

Project Estimate Report

Portland Open Space Sequence Restoration

22-Nov-2016

MANDATORY SCOPE ITEMS LIST *

IRA KELLER FORECOURT FOUNTAIN

Lighting Infrastructure

- Major restoration of site and fountain lighting, such as new mast lighting, recessed wall and step lighting

Park/Plaza

- Replace concrete walkway sections that are significantly lifting, cracking, settling or damaged
- Repair and replace handrails to improve accessibility

Fountain Structure

- Comprehensive cleaning of fountain structure
- Restoration and repair of concrete in vertical walls and basins

Site Infrastructure

- Replace fountain grates that create tripping hazards
- Repair and clear existing stormwater lines and upgrade the site drainage system to reduce water runoff

PETTYGROVE PARK

Site Infrastructure

- Repairs to storm drainage system including:
 - o New catch basin covers
 - o Rehabilitation of existing stormwater lines and addition of new lines to reduce water runoff

LOVEJOY FOUNTAIN PLAZA

Lighting Infrastructure

- Restore recessed wall and step lighting
- Revisions to electrical equipment to meet current PGE safety standards and to improve energy efficiency

Park/Plaza

- Remove and replace leaning trees that have damaged the surrounding paving
- Replace concrete walkway sections that are significantly lifting, cracking, settling or damaged

Fountain Infrastructure

- Rehabilitate control room ventilation system

Site Infrastructure

- Repair and clear stormwater drainage system to reduce water runoff

SOURCE FOUNTAIN

Fountain Infrastructure

- Replace or repair broken or leaking pipes
- Rebuild fountain vault wall

Site Infrastructure

- Clear blocked stormwater lines and install new trench drains

Notes:

* The inclusion of the optional scope improvements (and any mandatory improvements in the event of a final LID amount less than \$2,150,000) will be at the sole discretion of the Director of Portland Parks & Recreation.

** Tier 1 are the higher priority optional scope items that may be chosen to be added into the project if funding allows, while Tier 2 are the next priority.

EXHIBIT D

Project Estimate Report

Portland Open Space Sequence Restoration

22-Nov-2016

MANDATORY SCOPE ITEMS COST *

Ira Keller Forecourt Fountain Direct Construction Contract Cost		\$	652,569
Pettygrove Park Direct Construction Contract Cost		\$	175,484
Lovejoy Fountain Direct Construction Contract Cost		\$	804,252
Source Fountain Direct Construction Contract Cost		\$	140,995
Total Direct Construction Contract Cost		\$	1,773,300
Construction Contingency	20%	\$	354,660
Staff Construction & Post-Occupancy Work	2%	\$	35,466
Escalation to Mid-Point of Construction	7.95%	\$	172,089
Prof Services - Design, Eng, Testing, CM/GC Pre-Con Phase Fee	32.1%	\$	569,721
Permitting	1.4%	\$	25,000
Internal Management	32.8%	\$	582,156
Auditor's Costs	2.6%	\$	45,455
External Soft Cost Contingency	22.4%	\$	133,478
Internal Soft Cost Contingency	25%	\$	156,903
Prevailing Wage Rate Fee	0.1%	\$	1,773
TOTAL PROJECT COST		\$	3,850,000

Notes:

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OPTIONAL SCOPE ITEMS *

OPTIONAL SCOPE ITEMS- Ira Keller Fountain - Tier 1 **

Irrigation	\$	778,092.51
Utility Covers	\$	61,152.56
Lighting Controller	\$	288,455.29
TOTAL OPTIONAL	\$	1,127,700.36

OPTIONAL SCOPE ITEMS- Lovejoy Fountain - Tier 1 **

Equipment room hatch lid	\$	164,831.59
TOTAL OPTIONAL	\$	164,831.59

OPTIONAL SCOPE ITEMS- Ira Keller Fountain - Tier 2 **

Line Fountain Piping and Fixtures in Mechanical Room	\$	398,889.03
Clean & Inspect Fountain Structure	\$	203,886.00
Repair Fountain Structure	\$	179,351.96
TOTAL OPTIONAL	\$	782,126.98

OPTIONAL SCOPE ITEMS- Pettygrove Park - Tier 2 **

Additional Utility Repairs	\$	349,731.28
Refurbish Drinking Fountain	\$	39,127.42
TOTAL OPTIONAL	\$	388,858.70

OPTIONAL SCOPE ITEMS- Lovejoy Fountain- Tier 2 **

Rehabilitation of Fountain Electrical System	\$	262,259.75
Refurbish Drinking Fountain	\$	39,127.42
Shelter Lighting and Conduit	\$	69,371.45
TOTAL OPTIONAL	\$	370,758.61

OPTIONAL SCOPE ITEMS- The Source Fountain- Tier 2 **

Install Site Lighting & Conduit	\$	228,420.00
Repair Brick Pavers & Restore Base	\$	135,783.00
TOTAL OPTIONAL	\$	364,203.00

Notes:

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30% Construction Documents

November 10, 2016

LID Only



Prepared for:

PLACE

Ira Keller Fountain

30% CD Cost Update

ITEM NO.	PLAN QUANTITY	UNIT		PRIMARY REF.	PRICE PER UNIT DOLLARS.CENTS	TOTAL AMOUNT DOLLARS.CENTS
1	1	LS	MOBILIZATION		\$ 9,741.82	9,742
2	1	LS	TRAFFIC CONTROL		\$ -	0
3	920	LF	WORK ZONE FENCING		\$ 19.48	17,925
4	1	LS	SURVEY		\$ -	0
5	1	LS	SITE PROTECTION		\$ 6,672.29	6,672
6	1	LS	LOCATING SERVICE -NOT REQ		NIC	NIC
7	1	LS	TRENCH SAFETY		\$ 1,948.36	1,948
8	1	LS	ARBORIST		\$ -	0
9	1.10	ACRES	REMOVAL OF STRUCTURES AND OBSTRUCTIONS		\$ 1,164.21	1,286
10						
11	0	SF	EROSION CONTROL AND WATER POLLUTION CONTROL		\$ -	NIC
12						
13	2	TON	CRUSHED SURFACE BASE COURSE		\$ 83.97	168
14	30	TON	CONCRETE PAVING INCLUDES EX JOINT		\$ 490.50	14,715
15						
16	1	LS	FOUNTAIN REPAIR		\$ 168,095.10	168,095
17						
18	1	LS	SITE FURNISHINGS		\$ 36,399.34	36,399
19						
20	1	LS	TREE AND ROOT PRUNING		\$ -	NIC
21	1	LS	IRRIGATION SYSTEM		\$ -	0.00
22					\$ -	
23	0	SF	SOIL AND SURFACE PREP		\$ -	NIC
24	0	EA	EVERGREEN TREE, 2.5' CAL		\$ -	NIC
25	0	EA	JAPANESE SPURGE /SIM		\$ -	NIC
26	7538	SF	HYDROSEED- MIX		\$ 0.68	5,140
27	0	CY	TOPSOIL		\$ -	NIC
28	0	CY	MULCH		\$ -	NIC
29	0	LF	ROOT BARRIER		\$ -	NIC
30	0	LS	1 YR MAINTENANCE		\$ -	NIC
31					\$ -	
32						
33	113	LF	TRENCH FOR STORM SERVICES		\$ -	12,109.08
34	96	LF	CLEAR ROOT INTRUSION		\$ -	13,093.01
35	32	LF	8" PVC, REMOVE AND REPLACE		\$ -	4,987.81
36	28	LF	TRENCH DRAIN W/CUSTOM GRATE		\$ -	0.00
37	1	LS	CONNECTIONS-TIE INS		\$ -	9,741.82
38						
39	1	LS	ELECTRICAL DEMOLITION		\$ -	NIC
40	20	EA	RESET JUNCTION BOX AT NEW GRADE		\$ 389.67	7,793.46
41	1	LS	CONTROLLER, REPLACE		\$ -	0.00
42	1	LS	REPLACE BREAKERS W/ GFCI BREAKERS		\$ 15,586.91	15,586.91
43	1	LS	FOUNTAIN LIGHTING PER DWG. E4K		\$ 146,127.30	146,127.30
44	1	LS	SITE LIGHTING, PER DWG. E4K		\$ 114,813.19	114,813.19
45	618	LS	LIGHTING CONDUIT		\$ 107.16	66,224.89
			SCHEDULE 1 BASE BID TOTAL OF ITEMS 1-45			652,568
A1						
			TOTAL BID ITEMS AND ALTERNATES			652,568

Note: Costs include full mark ups including contractor, engineering fees and PP&R staff time. Base costs are direct construction costs only.

CONTROL QUANTITY CALCULATIONS

Mark ups - Per PP&R

PRE-SCOPE CONTINGENCY DIRECT CONSTRCTION COST	\$ 543,807
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Owner's Contingency

TOTAL DIRECT CONSTRUCTION CONTRACT COST	\$	652,568
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								BASE	W/MU
								334,931	652,568
L1	L2	L3	MH	DESCRIPTION	MEASURE	UNIT	RATE		
F30 DEMOLITION & PREPARATION								-	94.84%
Preparation									
				Mobilization	1	LS	5,000.00	5,000.00	9,741.82
				Traffic Control	1	LS	0.00	-	-
				GC Survey and investigation	1	LS	0.00	-	-
				Locating Service- Not req.				-	-
				Trench safety	1	LS	1,000.00	1,000.00	1,948.36
Temporary Protection								-	-
				Protect surfaces and structures to remain	48,114	SF	0.04	1,924.56	3,749.74
				Work zone fencing w/gates	920	LF	10.00	9,200.00	17,924.95
Tree Protection								-	-
				Preserve and Protect Trees	500	LF	3.00	1,500.00	2,922.55
Tree/Shrub Removal- not req.								-	-
Tree fencing								-	-
				Arborist evaluation coordination		LS		-	-
F3010 Structure Demolition								-	-
REMOVAL OF STRUCTURES AND OBSTRUCTIONS									
				Saw cuts		LF	15.00	-	-
				Remove concrete	470	SF	1.00	470.00	915.73

EXHIBIT D

Remove wood gap filler	LF	15.00	-	-
Remove utility hatch cover	EA	200.00	-	-
Remove catch basin lids	EA	15.00	-	-
Remove water feature grates	EA	35.00	-	-
Remove Handrails	38 LF	5.00	190.00	370.19
Strip lawn- hand work	SF	1.00	-	-
Remove Planting - hand work	SF	1.00	-	-
Haul debris	LS	10,000.00	-	-
			-	-
			-	-
			-	-
SUBTOTAL :			19,285	37,573

G10 SITE PREPARATION**G1010 Site Clearing****G1070 Site Earthwork****Surrounding site**

Erosion Control and monitoring	SF	0.10	-	-
Street cleaning	EA	500.00	-	-

SUBTOTAL :G20 SITE IMPROVEMENTS**G2030 Pedestrian Plazas and Walkways**

5" Base	1 TN	35.00	35.00	68.19
1" leveling	1 TN	35.00	35.00	68.19
Geo-fabric	30 SF	0.54	16.20	31.56
Concrete paving	30 SF	35.00	1,050.00	2,045.78
Replace expansion joint material and sealant	737 LF	6.50	4,790.50	9,333.64
Replace expansion joint material and sealant- Vertical	214 LF	8.00	1,712.00	3,335.60

G2060 Site Development**Structures****Water feature and pump room**

Clean and inspect- Fountain structure	3,351 SF	15.00	50,265.00	97,934.52
Repair fountain structure as required	554 SF	65.00	36,010.00	70,160.59
Reline fountain piping and fittings at pump room	LS	75,000.00	-	-
Pressure testing relined lines	LS	5,000.00	-	-
Abandon skimmer fitting	EA	250.00	-	-
Abandon filter suction fitting	EA	250.00	-	-

Furnishing

Handrails	92 LF	100.00	9,200.00	17,924.95
Replace water feature grates	44 LF	28.00	1,232.00	2,400.38
Utility Cover, Replace			-	-
Catch Basin lid replacements-custom	6 EA	1,500.00	8,250.00	16,074.00

G2080 Landscaping

Tree Pruning	EA	3,000.00	-	-
Root pruning	LS	10,000.00	-	-
Irrigation-lines and heads, new controller, new mainlines(w/hand trenching as req.)	19,111 SF	4.60		
Irrigation- controller wiring	1 LS	6,500.00		

Plantings

Soil and surface prep	SF	0.35	-	-
Evergreen Tree, 2.5" Cal	EA	250.00	-	-

EXHIBIT D

	Japanese Spurge /Sim	EA	5.00	-	-
	Hydroseed- mix	7,538 SF	0.35	2,638.13	5,140.03
	Topsoil	CY	46.00	-	-
	Mulch	CY	35.00	-	-
	Root barrier	LF	8.00	-	-
	1 YR maintenance	LS	3,000.00	-	-
SUBTOTAL :				115,234	224,517
<u>G30 LIQUID & GAS SITE UTILITIES</u>				-	-
G3010 Water Utilities				-	-
G3020 Sanitary Sewerage Utilities				-	-
G3030 Storm Drainage Utilities				-	-
	Trench for storm services	113 LF	55.00	6,215.00	12,109.08
	Clear root intrusion	96 LF	70.00	6,720.00	13,093.01
	8" PVC, Remove and replace	32 LF	80.00	2,560.00	4,987.81
	Trench drain w/custom grate	28 LF	185.00	-	-
	Connections-tie ins	1 LS	5,000.00	5,000.00	9,741.82
SUBTOTAL :				20,495	39,932
<u>G40 ELECTRICAL SITE IMPROVEMENTS</u>				-	-
G4010 Site Electric Distribution Systems				-	-
	Electrical demolition per Dwg. E3K	SF	2.00	-	-
	Reset junction box at new grade	20 EA	200.00	4,000.00	7,793.46
	Controller, replace	1 LS	35,000.00	-	-
	Replace breakers w/ GFCI breakers	1 LS	8,000.00	8,000.00	15,586.91
G4050 Site Lighting				-	-
	Fountain lighting per Dwg. E4K	1 LS	75,000.00	75,000.00	146,127.30
	Install battery packs 3 loc in pump rm.	EA	650.00	-	-
	Site lighting, per Dwg. E4K	LS	-	-	-
	L1	EA	-	-	-
	S1B	EA	-	-	-
	S2	EA	-	-	-
	S3A	EA	-	-	-
	S3B	EA	-	-	-
	S4	EA	-	-	-
	S5	19 EA	712.00	13,528.00	26,357.47
	S6	EA	-	-	-
	S7	4 EA	11,350.00	45,400.00	88,455.73
	S10	EA	-	-	-
	Lighting conduit	618 LF	55.00	33,990.00	66,224.89
SUBTOTAL :				179,918	350,546
<u>G50 SITE COMMUNICATIONS</u>				-	-
G5010 Site Communications Systems				-	-
SUBTOTAL :				-	-

95% Construction Drawings

November 10, 2016

LID Only



Prepared for:

PLACE

Pettygrove Park

Estimate review and Cost Update

ITEM NO.	PLAN QUANTITY	UNIT		PRIMARY REF.	PRICE PER UNIT DOLLARS.CENTS	TOTAL AMOUNT DOLLARS.CENTS
1	1	LS	MOBILIZATION	L0	\$ 3,896.73	3,897
2	1	LS	TRAFFIC CONTROL	L0	\$ -	0
3	100	LF	WORK ZONE FENCING	L0	\$ 19.48	1,948
4	1	LS	SURVEY	L0	\$ -	0
5	1	LS	SITE PROTECTION	L0	\$ 3,634.48	3,634
6	1	LS	LOCATING SERVICE	L0	\$ -	0
7	1	LS	SCHEDULE	L0	\$ -	0
8	1	LS	CLOSE OUT	L0	\$ -	0
9	1.07	ACRES	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L1	\$ 4,536.08	4,856
10						
11	1.07	ACRES	CLEARING AND GRUBBING	L1	\$ -	0
12						
13	46635	SF	EROSION CONTROL AND WATER POLLUTION CONTROL	C5& C7	\$ -	0
14	21393	SF	EXCAVATION, PAVEMENT GRADING	L3	\$ -	0
15						
16	154	TON	CRUSHED SURFACE BASE COURSE	L6	\$ -	0
17	414	TON	ASPHALT PAVING	L6	\$ 4.42	1,830
18	100	SF	UNIT PAVERS- NEW	L6	\$ -	0
19	503	SF	UNIT PAVERS- RESAND	L6	\$ -	0
20	140	LF	STEEL EDGE	L6	\$ -	0
21						
22	550	SF	EXISTING MASONRY CLEAN-REPAIR	S0	\$ -	0
23						
24	6	EA	TRASH/ RECYCLING	L7	\$ -	0
25	3	EA	BOLLARDS	L7	\$ -	0
26	1	EA	MONUMENT RELOCATION	L7	\$ -	0
27	2	EA	BENCH	L7	\$ -	0
28	1	EA	BENCH REPAIR	L7	\$ -	0
29	1	EA	NEW CONCRETE BASES	L8	\$ -	0
30	1	EA	SIGNAGE	L0	\$ -	0
31						
32	1	LS	IRRIGATION SYSTEM	L4	\$ -	0.00
33						
34	500	SF	SOILS AND PLANTING WHERE SD WAS REMOVED REPLACED	L5	\$ 10.72	5,358
35	1	LS	ROOT STAKES	L5	\$ -	0
36	2	EA	RED RAGE TUPELO- 2" CAL	L5	\$ -	0
37	4	EA	RED FOX KATSURA - 2" CAL	L5	\$ -	0
38	4	EA	PROSPECTOR ELM - 2" CAL	L5	\$ -	0
39	4	EA	CHEROKEE PRINCESS FLOWERING DOGWOOD 2" CAL	L5	\$ -	0
40	2	EA	JAPANESE STEWARTIA- 2" CAL	L5	\$ -	0
41	0	EA	JAPANESE HOLLY- 15 GAL	L5	\$ -	0
42	0	EA	GRABER'S PYRACANTHA	L5	\$ -	0
43	1400	EA	JAPANESE SPURGE	L5	\$ -	0
44	12085	SF	HYDROSEED	L5	\$ -	0
45	205	CY	TOPSOIL	L5	\$ -	0
46	28	CY	MULCH	L5	\$ -	0
47	205	LF	ROOT BARRIER	L5	\$ -	0
48	1	LS	1 YR MAINTENANCE	L0	\$ -	0
49					\$ -	
50	140	LF	1" COPPER WATER LINE	C4	\$ -	0.00
51	35	LF	2" HDPE	C4	\$ -	0.00
52	1	LS	REFURBISH AND INSTALL DRINKING FOUNTAIN	L6	\$ -	0.00
53	3	EA	CONNECTIONS	C4	\$ -	0.00
54	1	EA	VALVE BOX ADJUSTMENT	C4	\$ -	0.00
55	1	EA	NEW VAULT LID	C4	\$ -	0.00
56	825	LF	TRENCHING AND BEDDING ALL SERVICES	C6	\$ -	0.00
57						
58	1	LS	SANITARY SEWER MODIFICATIONS		\$ -	0.00
59						
60	385	LF	EX STORM DRAIN- ABANDON IN PLACE - GROUT	C3	\$ 19.48	7,501.20
61	104	LF	6" PVC	C3	\$ 107.16	11,144.64
62	382	LF	8" PVC	C3	\$ 126.64	48,377.88
63	224	LF	6" CIPP	C3	\$ 155.87	34,914.68
64	95	LF	10" CIPP	C3	\$ 175.35	16,658.51
65	20	LF	12" CIPP	C3	\$ 214.32	4,286.40
66	2	EA	CLEAN OUTS	C3	\$ 2,435.46	4,870.91
67	2	EA	INLETS	C3	\$ 2,922.55	5,845.09
68	2	EA	AREA DRAINS	C3	\$ 1,656.11	3,312.22

69	0	EA	CATCH BASINS TYPE 1	C3	\$ -	0.00
70	1	LS	CONNECTIONS-TIE INS	C3	\$ 9,741.82	9,741.82
71	5	LF	DRINKING FOUNTAIN 4" DRAIN PIPING	L0	\$ 58.45	292.25
72	0	EA	FLOW WELL AND VAULT	C6	\$ -	0.00
73	18	EA	STEEL COVER REPLACEMENT TO PRE-CAST	MEMO	\$ 389.67	7,014.11
74						
75	20	EA	RESET JUNCTION BOX AT NEW GRADE	L1	\$ -	0.00
76	6	EA	REPLACE PULL BOX W/ CONCRETE SURROUND	L1	\$ -	0.00
77	15	EA	LIGHT POLES- RESET AT NEW GRADE	L1	\$ -	0.00
78	15	EA	LIGHT POLE BASES	L1	\$ -	0.00
					.	.
			SCHEDULE 1 BASE BID TOTAL OF ITEMS 1-79		.	175,484
A1			ADDITIVE ALTERNATE A1 – GROUND COVER REMOVE AND REPLACE	L5	.	0
			TOTAL BID ITEMS AND ALTERNATES		.	175,484

Note: Costs include full mark ups including contractor, engineering fees and PP&R staff time. Base costs are direct construction costs only.

CONTROL QUANTITY CALCULATIONS

Mark ups - Per PP&R

PRE-SCOPE CONTINGENCY DIRECT CONSTRCTION COST	\$ 146,237
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Owner's Contingency

TOTAL DIRECT CONSTRUCTION CONTRACT COST	\$	175,484
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[illegible]

EXHIBIT D

Tree Protection						
Preserve and Protect Trees	LF	3.00	-	-	-	-
Tree/Shrub Removal- not req.				EA	-	-
Tree fencing					-	-
Arborist evaluation coordination	LS	2,000.00	-	-	-	-
F3010 Structure Demolition					-	-
REMOVAL OF STRUCTURES AND OBSTRUCTIONS					-	-
Remove pavement Asphalt	300 SF	1.00	300.00	584.51		
Remove pavement -Pavers	SF	5.00	-	-		
Strip lawn/planting - hand work	550 SF	0.35	192.50	375.06		
Remove steel edge	LF	2.00	-	-		
Remove bench parts and site features-salvage	LS	4,200.00	-	-		
Remove drinking fountain	LS	150.00	-	-		
Saw cuts	LF	15.00	-	-		
Stump grinding	EA	260.00	-	-		
Haul	1 LS	2,000.00	2,000.00	3,896.73		
SUBTOTAL :				7,358	14,336	

G10 SITE PREPARATION

G1010 Site Clearing						
Clear and grub	SF	0.25	-	-		
Hand work extra/over	LS	1,000.00	-	-		
G1070 Site Earthwork					-	-
Pavement grading	SF	0.33	-	-		
Surrounding site					-	-
Erosion Control and monitoring	SF	0.20	-	-		
Street cleaning	EA	380.00	-	-		
SUBTOTAL :						

G20 SITE IMPROVEMENTS

G2030 Pedestrian Plazas and Walkways						
Base course			-	-		
lower 5" Base	TN	35.00	-	-		
1" leveling	TN	35.00	-	-		
Geo-fabric	SF	0.54	-	-		
c332 Asphalt Paving					-	-
3" AC Pavement	4.55 TN	190.00	864.50	1,684.36		
Seal coat	300 SF	0.25	75.00	146.13		
Unit Pavers			-	-		
Cobble stone at entry walk	SF	15.00	-	-		
Resand	SF	4.00	-	-		
Edge steel	LF	25.00	-	-		
G2060 Site Development					-	-
Structures					-	-
Masonry retaining wall			-	-		

EXHIBIT D

Clean and Re-grout	SF	15.00	-	-
			-	-
			-	-
Furnishing			-	-
Trash/ Recycling	EA	1,800.00	-	-
Bollards	EA	550.00	-	-
Monument relocation	LS	500.00	-	-
Bench	EA	2,000.00	-	-
Bench repair	LS	6,500.00	-	-
New concrete bases	LS	1,000.00	-	-
Signage	LS	4,500.00	-	-
			-	-
			-	-
G2080 Landscaping			-	-
			-	-
Irrigation	Zones	2,900.00	-	-
Drip irrigation at trees- 3 per	EA	650.00	-	-
DCVA	LS	1,950.00	-	-
			-	-
			-	-
Plantings			-	-
Soils and planting where SD was removed replaced	500 SF	5.50	2,750.00	5,358.00
Soil and surface prep	SF	0.35	-	-
Root stakes	LS	1,000.00	-	-
Red Rage Tupelo- 2" cal	EA	450.00	-	-
Red Fox Katsura - 2" cal	EA	360.00	-	-
Prospector Elm - 2" cal	EA	400.00	-	-
Cherokee Princess Flowering Dogwood 2" cal	EA	360.00	-	-
Japanese Stewartia- 2" cal	EA	350.00	-	-
Japanese Holly- 15 Gal	EA		-	-
Graber's Pyracantha	EA		-	-
Japanese Spurge	EA	5.00	-	-
Hydroseed	SF	0.35	-	-
Topsoil	CY	46.00	-	-
Mulch	CY	35.00	-	-
Root barrier	LF	8.00	-	-
1 YR maintenance	LS	3,000.00	-	-
SUBTOTAL :			3,690	7,188
			-	-
			-	-
G30 LIQUID & GAS SITE UTILITIES			-	-
			-	-
G3010 Water Utilities			-	-
1" Copper water line	LF	20.00	-	-
2" HDPE	LF	40.00	-	-
Refurbish and install drinking fountain	LS	1,500.00	-	-
Connections	EA	800.00	-	-
Valve box adjustment	EA	250.00	-	-
New vault lid	EA	900.00	-	-
Trenching and bedding all services	LF	14.00	-	-
			-	-
			-	-
G3020 Sanitary Sewerage Utilities			-	-
Sanitary sewer modifications	1 LS	0.00	-	-
New Manhole			-	-
			-	-
G3030 Storm Drainage Utilities			-	-
Ex Storm Drain- Abandon in place - grout	385 LF	10.00	3,850.00	7,501.20
6" PVC	104 LF	55.00	5,720.00	11,144.64
8" PVC	382 LF	65.00	24,830.00	48,377.88
6" CIPP	224 LF	80.00	17,920.00	34,914.68
10" CIPP	95 LF	90.00	8,550.00	16,658.51
12" CIPP	20 LF	110.00	2,200.00	4,286.40

EXHIBIT D

Clean outs	2	EA	1,250.00	2,500.00	4,870.91
Inlets	2	EA	1,500.00	3,000.00	5,845.09
Area Drains	2	EA	850.00	1,700.00	3,312.22
Catch basins Type 1		EA	2,600.00	-	-
Connections-tie ins	1	LS	5,000.00	5,000.00	9,741.82
Drinking fountain 4" drain piping	5	LF	30.00	150.00	292.25
Flow well and vault		EA	1,500.00	-	-
Steel cover replacement to pre-cast	18	EA	200.00	3,600.00	7,014.11
				-	-
SUBTOTAL :				79,020	153,960
				-	-
				-	-
<u>G40 ELECTRICAL SITE IMPROVEMENTS</u>				-	-
G4010 Site Electric Distribution Systems				-	-
Reset junction box at new grade		EA	200.00	-	-
Replace pull box w/ concrete surround		EA	350.00	-	-
				-	-
				-	-
G4050 Site Lighting				-	-
Light poles- reset at new grade		EA	1,000.00	-	-
Light pole bases		EA	250.00	-	-
				-	-
SUBTOTAL :				-	-
				-	-
				-	-
<u>G50 SITE COMMUNICATIONS</u>				-	-
G5010 Site Communications Systems				-	-
				-	-
				-	-
				-	-
SUBTOTAL :				-	-

30% Construction Documents

November 10, 2016
LID Only



Prepared for:

PLACE

Lovejoy Fountain

30% CD Cost Update

ITEM NO.	PLAN QUANTITY	UNIT	BID ITEMS	PRIMARY REF.	PRICE PER UNIT DOLLARS,CENTS	TOTAL AMOUNT DOLLARS,CENTS
1	1	LS	MOBILIZATION	L0	\$ 9,741.82	\$9,742
2	1	LS	TRAFIC CONTROL	L0	\$ -	\$0
3	1	LS	GC SURVEY AND INVESTIGATION	L0	\$ -	\$0
4	1	LS	TRENCH SAFETY	L0	\$ -	\$1,948
5	1	LS	TREE REMOVAL AND ROOT PRUNING	L0	\$ 1,948.36	\$5,845
6	1	ls	SITE PROTECTION		\$ 24,103.99	\$24,104
7	1.15	ACRES	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L1	\$ 66,225.67	\$76,450
8						
9	105	CY	CRUSHED SURFACE BASE COURSE	L6	\$ 125.01	\$13,144
10	5678	SF	CONCRETE PANELS	L6	\$ 31.17	\$177,005
11	428	LF	EXPANSION JOINT REPAIR		\$ 10.77	\$4,610
12	1	LS	EQUIPMENT ROOM, REPLACE ROOM HATCH LID	S0	\$0	\$0
13						
14	200	SF	SOIL AND SURFACE PREPARATION FOR PLANTING & SEEDING	L5	\$ 0.68	\$136
15	8	CY	TOPSOIL	L5	\$ 89.62	\$717
16	6	CY	MULCH	L5	\$ 68.19	\$409
17	20	LF	ROOT BARRIER	L5	\$ 15.59	\$312
18	1	LS	1 YR MAINTENANCE	L0	\$ 974.18	\$974
19					\$ -	
20	140	LF	1" COPPER WATER LINE	C4	\$ -	\$0
21	35	LF	2" HDPE	C4	\$ -	\$0
22	1	LS	REFURBISH AND INSTALL DRINKING FOUNTAIN	L6	\$ -	\$0
23	2	EA	BACKFLOW PREVENTERS INCLUDING CONNECTIONS	L7	\$ -	\$0
24	3	EA	CONNECTIONS	C4	\$ -	\$0
25	1	EA	VALVE BOX ADJUSTMENT	C4	\$ -	\$0
26	1	EA	NEW VAULT LID	C4	\$ -	\$0
27	186	LF	TRENCHING AND BEDDING ALL SERVICES	C6	\$ 18.92	\$3,519
28	411	LF	TRENCH DRAIN, CLEANING	C3	\$ 23.38	\$9,609
29	414	LF	REPLACE SLOT GRATE	C3	\$ 171.46	\$70,983
30	104	LF	6" PVC	C3	\$ 107.16	\$11,145
31	82	LF	CLEAR 8" STORM DRAIN	C3	\$ 116.90	\$9,586
32	25	If	REPLACE STORM DRAIN		\$ 146.13	\$3,653
33	0	LF	DRINKING FOUNTAIN 4" DRAIN PIPING	C3	\$ -	\$0
34						
35	1	LS	ELECTRICAL DEMOLITION		\$ -	\$0
36	1	LS	NEW METER ABOVE GROUND	L1	\$ 38,967.28	\$38,967
37	1	EA	CABINET 48"x48"x11", METER STEP DOWN EQUIPMENT- 60AMP	L1	\$ 116,901.84	\$116,902
38	1	LS	REFEED EQUIPMENT INSIDE VAULT		\$ 54,554.19	\$54,554
39	1	LS	REPLACE VENTILATION		\$ 16,561.09	\$16,561
40	1	LS	LIGHTING CONTROL, REPLACE EXISTING	L1	\$ 38,967.28	\$38,967
41	6	EA	REPLACE PULL BOX W/ CONCRETE SURROUND	L2	\$ -	\$0
42	1	EA	INSTALL HANDHOLE		\$ -	\$0
43	4	EA	RELOCATE DRIVERS FOR CANOPY LUMINAIRES		\$ -	\$0
44	1	LS	LIGHTING PER DWG. E4L	L4	\$ 114,407.93	\$114,408
					.	.
			SCHEDULE 1 BASE BID TOTAL OF ITEMS 1-44		.	804,251
A1						
			TOTAL BID ITEMS AND ALTERNATES		.	804,251

Note: Costs include full mark ups including contractor, engineering fees and PP&R staff time. Base costs are direct construction costs only.

PROJECT DETAILS			CONTROL QUANTITIES			
Project Name:		Lovejoy Park				
File Information:						
City:		Portland				
State:		Oregon				
Owner:		PP&R				
Cost Estimators:		DCW Cost Management				
Notes:					AREA SF	50,285.00
					AREA ACRES	1.15

CONTROL QUANTITY CALCULATIONS

				50,285	SF
	Area			50,285	
	ACRES				1.154
<u>SUBTOTAL OF DIRECT CONSTRUCTION COST</u>	\$		412,782.71		
<u>Mark ups - Per PP&R</u>					
Estimating Level of Confidence Buffer	30%	\$	123,835	536,618	
General Conditions	10%	\$	53,662	590,279	
Overhead	3%	\$	17,708	607,988	
Profit	7%	\$	42,559	650,547	
Insurance	1.5%	\$	9,758	660,305	
Bond	1.5%	\$	9,905	670,210	
<u>PRE-SCOPE CONTINGENCY DIRECT CONSTRUCTION COST</u>				\$ 670,210	
<u>Owner's Contingency</u>					
Scope Contingency	20%	\$	134,042	\$ 804,251	
<u>TOTAL DIRECT CONSTRUCTION CONTRACT COST</u>	\$		804,251		

								BASE	W/MU
								412,783	804,251
L1	L2	L3	MH	DESCRIPTION	MEASURE	UNIT	RATE		
								-	94.84%
				<u>F30 DEMOLITION & PREPARATION</u>					
				Preparation					
				Mobilization	1	LS	5,000.00	5,000.00	9,741.82
				Traffic Control		LS	5,000.00	-	-
				GC Survey and investigation		LS	25,000.00	-	-
				Trench safety	1	LS	1,000.00	1,000.00	1,948.36
								-	-
				Temporary Protection					
				Protect surfaces and structures to remain	50,285	SF	0.04	2,011.40	3,918.94
				Work zone fencing w/gates	936	LF	10.00	9,360.00	18,236.69
								-	-
				Tree Protection					
				Preserve and Protect Trees	1	LS	1,000.00	1,000.00	1,948.36
								-	-
				Tree/Shrub Removal					
				Tree Removal and Replacement	2	EA	1,500.00	3,000.00	5,845.09
				Root pruning		LS	2,000.00	-	-
				Tree fencing					
				Arborist evaluation coordination		LS	1,000.00	-	-
								-	-
				F3010 Structure Demolition					
				REMOVAL OF STRUCTURES AND OBSTRUCTIONS					-
				Remove concrete panels	5,678	SF	6.00	34,068.00	66,376.86
				Remove hatch cover	1	EA	350.00	350.00	681.93
				Root Pruning		SF	1.15	-	-
				Remove bike blocks		EA	80.00	-	-
				Remove hose bibs for repair		EA	75.00	-	-

EXHIBIT D

Remove drinking fountain	LS	150.00	-	-
Saw cuts	188 LF	15.00	2,820.00	5,494.39
Expand tree wells	EA	1,100.00	-	-
Haul debris	1 LS	2,000.00	2,000.00	3,896.73
			-	-
			-	-

SUBTOTAL :

60,609

118,089

G10 SITE PREPARATION

G1010 Site Clearing

G1070 Site Earthwork

Surrounding site

SUBTOTAL :

G20 SITE IMPROVEMENTS

G2030 Pedestrian Plazas and Walkways

5" Base	105 CY	35.00	3,680.19	7,170.34
Geo-fabric	5,678 SF	0.54	3,066.12	5,973.92
Concrete Panels	5,678 SF	16.00	90,848.00	177,004.97
Replace expansion joint material and sealant	364 LF	6.50	2,366.00	4,609.83
Replace expansion joint material and sealant- Vertical	64 LF		-	-
			-	-
			-	-

G2060 Site Development

Structures

Water feature and pump room

Water feature, clean and inspect	SF	15.00	-	-
Water feature, Joint cleaning, mortar repair, and re-sealing	LF	16.00	-	-
Water feature, repair concrete voids and stabilize	LF	26.00	-	-
Reline fountain piping and fittings at pump room	LS	75,000.00	-	-
Pressure testing	LS	20,000.00	-	-
Replace intakes and returns in concrete	LS	150,000.00	-	-
Replace water level sensor	EA	10,000.00	-	-
Replace overflow	EA	10,000.00	-	-
Relocate filter return lines	LS	7,600.00	-	-
Equipment room, replace room hatch lid	1 EA	20,000.00	-	-
Trenching	LF	80.00	-	-
Replace filter pump	EA	12,500.00	-	-
Replace sand filter, install new filter pump	EA	9,500.00	-	-
Replace CO2 system with new tank and fill lines/accessories	EA	50,000.00	-	-
Replace chemical controller	EA	30,000.00	-	-
Replace Chlorine feeder	EA	35,000.00	-	-
Hose bib covers	EA	100.00	-	-
			-	-
			-	-

G2080 Landscaping

Plantings

Soil and surface prep	200 SF	0.35	70.00	136.39
Topsoil	8 CY	46.00	368.00	717.00
Mulch	6 CY	35.00	210.00	409.16
Root barrier	20 LF	8.00	160.00	311.74
1 YR maintenance	1 LS	500.00	500.00	974.18

EXHIBIT D

SUBTOTAL :				101,268	197,308
				-	-
				-	-
				-	-
<u>G30 LIQUID & GAS SITE UTILITIES</u>				-	-
G3010 Water Utilities				-	-
1" Copper water line	LF	20.00	-	-	-
2" HDPE	LF	40.00	-	-	-
Refurbish and install drinking fountain	LS	1,500.00	-	-	-
Backflow preventers including connections	EA	1,850.00	-	-	-
Connections	EA	800.00	-	-	-
Valve box adjustment	EA	250.00	-	-	-
New vault lid	EA	900.00	-	-	-
Trenching and bedding all services	129 LF	14.00	1,806.00	3,518.75	-
				-	-
				-	-
				-	-
G3020 Sanitary Sewerage Utilities				-	-
				-	-
				-	-
G3030 Storm Drainage Utilities				-	-
Trench drain, cleaning	411 LF	12.00	4,932.00	9,609.33	-
Replace slot grate	414 LF	88.00	36,432.00	70,982.80	-
6" PVC	104 LF	55.00	5,720.00	11,144.64	-
Clear 8" Storm drain	82 LF	60.00	4,920.00	9,585.95	-
Replace 8" SD	25 LF	75.00	1,875.00	3,653.18	-
Drinking fountain 4" drain piping	LF	30.00	-	-	-
				-	-
				-	-
SUBTOTAL :				55,685	108,495
				-	-
				-	-
				-	-
<u>G40 ELECTRICAL SITE IMPROVEMENTS</u>				-	-
G4010 Site Electric Distribution Systems				-	-
Electrical Demolition	SF	2.00	-	-	-
New meter above ground	1 LS	20,000.00	20,000.00	38,967.28	-
Cabinet 48"x48"x11", meter step down equipment- 60AMP	1 EA	60,000.00	60,000.00	116,901.84	-
Refeed equipment inside vault	1 LS	28,000.00	28,000.00	54,554.19	-
Replace ventilation	1 LS	8,500.00	8,500.00	16,561.09	-
Replace pull box w/ concrete surround	EA	350.00	-	-	-
Install handhole	EA	650.00	-	-	-
				-	-
				-	-
G4050 Site Lighting				-	-
Relocate S8 Drivers in vandal proof housing	4 EA	0.00	-	-	-
Lighting per Dwg. E4L	LS	130,000.00	-	-	-
L1	EA	-	-	-	-
S1A	EA	-	-	-	-
S2	EA	-	-	-	-
S3A	EA	-	-	-	-
S5	12 EA	680.00	8,160.00	15,898.65	-
S7C- use existing poles and infrastructure 8- lights each	2 EA	25,280.00	50,560.00	98,509.28	-
Submersible luminaires	EA	-	-	-	-
Lighting control, replace existing	1 LS	20,000.00	20,000.00	38,967.28	-
				-	-
SUBTOTAL :				195,220	380,360
				-	-
				-	-
				-	-
<u>G50 SITE COMMUNICATIONS</u>				-	-
G5010 Site Communications Systems				-	-
				-	-
				-	-
				-	-
SUBTOTAL :				-	-

30% Construction Documents

November 10, 2016

LID Only



Prepared for:

PLACE

Source Fountain

30% CD Cost Update

ITEM NO.	PLAN QUANTITY	UNIT		PRIMARY REF.	PRICE PER UNIT DOLLARS.CENTS	TOTAL AMOUNT DOLLARS.CENTS
1	1	LS	MOBILIZATION AND INVESTIGATION		\$ 3,896.73	3,897
2	100	LF	WORK ZONE FENCING		\$ 19.48	1,948
3	1	LS	SITE PROTECTION		\$ 323.43	323
4	0.10	ACRES	REMOVAL OF STRUCTURES AND OBSTRUCTIONS		\$ 102,253.90	9,742
5						
6	30	SF	CONCRETE PAVING		\$ -	0
7	1472	SF	UNIT PAVERS- RESAND		\$ -	0
8						
9	85	SF	CLEAN PLANTER AND RESEAL		\$ -	0
10	1	LS	WATER FEATURE REPAIR		\$ 50,462.63	50,463
11	1	LS	IRRIGATION SYSTEM		\$ -	0.00
12						
13	1	EA	RED FOX KATSURA/SIM - 2.5" CAL		\$ -	0
14	38	EA	JAPANESE SPURGE/SIM		\$ -	0
15	3	CY	TOPSOIL		\$ -	0
16	2	CY	MULCH		\$ -	0
17	205	LF	ROOT BARRIER		\$ -	0
18	1	LS	1 YR MAINTENANCE		\$ -	0
19						
20	1	LS	STORM DRAINAGE			74,622.34
21	1	LS	REPLACE JUNCTIONS AND CONNECTION AS REQUIRED			0.00
22	1	LS	REMOVE EXISTING FEEDERS AND CONTROLS			0.00
23	1	LS	REPLACE EXISTING FEEDERS			0.00
24						
25						
26						
27	1	LS	LED REPLACEMENT LUMINAIRES		\$ -	0.00
28	40	LF	STRIP LIGHTING - FOUNTAIN BASE		\$ -	0.00
29	1	LS	SITE LIGHTING ALLOWANCE		\$ -	0.00
					.	.
			SCHEDULE 1 BASE BID TOTAL OF ITEMS 1-29		.	140,995
A1			ALTERNATES		.	
			TOTAL BID ITEMS AND ALTERNATES		.	140,995

Note: Costs include full mark ups including contractor, engineering fees and PP&R staff time. Base costs are direct construction costs only.

CONTROL QUANTITY CALCULATIONS

<u>SUBTOTAL OF DIRECT CONSTRCTION COST</u>	\$	72,366.00
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Mark ups - Per PP&R

PRE-SCOPE CONTINGENCY DIRECT CONSTRCTION COST	\$ 117,496
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Owner's Contingency

Scope Contingency	20%	\$	23,499	\$ 140,995
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TOTAL DIRECT CONSTRUCTION CONTRACT COST	\$	140,995
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								BASE	W/MU
								72,366	140,995
L1	L2	L3	MH	DESCRIPTION	MEASURE	UNIT	RATE		
								-	94.84%
				Preparation					
				Mobilization and investigation	1	LS	2,000.00	2,000.00	3,896.73
				Temporary Protection				-	-
				Protect surfaces and structures to remain	4,150	SF	0.04	166.00	323.43
				Work zone fencing w/gates	100	LF	10.00	1,000.00	1,948.36
								-	-
				Tree Protection				-	-
								-	-
				Tree/Shrub Removal				-	-
				Remove damaged tree and roots		EA	500.00	-	-
				Tree fencing				-	-
				Arborist evaluation coordination				-	NIC
								-	-
				F3010 Structure Demolition				-	-
				REMOVAL OF STRUCTURES AND OBSTRUCTIONS					-
				Remove Concrete		SF	20.00	-	-
				Remove existing brick pavers		SF	5.00	-	-
				Remove hatch cover		EA	100.00	-	-
				Remove drain grate, salvage and repair		LF	6.00	-	-
				Remove all equipment in vault	1	LS	5,000.00	5,000.00	9,741.82
				Clear trench drain, repair		LF	20.00	-	-
				Saw cuts		LF	15.00	-	-

	Haul	LS	7,500.00	-	-
				-	-
				-	-
				-	-
SUBTOTAL :				8,166	15,910
				-	-
				-	-
SUBTOTAL :					
				-	-
				-	-
				-	-
<u>G20 SITE IMPROVEMENTS</u>					
G2030 Pedestrian Plazas and Walkways					
	5" Base	TN	35.00	-	-
	1" leveling	TN	35.00	-	-
	Geo-fabric	SF	0.54	-	-
	Concrete Paving- reinforced	CY	750.00	-	-
	Replace Unit Pavers	SF	20.00	-	-
	Replace expansion joint material and sealant	LF	6.50	-	-
				-	-
				-	-
				-	-
G2060 Site Development					
Structures					
Water Feature and vault					
	Clean planter and reseal- NIC	SF	4.50	-	-
	Rebuild east side of vault wall	1 LS	2,500.00	2,500.00	4,870.91
	Replacement of broken/leaky pipes	1 ALW	20,600.00	20,600.00	40,136.30
	Pressure testing	1 LS	2,800.00	2,800.00	5,455.42
Furnishing					
				-	-
				-	-
G2080 Landscaping					
	Irrigation	Zones	5,000.00	-	-
				-	-
				-	-
Plantings					
	Red Fox Katsura/Sim - 2.5" cal	EA	450.00	-	-
	Japanese Spurge/Sim	EA	5.00	-	-
	Topsoil	CY	46.00	-	-
	Mulch	CY	35.00	-	-
	Root barrier	LF	8.00	-	-
	1 YR maintenance	LS	1,000.00	-	-
SUBTOTAL :				25,900	50,463
				-	-
				-	-
				-	-
G3030 Storm Drainage Utilities					
	Trench for storm drain	150 LF	75.00	11,250.00	21,919.10
	Clean trench drains	185 LF	10.00	1,850.00	3,604.47
	Replace slot drains	90 LF	280.00	25,200.00	49,098.77
	8" PVC	LF	80.00	-	-
	Connections-tie ins	LS	5,000.00	-	-
				-	-
SUBTOTAL :				38,300	74,622
				-	-
				-	-
				-	-
<u>G40 ELECTRICAL SITE IMPROVEMENTS</u>					
G4010 Site Electric Distribution Systems					
	Replace junctions and connection as required	LS	15,000.00	-	-
	Remove existing feeders and controls	LS	12,500.00	-	-
	Replace existing feeders	LS	35,000.00	-	-
				-	-
				-	-
				-	-
G4050 Site Lighting					
	LED replacement luminaires	LS	16,500.00	-	-
	Strip Lighting - Fountain Base	LF	500.00	-	-
	Site Lighting - Allowance	LS	40,000.00	-	-

EXHIBIT D

		-
SUBTOTAL :		
		-
		-
G50 SITE COMMUNICATIONS		-
	G5010 Site Communications Systems	-
		-
		-
		-
SUBTOTAL :		