structure	9,910	SF		
Site Prep, Demo, and Earthwork				
Site prep				
Erosion control	9,910	SF	0.35	3,469
Construction entrance	1	EA	5,000.00	5,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	12	MO	1,500.00	18,000
Street cleanup	12	MO	1,290.00	15,480
Temp facilities	12	MO	1,500.00	18,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - see project #2				<i>incl. above</i>
Site earthwork				
No work anticipated				<i>NIC</i>
New Construction				
Foundations				
Superstructure				
Roof construction	42.1	TN	10,500.00	442,234
Exterior enclosure				
Columns and beams - galvanized steel	29.2	TN	10,500.00	306,180
Roofing				
Metal shed roof	9,910	SF	25.00	247,750
Interior construction				
Support building - fitout	750	SF	40.00	30,000
Interior finishes				
Support building - fitout	750	SF	15.00	11,250
Restroom - fitout	2	EA	1,150.00	2,300
Plumbing				
Connection to existing	1	EA	5,000.00	5,000
Utility wash station	10	EA	3,500.00	35,000
Water closet	2	EA	2,000.00	4,000
Floor drains	10	EA	1,200.00	12,000
Vanity	2	EA	1,750.00	3,500
Drinking fountain	1	EA	4,850.00	4,850
WS pipe	875	LF	45.00	39,375
SS pipe	1,006	LF	50.00	50,313
Fire Protection				
Wet system	9,910	SF	6.50	64,415

Port of Astoria
Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
Electrical				
Power supply - distribution and equipment	1	LS	75,000.00	75,000
Lighting and branch wiring	9,910	SF	15.00	148,650
Communications & security	9,910	SF	6.50	64,415
PV - infrastructure only	9,910	SF	2.10	20,811
Direct Construction Cost				1,661,991
Contingency - construction and design	10.0%			166,199
General conditions	7.0%			127,973
General requirements	7.5%			146,712
Contractor's overhead and profit or fee	4.5%			94,629
Bonds and insurance	1.5%			32,963
Soft Costs (permitting and consultant costs)	15.5%			325,946
Construction Cost Before Escalation				2,556,413

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Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
11. Industry Street	122,430	SF		
Site Prep, Demo, and Earthwork				
Site prep				
Erosion control	122,430	SF	0.35	42,851
Construction entrance	1	EA	5,000.00	5,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	12	MO	1,500.00	18,000
Street cleanup	12	MO	1,290.00	15,480
Temp facilities	12	MO	1,500.00	18,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - hardscape	122,430	SF	2.50	306,075
Site earthwork				
Excavation	4,534	CY	18.00	81,620
Grading	122,430	SF	0.50	61,215
Haul and dispose	4,534	CY	22.00	99,758
Base aggregates	2,267	CY	35.00	79,353
No work anticipated				NIC
New Construction				
Sitework				
Parking lot				
Asphalt paving	106,880	SF	4.50	480,960
Concrete - raised crossing	2,400	SF	18.50	44,400
Curb	3,500	LF	30.00	105,000
Site development				
Signage	1.00	LS	25,000.00	25,000
Landscape				
Topsoil	487	CY	45.00	21,917
Mulch	122	CY	40.00	4,870
Trees - 2" cal.	40	EA	500.00	20,000
Shrubs and groundcover - 1 gal., 24" O.C.	9,288	SF	11.00	102,163
Irrigation	13,150	SF	2.00	26,300
Stormwater management - gallery, incl. pipe and devices	13,150	SF	15.00	197,250

Port of Astoria
Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
Site Electrical				
Pole light - incl. power outlet	44	EA	8,500.00	371,875
Conduit and wire - incl. trenching and backfill	1,750	LF	140.00	245,000
Direct Construction Cost				2,407,086
Contingency - construction and design	10.0%			240,709
General conditions	7.0%			185,346
General requirements	7.5%			212,485
Contractor's overhead and profit or fee	4.5%			137,053
Bonds and insurance	1.5%			47,740
Soft Costs (permitting and consultant costs)	15.5%			472,072
Construction Cost Before Escalation				3,702,490

Port of Astoria Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
12. Riverwalk Trail Improvements	48,000	SF		
Site Prep, Demo, and Earthwork				185,629
Site prep				
Erosion control	48,000	SF	0.17	8,160
Construction entrance	1	EA	5,000.00	5,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	3	MO	1,500.00	4,500
Street cleanup	3	MO	1,290.00	3,870
Temp facilities	3	MO	1,500.00	4,500
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - hardscape	14,672	SF	2.25	33,012
Protect - trolley tracks	1,880	LF	30.00	56,400
Site earthwork				
Excavation	543	CY	22.00	11,955
Grading	14,672	SF	0.50	7,336
Haul and dispose	543	CY	22.00	11,955
Base aggregates	113	CY	35.00	3,941
Renovation	48,000	SF	10.69	513,255
Ped paving				
Asphalt	6,080	SF	10.50	63,840
Site development				
Signage - per quote				
Kiosk map & directional	2	EA	9,500.00	19,000
Mile marker - .25 mile	2	EA	650.00	1,300
Mile marker - 1 mile	2	EA	750.00	1,500
Interpretive	2	EA	1,340.00	2,680
Trolley stop incl. bulletin board	1	EA	1,650.00	1,650
Installation	1	LS	10,000.00	10,000
Landscape	41,920	SF		
Topsoil	1,553	CY	45.00	69,867
Hydroseed	41,920	SF	0.40	16,768

Port of Astoria
Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
Site Electrical				
Bollard light	47	EA	1,350.00	63,450
Conduit and wire - incl. trenching and backfill	1,880	LF	140.00	263,200
Direct Construction Cost				698,883
Contingency - construction and design	10.0%			69,888
General conditions	7.0%			53,814
General requirements	7.5%			61,694
Contractor's overhead and profit or fee	4.5%			39,793
Bonds and insurance	1.5%			13,861
Soft Costs (permitting and consultant costs)	15.5%			137,063
Construction Cost Before Escalation				1,074,997

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Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
13. Relocated Trolley Stop	400	SF		
Site Prep, Demo, and Earthwork	400	SF	23.90	9,561
Site prep				
Erosion control	1	LS	250.00	250
Site survey and layout	1	LS	2,500.00	2,500
Site demolition				
Demo - hardscape	400	SF	2.25	900
Protect - existing structure	400	SF	12.00	4,800
Site earthwork				
Excavation	15	CY	22.00	326
Grading	400	SF	0.50	200
Haul and dispose	15	CY	22.00	326
Base aggregates	7	CY	35.00	259
Renovation	400	SF	37.50	15,000
Site structure - relocate	1	LS	10,000.00	10,000
Concrete pad	400	SF	12.50	5,000
Direct Construction Cost				24,561
Contingency - construction and design	10.0%			2,456
General conditions	7.0%			1,891
General requirements	7.5%			2,168
Contractor's overhead and profit or fee	4.5%			1,398
Bonds and insurance	1.5%			487
Soft Costs (permitting and consultant costs)	15.5%			4,817
Construction Cost Before Escalation				37,779

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Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
14a. Bay Street Connection Within Study Area	15,400	SF		
Site Prep, Demo, and Earthwork				169,026
Site prep				
Erosion control	15,400	SF	0.17	2,618
Construction entrance	1	EA	5,000.00	5,000
Tree protection - not required				NIC
Utility protection	12	MO	1,500.00	18,000
Street cleanup	12	MO	1,290.00	15,480
Temp facilities	12	MO	1,500.00	18,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - hardscape	15,400	SF	2.25	34,650
Protect - trolley tracks	1	LS	2,500.00	2,500
Site earthwork				
Excavation	570	CY	22.00	12,548
Grading	15,400	SF	0.50	7,700
Haul and dispose	570	CY	22.00	12,548
Base aggregates	285	CY	35.00	9,981
Renovation	15,400	SF	22.17	341,343
Roadway				
Asphalt	6,160	SF	10.50	64,680
Curb	620	LF	35.00	21,700
Ped paving				
Concrete sidewalk	5,544	SF	10.50	58,212
Curb	620	LF	35.00	21,700
Landscape	3,696	SF		
Topsoil	137	CY	45.00	6,160
Mulch	34	CY	40.00	1,369
Trees	7	EA	500.00	3,696
Shrubs and groundcover - 1 gal., 24" O.C.	924	SF	11.00	10,164
Irrigation	3,696	SF	2.00	7,392
Stormwater management - allow	1	LS	30,000.00	30,000

Port of Astoria
Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
Site Electrical				
Street light	8	EA	9,500.00	73,150
Conduit and wire - incl. trenching and backfill	308	LF	140.00	43,120
Direct Construction Cost				510,369
Contingency - construction and design	10.0%			51,037
General conditions	7.0%			39,298
General requirements	7.5%			45,053
Contractor's overhead and profit or fee	4.5%			29,059
Bonds and insurance	1.5%			10,122
Soft Costs (permitting and consultant costs)	15.5%			100,092
Construction Cost Before Escalation				785,030

Port of Astoria Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
14b. Bay Street Connection Outside Study Area	6,500	SF		
Site Prep, Demo, and Earthwork	6,500	SF	5.98	38,895
Site prep				
Erosion control	6,500	SF	0.35	2,275
Construction entrance	1	EA	5,000.00	5,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	3	MO	1,500.00	4,500
Street cleanup	3	MO	1,290.00	3,870
Temp facilities	3	MO	1,500.00	4,500
Site survey and layout	1	LS	10,000.00	10,000
Site demolition				
Demo - hardscape	1,500	SF	2.50	3,750
Site earthwork				
No work anticipated				<i>NIC</i>
New Construction	6,500	SF	4.23	27,500
Sitework				
Roadway				
Asphalt grind and overlay	5,000	SF	2.65	13,250
Pedestrian paving				
Sidewalk repairs	1,500	SF	8.50	12,750
Landscape	13,150			
Restoration as required, allow	1	LS	1,500.00	1,500
Direct Construction Cost				66,395
Contingency - construction and design	10.0%			6,640
General conditions	7.0%			5,112
General requirements	7.5%			5,861
Contractor's overhead and profit or fee	4.5%			3,780
Bonds and insurance	1.5%			1,317
Soft Costs (permitting and consultant costs)	15.5%			13,021
Construction Cost Before Escalation				102,126

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Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
15a. Basin Street Connection Within Study Area	10,220	SF		
Site Prep, Demo, and Earthwork				127,101
Site prep				
Erosion control	10,220	SF	0.17	1,737
Construction entrance	1	EA	5,000.00	5,000
Tree protection - not required				NIC
Utility protection	12	MO	1,500.00	18,000
Street cleanup	12	MO	1,290.00	15,480
Temp facilities	12	MO	1,500.00	18,000
Site survey and layout	1	LS	15,000.00	15,000
Site demolition				
Demo - hardscape	10,220	SF	2.25	22,995
Protect - trolley tracks	1	LS	2,500.00	2,500
Site earthwork				
Excavation	379	CY	22.00	8,327
Grading	10,220	SF	0.50	5,110
Haul and dispose	379	CY	22.00	8,327
Base aggregates	189	CY	35.00	6,624
Renovation	10,220	SF	17.50	178,854
Roadway				
Asphalt	5,840	SF	10.50	61,320
Curb	620	LF	35.00	21,700
Ped paving				
Concrete sidewalk	3,696	SF	10.50	38,808
Curb	620	LF	35.00	21,700
Landscape	684	SF		
Topsoil	25	CY	45.00	1,140
Mulch	6	CY	40.00	253
Trees	1	EA	500.00	684
Shrubs and groundcover - 1 gal., 24" O.C.	171	EA	11.00	1,881

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Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
Irrigation	684	SF	2.00	1,368
Stormwater management - allow	1	LS	30,000.00	30,000
Direct Construction Cost				305,956
Contingency - construction and design	10.0%			30,596
General conditions	7.0%			23,559
General requirements	7.5%			27,008
Contractor's overhead and profit or fee	4.5%			17,420
Bonds and insurance	1.5%			6,068
Soft Costs (permitting and consultant costs)	15.5%			60,003
Construction Cost Before Escalation				470,610

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Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
15b. Basin Street Connection Outside Study Area	5,500	SF		
Site Prep, Demo, and Earthwork	5,500	SF	6.78	37,295
Site prep				
Erosion control	5,500	SF	0.35	1,925
Construction entrance	1	EA	5,000.00	5,000
Tree protection - allow	1	LS	5,000.00	5,000
Utility protection	3	MO	1,500.00	4,500
Street cleanup	3	MO	1,290.00	3,870
Temp facilities	3	MO	1,500.00	4,500
Site survey and layout	1	LS	10,000.00	10,000
Site demolition				
Demo - hardscape	1,000	SF	2.50	2,500
Site earthwork				
No work anticipated				<i>NIC</i>
New Construction	5,500	SF	4.23	23,250
Sitework				
Roadway				
Asphalt grind and overlay	5,000	SF	2.65	13,250
Pedestrian paving				
Sidewalk repairs	1,000	SF	8.50	8,500
Landscape	13,150			
Restoration as required, allow	1	LS	1,500.00	1,500
				60,545
Direct Construction Cost				60,545
Contingency - construction and design	10.0%			6,055
General conditions	7.0%			4,662
General requirements	7.5%			5,345
Contractor's overhead and profit or fee	4.5%			3,447
Bonds and insurance	1.5%			1,201
Soft Costs (permitting and consultant costs)	15.5%			11,874
Construction Cost Before Escalation				93,128

Port of Astoria Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
16a. Portway Street Connection Within Study Area	58,440	SF		
Site Prep, Demo, and Earthwork				366,998
Site prep				
Erosion control	58,440	SF	0.17	9,935
Construction entrance	1	EA	5,000.00	5,000
Tree protection - not required				NIC
Utility protection	6	MO	1,500.00	9,000
Street cleanup	6	MO	1,290.00	7,740
Temp facilities	6	MO	1,500.00	9,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - hardscape	58,440	SF	2.25	131,490
Protect - trolley tracks	1	LS	2,500.00	2,500
Site earthwork				
Excavation	2,164	CY	22.00	47,618
Grading	58,440	SF	0.50	29,220
Haul and dispose	2,164	CY	22.00	47,618
Base aggregates	1,082	CY	35.00	37,878
Renovation	58,440	SF	17.40	1,016,569
Roadway				
Asphalt	19,460	SF	10.50	204,330
Curb	620	LF	35.00	21,700
Ped paving				
Concrete sidewalk	17,532	SF	10.50	184,086
Curb	620	LF	35.00	21,700
Landscape	21,448	SF		
Topsoil	794	CY	45.00	35,747
Mulch	199	CY	40.00	7,944
Trees	43	EA	500.00	21,500
Shrubs and groundcover - 1 gal., 24" O.C.	5,362	EA	11.00	58,982
Irrigation	21,448	SF	2.00	42,896
Stormwater management - allow	1	LS	50,000.00	50,000

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Scope Outline

Item Description	Quantity	Unit	Rate	Total
Site Electrical				
Street light	24	EA	9,500.00	231,325
Conduit and wire - incl. trenching and backfill	974	LF	140.00	136,360
Direct Construction Cost				1,383,568
Contingency - construction and design	10.0%			138,357
General conditions	7.0%			106,535
General requirements	7.5%			122,134
Contractor's overhead and profit or fee	4.5%			78,777
Bonds and insurance	1.5%			27,441
Soft Costs (permitting and consultant costs)	15.5%			271,342
Construction Cost Before Escalation				2,128,153

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Scope Outline

Item Description	Quantity	Unit	Rate	Total
16b. Portway Street Connection Outside Study Area	5,500	SF		
Site Prep, Demo, and Earthwork				74,668
Site prep				
Erosion control	5,500	SF	0.17	935
Construction entrance	1	EA	5,000.00	5,000
Tree protection - not required				NIC
Utility protection	2	MO	1,500.00	3,000
Street cleanup	2	MO	1,290.00	2,580
Temp facilities	2	MO	1,500.00	3,000
Site survey and layout	1	LS	30,000.00	30,000
Site demolition				
Demo - hardscape	5,500	SF	2.25	12,375
Protect - trolley tracks	1	LS	2,500.00	2,500
Site earthwork				
Excavation	204	CY	22.00	4,481
Grading	5,500	SF	0.50	2,750
Haul and dispose	204	CY	22.00	4,481
Base aggregates	102	CY	35.00	3,565
Renovation	5,500	SF	33.50	184,237
Roadway				
Asphalt	4,000	SF	10.50	42,000
Curb	200	LF	35.00	7,000
Ped paving				
Concrete sidewalk	500	SF	10.50	5,250
Curb	620	LF	35.00	21,700
Landscape	1,000	SF		
Topsoil	37	CY	45.00	1,667
Mulch	9	CY	40.00	370
Trees	2	EA	500.00	1,000
Shrubs and groundcover - 1 gal., 24" O.C.	250	EA	11.00	2,750
Irrigation	1,000	SF	2.00	2,000
Stormwater management - allow	1	LS	25,000.00	25,000

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Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
Site Electrical				
Street light	5	EA	9,500.00	47,500
Conduit and wire - incl. trenching and backfill	200	LF	140.00	28,000
Direct Construction Cost				258,905
Contingency - construction and design	10.0%			25,890
General conditions	7.0%			19,936
General requirements	7.5%			22,855
Contractor's overhead and profit or fee	4.5%			14,741
Bonds and insurance	1.5%			5,135
Soft Costs (permitting and consultant costs)	15.5%			50,776
Construction Cost Before Escalation				398,238

Port of Astoria
Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
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17. T-Dock Electrical

Renovation				295,220
Electrical				
Power supply - MDP	1	EA	50,000.00	50,000
Power distribution - conduit and wire	1,005	LF	180.00	180,900
Convenience and equipment connections	20	EA	3,200.00	64,320
Direct Construction Cost				295,220
Contingency - construction and design	10.0%			29,522
General conditions	7.0%			22,732
General requirements	7.5%			26,061
Contractor's overhead and profit or fee	4.5%			16,809
Bonds and insurance	1.5%			5,855
Soft Costs (permitting and consultant costs)	15.5%			57,898
Construction Cost Before Escalation				454,097

Port of Astoria
Waterfront Master Plan

Scope Outline

Item Description	Quantity	Unit	Rate	Total
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18. Utility Infrastructure

Renovation				1,134,950
Sitework				
Site Utilities				
WS - pipe, incl. trenching and backfill	1,300	LF	110.00	143,000
Connections to existing	4	EA	5,000.00	20,000
SS - pipe, incl. trenching and backfill	800	LF	150.00	120,000
Connections to existing	4	EA	5,000.00	20,000
SD - pipe, incl. trenching and backfill	1,710	LF	85.00	145,350
SD - stormwater treatment	1	LS	375,000.00	375,000
Connections to existing	4	EA	5,000.00	20,000
Fiber - conduit and wire, incl. trenching and backfill	2,180	LF	120.00	261,600
Fiber - vaults and new pole	1	LS	30,000.00	30,000
Direct Construction Cost				1,134,950
Contingency - construction and design	10.0%			113,495
General conditions	7.0%			87,391
General requirements	7.5%			100,188
Contractor's overhead and profit or fee	4.5%			64,621
Bonds and insurance	1.5%			22,510
Soft Costs (permitting and consultant costs)	15.5%			222,584
Construction Cost Before Escalation				1,745,738