

CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE
SW Vermont_45th_California LID

EXHIBIT E

PRELIMINARY ENGINEER'S ESTIMATE FOR THE addition of curb, sidewalk, and stormwater facilities along SW Vermont St., SW 45th Ave., and SW California St.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	SW 45th Avenue	SW California St.	SW Vermont St.	TOTAL AMOUNT
1	MOBILIZATION	1.00	LS	\$16,812.58	\$5,864.48	\$7,298.73	\$3,649.37	\$16,812.58
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	1.00	LS	\$8,406.29	\$2,932.24	\$3,649.37	\$1,824.68	\$8,406.29
3	TEMPORARY SIGNS	200.00	SQFT	\$23.41	\$2,341.00	\$1,560.67	\$780.33	\$4,682.00
5	TEMPORARY BARRICADES, TYPE III	20.00	EACH	\$199.00	\$1,990.00	\$1,326.67	\$663.33	\$3,980.00
10	TEMPORARY PLASTIC DRUMS	50.00	EACH	\$70.24	\$1,756.00	\$1,170.67	\$585.33	\$3,512.00
19	FLAGGERS	500.00	HOUR	\$44.48	\$15,123.20	\$4,744.53	\$2,372.27	\$22,240.00
22	EROSION CONTROL	1.00	LS	\$3,152.36	\$1,099.59	\$1,368.51	\$684.26	\$3,152.36
27	SEDIMENT FENCE, UNSUPPORTED	300.00	FOOT	\$3.51	\$1,053.00	\$0.00	\$0.00	\$1,053.00
28	INLET PROTECTION	4.00	EACH	\$105.35	\$210.70	\$140.47	\$70.23	\$421.40
29	POLLUTION CONTROL PLAN	1.00	LS	\$1,050.79	\$366.53	\$456.17	\$228.09	\$1,050.79
42	REMOVAL OF STRUCTURES & OBSTRUCTIONS	1.00	LS	\$2,080.77	\$725.80	\$903.31	\$451.66	\$2,080.77
44	CLEARING AND GRUBBING	1.00	LS	\$2,101.57	\$733.06	\$912.34	\$456.17	\$2,101.57
45	TREE ROOT REMOVAL	3.00	HOUR	\$180.00	\$360.00	\$120.00	\$60.00	\$540.00
46	TREE TRIMMING	4.00	HOUR	\$350.00	\$700.00	\$466.67	\$233.33	\$1,400.00
49	GENERAL EXCAVATION	168.00	CUYD	\$24.58	\$1,671.44	\$1,638.67	\$819.33	\$4,129.44
53	12 INCH SUBGRADE STABILIZATION	6.00	SQYD	\$15.22	\$91.32	\$0.00	\$0.00	\$91.32
58	SUBGRADE GEOTEXTILE	56.00	SQYD	\$1.76	\$86.24	\$8.21	\$4.11	\$98.56
64	OUTFALLS, RIPRAP	2.00	EACH	\$6,500.00	\$0.00	\$8,666.67	\$4,333.33	\$13,000.00
73	STORMWATER PLANTERS	572.00	SQFT	\$20.00	\$4,000.00	\$4,960.00	\$2,480.00	\$11,440.00
79	12 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	450.00	FOOT	\$88.97	\$0.00	\$26,691.00	\$13,345.50	\$40,036.50
84	CONCRETE MANHOLES, 48 INCH, 0-8 FT DEPTH	2.00	EACH	\$3,160.62	\$0.00	\$4,214.16	\$2,107.08	\$6,321.24
95	CONCRETE INLETS, TYPE G-2	3.00	EACH	\$1,521.78	\$1,521.78	\$2,029.04	\$1,014.52	\$4,565.34
97	CONCRETE INLETS, TYPE METAL	3.00	EACH	\$550.00	\$1,100.00	\$366.67	\$183.33	\$1,650.00
134	AGGREGATE BASE	106.00	TON	\$29.27	\$1,404.96	\$1,131.77	\$565.89	\$3,102.62
136	LEVEL 2, 1/2 INCH DENSE, MHMAC MIXTURE	16.00	TON	\$85.81	\$1,201.34	\$114.41	\$57.21	\$1,372.96
141	14 INCH ASPHALT CONCRETE PAVEMENT REPAIR	33.00	SQYD	\$32.90	\$1,085.70	\$0.00	\$0.00	\$1,085.70
142	EXTRA FOR ASPHALT APPROACHES	2.00	EACH	\$567.74	\$1,135.48	\$0.00	\$0.00	\$1,135.48
149	CONCRETE CURBS, STANDARD CURB	128.00	FOOT	\$18.73	\$2,397.44	\$0.00	\$0.00	\$2,397.44
151	CONCRETE CURBS, THICKENED CURB AND GUTTER	143.00	FOOT	\$30.00	\$1,500.00	\$1,860.00	\$930.00	\$4,290.00
153	CONCRETE DRIVEWAYS	720.00	SQFT	\$7.02	\$0.00	\$3,369.60	\$1,684.80	\$5,054.40
155	CONCRETE WALKS	5,306.00	SQFT	\$5.97	\$9,707.22	\$14,646.40	\$7,323.20	\$31,676.82
156	MONOLITHIC CURB AND SIDEWALKS	970.00	SQFT	\$9.66	\$4,366.32	\$3,335.92	\$1,667.96	\$9,370.20
182	PAVEMENT LINE REMOVAL	1,113.00	FOOT	\$0.62	\$690.06	\$0.00	\$0.00	\$690.06
183	PAVEMENT LEGEND REMOVAL	1.00	EACH	\$59.12	\$59.12	\$0.00	\$0.00	\$59.12
186	THERMOPLASTIC, NON-PROFILE, 120 MILS, EXTRUDED	1,113.00	FOOT	\$1.11	\$1,235.43	\$0.00	\$0.00	\$1,235.43
187	PAVEMENT LEGEND, TYPE B: ARROWS	1.00	EACH	\$243.48	\$243.48	\$0.00	\$0.00	\$243.48
189	PAVEMENT LEGEND, TYPE B: BICYCLE LANE SYMBOLS	2.00	EACH	\$250.51	\$501.02	\$0.00	\$0.00	\$501.02
192	REMOVE EXISTING SIGNS	5.00	LS*	\$128.77	\$643.85	\$0.00	\$0.00	\$643.85
194	SIGN SUPPORT FOOTINGS, BREAKAWAY	9.00	LS*	\$102.90	\$926.10	\$0.00	\$0.00	\$926.10
196	PIPE SIGN SUPPORTS	9.00	LS*	\$117.00	\$1,053.00	\$0.00	\$0.00	\$1,053.00
200	TYPE "G" SIGNS IN PLACE	8.00	SQFT	\$32.78	\$262.24	\$0.00	\$0.00	\$262.24
205	TYPE "W1" SIGNS IN PLACE	8.00	SQFT	\$24.58	\$196.64	\$0.00	\$0.00	\$196.64
226	LAWN SEEDING	252.00	SQYD	\$5.27	\$1,011.84	\$210.80	\$105.40	\$1,328.04
227	TOPSOIL	42.00	CUYD	\$32.66	\$1,045.12	\$217.73	\$108.87	\$1,371.72
230	DECIDUOUS TREES, 2-1/2 INCH CALIPER	19.00	EACH	\$741.39	\$6,672.51	\$4,942.60	\$2,471.30	\$14,086.41
244	ADDITIONAL ESTABLISHMENT PERIOD	1.00	YEAR*	\$6,832.97	\$3,236.67	\$2,397.53	\$1,198.77	\$6,832.97

* Unit Price Shown is on Each or Foot Basis

TOTAL BID ITEMS

\$84,301.92 \$104,919.29 \$52,459.65 \$241,680.86

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE				TOTAL AMOUNT
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	4.00	EACH	\$550.00	\$0.00	\$1,466.67	\$733.33	\$2,200.00
7	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT	572.00	SQFT	\$15.00	\$3,000.00	\$3,720.00	\$1,860.00	\$8,580.00
13	BOLI FEE PAYMENT	1.00	LS	\$250.00	\$250.00	\$0.00	\$0.00	\$250.00
14	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER	1.00	LS	\$24,168.09	\$8,430.19	\$10,491.93	\$5,245.96	\$24,168.09

TOTAL ANTICIPATED ITEMS

\$11,680.19 \$15,678.60 \$7,839.29 \$35,198.09

SCHEDULE SUMMARY

BID ITEMS		\$84,301.92	\$104,919.29	\$52,459.65	\$241,680.86
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$4,215.08	\$5,245.95	\$2,622.97	\$12,084.00
SUBTOTAL		\$88,517.00	\$110,165.24	\$55,082.62	\$253,764.86
ANTICIPATED ITEMS		\$11,680.19	\$15,678.60	\$7,839.29	\$35,198.09
TOTAL CONSTRUCTION		\$100,197.19	\$125,843.84	\$62,921.92	\$288,962.95
PROJECT MANAGEMENT	5% of Bid Items	\$4,190.11	\$5,262.62	\$2,631.31	\$12,084.04
DESIGN ENGINEERING	25% of Bid Items	\$20,950.49	\$26,313.01	\$13,156.50	\$60,420.00
CONSTRUCTION MANAGEMENT	20% of Bid Items	\$16,760.39	\$21,050.41	\$10,525.20	\$48,336.00
SUBTOTAL		\$41,900.99	\$52,626.04	\$26,313.02	\$120,840.04

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	SW 45th Avenue	SW California St.	SW Vermont St.	TOTAL AMOUNT
	PROJECT ENGINEERING & MANAGEMENT OVERHEAD			73.78% of PM, Eng. and CM	\$30,914.55	\$38,827.49	\$19,413.74	\$89,155.78
	TOTAL PROJECT ENGINEERING & MANAGEMENT				\$72,815.54	\$91,453.53	\$45,726.76	\$209,995.83
	RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES				\$0.00	\$0.00	\$0.00	\$0.00
	RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION				\$0.00	\$0.00	\$0.00	\$0.00
	RIGHT-OF-WAY CONTINGENCY			30% of Land, Improv. and Damages	\$0.00	\$0.00	\$0.00	\$0.00
	TOTAL PROJECT RIGHT-OF-WAY				\$0.00	\$0.00	\$0.00	\$0.00
	INFLATION RATE ON CONTRACT	Years	Inflation					
		2	4.5% of Construction		\$9,220.71	\$11,580.86	\$5,790.43	\$26,592.00
	INFLATION RATE ON PERSONNEL	2	2.0% of Eng & Mgmt		\$2,941.81	\$3,694.80	\$1,847.40	\$8,484.00
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE		20% of Const, Eng & Mgmt, and Inflation		\$37,035.05	\$46,514.60	\$23,257.30	\$106,806.95
	TOTAL PROJECT CONTINGENCY				\$49,197.57	\$61,790.26	\$30,895.13	\$141,882.95
	TOTAL PROJECT ESTIMATE				\$222,210.30	\$279,087.62	\$139,543.81	\$640,841.73