

Opinion of Probable Construction Cost - Meadowdale Beach Park and Estuary Restoration 60% Design

Item			Qty.	Unit	Unit Cost	Subtotal
1. Temporary Facilities (A portion of these costs have been integrated into Salmon Recovery PRISM Metrics)						
a.	Temporary construction fencing		84	LF	\$ 15.22	\$ 1,278
b.	Temporary tree protection fencing		784	LF	\$ 15.22	\$ 11,929
c.	Temporary erosion and sediment control		1	LS	\$ 109,553.53	\$ 109,554
d.	Temporary Diversion and Control of Water		1	LS	\$ 53,255.19	\$ 53,255
Subtotal Temporary Facilities						\$ 176,016
2. Demolition & Clearing (A portion of these costs have been integrated into Salmon Recovery PRISM Metrics)						
a.	Remove existing restroom enclosure		1	LS	\$ 13,166.20	\$ 13,166
b.	Demo utilities		1	LS	\$ 3,043.15	\$ 3,043
c.	Clear and grub site		78,130	SF	\$ 0.30	\$ 23,776
d.	Sawcut existing asphalt paving		36	LF	\$ 7.61	\$ 274
e.	Strip and stockpile 6" topsoil from all vegetated areas to be cleared and grubbed		1,447	CY	\$ 30.43	\$ 44,030
f.	Selectively remove invasive, non-native vegetation		13,127	SF	\$ 3.04	\$ 39,947
g.	Rotomill AC pavement and stockpile		11,809	SF	\$ 1.52	\$ 17,968
h.	Remove subsurface debris		1,700	CY	\$ 136.94	\$ 232,801
i.	Remove Rock Armoring (3.5-ft depth)		32	CY	\$ 66.95	\$ 2,152
j.	Removed Crushed Rock Surfacing		3,352	SF	\$ 0.91	\$ 3,060
k.	Remove Volleyball Court Surfacing, Stockpile and reuse at lawn		2,027	SF	\$ 0.91	\$ 1,851
l.	Remove grill		6	EA	\$ 255.62	\$ 1,534
m.	Dispose of excess cleared material		1	LS	\$ 7,607.88	\$ 7,608
n.	Remove miscellaneous debris		1	LS	\$ 7,607.88	\$ 7,608
o.	Remove picnic table		6	EA	\$ 255.62	\$ 1,534
p.	Remove drinking fountain		1	EA	\$ 255.62	\$ 256
Subtotal Demolition & Clearing						\$ 400,609
3. Earthwork (A portion of these costs have been integrated into Salmon Recovery PRISM Metrics)						
a.	Upland cut and fill		17,670	CY	\$ 13.69	\$ 241,983
b.	Place and compact on-site stockpiled sandy soil		508	CY	\$ 13.69	\$ 6,957
c.	Haul excess and unsuitable excavated material		15,516	CY	\$ 50.21	\$ 779,081
d.	Place salvaged on-site topsoil for topsoil type 1 (6-in depth)		767	CY	\$ 10.65	\$ 8,167
e.	Import and place topsoil type 2 (12-in depth in swale, 6-in depth elsewhere)		606	CY	\$ 63.91	\$ 38,746
f.	Import and place salvaged sandy soil at lawn areas (depth varies)		508	CY	\$ 10.65	\$ 5,411
g.	Place jute fabric in planting areas with 4:1 or steeper slope		2,032	SY	\$ 12.17	\$ 24,732
h.	Place coir fabric in tidal emergent marsh areas		2,047	SY	\$ 28.91	\$ 59,169
i.	Mulch (3" depth)		235	CY	\$ 63.91	\$ 14,989
j.	Trenching for utility trench and Excavation for Stormwater Swales		519	CY	\$ 12.17	\$ 6,322
k.	Furnish, place, and compact pipe bedding for utility improvements		142	CY	\$ 53.26	\$ 7,588
l.	Place and compact native backfill for utility improvements		260	CY	\$ 13.69	\$ 3,561
Subtotal Earthwork						\$ 1,196,707
4. Railroad Bridge (A portion of these costs have been integrated into Salmon Recovery PRISM Metrics)						
a.	Temporary embankment with quarry spalls		4,900	CY	\$ 129.33	\$ 633,737
b.	Temporary embankment capping material (subballast)		240	CY	\$ 83.69	\$ 20,085
c.	Remove temporary embankment		5,140	CY	\$ 68.47	\$ 351,941
d.	Structural excavation		1,970	CY	\$ 76.08	\$ 149,875
e.	Temporary soil retention system		4,354	SF	\$ 760.79	\$ 3,312,214
f.	Furnish and drive steel H-pile (HP 14x89)		4,800	LF	\$ 152.16	\$ 730,357
g.	Furnish and erect precast abutment cap		4	EA	\$ 14,835.37	\$ 59,341
h.	Furnish and erect precast bent cap		8	EA	\$ 9,585.93	\$ 76,687
i.	Furnish and erect precast beam (B20-2110)		8	EA	\$ 15,946.12	\$ 127,569
j.	Furnish and erect precast beam (B30-2710)		12	EA	\$ 20,328.27	\$ 243,939
k.	Furnish and erect precast wingwalls		4	EA	\$ 2,282.37	\$ 9,129
l.	Demo existing box culvert		1	LS	\$ 76,078.84	\$ 76,079
m.	Waterproofing		4,011	SF	\$ 38.04	\$ 152,564
n.	Block wall		363	SF	\$ 176.50	\$ 64,087
o.	Track removal/reinstallation (by BNSF)		336	TF	\$ 1,521.58	\$ 511,250
p.	Install WSDOT Type 3 chain-link fence		242	LF	\$ 68.47	\$ 16,570
q.	Remove chain-link fence		275	LF	\$ 22.82	\$ 6,277
Subtotal Railroad Bridge						\$ 6,541,701
5. Access Road Reinforcement (A portion of these costs have been integrated into Salmon Recovery PRISM Metrics)						
a.	Spiral Nail Reinforcement		8,100	SF	\$ 63.91	\$ 517,640
Subtotal Access Road						\$ 517,640
6. Utilities						
a.	Utility Locate and Protect		1	LS	\$ 6,086.31	\$ 6,086
b.	Storm Drainage Improvements		1	LS	\$ 83,686.72	\$ 83,687
c.	Stormwater Bio-filtration Swale		1	LS	\$ 22,823.65	\$ 22,824
d.	Water Service Line Relocation		1	LS	\$ 18,258.92	\$ 18,259
Subtotal Utilities						\$ 130,856
7. CIP Concrete and Crushed Rock Site Work						
a.	Install concrete path and concrete pads		1,379	SF	\$ 12.17	\$ 16,786
b.	Furnish and place crushed rock surfacing base course for concrete paving (2-inch)		8	CY	\$ 63.91	\$ 542
c.	Furnish and place crushed rock for paths and viewpoints (6-inch)		62	CY	\$ 53.26	\$ 3,301
d.	Standard sawcutting		1,379	LF	\$ 6.09	\$ 8,393
e.	Install concrete seatwall and sheetpile cap		13	CY	\$ 987.50	\$ 12,728
f.	Install 4-ft vinyl sheetpile wall		78	LF	\$ 214.54	\$ 16,734
g.	Install concrete wheel stops in parking area		7	EA	\$ 237.37	\$ 1,662
h.	Install concrete mowstrip		350	LF	\$ 65.43	\$ 22,900
Subtotal CIP Concrete and Crushed Rock Site Work						\$ 83,045
8. Asphalt Paving and Pavement Markings						
a.	Install HMA asphalt paving (access road and path)		454	TON	\$ 206.93	\$ 93,948
b.	Install HMA asphalt paving at parking lot		85	TON	\$ 206.93	\$ 17,589
c.	Install crushed surfacing top course (CSTC) access road		398	TON	\$ 76.08	\$ 30,279
d.	Install crushed surfacing top course (CSTC) at parking lot		85	TON	\$ 76.08	\$ 6,467
e.	Parking lot striping		1	LS	\$ 760.79	\$ 761
Subtotal Asphalt Paving and Pavement Markings						\$ 149,045

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9. Large Wood and Stream Materials (A portion of tree clearing costs have been integrated into Salmon Recovery PRISM Metrics)							
	a.	Remove tree, salvage, and cut select pieces as large woody debris (LWD)		40	EA	\$ 1,582.44	\$ 63,298
	b.	Place salvaged on-site logs (uncut) with rootwads		19	EA	\$ 489.95	\$ 9,309
	c.	Place salvaged on-site stumps with rootwads and/or tree-tops in ravine channel		34	EA	\$ 327.14	\$ 11,123
	d.	Furnish and place streambed cobble		509	TON	\$ 106.51	\$ 54,214
	e.	Furnish and place beach sand (above OHWM)		1,671	TON	\$ 68.47	\$ 114,415
Subtotal Large Wood and Stream Materials							\$ 189,060
10. Restroom Enclosure							
	a.	Architecture		1	LS	\$ 178,141.65	\$ 178,142
Subtotal Restroom Enclosure							\$ 178,142
11. Pedestrian Bridge							
	a.	Furnish and install pedestrian bridge		1	LS	\$ 185,468.04	\$ 185,468
	b.	Pedestrian Bridge abutments		1		\$ 76,078.84	\$ 76,079
	c.	Concrete wing walls		1	LS	\$ 10,651.04	\$ 10,651
	d.	Decorative concrete pilasters		6	CY	\$ 1,065.10	\$ 6,391
	e.	Guardrails		40	LF	\$ 380.39	\$ 15,216
Subtotal Pedestrian Bridge							\$ 293,804
12. Boardwalk							
	a.	Field-built diamond-pier supported boardwalk		44	LF	\$ 950.99	\$ 41,843
	b.	Boardwalk abutments and plinths		1	LS	\$ 15,215.77	\$ 15,216
Subtotal Boardwalk							\$ 57,059
13. Site Furnishings							
	a.	Furnish and install benches		4	EA	\$ 1,506.36	\$ 6,025
	b.	Furnish and install ADA picnic tables		2	EA	\$ 7,197.06	\$ 14,394
	c.	Furnish and install picnic tables		3	EA	\$ 4,412.57	\$ 13,238
	d.	Furnish and install footwash		1	EA	\$ 7,577.45	\$ 7,577
	e.	Furnish and install drinking fountain		1	EA	\$ 16,022.20	\$ 16,022
	f.	Furnish and install landscape boulder		1.6	TON	\$ 169.35	\$ 271
	g.	Interpretive signage frame installation only		1	LS	\$ 2,738.84	\$ 16,000
	h.	Misc. park signage		1	LS	\$ 3,043.15	\$ 3,043
Subtotal Site Furnishings							\$ 76,571
14. Irrigation (Riparian and lawn landward of RR Bridge)							
	a.	Irrigation system installed		1	LS	\$ 130,917.61	\$ 130,918
	b.	1-1/2" Water Meter		1	LS	\$ 15,215.77	\$ 15,216
	c.	RPBA Backflow Assembly with PRV		1	LS	\$ 7,607.88	\$ 7,608
	d.	Controller		1	LS	\$ 19,019.71	\$ 19,020
	e.	Quick Couplers		1	LS	\$ 2,510.60	\$ 2,511
Subtotal Irrigation							\$ 175,272
15. Landscape Planting and Seeding (A portion of these costs have been integrated into Salmon Recovery PRISM Metrics)							
	a.	Coniferous tree (5 gallon)		115	EA	\$ 66.98	\$ 7,703
	b.	Coniferous tree (2 gallon)		20	EA	\$ 50.21	\$ 1,004
	c.	Deciduous trees (5 gallon)		30	EA	\$ 82.21	\$ 2,466
	d.	Shrub (1 gallon)		549	EA	\$ 15.22	\$ 8,358
	e.	Groundcover (1 gallon, 2-ft O.C.)		620	EA	\$ 18.27	\$ 11,326
	f.	Emergent plug (10 cubic inch, 2-ft O.C.)		4,884	EA	\$ 8.16	\$ 39,832
	g.	Emergent hand-seeding (freshwater wetland)		938	SF	\$ 0.76	\$ 713
	h.	Livestake (3' O.C.)		341	EA	\$ 4.56	\$ 1,557
	i.	Lawn hydroseed		16,763	SF	\$ 0.61	\$ 10,202
Subtotal Planting							\$ 83,162
						Subtotal	\$ 10,248,688
				Mobilization (15%) A portion of these costs have been integrated into Salmon Recovery PRISM Metrics			\$ 1,537,303
					Subtotal Construction + Mob.		\$ 11,785,992
					Construction Supervision		\$ 1,430,000
					Subtotal Construction + Mob. + CS		\$ 13,215,992
					Administrative, Architecture, Engineering		\$ 275,000
					Subtotal Construction + Mob. + CS+ AAE		\$ 13,490,992
					BNSF O&M Agreement		\$ 2,000,000
					Subtotal BNSF O&M Agreement		\$ 15,490,992
					Total Project Cost (rounded)		\$ 15,500,000
All costs are in 2020 dollars.							
In providing opinions of probable construction cost, the Client (Snohomish County Parks and Recreation) understands that the Consultant (Anchor QEA L.L.C.) has no control over the cost or availability of labor, equipment or materials, or over market condition or the Contractor's method of pricing, and the consultant's opinions of probable construction costs are made on the basis of the Consultant's professional judgment and experience. The Consultant makes no warranty, expressed or implied, that the bids or the negotiated cost of the Work will not vary from the Consultant's opinion of probable construction cost.							
Other Non-Construction Costs Not Included: Bidding							