

EXHIBIT E

CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE

47th Avenue at Luradel Street LID Date: July 28, 2016
Updated 9/08/16

By: RB

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF SW 47th Avenue FROM SW Luradel Street to 286 Feet North

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$15,146.67	\$15,146.67
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$1,514.67	\$1,514.67
3	TEMPORARY SIGNS	SQFT	54.00	\$20.00	\$1,080.00
4	TEMPORARY BARRICADES, TYPE III	EACH	2.00	\$150.00	\$300.00
5	TEMPORARY PLASTIC DRUMS	EACH	10.00	\$52.00	\$520.00
6	FLAGGERS	HOUR	20.00	\$48.50	\$970.00
7	EROSION CONTROL	LS	1.00	\$1,514.67	\$1,514.67
8	CONSTRUCTION ENTRANCES	EACH	1.00	\$1,890.00	\$1,890.00
9	SEDIMENT FENCE, UNSUPPORTED	FOOT	459.00	\$2.50	\$1,147.50
10	INLET PROTECTION	EACH	4.00	\$88.00	\$352.00
11	POLLUTION CONTROL PLAN	LS	1.00	\$151.47	\$151.47
12	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$3,029.33	\$3,029.33
13	CLEARING AND GRUBBING	LS	1.00	\$3,862.40	\$3,862.40
14	GENERAL EXCAVATION	CUYD	414.00	\$49.00	\$20,286.00
15	12 INCH SUBGRADE STABILIZATION	SQYD	119.00	\$30.17	\$3,590.23
16	SUBGRADE GEOTEXTILE	SQYD	1,192.00	\$1.25	\$1,490.00
17	VIDEO INSPECTION OF SEWERS, MAINLINE	FOOT	94.00	\$3.30	\$310.20
18	STORMWATER PLANTERS	SQFT	550.00	\$38.10	\$20,955.00
19	12 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	FOOT	94.00	\$200.00	\$18,800.00
20	CONCRETE MANHOLES, 48 INCH, 0-8 FT DEPTH	EACH	1.00	\$4,400.00	\$4,400.00
21	CONCRETE INLETS, TYPE METAL	EACH	3.00	\$500.00	\$1,500.00
22	CONCRETE INLETS, TYPE BEEHIVE	EACH	1.00	\$1,500.00	\$1,500.00
23	MINOR ADJUSTMENT OF MANHOLES	EACH	1.00	\$642.00	\$642.00
24	AGGREGATE BASE, 8 INCH THICK	SQYD	1,192.00	\$12.30	\$14,661.60
25	LEVEL 2, 1/2 INCH DENSE, MWMAC MIXTURE	TON	209.00	\$89.50	\$18,705.50
26	CONCRETE CURBS, STANDARD CURB	FOOT	465.00	\$25.50	\$11,857.50
27	CONCRETE CURBS, THICKENED CURB AND GUTTER	FOOT	56.00	\$37.70	\$2,111.20
28	CONCRETE DRIVEWAYS	SQFT	222.00	\$8.40	\$1,864.80
29	CONCRETE WALKS	SQFT	1,788.00	\$7.40	\$13,231.20
30	REMOVE EXISTING SIGNS	LS*	21.00	\$41.70	\$875.70
31	SIGN SUPPORT FOOTINGS, BREAKAWAY	LS*	9.00	\$182.00	\$1,638.00
32	PIPE SIGN SUPPORTS	LS*	9.00	\$180.00	\$1,620.00
33	TYPE "G" SIGNS IN PLACE	SQFT	4.00	\$39.60	\$158.40
34	TYPE "W12" SIGNS IN PLACE	SQFT	4.00	\$25.60	\$102.40
35	TYPE "Y1" SIGNS IN PLACE	SQFT	1.00	\$19.00	\$19.00
36	LAWN SEEDING	SQYD	212.00	\$10.04	\$2,128.48
37	TOPSOIL	CUYD	46.00	\$60.00	\$2,760.00
TOTAL BID ITEMS					\$176,685.92

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	STREET LIGHTING - UPGRADE LUMINAIRES	EACH	2.00	\$600.00	\$1,200.00
2	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	EACH	2.00	\$5,000.00	\$10,000.00
3	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT	SQFT	495.00	\$20.00	\$9,900.00
4	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	11.00	\$1,350.00	\$14,850.00
5	BOLI FEE PAYMENT	LS	1.00	\$250.00	\$250.00
6	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER EST	LS	1.00	\$17,668.59	\$17,668.59

EXHIBIT E

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
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TOTAL ANTICIPATED ITEMS

\$53,868.59

SCHEDULE SUMMARY

BID ITEMS					\$176,685.92
CONSTRUCTION CONTINGENCY		5% of Bid Items*			\$8,834.00
SUBTOTAL					\$185,519.92

ANTICIPATED ITEMS

\$53,868.59

TOTAL CONSTRUCTION**\$239,388.51**

PROJECT MANAGEMENT		5% of Bid Items			\$8,834.30
DESIGN ENGINEERING		35% of Bid Items			\$61,840.00
CONSTRUCTION MANAGEMENT		15% of Bid Items			\$26,503.00
SUBTOTAL					\$97,177.30

PROJECT ENGINEERING & MANAGEMENT OVERHEAD

79.27% of PM, Eng, and CM

\$77,032.44

TOTAL PROJECT ENGINEERING & MANAGEMENT**\$174,209.74**

RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES					\$0.00
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION					\$0.00

RIGHT-OF-WAY CONTINGENCY

30% of Land, Improve, and
Damages

\$0.00

TOTAL PROJECT RIGHT-OF-WAY**\$0.00**

INFLATION RATE ON CONTRACT	Years	Inflation			
INFLATION RATE ON PERSONNEL	2	4.5% of Construction			\$22,030.00
ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE	2	2.0% of Eng & Mgmt			\$7,038.00
		40% of Const, Eng & Mgmt, and Inflation			\$177,066.50

TOTAL PROJECT CONTINGENCY**\$206,134.50****TOTAL PROJECT ESTIMATE****\$619,732.75**