



RESOLUTION AWARDING A CONSTRUCTION CONTRACT TO THE LOWEST RESPONSIBLE AND RESPONSIVE BIDDER, GHILOTTI CONSTRUCTION COMPANY, INC., IN AN AMOUNT NOT TO EXCEED \$29,684,453, AUTHORIZING THE EXECUTIVE DIRECTOR TO NEGOTIATE CONTRACT PAYMENT TERMS AND NON-MATERIAL TERMS AND CONDITIONS FOR THE CONSTRUCTION CONTRACT, AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE ALL OTHER RELATED SUPPORTING AND SUPPLEMENTAL AGREEMENTS, AND AUTHORIZING AN ADDITIONAL CONSTRUCTION ALLOTMENT OF \$10,961,414, FOR A TOTAL CONSTRUCTION ALLOTMENT NOT TO EXCEED \$40,645,867, FOR THE SOUTHGATE ROAD REALIGNMENT IMPROVEMENT PROJECT

WHEREAS, The Transportation Authority is in the process of completing the I-80/Yerba Buena Island Interchange Improvement Project, which includes the I-80/Yerba Buena Island Interchange Improvement Project and the Yerba Buena Island Westside Bridges Seismic Retrofit Project, of which there is Phase 1, constructing new westbound on- and off-ramps to the new Eastern Span of the San Francisco-Oakland Bay Bridge, and Phase 2, the Southgate Road Realignment Improvements Project (Project); and

WHEREAS, The Project will effectively function as an extension of the on- and off-ramps system for the Yerba Buena Island Westbound Ramps Project and would separate traffic heading to westbound and eastbound I-80, thereby eliminating queue spillback onto I-80; and

WHEREAS, On December 3, 2019, the Transportation Authority issued an Invitation to Bid for construction services for the Project through an electronic bid website and held a pre-bid meeting and networking session on December 18, 2019; and

WHEREAS, On the bid-opening date of January 14, 2020, the Transportation Authority received and opened four bids in response to the Invitation to Bid; and

WHEREAS, The project team reviewed the Disadvantaged Business Enterprise goal and good faith effort documentation and determined that the apparent lowest bidder, Gordon N. Ball, Inc. did not meet the Disadvantaged Business Enterprise Goal as well as the good faith



effort requirements; and

WHEREAS, The Transportation Authority determined that Ghilotti Construction Company, Inc. is the lowest responsible and responsive bidder, bidding at \$29,684,452.46, which is 11.07% over the Engineer's Estimate of \$26,725,331.05; and

WHEREAS, In order to construct the project, the Transportation Authority will need to enter into agreements with other agencies/entities, including but not limited to the California Highway Patrol, the San Francisco Public Utilities Commission, San Francisco Municipal Transportation Agency, San Francisco Public Works, and the Pacific Gas and Electric Company to purchase state/agency furnished materials and to oversee select portions of the construction contractor's work; and

WHEREAS, The construction phase budget includes \$7,648,934 for supplemental funds and state/agency furnished materials, and the Transportation Authority is also recommending an additional contingency of \$3,312,480, or 9% of total anticipated construction costs, for a total construction allocation allotment of \$40,645,867; and

WHEREAS, The construction contract and the related items will be funded with federal Highway Bridge Program (HBP), State Prop 1B (Prop 1B), Bay Area Toll Authority (BATA), State Affordable Housing and Sustainable Communities grant funds allocated to Treasure Island Development Authority (TIDA) for the bicycle and pedestrian path component of the project, other TIDA funds specifically designated for the Project, and federal Advanced Transportation Congestion and Mitigation Technologies Deployment (ATCMTD) grant funds; and

WHEREAS, Any costs not reimbursed by the various grant funds will be reimbursed by TIDA; and

WHEREAS, The first year's activities are included in the proposed Fiscal Year 2019/20 budget amendment, and sufficient funds will be included in future budgets to cover the remaining cost of the contract; and

WHEREAS, Due to the longer than anticipated good faith effort review process performed



by staff and Caltrans, this item was not considered by the CAC at its February 26, 2020 meeting; now, therefore, be it

RESOLVED, That the Transportation Authority hereby awards Construction Contract No. 19/20-01 to the lowest responsible and responsive bidder, Ghilotti Construction Company, Inc., in an amount not to exceed \$29,684,453; and be it further

RESOLVED, That the Executive Director is authorized to negotiate contract payment terms and non-material contract terms and conditions; and be it further

RESOLVED, That the Executive Director is authorized to execute all other related supporting and supplemental agreements; and be it further

RESOLVED, That the Transportation Authority hereby authorizes an additional construction allotment of 10,961,414, for a total construction allotment not to exceed \$40,645,867 for the Project; and be it further

RESOLVED, That for the purposes of this resolution, "non-material" shall mean contract terms and conditions other than provisions related to the overall contract amount, terms of payment, and general scope of services; and be it further

RESOLVED, That notwithstanding the foregoing and any rule or policy of the Transportation Authority to the contrary, the Executive Director is expressly authorized to execute contracts and amendments to contracts that do not cause the total contract value, as approved herein, to be exceeded and that do not expand the general scope of services.



Memorandum

AGENDA ITEM 11

DATE: March 3, 2020

TO: Transportation Authority Board

FROM: Eric Cordoba - Deputy Director for Capital Projects

SUBJECT: 03/10/20 Board Meeting: Award a Construction Contract to the Lowest Responsible and Responsive Bidder, Ghilotti Construction Company, Inc., in an Amount not to Exceed \$29,684,453, Authorize the Executive Director to Execute All Other Related Supporting and Supplemental Agreements, and Authorize an Additional Construction Allotment of \$10,961,417, for a Total Construction Allotment Not to Exceed \$40,645,870, for the Southgate Road Realignment Improvement Project

<p>RECOMMENDATION <input type="checkbox"/> Information <input checked="" type="checkbox"/> Action</p> <ul style="list-style-type: none"> • Award a construction contract to the lowest responsible and responsive bidder, Ghilotti Construction Company, Inc. (Ghilotti Construction), in an amount not to exceed \$29,684,453 • Authorize the Executive Director to negotiate contract payment terms and non-materials contract terms and conditions for the construction contract • Authorize the Executive Director to execute all other related supporting and supplemental agreements • Authorize an additional construction allotment of \$10,961,417, for a total construction allotment not to exceed \$40,645,870, for the Southgate Road Realignment Improvement project <p>SUMMARY</p> <p>As part of the I-80/Yerba Buena Island (YBI) Interchange Improvement Project we are delivering the Southgate Road Realignment Improvement Project. We advertised the contract on December 3, 2019 and received four electronic bids on January 14, 2020. After conducting a good faith efforts review</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Fund Allocation <input type="checkbox"/> Fund Programming <input type="checkbox"/> Policy/Legislation <input type="checkbox"/> Plan/Study <input type="checkbox"/> Capital Project Oversight/Delivery <input type="checkbox"/> Budget/Finance <input checked="" type="checkbox"/> Contract/Agreement <input type="checkbox"/> Other: _____
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<p>process we determined that the lowest responsive and responsible bidder is Ghilotti Construction with a bid of \$29,684,452.46 and a DBE commitment of 16.84%.</p>	
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BACKGROUND

The scope of the I-80/YBI Interchange Improvement Project includes two major components: the I-80/YBI Ramps Improvement Project and the YBI Westside Bridges Seismic Retrofit Project. The I-80/YBI Ramps Improvement Project is comprised of two phases:

- Phase 1, which includes constructing new westbound on- and off-ramps (on the east side of YBI) to the new Eastern Span of the San Francisco-Oakland Bay Bridge opened to traffic in Oct. 2016; and
- Phase 2, the Southgate Road Realignment Improvement Project, consists of the construction (re-opening) of the I-80 eastbound off-ramp to YBI at the San Francisco - Oakland Bay Bridge, realignment of Southgate Road, widening and improving Hillcrest Road, and construction of a bicycle and pedestrian path.

Southgate Road as realigned would effectively function as an extension of the on- and off-ramps system for the YBI Westbound Ramps Project and would separate traffic heading to westbound and eastbound I-80, thereby eliminating queue spillback onto I-80. The extended ramps would provide direct access from Hillcrest Road to the westbound on-ramp and would ensure all truck turning movements are accommodated. The work includes building demolition, construct grading, aggregate base, hot mix asphalt paving, concrete bike path, storm drainage, concrete barriers, architectural metal railing, fencing, crash cushions, bridges, mechanically stabilized embankment retaining wall, soldier pile retaining wall, soil nail retaining wall, sign structures, signing, striping, traffic signals, water line, joint utility trench and electrical work.

DISCUSSION

Bid Process and Results. On December 3, 2019, we issued an Invitation to Bid (ITB) for construction services for the Project through an electronic bid website. Since this project includes federal funds, we are mandated to follow federal requirements for this procurement, including the establishment of a Disadvantaged Business Enterprise (DBE) goal. Accordingly, in collaboration with the California Department of Transportation (Caltrans), we established a 16% DBE goal for the construction contract.

We conducted active outreach to the contractor community to ensure that robust competition for this procurement opportunity took place. In particular, we coordinated with multiple trade and contractor industry organizations to distribute the appropriate notifications of plan availability for this construction bid opportunity. Providing access to contract documents and conducting active outreach to the contractor community to encourage participation from DBE firms were priorities, and were achieved through the following means:

- Legal ad placed in San Francisco Examiner;



- Contract announcement placed in seven local/ethnic publications: San Francisco Chronicle, San Francisco Bay View, El Reportero, Nichi Bei, Small Business Exchange, The Western Edition, and the World Journal; and
- Announcements posted on the Transportation Authority’s website, the electronic bid website and distributed via email.

On December 18, 2019 we held a pre-bid meeting and networking session at the Ship Shape Community Center on Treasure Island, which provided opportunities for interested disadvantaged businesses to meet potential prime contractors and form partnerships. Representatives from 29 firms attended this event, including disadvantaged business enterprises and potential prime contractors, along with representatives of the United States Coast Guard. A representative from One Treasure Island also attended the pre-bid meeting and discussed how their organization promotes job opportunities for Treasure Island and San Francisco residents through a worker training and job placement program.

On the bid-opening date of January 14, 2020, we received and opened four bids in response to the ITB. Transportation Authority staff and our construction management consultant, MNS Engineers, Inc., reviewed and evaluated the bids. The verified bid results are listed below in Table 1.

Table 1. Bid Results

Company	Bid Amount	DBE Commitment
Gordon N. Ball, Inc.	\$28,186,848.80	10.85%
Ghilotti Construction Company, Inc.	\$29,684,452.46	16.84%
DeSilva Gates Construction	\$35,555,486.29	16.52%
Golden State Bridge, Inc.	\$36,845,715.45	Not submitted

The first and fourth lowest bidders did not meet the DBE goal, while the second and third lowest bidders exceeded the 16% DBE goal. Pursuant to the Local Agency Public Construction Act, the responsible and responsive bidder who submitted the lowest bid shall be awarded the contract, if it is awarded.

DBE Goal and Good Faith Effort Process. Pursuant to federal DBE regulations, a bidder must either meet the DBE goal by obtaining sufficient DBE participation or must show that it made adequate good faith efforts to meet the goal. The project team reviewed the DBE goal documentation provided by the three lowest bidders showing their efforts to meet the goal. Pursuant to this review, we found that the apparent lowest bidder, Gordon N. Ball, Inc., failed to meet the DBE goal as well as the good faith efforts requirements. In accordance with federal DBE regulations, we provided Gordon N. Ball, Inc. with an opportunity for reconsideration of this good faith efforts determination at a meeting held on February 11,



2020. At the meeting, Gordon N. Ball, Inc. supplemented previously submitted documentation with respect to its efforts to meet the DBE goal. However, Gordon N. Ball, Inc.'s additional written documentation and its oral testimony explaining the previously submitted documentation did not cause the Transportation Authority to modify the original finding that the company did not meet good faith efforts requirements. Accordingly, we notified Gordon N. Ball, Inc. of our final decision following the reconsideration process that the company did not meet good faith efforts requirements. Furthermore, Caltrans reviewed our good faith efforts evaluation and concurred with our determination that Gordon N. Ball, Inc. did not demonstrate adequate good faith efforts to meet the contract goal. Consistent with federal regulations and state guidelines, the result of the reconsideration process is a final administrative decision and is not administratively appealable to the Transportation Authority Board or Caltrans.

As a result, we have determined that Ghilotti Construction is the lowest responsible and responsive bidder, bidding at \$29,684,452.46 with 16.84% DBE participation. A detailed bid item list is included in Attachment 1 and is approximately 11.07% over the Engineer's Estimate for the Project's construction cost of \$26,725,311.05.

Schedule. The Project schedule is projected as follows:

- Award Construction Contract - March 2020
- Begin Construction - April 2020
- Construction Completion - Summer 2022

Additional Construction Allotment. In order to construct the project, we will need to enter into agreements with other agencies/entities, including but not limited to the California Highway Patrol, the San Francisco Public Utilities Commission, San Francisco Municipal Transportation Agency, San Francisco Public Works, and the Pacific Gas and Electric Company to purchase state/agency furnished materials and for these agencies/entities to oversee select portions of the construction contractor's work. The construction phase budget includes \$7,648,934 for supplemental funds and state/agency furnished materials. A list of supplemental work items and cost estimates for state/agency furnished materials are included in Attachment 2. We also recommend an additional contingency of \$3,312,483, or 9% of total anticipated construction costs, for a total construction allotment of \$40,645,870.

Funding. The construction contract and the related items described in the prior section will be funded with federal Highway Bridge Program (HBP), State Prop 1B (Prop 1B), Bay Area Toll Authority (BATA), State Affordable Housing and Sustainable Communities (AHSC) grant funds allocated to Treasure Island Development Authority (TIDA) for the bicycle and pedestrian path component of the project, other TIDA funds specifically designated for the Project, and federal Advanced Transportation Congestion and Mitigation Technologies Deployment (ATCMTD) grant all as shown in the below table. Please note that the "Additional BATA" funds shown in Table 2 below represent funds that have not been allocated as of the date of



this memo, but are anticipated to be allocated to the Project at the BATA Oversight Committee meeting on March 11, 2020, prior to the Transportation Authority Board’s final action on this matter. Any costs not reimbursed by the various grant funds will be reimbursed by TIDA.

Table 2. Project Funding Plan

Phase	Federal Highway Bridge Program	State Prop 1B	TIDA (AHSC Grant)	TIDA	Federal ATCMTD	BATA	Additional BATA	Total
Preliminary Engineering						\$ 10,104,114	\$ 1,500,000	\$ 11,604,114
Right-of-Way Capital	\$ 3,629,730	\$ 114,700		\$ 371,400		\$ 355,570		\$ 4,471,400
Construction Support	\$ 3,934,288	\$ 75,702	\$ 350,000			\$ 674,181	\$ 1,994,294	\$ 7,028,465
Construction	\$ 24,956,131	\$ 2,084,213	\$ 2,050,000	\$ 2,578,600	\$ 1,350,000	\$ 3,400,520	\$ 4,226,406	\$ 40,645,870
Totals	\$32,520,149	\$2,274,615	\$2,400,000	\$2,950,000	\$1,350,000	\$14,534,385	\$7,720,700	\$63,749,849

FINANCIAL IMPACT

The construction contract will be funded by the various funding sources discussed above. The first year’s activities are included in the proposed Fiscal Year 2019/20 budget amendment, and sufficient funds will be included in future budgets to cover the remaining cost of the contract.

CAC POSITION

Due to the longer than anticipated Good Faith Effort review process performed by staff and Caltrans, this item was not considered by the CAC at its February 26, 2020 meeting. The CAC will be provided an update on this item and the overall construction activities on YBI at a future meeting.

SUPPLEMENTAL MATERIALS

Attachment 1 - Construction Services for the Southgate Road Realignment Improvement Project Bid Item List

Attachment 2 - Supplemental Work Items and State/Agency Furnished Materials - Estimated Costs

Attachment 1

Southgate Road Realignment Project

Bid Item List

Ghilotti Construction Company, Inc.

BID SCHEDULE A - VOLUME 1

Item No.	Item Description	Unit of Measure	Estimated Quantity	UNIT PRICE	AMOUNT
1	EXISTING UTILITY VERIFICATION	LS	LUMP SUM	\$55,000.00	\$55,000.00
2	LEAD COMPLIANCE PLAN	LS	LUMP SUM	\$4,600.00	\$4,600.00
3	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM	\$6,000.00	\$6,000.00
4	DEVELOP WATER SUPPLY	LS	LUMP SUM	\$6,000.00	\$6,000.00
5	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	\$12,500.00	\$12,500.00
6	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	\$375,000.00	\$375,000.00
7	FLASHING ARROW SIGN	EA	1	\$15,000.00	\$15,000.00
8	TYPE III BARRICADE	EA	6	\$70.00	\$420.00
9	TEMPORARY PAVEMENT MARKING (PAINT)	SQFT	80	\$12.00	\$960.00
10	TEMPORARY TRAFFIC STRIPE (PAINT)	LF	4,570	\$4.00	\$18,280.00
11	CHANNELIZER (SURFACE MOUNTED)	EA	46	\$35.00	\$1,610.00
12	TEMPORARY TERMINAL SECTION (TYPE K)	EA	3	\$1,200.00	\$3,600.00
13	PORTABLE CHANGEABLE MESSAGE SIGN (LS)	LS	LUMP SUM	\$55,000.00	\$55,000.00
14	TEMPORARY RAILING (TYPE K)	LF	2140	\$30.00	\$64,200.00
15	TEMPORARY CRASH CUSHION MODULE	EA	22	\$400.00	\$8,800.00
16	TEMPORARY ALTERNATIVE CRASH CUSHION	EA	5	\$3,500.00	\$17,500.00
17	JOB SITE MANAGEMENT	LS	LUMP SUM	\$40,000.00	\$40,000.00
18	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	\$1,550.00	\$1,550.00
19	STORM WATER ANNUAL REPORT	EA	2	\$1,000.00	\$2,000.00
20	MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)	EA	2	\$1,000.00	\$2,000.00
21	TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX)	SQYD	9300	\$2.00	\$18,600.00
22	TEMPORARY COVER	SQYD	570	\$12.00	\$6,840.00
23	TEMPORARY CHECK DAM	LF	180	\$12.00	\$2,160.00
24	TEMPORARY DRAINAGE INLET PROTECTION	EA	40	\$200.00	\$8,000.00
25	TEMPORARY FIBER ROLL	LF	3450	\$7.00	\$24,150.00
26	TEMPORARY CONSTRUCTION ENTRANCE	EA	3	\$4,000.00	\$12,000.00
27	STREET SWEEPING	LS	LUMP SUM	\$28,800.00	\$28,800.00
28	TEMPORARY CONCRETE WASHOUT	LS	LUMP SUM	\$20,000.00	\$20,000.00
29	ASBESTOS COMPLIANCE PLAN	LS	LUMP SUM	\$58,000.00	\$58,000.00
30	TREATED WOOD WASTE	LB	1820	\$0.85	\$1,547.00
31	INVASIVE SPECIES CONTROL	LS	LUMP SUM	\$4,000.00	\$4,000.00
32	NOISE MONITORING	LS	LUMP SUM	\$2,000.00	\$2,000.00
33	REMOVE CONCRETE (SQYD)	SQYD	90	\$75.00	\$6,750.00
34	REMOVE CONCRETE (MISCELLANEOUS)	CY	70	\$350.00	\$24,500.00
35	CLEARING AND GRUBBING (LS)	LS	LUMP SUM	\$45,000.00	\$45,000.00
36	ROADWAY EXCAVATION	CY	61300	\$50.00	\$3,065,000.00
37	ROADWAY EXCAVATION (TYPE Z-2)	CY	1200	\$325.00	\$390,000.00
38	ROADWAY EXCAVATION (TYPE Z-3)	CY	70	\$425.00	\$29,750.00
39	STRUCTURE EXCAVATION (RETAINING WALL)	CY	1036	\$55.00	\$56,980.00
40	STRUCTURE EXCAVATION (SOLDIER PILE WALL)	CY	1527	\$90.00	\$137,430.00
41	STRUCTURE EXCAVATION (GROUND ANCHOR WALL)	CY	1164	\$100.00	\$116,400.00
42	STRUCTURE BACKFILL (BRIDGE)	CY	5	\$600.00	\$3,000.00
43	STRUCTURE BACKFILL (RETAINING WALL)	CY	840	\$110.00	\$92,400.00
44	STRUCTURE BACKFILL (GROUND ANCHOR WALL)	CY	56	\$150.00	\$8,400.00

Item No.	Item Description	Unit of Measure	Estimated Quantity	UNIT PRICE	AMOUNT
45	STRUCTURE BACKFILL (SOLDIER PILE WALL)	CY	202	\$110.00	\$22,220.00
46	CONCRETE BACKFILL (SOLDIER PILE WALL)	CY	440	\$495.00	\$217,800.00
47	LEAN CONCRETE BACKFILL	CY	622	\$405.00	\$251,910.00
48	DITCH EXCAVATION	CY	50	\$150.00	\$7,500.00
49	LIGHTWEIGHT EMBANKMENT MATERIAL (CELLULAR CONCRETE CLASS III)	CY	358	\$175.00	\$62,650.00
50	PLANT (GROUP K)	EA	375	\$185.00	\$69,375.00
51	DECOMPOSED GRANITE	SQFT	530	\$12.50	\$6,625.00
52	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	2	\$1,200.00	\$2,400.00
53	ROLLED EROSION CONTROL PRODUCT (BLANKET)	SQFT	8710	\$0.55	\$4,790.50
54	HYDROMULCH	SQFT	63600	\$0.05	\$3,180.00
55	FIBER ROLLS	LF	3470	\$2.75	\$9,542.50
56	STRAW	SQFT	54,900	\$0.06	\$3,294.00
57	HYDROSEED	SQFT	63600	\$0.11	\$6,996.00
58	COMPOST (CY)	CY	170	\$50.00	\$8,500.00
59	INCORPORATE MATERIALS	SQFT	54900	\$0.10	\$5,490.00
60	IMPORTED BIOFILTRATION SOIL	CY	490	\$150.00	\$73,500.00
61	CLASS 2 AGGREGATE BASE (CY)	CY	1480	\$125.00	\$185,000.00
62	CONCRETE BASE	CY	1050	\$350.00	\$367,500.00
63	HOT MIX ASPHALT (TYPE A)	TON	2800	\$125.00	\$350,000.00
64	TACK COAT	TON	5	\$1,884.00	\$9,420.00
65	COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD	2260	\$6.00	\$13,560.00
66	GROUND ANCHOR (SUB HORIZONTAL), LOCATION A	EA	11	\$9,400.00	\$103,400.00
67	GROUND ANCHOR (SUB HORIZONTAL), LOCATION B	EA	5	\$3,200.00	\$16,000.00
68	GROUND ANCHOR (SUB HORIZONTAL), LOCATION C	EA	254	\$3,200.00	\$812,800.00
69	GROUND ANCHOR (SUB HORIZONTAL), LOCATION D	EA	25	\$3,400.00	\$85,000.00
70	GROUND ANCHOR (SUB HORIZONTAL), LOCATION E	EA	84	\$3,200.00	\$268,800.00
71	MECHANICALLY STABILIZED EMBANKMENT, LOCATION A	SQFT	4397	\$125.00	\$549,625.00
72	MECHANICALLY STABILIZED EMBANKMENT (MODULAR BLOCK WALL)	SQFT	2322	\$250.00	\$580,500.00
73	STEEL SOLDIER PILE (W8X21)	LF	321	\$55.00	\$17,655.00
74	STEEL SOLDIER PILE (W14X82)	LF	594	\$115.00	\$68,310.00
75	STEEL SOLDIER PILE (W18X130)	LF	460	\$135.00	\$62,100.00
76	STEEL SOLDIER PILE (W18X158)	LF	195	\$165.00	\$32,175.00
77	STEEL SOLDIER PILE (W18X175)	LF	425	\$175.00	\$74,375.00
78	STEEL SOLDIER PILE (W18X211)	LF	549	\$205.00	\$112,545.00
79	STEEL SOLDIER PILE (W18X258)	LF	363	\$235.00	\$85,305.00
80	STEEL SOLDIER PILE (W24X192)	LF	328	\$185.00	\$60,680.00
81	STEEL SOLDIER PILE (W24X229)	LF	836	\$205.00	\$171,380.00
82	STEEL SOLDIER PILE (W24X250)	LF	447	\$295.00	\$131,865.00
83	STEEL SOLDIER PILE (W30X292)	LF	379	\$235.00	\$89,065.00
84	24" DRILLED HOLE	LF	791	\$110.00	\$87,010.00
85	30" DRILLED HOLE	LF	2016	\$75.00	\$151,200.00
86	36" DRILLED HOLE	LF	2169	\$75.00	\$162,675.00
87	42" DRILLED HOLE	LF	379	\$155.00	\$58,745.00
88	30" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	171	\$375.00	\$64,125.00
89	72" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	616	\$600.00	\$369,600.00
90	48" PERMANENT NEW STEEL PIPE FORM	LF	162	\$525.00	\$85,050.00
91	72" STEEL CASING	LF	282	\$900.00	\$253,800.00
92	PRESTRESSING CAST-IN-PLACE CONCRETE	LS	LUMP SUM	\$35,000.00	\$35,000.00
93	STRUCTURAL CONCRETE, BRIDGE	CY	247	\$4,200.00	\$1,037,400.00
94	STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	CY	240	\$800.00	\$192,000.00
95	STRUCTURAL CONCRETE, RETAINING WALL	CY	1398	\$2,000.00	\$2,796,000.00
96	STRUCTURAL CONCRETE, BARRIER SLAB	CY	516	\$850.00	\$438,600.00

Item No.	Item Description	Unit of Measure	Estimated Quantity	UNIT PRICE	AMOUNT
97	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ)	CY	41	\$1,400.00	\$57,400.00
98	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ MODIFIED)	CY	61	\$1,100.00	\$67,100.00
99	STRUCTURAL CONCRETE, HEADWALL	CY	4	\$4,500.00	\$18,000.00
100	STRUCTURAL CONCRETE, DRAINAGE INLET	CY	90	\$2,200.00	\$198,000.00
101	STRUCTURAL CONCRETE, CONCRETE SLAB	CY	100	\$500.00	\$50,000.00
102	STRUCTURAL CONCRETE, STAIR FOUNDATION	LS	LUMP SUM	\$20,000.00	\$20,000.00
103	MINOR CONCRETE	CY	160	\$500.00	\$80,000.00
104	LIGHTWEIGHT CONCRETE (RETAINING WALL)	CY	166	\$1,400.00	\$232,400.00
105	FRACTURED RIB TEXTURE	SQFT	20477	\$18.00	\$368,586.00
106	DRILL AND BOND DOWEL	LF	1009	\$70.00	\$70,630.00
107	JOINT SEAL (MR 1/2")	LF	56	\$100.00	\$5,600.00
108	JOINT SEAL ASSEMBLY (MR 6")	LF	116	\$800.00	\$92,800.00
109	BAR REINFORCING STEEL (BRIDGE)	LB	463567	\$1.21	\$560,916.07
110	BAR REINFORCING STEEL (RETAINING WALL)	LB	327155	\$1.24	\$405,672.20
111	STRUCTURAL SHOTCRETE	CY	412	\$690.00	\$284,280.00
112	STRUCTURAL STEEL (BRIDGE)	LB	3504	\$12.00	\$42,048.00
113	TIMBER LAGGING	MFBM	48	\$4,400.00	\$211,200.00
114	CLEAN AND PAINT STRUCTURAL STEEL	LS	LUMP SUM	\$169,840.00	\$169,840.00
115	PUBLIC SAFETY PLAN	LS	LUMP SUM	\$3,000.00	\$3,000.00
116	REMOVE RETAINING WALL (LF)	LF	660	\$90.00	\$59,400.00
117	REMOVE RETAINING WALL (PORTION) (LS)	LS	LUMP SUM	\$65,000.00	\$65,000.00
118	REMOVE TEMPORARY SHORING	LF	25	\$400.00	\$10,000.00
119	REMOVE CONCRETE DECK SURFACE	SQFT	340	\$15.00	\$5,100.00
120	REMOVE CONCRETE PILES (PARTIAL)	LF	2210	\$175.00	\$386,750.00
121	FURNISH POLYESTER CONCRETE OVERLAY	CF	370	\$120.00	\$44,400.00
122	PLACE POLYESTER CONCRETE OVERLAY	SQFT	8730	\$20.00	\$174,600.00
123	EMBANKMENT CONFINEMENT SYSTEM (ECS) REMOVAL (PORTION)	LS	LUMP SUM	\$20,000.00	\$20,000.00
124	12" ALTERNATIVE PIPE CULVERT	LF	45	\$250.00	\$11,250.00
125	18" ALTERNATIVE PIPE CULVERT	LF	240	\$275.00	\$66,000.00
126	24" ALTERNATIVE PIPE CULVERT	LF	150	\$300.00	\$45,000.00
127	10" CITY CULVERT	LF	230	\$200.00	\$46,000.00
128	12" CITY CULVERT	LF	1300	\$200.00	\$260,000.00
129	18" CITY CULVERT	LF	340	\$225.00	\$76,500.00
130	24" CITY CULVERT	LF	170	\$250.00	\$42,500.00
131	6" PERFORATED PLASTIC PIPE UNDERDRAIN	LF	150	\$350.00	\$52,500.00
132	DRAINAGE INLET MARKER	EA	20	\$40.00	\$800.00
133	12" WELDED STEEL PIPE (.105" THICK)	LF	60	\$375.00	\$22,500.00
134	CITY MANHOLE	EA	24	\$10,000.00	\$240,000.00
135	CITY MANHOLE FRAME AND COVER	EA	24	\$1,000.00	\$24,000.00
136	INLET DEPRESSION	EA	20	\$1,500.00	\$30,000.00
137	ABANDON CULVERT (LF)	LF	80	\$125.00	\$10,000.00
138	REMOVE CONCRETE GUTTER LINING	CY	14	\$125.00	\$1,750.00
139	REMOVE CULVERT (LF)	LF	1230	\$40.00	\$49,200.00
140	REMOVE INLET	EA	7	\$1,500.00	\$10,500.00
141	REMOVE MANHOLE	EA	1	\$2,000.00	\$2,000.00
142	REMOVE SEWER PIPE	LF	170	\$60.00	\$10,200.00
143	ADJUST INLET	EA	1	\$4,000.00	\$4,000.00
144	ROCK SLOPE PROTECTION (300 lb, Class IV, METHOD B) (CY)	CY	5	\$450.00	\$2,250.00
145	CONCRETE (DITCH LINING)	CY	20	\$1,000.00	\$20,000.00
146	SLOPE PAVING (CONCRETE)	CY	4	\$1,000.00	\$4,000.00
147	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	SQYD	20	\$8.00	\$160.00
148	MINOR CONCRETE (CURB) (CY)	CY	20	\$1,800.00	\$36,000.00

Item No.	Item Description	Unit of Measure	Estimated Quantity	UNIT PRICE	AMOUNT
149	MINOR CONCRETE (GUTTER) (CY)	CY	33	\$1,800.00	\$59,400.00
150	REMOVE DETECTABLE WARNING PANEL	EA	2	\$500.00	\$1,000.00
151	DETECTABLE WARNING SURFACE	SQFT	200	\$30.00	\$6,000.00
152	MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)	CY	29	\$900.00	\$26,100.00
153	MINOR CONCRETE (CURB AND GUTTER)	CY	30	\$1,000.00	\$30,000.00
154	MINOR CONCRETE (ISLAND PAVING)	CY	1	\$1,000.00	\$1,000.00
155	REMOVE CONCRETE (CURB AND GUTTER)	LF	590	\$30.00	\$17,700.00
156	MISCELLANEOUS IRON AND STEEL	LB	8860	\$3.00	\$26,580.00
157	MISCELLANEOUS METAL (RETAINING WALL)	LB	45222	\$9.00	\$406,998.00
158	MISCELLANEOUS METAL (INCLINED SCREEN)	LB	170	\$15.00	\$2,550.00
159	MISCELLANEOUS METAL (STEEL STAIR)	LS	LUMP SUM	\$75,000.00	\$75,000.00
160	SIGNAL AND LIGHTING (CITY)	LS	LUMP SUM	\$105,000.00	\$105,000.00
161	MODIFYING EXISTING ELECTRICAL SYSTEM, LIGHTING (CITY STREET)	LS	LUMP SUM	\$265,000.00	\$265,000.00
162	ELECTRONIC TOLLING SYSTEM	LS	LUMP SUM	\$25,300.00	\$25,300.00
163	GROUNDING CABLE	LS	LUMP SUM	\$8,000.00	\$8,000.00
164	REMOVE WATER PIPE	LF	1500	\$125.00	\$187,500.00
165	REMOVE GAS PIPE	LF	330	\$60.00	\$19,800.00
166	REMOVE FIRE HYDRANT	EA	1	\$1,500.00	\$1,500.00
167	2" COPPER PIPE (SUPPLY LINE)	LF	60	\$300.00	\$18,000.00
168	6" DUCTILE IRON PIPE	LF	100	\$350.00	\$35,000.00
169	8" DUCTILE IRON PIPE	LF	560	\$375.00	\$210,000.00
170	12" DUCTILE IRON PIPE	LF	10	\$500.00	\$5,000.00
171	2" BALL VALVE	EA	1	\$1,700.00	\$1,700.00
172	6" GATE VALVE	EA	2	\$3,000.00	\$6,000.00
173	8" GATE VALVE	EA	3	\$3,300.00	\$9,900.00
174	AIR RELEASE VALVE	EA	2	\$6,500.00	\$13,000.00
175	FIRE HYDRANT	EA	1	\$6,000.00	\$6,000.00
176	12" x 8" REDUCER	EA	1	\$2,500.00	\$2,500.00
177	10" x 15" x 12" METER BOX ASSEMBLY	EA	1	\$750.00	\$750.00
178	48" x 72" x 30" METER VAULT ASSEMBLY	EA	2	\$9,000.00	\$18,000.00
179	6" BACKFLOW PREVENTER ASSEMBLY	EA	1	\$12,000.00	\$12,000.00
180	12" x 30" TRENCH - FOR JOINT TRENCH	LF	44	\$235.00	\$10,340.00
181	12" x 31" TRENCH - FOR JOINT TRENCH - SFDT	LF	94	\$235.00	\$22,090.00
182	12" x 39" TRENCH - FOR JOINT TRENCH	LF	94	\$235.00	\$22,090.00
183	18" x 46" TRENCH - FOR JOINT TRENCH	LF	38	\$235.00	\$8,930.00
184	24" x 49" TRENCH - FOR JOINT TRENCH	LF	1084	\$235.00	\$254,740.00
185	24" x 50" TRENCH - FOR JOINT TRENCH	LF	575	\$235.00	\$135,125.00
186	17" x 30" SPICE BOX - SFPUC	EA	2	\$1,500.00	\$3,000.00
187	24" x 36" (N40) SPLICE BOX - SFDT	EA	3	\$1,600.00	\$4,800.00
188	3'-0" x 5'-0" x 4'-6" VAULT - SFPUC	EA	1	\$21,000.00	\$21,000.00
189	4'-0" x 6'-6" x 5'-0" VAULT - SFPUC	EA	1	\$25,000.00	\$25,000.00
190	3" PVC SCHEDULE 40 CONDUIT - SFPUC	LF	4300	\$14.00	\$60,200.00
191	4" PVC SCHEDULE 40 CONDUIT - SFPUC	LF	3650	\$14.00	\$51,100.00
192	4" PVC SCHEDULE 40 CONDUIT - SFDT	LF	1606	\$14.00	\$22,484.00
193	TEMPORARY FENCE	LF	960	\$0.15	\$144.00
194	CHAIN LINK FENCE (TYPE CL-6)	LF	410	\$32.00	\$13,120.00
195	CHAIN LINK FENCE (TYPE CL-8, VINYL-CLAD)	LF	5	\$36.00	\$180.00
196	CHAIN LINK FENCE (TYPE CL-6, BLACK VINYL-CLAD Mod)	LF	145	\$42.00	\$6,090.00
197	PRIVACY FENCE PANEL	SQFT	4600	\$12.00	\$55,200.00
198	4' CHAIN LINK GATE (TYPE CL-6)	EA	3	\$1,800.00	\$5,400.00
199	16' CHAIN LINK GATE (TYPE CL-6)	EA	1	\$4,500.00	\$4,500.00
200	20' CHAIN LINK GATE (TYPE CL-10)	EA	2	\$6,500.00	\$13,000.00

Item No.	Item Description	Unit of Measure	Estimated Quantity	UNIT PRICE	AMOUNT
201	14' CHAIN LINK GATE (TYPE CL-10)	EA	2	\$4,000.00	\$8,000.00
202	5' CHAIN LINK GATE (TYPE CL-10)	EA	1	\$2,000.00	\$2,000.00
203	CANTILEVER SLIDING GATE	EA	1	\$25,500.00	\$25,500.00
204	COAST GUARD SECURITY METAL GATE	EA	1	\$32,000.00	\$32,000.00
205	REMOVE FENCE	LF	1150	\$10.00	\$11,500.00
206	REMOVE GATE	EA	11	\$750.00	\$8,250.00
207	SALVAGE FENCE	LF	260	\$15.00	\$3,900.00
208	RELOCATE GATE	EA	1	\$3,500.00	\$3,500.00
209	REMOVE PAVEMENT MARKER	EA	7	\$10.00	\$70.00
210	DELINEATOR (CLASS 1)	EA	11	\$40.00	\$440.00
211	PAVEMENT MARKER (RETROREFLECTIVE)	EA	180	\$12.00	\$2,160.00
212	REMOVE BOLLARD	EA	2	\$400.00	\$800.00
213	REMOVEABLE BOLLARD	EA	10	\$1,500.00	\$15,000.00
214	RESET BOLLARD	EA	2	\$700.00	\$1,400.00
215	OBJECT MARKER (TYPE P)	EA	2	\$50.00	\$100.00
216	SPECIAL MARKER	EA	2	\$40.00	\$80.00
217	REMOVE ROADSIDE SIGN	EA	15	\$100.00	\$1,500.00
218	REMOVE SIGN FROM ELECTROLIER	EA	2	\$50.00	\$100.00
219	REMOVE ROADSIDE SIGN (METAL POST)	EA	6	\$100.00	\$600.00
220	REMOVE ROADSIDE SIGN PANEL	EA	5	\$50.00	\$250.00
221	REMOVE SIGN PANEL	EA	2	\$200.00	\$400.00
222	RESET ROADSIDE SIGN (WOOD POST)	EA	1	\$200.00	\$200.00
223	RELOCATE ROADSIDE SIGN (METAL POST)	EA	2	\$200.00	\$400.00
224	RELOCATE ROADSIDE SIGN (WOOD POST)	EA	5	\$200.00	\$1,000.00
225	RELOCATE SIGN PANEL	EA	1	\$150.00	\$150.00
226	FURNISH LAMINATED PANEL SIGN (1"-TYPE A)	SQFT	360	\$36.50	\$13,140.00
227	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	380	\$23.75	\$9,025.00
228	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED)	SQFT	171	\$19.50	\$3,334.50
229	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-FRAMED)	SQFT	72	\$20.75	\$1,494.00
230	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED)	SQFT	40	\$33.00	\$1,320.00
231	METAL (BARRIER MOUNTED SIGN)	LB	550	\$13.00	\$7,150.00
232	METAL (DECK MOUNTED SIGN)	LB	186	\$15.00	\$2,790.00
233	ROADSIDE SIGN - ONE POST	EA	45	\$275.00	\$12,375.00
234	ROADSIDE SIGN - TWO POST	EA	5	\$400.00	\$2,000.00
235	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	9	\$100.00	\$900.00
236	INSTALL SIGN (MAST ARM HANGER METHOD)	EA	2	\$200.00	\$400.00
237	INSTALL SIGN PANEL ON EXISTING FRAME	SQFT	360	\$15.00	\$5,400.00
238	INSTALL SIGN PANEL ON EXISTING COLUMN	EA	2	\$150.00	\$300.00
239	INSTALL ROADSIDE SIGN ON EXIST POST	EA	2	\$75.00	\$150.00
240	MIDWEST GUARDRAIL SYSTEM	LF	140	\$125.00	\$17,500.00
241	BIKE PATH RAILING	LF	230	\$900.00	\$207,000.00
242	BIKE PATH RAILING (RETAINING WALL) (Mod)	LF	324	\$1,050.00	\$340,200.00
243	RELOCATE PIPE HANDRAILING	LF	90	\$275.00	\$24,750.00
244	CABLE RAILING	LF	929	\$85.00	\$78,965.00
245	TRANSITION RAILING (TYPE WB-31)	EA	2	\$6,000.00	\$12,000.00
246	END CAP (TYPE A)	EA	1	\$1,000.00	\$1,000.00
247	ALTERNATIVE CRASH CUSHION	EA	6	\$50,000.00	\$300,000.00
248	CONCRETE BARRIER (TYPE 60M)	LF	150	\$250.00	\$37,500.00
249	CONCRETE BARRIER (TYPE 60MC)	LF	440	\$325.00	\$143,000.00
250	CONCRETE BARRIER (TYPE 60MD)	LF	183	\$175.00	\$32,025.00
251	CONCRETE BARRIER (TYPE 60MS)	LF	170	\$200.00	\$34,000.00
252	CONCRETE BARRIER (TYPE 60MSC)	LF	30	\$250.00	\$7,500.00

Item No.	Item Description	Unit of Measure	Estimated Quantity	UNIT PRICE	AMOUNT
253	CONCRETE BARRIER (TYPE 60MC Mod)	LF	55	\$400.00	\$22,000.00
254	CONCRETE BARRIER (TYPE 60MD Mod)	LF	983	\$200.00	\$196,600.00
255	CONCRETE BARRIER (TYPE 60R Mod)	LF	200	\$650.00	\$130,000.00
256	CONCRETE BARRIER (TYPE 60M Mod)	LF	20	\$250.00	\$5,000.00
257	CONCRETE BARRIER (TYPE 60M Mod 1)	LF	60	\$300.00	\$18,000.00
258	CONCRETE BARRIER (TYPE 60M Mod 2)	LF	90	\$300.00	\$27,000.00
259	CONCRETE BARRIER (TYPE 60MC Mod1)	LF	230	\$300.00	\$69,000.00
260	CONCRETE BARRIER (TYPE 60MSC Mod)	LF	26	\$650.00	\$16,900.00
261	CONCRETE BARRIER (TYPE 836)	LF	313	\$283.81	\$88,832.53
262	CONCRETE BARRIER (TYPE 736)	LF	725	\$226.84	\$164,459.00
263	CONCRETE BARRIER (TYPE 736A)	LF	113	\$412.09	\$46,566.17
264	CONCRETE BARRIER (TYPE 842)	LF	69	\$437.05	\$30,156.45
265	CONCRETE BARRIER (TYPE 842A)	LF	199	\$250.56	\$49,861.44
266	CONCRETE BARRIER (TYPE 742 Mod)	LF	43	\$460.04	\$19,781.72
267	CONCRETE BARRIER TRANSITION	LF	76	\$150.00	\$11,400.00
268	CONCRETE RETAINING BARRIER	LF	56	\$245.83	\$13,766.48
269	REMOVE GUARDRAIL	LF	800	\$10.00	\$8,000.00
270	REMOVE CONCRETE BARRIER	LF	1050	\$35.00	\$36,750.00
271	REMOVE METAL RAILING	LF	280	\$25.00	\$7,000.00
272	REMOVE CRASH CUSHION	EA	2	\$800.00	\$1,600.00
273	12" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	190	\$6.00	\$1,140.00
274	THERMOPLASTIC PAVEMENT MARKING (ENHANCED WET NIGHT VISIBILITY)	SOFT	2220	\$8.00	\$17,760.00
275	6" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY) (BROKEN 17-7)	LF	110	\$1.90	\$209.00
276	4" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY) (BROKEN 9-3)	LF	360	\$1.25	\$450.00
277	4" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	90	\$1.30	\$117.00
278	6" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	4900	\$3.00	\$14,700.00
279	8" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	1300	\$3.40	\$4,420.00
280	8" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY) (BROKEN 12-3)	LF	290	\$3.00	\$870.00
281	REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	300	\$15.00	\$4,500.00
282	LIGHTING SYSTEM	LS	LUMP SUM	\$580,000.00	\$580,000.00
283	FLASHING BEACON SYSTEM	LS	LUMP SUM	\$30,000.00	\$30,000.00
284	TEMPORARY LIGHTING SYSTEM	LS	LUMP SUM	\$25,500.00	\$25,500.00
285	MODIFYING EXISTING ELECTRICAL SYSTEM	LS	LUMP SUM	\$155,000.00	\$155,000.00
286	REMOVE ELECTRICAL TRANSFORMER AND SERVICE ENCLOSURE	EA	1	\$12,000.00	\$12,000.00
287	BUILDING DEMOLITION	LS	LUMP SUM	\$115,000.00	\$115,000.00
288	REMOVE CARPORT	LS	LUMP SUM	\$4,500.00	\$4,500.00
289	MOBILIZATION	LS	LUMP SUM	\$2,900,000.00	\$2,900,000.00
290	SHOTCRETE (LOCATION C1)	CY	110	\$650.00	\$71,500.00
291	PLACE HOT MIX ASPHALT DIKE (TYPE E)	LF	170	\$20.00	\$3,400.00

BID SCHEDULE B - VOLUME 2

1	INVASIVE SPECIES CONTROL	LS	LUMP SUM	\$5,000.00	\$5,000.00
2	NOISE MONITORING	LS	LUMP SUM	\$2,000.00	\$2,000.00
3	TEMPORARY HIGH-VISIBILITY FENCE	LF	430	\$15.00	\$6,450.00
4	ROADWAY EXCAVATION	CY	120	\$170.00	\$20,400.00
5	ROADSIDE CLEARING	LS	LUMP SUM	\$2,000.00	\$2,000.00
6	SOIL AMENDMENT	CF	40	\$12.00	\$480.00
7	PACKET FERTILIZER	EA	1970	\$1.00	\$1,970.00
8	PLANT (GROUP A)	EA	990	\$40.00	\$39,600.00
9	MAINTAIN EXISTING PLANTED AREAS	LS	LUMP SUM	\$30,000.00	\$30,000.00
10	PLANT ESTABLISHMENT WORK	LS	LUMP SUM	\$18,000.00	\$18,000.00

Item No.	Item Description	Unit of Measure	Estimated Quantity	UNIT PRICE	AMOUNT
11	WOOD MULCH	CY	90	\$115.00	\$10,350.00
12	WEED BLOCK FABRIC	SQFT	10200	\$0.50	\$5,100.00
13	CHECK AND TEST EXISTING IRRIGATION FACILITIES	LS	LUMP SUM	\$7,500.00	\$7,500.00
14	MAINTAIN EXISTING IRRIGATION FACILITIES	LS	LUMP SUM	\$9,000.00	\$9,000.00
15	OPERATE EXISTING IRRIGATION FACILITIES	LS	LUMP SUM	\$6,000.00	\$6,000.00
16	CONTROL & NEUTRAL CONDUCTORS	LS	LUMP SUM	\$2,500.00	\$2,500.00
17	5/8" DRIP IRRIGATION TUBING	LF	6289	\$5.00	\$31,445.00
18	DRIP VALVE ASSEMBLY	EA	4	\$800.00	\$3,200.00
19	3/4" PLASTIC PIPE (SCH 40) (SUPPLY LINE)	LF	96	\$6.50	\$624.00
20	1" PLASTIC PIPE (SCH 40) (SUPPLY LINE)	LF	246	\$7.50	\$1,845.00
21	2" PLASTIC PIPE (SCH 40) (SUPPLY LINE)	LF	150	\$12.00	\$1,800.00
22	COMBINATION AIR RELEASE VALVE	EA	16	\$65.00	\$1,040.00
23	QUICK COUPLING VALVE	EA	2	\$300.00	\$600.00
24	FLUSH VALVE	EA	17	\$65.00	\$1,105.00
25	BALL VALVE	EA	2	\$250.00	\$500.00
26	PVC PIPE CONDUIT (SLEEVE)	LF	12	\$55.00	\$660.00
27	MOVE-IN/MOVE OUT (EROSION CONTROL)	EA	1	\$1,200.00	\$1,200.00
28	ROLLED EROSION CONTROL PRODUCT (NETTING)	SQFT	3850	\$0.58	\$2,233.00
29	HYDROMULCH	SQFT	3850	\$0.05	\$192.50
30	FIBER ROLLS	LF	554	\$2.75	\$1,523.50
31	HYDROSEED	SQFT	3850	\$0.11	\$423.50
32	COMPOST (CY)	CY	6	\$50.65	\$303.90
33	CLASS 2 AGGREGATE BASE (CY)	CY	68	\$275.00	\$18,700.00
34	STRUCTURAL CONCRETE, DRAINAGE INLET	CY	1.92	\$4,000.00	\$7,680.00
35	18" ALTERNATIVE PIPE CULVERT	LF	57.1	\$185.00	\$10,563.50
36	MINOR CONCRETE (CURB) (CY)	CY	10	\$1,400.00	\$14,000.00
37	MINOR CONCRETE (SIDEWALK)	CY	45	\$800.00	\$36,000.00
38	REMOVE CONCRETE CURB AND SIDEWALK (SQYD)	SQYD	77	\$100.00	\$7,700.00
39	MISCELLANEOUS IRON AND STEEL	LB	239	\$3.00	\$717.00
40	FENCE (TYPE CL-12 BLACK VINYL CLAD) WITH BARBED WIRE EXTENSION ARMS	LF	60	\$110.00	\$6,600.00
41	REMOVE CHAIN LINK FENCE	LF	113	\$10.00	\$1,130.00
42	RELOCATE ROADSIDE SIGN (WOOD POST)	EA	2	\$200.00	\$400.00
43	MODIFIED CABLE RAILING	LF	180	\$75.00	\$13,500.00
44	SWING GATE (TYPE MODIFIED CABLE RAILING)	EA	2	\$1,200.00	\$2,400.00
45	FENCE (TYPE ANTI-CLIMB)	LF	564	\$150.00	\$84,600.00
46	SWING GATE (TYPE ANTI-CLIMB)	EA	2	\$4,500.00	\$9,000.00
47	CABLE BARRIER SYSTEM	LF	414	\$150.00	\$62,100.00
48	CONCRETE BARRIER (TYPE 60M)	LF	39	\$350.00	\$13,650.00
49	REMOVE CONCRETE BARRIER (TYPE K)	LF	416	\$25.00	\$10,400.00
50	REMOVE BOLLARD	EA	4	\$400.00	\$1,600.00
51	LIGHTING SYSTEM	LS	LUMP SUM	\$30,000.00	\$30,000.00
52	BUILDING WORK	LS	LUMP SUM	\$80,000.00	\$80,000.00
53	MOBILIZATION	LS	LUMP SUM	\$44,000.00	\$44,000.00

Total Item Amount: \$29,684,452.46

Attachment 2

Supplemental Work Items and State/Agency Furnished Materials - Estimated Costs

SUPPLEMENTAL WORK ITEMS

1	FEDERAL TRAINEE PROGRAM	\$ 21,600
2	MAINTAIN TRAFFIC	\$ 100,000
3	VALUE ANALYSIS	\$ 10,000
4	DUST PALLIATIVE	\$ 25,000
5	MAINTAIN EXISTING PLANTED AREAS (EXTRA WORK)	\$ 25,000
6	CONTRACTOR YARD	\$ 500,000
7	RESIDENT ENGINEER'S OFFICE	\$ 170,000
8	TEMPORARY DRAINAGE	\$ 200,000
9	REMOVE UNSUITABLE MATERIALS	\$ 50,000
10	ADDITIONAL CONCRETE PILES REMOVAL	\$ 200,000
11	REMOVE BURIED MAN-MADE OBJECTS	\$ 200,000
12	ENVIRONMENTAL MITIGATION	\$ 20,000
13	HISTORICAL INTERPRETIVE SIGNS FOR Q8	\$ 35,000
14	REVEGETATION OF DISTURBED SLOPE	\$ 10,000
15	TEMPORARY BIKE SIGNAGE	\$ 10,000
16	WATER POLLUTION CONTROL MAINTENANCE SHARING	\$ 10,000
17	ADDITIONAL WATER POLLUTION CONTROL	\$ 8,109
18	STORM WATER SAMPLING AND ANALYSIS	\$ 25,000
19	ADDITIONAL SAMPLING AND ANALYSIS OF SURPLUS MATERIAL	\$ 50,000
20	PARTNERING	\$ 70,000
21	PAYMENT ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS	\$ 24,300
22	USCG MISCELLANEOUS WORK	\$ 20,000
23	MAINTAIN EXISTING AND TEMPORARY ELECTRICAL SYSTEM	\$ 20,000
24	USCG DRIVEWAY SECURITY EQUIPMENT	\$ 20,000
25	ADDITIONAL WATER RELOCATION AND METERS	\$ 150,000
26	CONNECT UNDERGROUND ELECTRICAL/COMS TO Q9 OVERHEAD	\$ 20,000
27	ANNUAL CONSTRUCTION GENERAL PERMIT FEE	\$ 1,000
28	ADDITIONAL CONTAMINATION REMEDIATION	\$ 200,000
29	TRAFFIC MANAGEMENT PLAN - PUBLIC INFORMATION	\$ 30,000
30	PENTAGONAL SHAPE BIKE PATH LIGHT POLE	\$ 59,500
31	PENTAGONAL SHAPE ROADWAY ELECTROLIER	\$ 24,000
32	PENTGAONAL SHAPE BIKE PATH ELECTROLIER	\$ 49,000
33	MITIGATION - TORPEDO BUILDING REHAB	\$ 1,508,600
34	TIMMA CIVIL INFRASTRUCTURE COST	\$ 2,700,000
35	BIKE/PEDESTRIAN SAFETY IMPROVEMENTS	\$ 400,000
TOTAL SUPPLEMENTAL WORK ITEMS		\$ 6,966,109

STATE/AGENCY FURNISHED MATERIALS AND EXPENSES

1	COZEEP CONTRACT	\$ 70,000
2	MODEL 2070E CONTROLLER ASSEMBLY	\$ 40,000
3	SFMTA TRAFFIC SIGNAL CONTROLLER ASSEMBLY AND CABINET	\$ 77,000
4	SFPUC FURNISHED WATER SYSTEM MATERIALS	\$ 150,000
5	JOINT TRENCE ELECTRICAL COMPONENTS, INCLUDING TRANSFORMER	\$ 185,825
6	SFPUC ELECTRIC SYSTEM ENERGIZING COSTS	\$ 100,000
7	PG&E GAS DESIGN, INSPECTION, TAX COSTS	\$ 60,000
TOTAL STATE/AGENCY FURNISHED MATERIALS AND EXPENSES		\$ 682,825

TOTAL SUPPLEMENTAL WORK ITEMS AND STATE/AGENCY FURNISHED MATERIALS	\$ 7,648,934
CONTINGENCY	\$ 3,312,483
ADDITIONAL CONSTRUCTION ALLOTMENT SUBTOTAL	\$ 10,961,417
CONSTRUCTION CONTRACT	\$ 29,684,453
TOTAL CONSTRUCTION ALLOTMENT	\$ 40,645,870