

187244

EXHIBIT E

CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE
NW 20th Ave: Raleigh - Upshur LID

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF 20TH AVE: UPSHUR ST. TO RALEIGH ST. (2015)

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	1.00	LS	\$146,722.34	\$146,722.34
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	1.00	LS	\$44,016.70	\$44,016.70
3	TEMPORARY SIGNS	100.00	SQFT	\$20.00	\$2,000.00
4	TEMPORARY BARRICADES, TYPE III	12.00	EACH	\$115.00	\$1,380.00
5	EROSION CONTROL	1.00	LS	\$14,672.23	\$14,672.23
6	CONSTRUCTION ENTRANCES	8.00	EACH	\$1,890.00	\$15,120.00
7	INLET PROTECTION	40.00	EACH	\$88.00	\$3,520.00
8	POLLUTION CONTROL PLAN	1.00	LS	\$1,467.22	\$1,467.22
9	REMOVAL OF RAILROAD TRACK AND TIES	50.00	FOOT	\$58.70	\$2,935.00
10	REMOVAL OF STRUCTURES & OBSTRUCTIONS	1.00	LS	\$58,688.93	\$58,688.93
11	CLEARING AND GRUBBING	1.00	LS	\$38,147.81	\$38,147.81
12	GENERAL EXCAVATION	3,535.00	CUYD	\$35.00	\$123,725.00
13	12 INCH SUBGRADE STABILIZATION	477.40	SQYD	\$21.90	\$10,455.06
14	SUBGRADE GEOTEXTILE	4,774.00	SQYD	\$1.25	\$5,968.18
15	STORMWATER PLANTERS	1,240.00	SQFT	\$38.10	\$47,244.00
16	10 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	160.00	FOOT	\$75.00	\$12,000.00
17	CONCRETE INLETS, TYPE G-2	8.00	EACH	\$1,770.00	\$14,160.00
18	CONCRETE INLETS, TYPE METAL	32.00	EACH	\$500.00	\$16,000.00
19	CONNECTION TO EXISTING STRUCTURES	8.00	EACH	\$841.00	\$6,728.00
20	MINOR ADJUSTMENT OF MANHOLES	8.00	EACH	\$642.00	\$5,136.00
21	MAJOR ADJUSTMENT OF MANHOLES	4.00	EACH	\$1,520.00	\$6,080.00
22	GRANULAR WALL BACKFILL	33.33	CUYD	\$63.90	\$2,130.05
23	PEDESTRIAN RAILING	225.00	LF	\$80.00	\$18,000.00
24	RETAINING WALL, CAST-IN-PLACE CONCRETE	900.00	SQFT	\$95.80	\$86,220.00
25	AGGREGATE BASE, 6 INCH THICK	4,774.00	SQYD	\$9.80	\$46,785.20
26	LEVEL 3, 1/2 INCH DENSE, MHMAC MIXTURE	2,104.00	TON	\$89.50	\$188,308.00
27	EXTRA FOR ASPHALT APPROACHES	4.00	EACH	\$651.00	\$2,604.00
28	ASPHALT CONNECTIONS	375.00	SQFT	\$7.30	\$2,737.50
29	CONCRETE CURBS, CURB AND GUTTER	720.00	FOOT	\$25.50	\$18,360.00
30	CONCRETE CURBS, THICKENED CURB AND GUTTER	310.00	FOOT	\$37.70	\$11,687.00
31	CONCRETE DRIVEWAYS	1,174.50	SQFT	\$8.40	\$9,865.80
32	CONCRETE WALKS	11,124.00	SQFT	\$6.00	\$66,744.00
33	MONOLITHIC CURB GUTTER AND SIDEWALKS	16,929.50	SQFT	\$10.40	\$176,066.80
34	BRICK PAVERS	3,090.00	SQFT	\$45.90	\$141,831.00
35	THERMOPLASTIC, NON-PROFILE, 120 MILS, EXTRUDED	9,304.00	FOOT	\$1.40	\$13,025.60
36	PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL	12.00	EACH	\$290.00	\$3,480.00
37	SIGN SUPPORT FOOTINGS, BREAKAWAY	10.00	LS*	\$182.00	\$1,820.00
38	PIPE SIGN SUPPORTS	10.00	LS*	\$180.00	\$1,800.00
39	STREET LIGHT COMPLETE, TWIN ORNAMENTAL	18.00	EACH	\$17,000.00	\$306,000.00
40	LAWN SEEDING	2,416.67	SQYD	\$4.00	\$9,666.67
41	TOPSOIL	269.00	CUYD	\$43.60	\$11,728.40
42	DECIDUOUS TREES, 3 INCH CALIPER	25.00	EACH	\$890.00	\$22,250.00
43	ADDITIONAL ESTABLISHMENT PERIOD	1.00	YEAR*	\$6,600.00	\$6,600.00
44	CL-6R CHAIN-LINK FENCE	850.00	FOOT	\$22.90	\$19,463.31
45	UNDER BRIDGE SECURITY FENCING	214.00	FOOT	\$100.00	\$21,400.00
46	BICYCLE RACKS	16.00	EACH	\$386.30	\$6,180.80

* Unit Price Shown is on Pound, Each, or Foot Basis as Applicable

TOTAL BID ITEMS

\$1,770,938.60

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
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NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT	1240.00	SQFT	\$15.00	\$18,600.00
2	BOLI FEE PAYMENT	1.00	LS	\$1,770.94	\$1,770.94
3	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER	1.00	LS	\$177,093.86	\$177,093.86

TOTAL ANTICIPATED ITEMS

\$197,464.80

SCHEDULE SUMMARY

BID ITEMS		\$1,770,938.60
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$88,547.00
SUBTOTAL		\$1,859,485.60

ANTICIPATED ITEMS

\$197,464.80

TOTAL CONSTRUCTION**\$2,056,950.40**

PROJECT MANAGEMENT		\$50,000.00
DESIGN ENGINEERING - CIVIL	25% of Bid Items minus st. lights	\$366,235.00
DESIGN ENGINEERING - ELECTRICAL		\$12,000.00
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$265,641.00
SUBTOTAL		\$693,876.00

PROJECT ENGINEERING & MANAGEMENT OVERHEAD

73.35% of PM, Eng, and CM

\$508,958.05

TOTAL PROJECT ENGINEERING & MANAGEMENT**\$1,202,834.05**

RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES		\$2,754,775.00
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION		\$10,900.00

TOTAL PROJECT RIGHT-OF-WAY**\$2,765,675.00**

	Years	Inflation	
INFLATION RATE ON CONTRACT	2	4.5% of Construction	\$189,291.00
INFLATION RATE ON PERSONNEL	2	2.0% of Eng & Mgmt	\$48,594.00
ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE		20% of Const, Eng & Mgmt, and Inflation excluding ROW	\$699,533.89

TOTAL PROJECT CONTINGENCY**\$937,418.89****TOTAL PROJECT ESTIMATE****\$6,962,878.33**