

**CITY OF PHILOMATH
Water System Master Plan,
Philomath, Oregon**

Preliminary Cost Estimates

Appendix E

Table E-2
**Water Treatment Plant - Preliminary Construction Cost Estimates
 Philomath Water Master Plan**

960.4140.0

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1.	Mobilization, Bonds, Permits and Insurance	ALL	L.S.	Lump Sum	\$165,000.00
2.	Intake				
	a. Intake Equipment Upgrade	All	L.S.	Lump Sum	\$20,000.00
	b. New Intake Pump Installation	4	Each	20,000.00	\$80,000.00
	c. New Pump Building	All	L.S.	Lump Sum	\$15,000.00
3.	6" Raw Water Lines				
	a. 6" Ductile Iron Waterline	2755	L.F.	30.00	\$82,650.00
	b. Excavation and Backfill (stacked)	540	L.F.	25.00	\$13,500.00
	c. Excavation and Backfill (parallel)	120	L.F.	35.00	\$4,200.00
	d. Excavation and Backfill (single)	115	L.F.	15.00	\$1,725.00
	e. Surface Restoration	775	L.F.	5.00	\$3,875.00
4.	Chemical Injection				
	a. Alum	4	Each	4,500.00	\$18,000.00
	b. Caustic	4	Each	4,500.00	\$18,000.00
	c. Polymer	4	Each	4,500.00	\$18,000.00
	d. Fluoride	4	Each	4,500.00	\$18,000.00
	e. Caustic Soda Tank	1	Each	30,000.00	\$30,000.00
	f. Static Mixer	4	Each	4,200.00	\$16,800.00
	g. High Range Turbidimeter	1	Each	5,000.00	\$5,000.00
	h. Low Range Turbidimeter	2	Each	3,000.00	\$6,000.00
	I. Flow Meters	4	Each	1,500.00	\$6,000.00
	j. Building Expansion	700	S.F.	150.00	\$105,000.00
5.	New Treatment Units				
	a. Treatment Unit - 210A double tank	All	L.S.	Lump Sum	\$360,000.00
	b. Controls	All	L.S.	Lump Sum	\$75,000.00
	c. Piping	All	L.S.	Lump Sum	\$100,000.00
	d. Concrete (elevated slab)	20	C.Y.	300.00	\$6,000.00
6.	Clearwell and Building Expansion				
	a. Excavation	283	C.Y.	15.00	\$4,245.00
	b. Structural Concrete (footings and slab)	135	C.Y.	300.00	\$40,500.00
	c. 2" Fill Material	252	TONS	17.00	\$4,284.00
	d. 3/4" Crushed Rock	50	TONS	12.00	\$600.00
	e. New Clearwell Pump	2	Each	20,000.00	\$40,000.00
	g. 12" D.I. Spool W/ Gate Valve	2	Each	2,000.00	\$4,000.00
	h. Building Expansion	1292	S.F.	125.00	\$161,500.00
	I. Equipment Door	1	Each	10,000.00	\$10,000.00
7.	Sewage Pump Replacement	All	L.S.	Lump Sum	\$6,000.00

Table E-2

**Water Treatment Plant - Preliminary Construction Cost Estimates
Philomath Water Master Plan**

960.4140.0

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
8.	Backwash Pond Upgrade				
a.	Excavation	1,110	C.Y.	15.00	\$16,650.00
b.	Base Rock	325	TONS	17.00	\$5,525.00
c.	Structural Concrete (10" walls)	100	C.Y.	400.00	\$40,000.00
d.	Structural Concrete (6" base)	175	C.Y.	300.00	\$52,500.00
e.	Piping	All	L.S.	Lump Sum	\$25,000.00
9.	Parking Lot Extension				
a.	Excavation	110	C.Y.	12.00	\$1,320.00
b.	Base Rock	90	TON	14.00	\$1,260.00
c.	Asphalt	37	TON	55.00	\$2,035.00
d.	Curb	125	L.F.	\$15.00	\$1,875.00
e.	Storm Drainage	All	L.S.	Lump Sum	\$5,000.00
10.	Chlorine Contact Piping	All	L.S.	Lump Sum	\$100,000.00
11.	Fence construction/relocation	250	L.F.	\$50.00	\$12,500.00
12.	Landscaping	All	L.S.	Lump Sum	\$15,000.00
13.	Electrical & Controls	All	L.S.	Lump Sum	\$375,000.00
14.	Upgrades Resulting from Future Regulations	All	L.S.	Lump Sum	\$150,000.00
Rounded Total					\$2,243,000

Note: The above estimate is for construction costs only. See table E-1 for total project costs.

Table E-3**1.75 Million Gallon West Side Reservoir - Preliminary Construction Cost Estimates
Philomath Water Master Plan**

960.4140.0

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1.	Mobilization, Bonds, Permits and Insurance	ALL	L.S.	Lump Sum	\$125,000
2.	Reservoir Structure (Prestressed Concrete AWWA D110)	ALL	L.S.	Lump Sum	\$1,250,000
3.	Site Work/Landscaping/Fencing/Yard Piping (Assumes no rock excavation)	87,000	S.F.	\$5.00	\$435,000
4.	Valve Vault and Electrical Building	ALL	L.S.	Lump Sum	\$100,000
5.	Electrical and Controls	ALL	L.S.	Lump Sum	\$45,000

Rounded Total**\$1,955,000**

Note: The above estimate is for construction costs only. See table E-1 for total project costs.

Table E-4

Neabeack Hill Reservoir Improvements - Preliminary Construction Cost Estimates
 Philomath Water Master Plan
 960.4140.0

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1.	Mobilization, Bonds, Permits and Insurance	ALL	L.S.	Lump Sum	\$8,000
2.	Drain and Clean Existing Tank	ALL	L.S.	Lump Sum	\$3,500
3.	Coat tank interior (Xypex)	ALL	L.S.	Lump Sum	\$35,000
4.	Install Altitude Valve and Sensing Line	ALL	L.S.	Lump Sum	\$25,000
5.	Disinfect Tank and Place Back Into Service	ALL	L.S.	Lump Sum	\$2,500
6.	Install Auxilliary Power Generator w/Automatic Transfer Switch (Neabeack Hill Domestic P.S. & Reservoir)	ALL	L.S.	Lump Sum	\$65,000
7.	Electrical and Controls	ALL	L.S.	Lump Sum	\$30,000
Rounded Total					\$169,000

Note: The above estimate is for construction costs only. See table E-1 for total project costs.

Table E-5

**Starlight Village Pump Station Phase I Improvements - Preliminary Construction Cost Estimates
Philomath Water Master Plan**

960.4140.0

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1.	Mobilization, Bonds, Permits and Insurance	ALL	L.S.	Lump Sum	\$10,000
2.	Remove Vault Lid and Construct CMU Block Building w/HVAC	ALL	L.S.	Lump Sum	\$50,000
3.	Stairs and Catwalks	ALL	L.S.	Lump Sum	\$10,000
4.	Install Auxilliary Power Generator w/Automatic Transfer Switch	ALL	L.S.	Lump Sum	\$85,000
5.	Electrical and Controls	ALL	L.S.	Lump Sum	\$30,000
Rounded Total					\$185,000

Note: The above estimate is for construction costs only. See table E-1 for total project costs.

Table E-6
Seabrook Fire Pump Station Improvements - Preliminary Construction Cost Estimates
Philomath Water Master Plan
960.4140.0

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1.	Mobilization, Bonds, Permits and Insurance	ALL	L.S.	Lump Sum	\$5,500
2.	Install Auxilliary Power Generator w/Automatic Transfer Switch	ALL	L.S.	Lump Sum	\$85,000
3.	Electrical and Controls	ALL	L.S.	Lump Sum	\$10,000
Rounded Total					\$101,000

Note: The above estimate is for construction costs only. See table E-1 for total project costs.

Table E-7

Starlight Village Pump Station Phase II Improvements - Preliminary Construction Cost Estimates
Philomath Water Master Plan
960.4140.0

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1.	Mobilization, Bonds, Permits and Insurance	ALL	L.S.	Lump Sum	\$24,000
2.	Sitework	ALL	L.S.	Lump Sum	\$10,000.00
3.	Control Building	ALL	L.S.	Lump Sum	\$40,000
4.	Yard Piping	ALL	L.S.	Lump Sum	\$25,000
5.	Pumping Equipment	ALL	L.S.	Lump Sum	\$100,000
6.	Electrical & Controls	ALL	L.S.	Lump Sum	\$40,000
7.	Auxilliary Power Generator w/Automatic Transfer Switch	ALL	L.S.	Lump Sum	\$70,000.00
8.	Landscape & Fencing	ALL	L.S.	Lump Sum	\$15,000
Rounded Total					\$324,000

Note: The above estimate is for construction costs only. See table E-1 for total project costs.