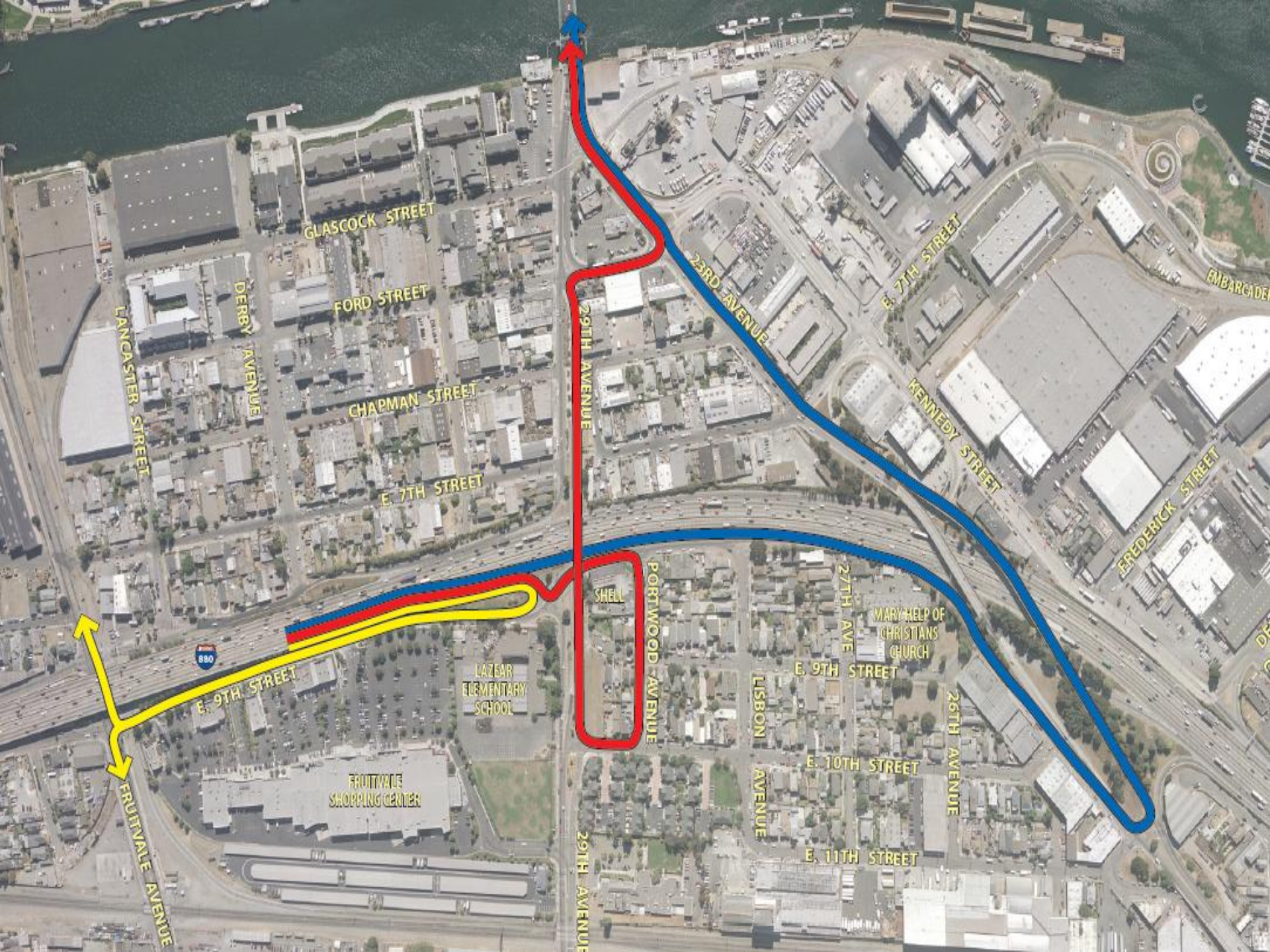
I-880 Operational and Safety Improvements at 29th Avenue and 23rd Avenue Overcrossings

Agenda

- Project Overview
  - ✓ Purpose and Need
  - ✓ Project Features
  - ✓ Stage Construction Phasing
- Potential Subcontracting Work Items

Northbound Mainline Congestion – “Bottlenecks”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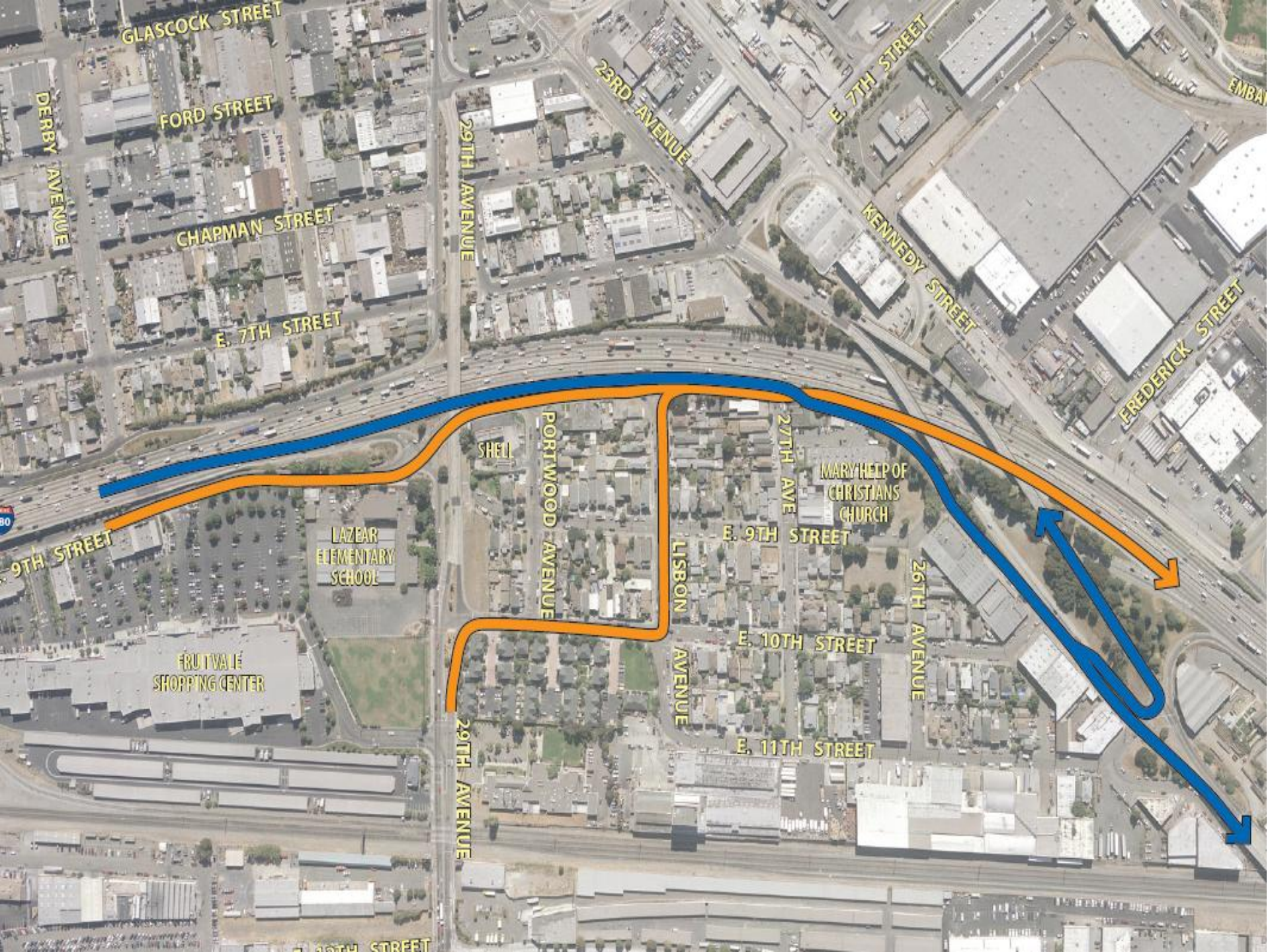
KENNEDY STREET
EMBARCADE
FREDERICK STREET
SHELL
PORTWOOD AVENUE
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
E. 9TH STREET
LISBON AVENUE
26TH AVENUE
E. 10TH STREET
E. 11TH STREET
LAZEAR ELEMENTARY SCHOOL
FRUITVALE SHOPPING CENTER
FRUITVALE AVENUE
880
E. 9TH STREET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SHELL
PORTWOOD AVENUE
LISBON AVENUE
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
E. 9TH STREET
26TH AVENUE
E. 10TH STREET
E. 11TH STREET
29TH AVENUE

xpedx

SUPREME INTERIORS
510-536-3121
SUPREME INTERIORS
28

SIGNS
SAVE

RD STREET
CHAPMAN STREET
E. 7TH STREET
29TH AVENUE
23RD AVENUE
E. 7TH STR
KENNEDY STREET
FREDERICK STREET
880
SHELL
PORTWOOD AVENUE
LIBSON AVENUE
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
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LAZEAR ELEMENTARY SCHOOL
26TH AVENUE
E. 10TH STREET
FRUITVALE OPPING CENTER
E. 11TH STREET

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CHAPMAN STREET
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29TH AVENUE
23RD AVENUE
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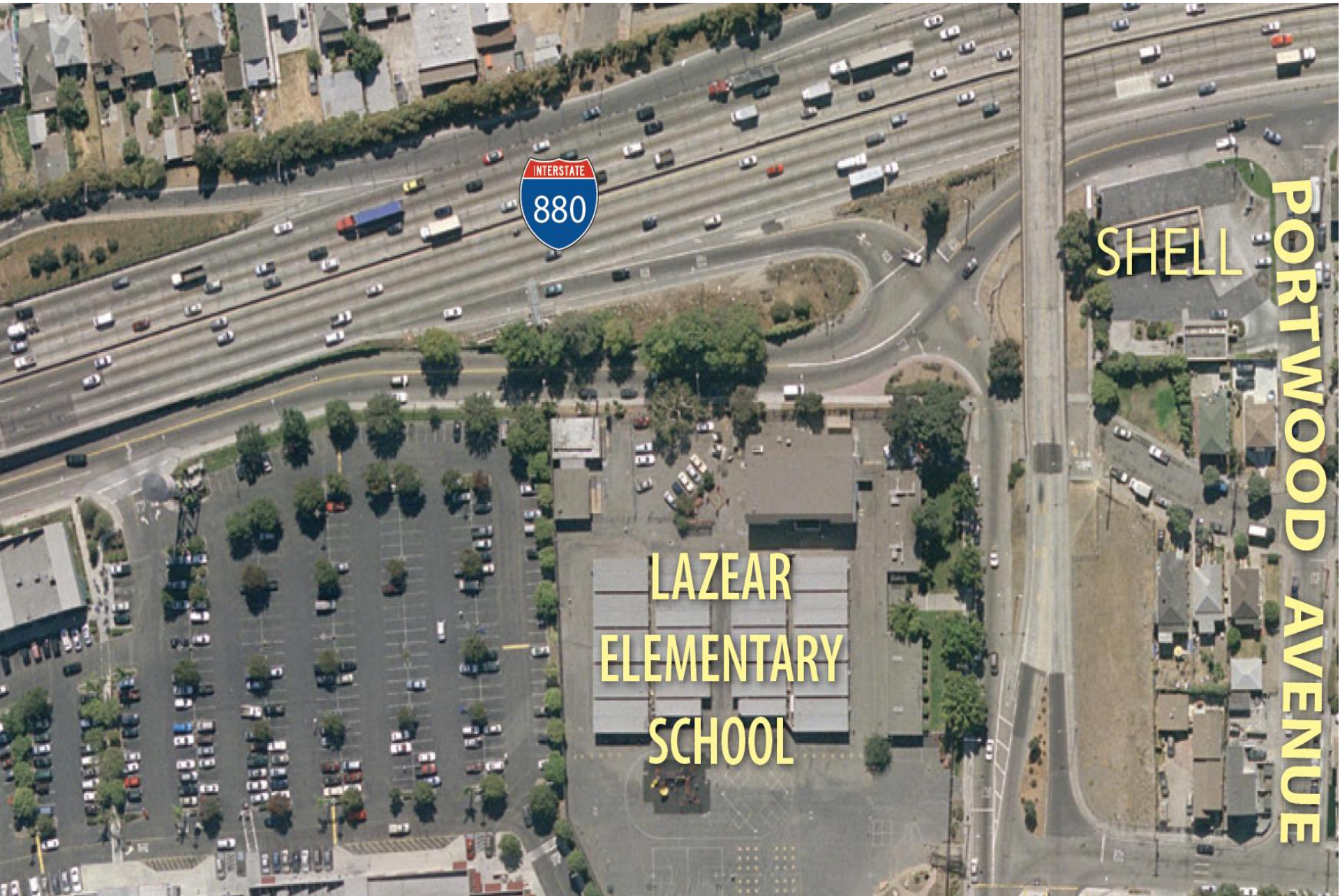
KENNEDY STREET
FREDERICK STREET
880
SHELL
PORTWOOD AVENUE
NEW SOUNDWALL
LISBON AVENUE
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
E. 9TH STREET
LAZEAR ELEMENTARY SCHOOL
26TH AVENUE
FRUITVALE OPPING CENTER
E. 10TH STREET
29TH
E. 11TH STREET

29th Avenue Off Ramp (Existing Conditions)



DO NOT
ENTER
WRONG
WAY
STOP
STOP

23rd Ave 1/4
5th Ave 1 3/4
Oak St 2 1/4
14.9
1000 FT
AHEAD
WEST
29th Ave
EAST

23rd Ave
5th Ave
Oak St

29th Avenue Off Ramp

29th Avenue / E. 9th Street Intersection

29th Avenue NB On Ramp

23rd Avenue (Existing Conditions)

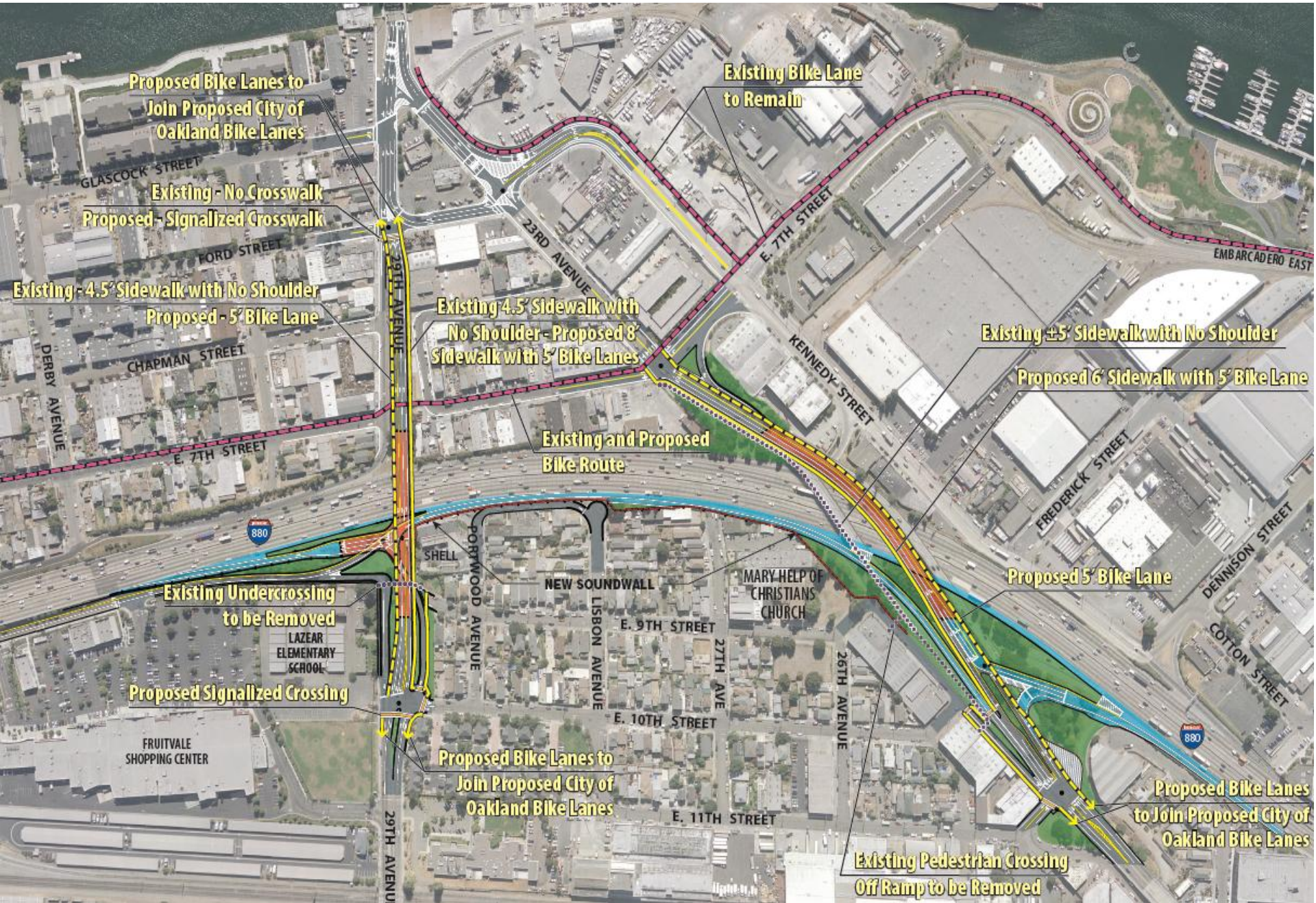
DO NOT
ENTER
WRONG
WAY
DO NOT
ENTER
WRONG
WAY

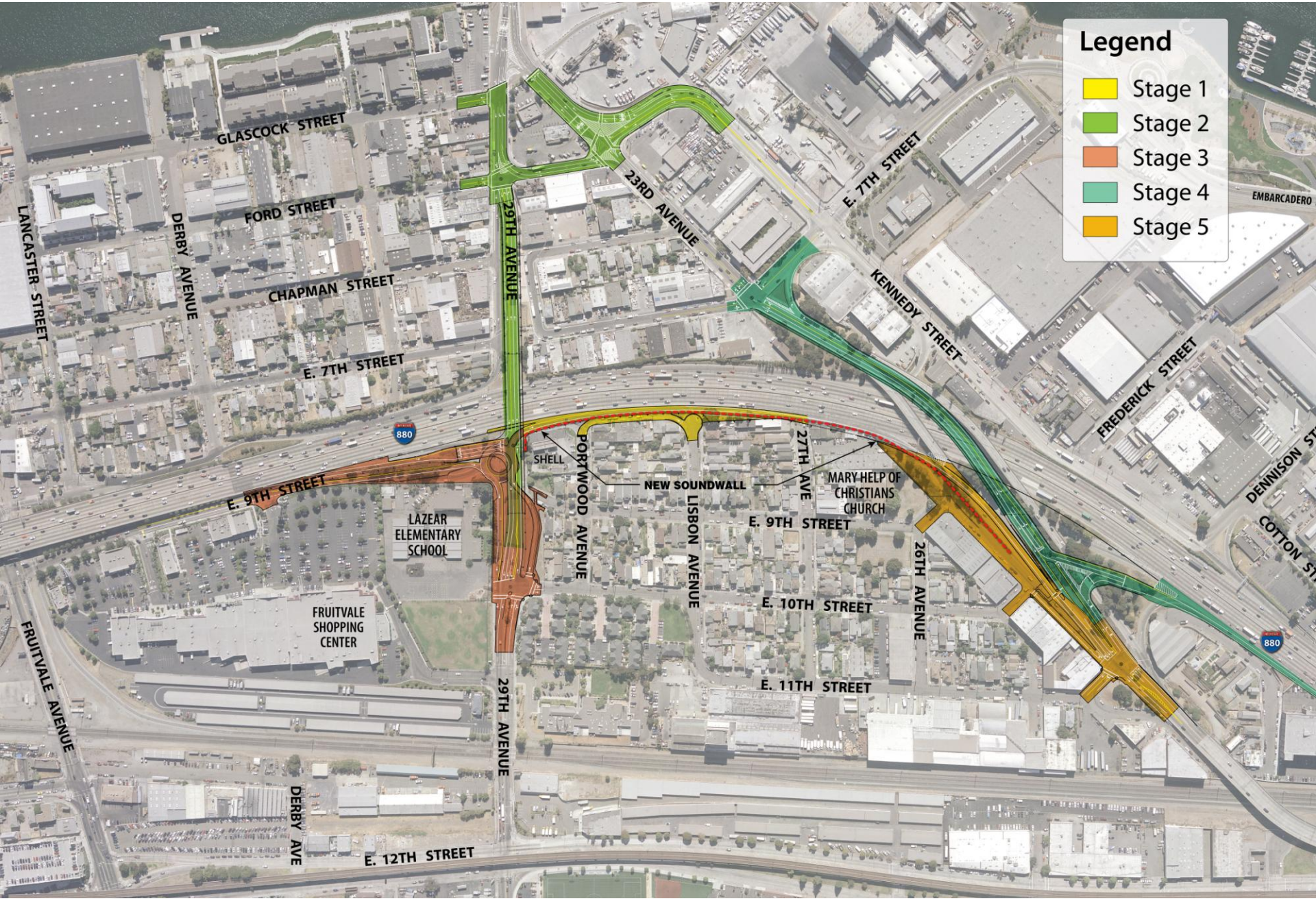
KENNEDY STREET
FREDERICK STREET
UNDWALL
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
E. 9TH STREET
LISBON AVENUE
26TH AVENUE
E. 10TH STREET
E. 11TH STREET

23rd Avenue NB Single On Ramp

23RD AV

Pedestrian and Bicycle Circulation




Legend
Stage 1
Stage 2
Stage 3
Stage 4
Stage 5
GLASCOCK STREET
FORD STREET
CHAPMAN STREET
E. 7TH STREET
LANCASTER STREET
DERBY AVENUE
29TH AVENUE
23RD AVENUE
E. 7TH STREET
KENNEDY STREET
EMBARCADERO
FREDERICK STREET
DENNISON ST
COTTON ST
880
E. 9TH STREET
SHELL
NEW SOUNDWALL
PORTWOOD AVENUE
LISBON AVENUE
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
E. 9TH STREET
LAZEAR ELEMENTARY SCHOOL
26TH AVENUE
FRUITVALE SHOPPING CENTER
E. 10TH STREET
FRUITVALE AVENUE
E. 11TH STREET
DERBY AVE
E. 12TH STREET

Stage 1

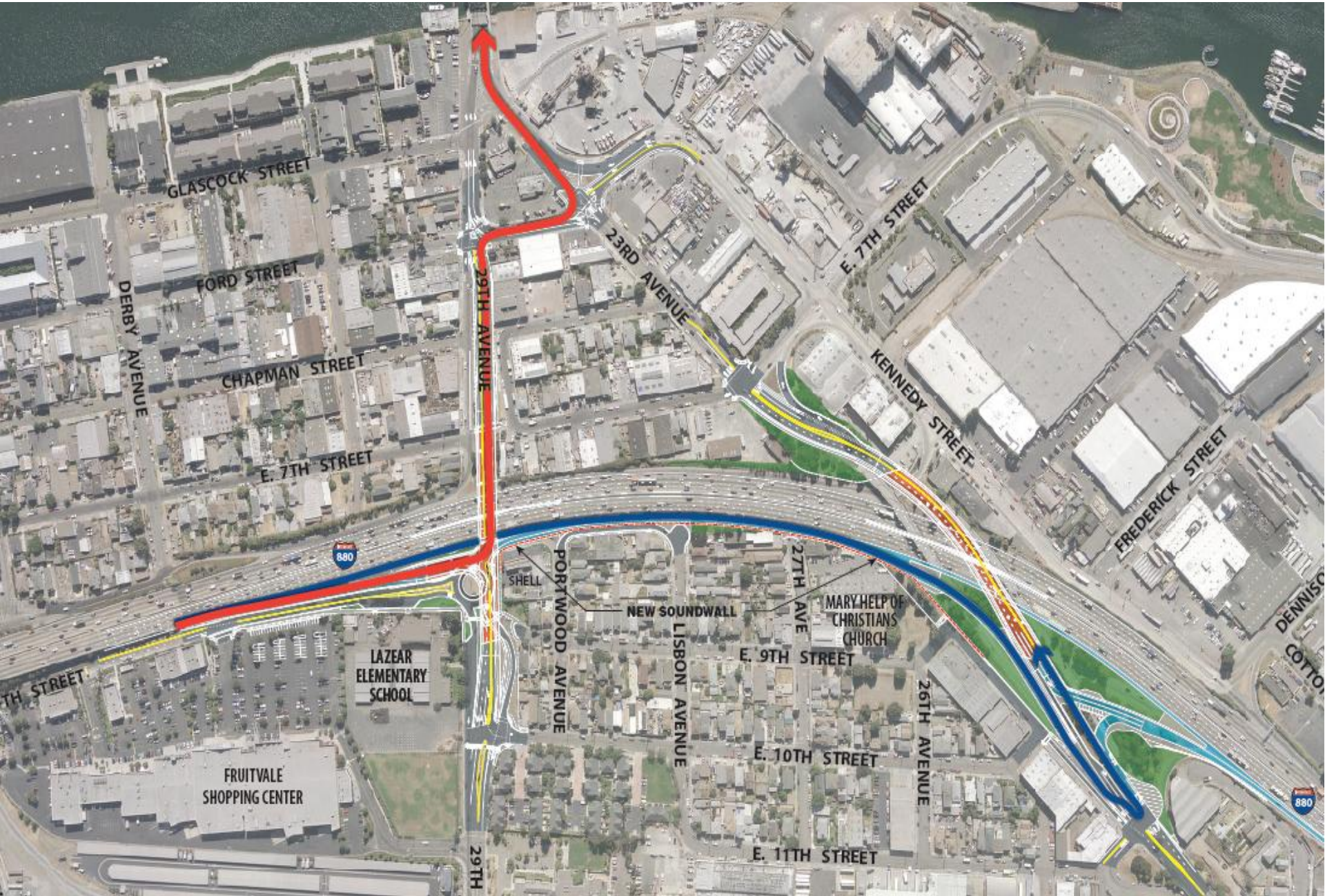
29th Avenue Northbound
On-Ramp Closed 3 Weeks
880
SHELL
PORTWOOD AVENUE
NEW SOUNDWALL
LISBON AVENUE
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
E. 9TH STREET
26TH AVENUE
E. 10TH STREET
E. 11TH STREET
LAZEAR ELEMENTARY SCHOOL
FRUITVALE SHOPPING CENTER
29TH AVENUE
23RD AVENUE
KENNEDY STREET
FREDERICK STREET

Stage 2

29th Avenue Northbound On-Ramp and Off-Ramp Open

Stage 3

FORD STREET
CHAPMAN STREET
E. 7TH STREET
29TH AVENUE
23RD AVENUE
E. 7TH ST
KENNEDY STREET
FREDERICK ST
880
SHELL
PORTWOOD AVENUE
NEW SOUNDWALL
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
LISBON AVENUE
E. 9TH STREET
E. 9TH STREET
Existing Off Ramp Closed
LAZEAR ELEMENTARY SCHOOL
FRUITVALE SHOPPING CENTER
26TH AVENUE
E. 10TH STREET
E. 11TH STREET
29TH AVEN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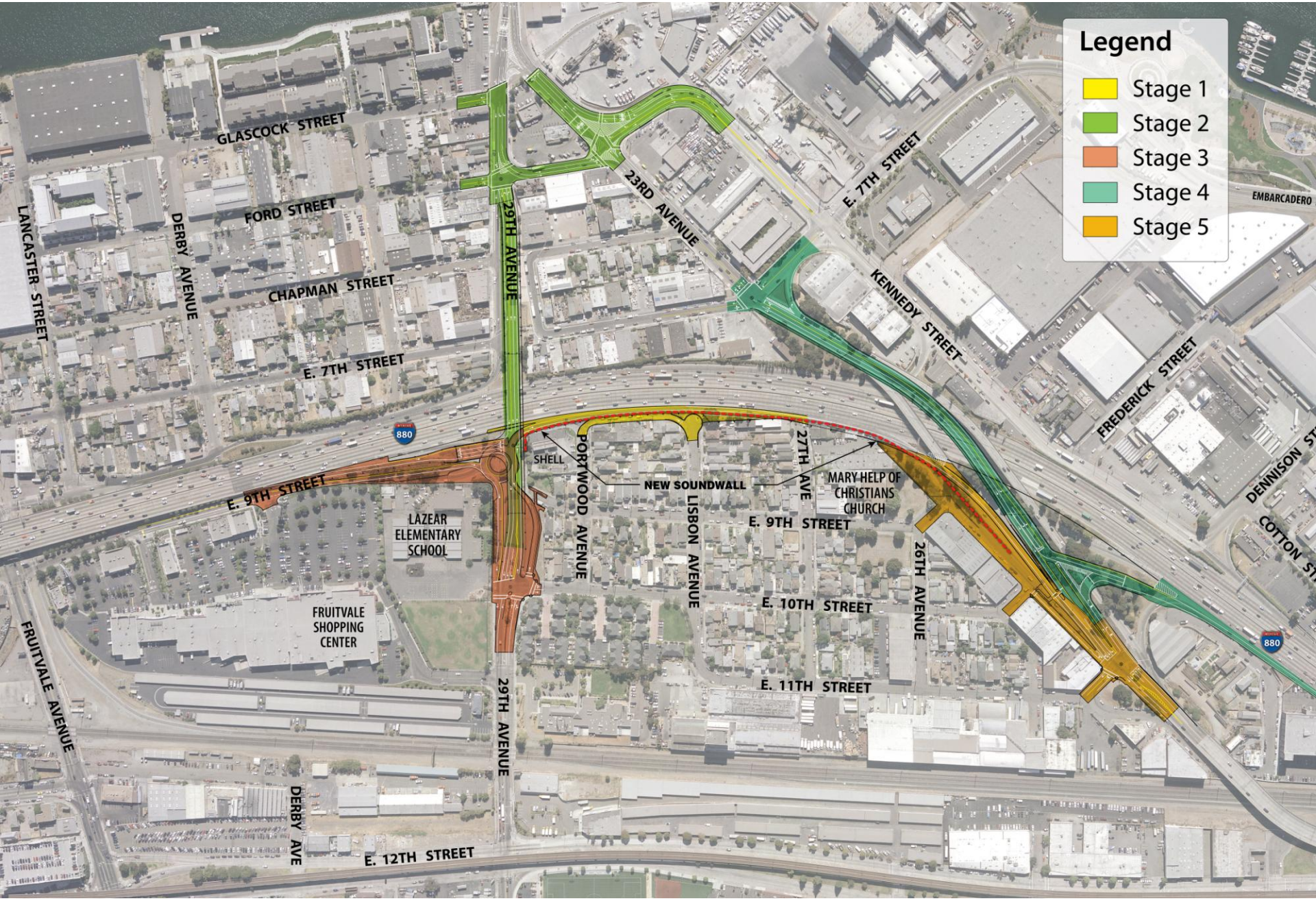
FREDERICK STREET
880
SHELL
PORTWOOD AVENUE
NEW SOUNDWALL
LISBON AVENUE
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
E. 9TH STREET
LAZEAR ELEMENTARY SCHOOL
FRUITVALE SHOPPING CENTER
E. 10TH STREET
26TH AVENUE
E. 11TH STREET
29TH

Stage 4

29TH AVENUE
KENNEDY STREET
EMBARCADERO EAST
FREDERICK STREET
DENNISON STREET
COTTON STREET
SHELL
PORTWOOD AVENUE
NEW SOUNDWALL
LISBON AVENUE
27TH AVE
MARY HELP OF CHRISTIANS CHURCH
E. 9TH STREET
E. 10TH STREET
E. 11TH STREET
26TH AVENUE
880
29TH AVENUE

Stage 5

23rd Avenue
Northbound Off-Ramp
Closed 3 Weeks


Legend
Stage 1
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FRUITVALE AVENUE
E. 11TH STREET
DERBY AVE
E. 12TH STREET

Project Detours and Traffic Management Planning

- ✓ Implement Public Awareness Program
- ✓ Short-term (several hours) and Long-term (several months) Detours
- ✓ Strategic Placement of Portable Changeable Message Signs
- ✓ Traffic Management Plan – Living Document
- ✓ Construction Traffic Management Committee –
  - Caltrans, Alameda, Oakland
- ✓ Construction Traffic Management Contingency Plan
  - “Initial Closure Period” – Implement detours in advance of required work
  - Improve traffic data collection devices along proposed detour routes

Potential Subcontracting Work Items – Page 1

ITEM NO	ITEM CODE	ITEM DESCRIPTION	UNIT (ALT)	QUANTITY
2	074016	CONSTRUCTION SITE MANAGEMENT	LS	LUMP SUM
3	080050	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM
5	120090	CONSTRUCITON AREA SIGNS	LS	LUMP SUM
6	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM
10	128625	PORTABLE CHNAGABLE MESSAGE SIGN (LS)	LS	LUMP SUM
11	129000	TEMPORARY RAILING (TYPE K)	LF	13,600
14	129150	TEMPORARY TRAFFIC SCREEN	LF	13,600
15	130300	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM
19	130570	TEMPORARY COVER	SQYD	4,480
20	130620	TEMPORARY DRAINAGE INLET PROTECTION	EA	130
21	130710	TEMPORARY CONSTRUCTION ENTRANCE	EA	6
22	130730	STREET SWEEPING	LS	LUMP SUM
24	130900	TEMPORARY CONCRETE WASHOUT	LS	LUMP SIUM
27	141120	TREATED WOOD WASTE	LB	31,800
28	148005	NOISE MONITORING	LS	LUMP SUM
30	150204	ABANDON CULVERT (LF)	LF	3,740
31	150605A	REMOVE GUARD POST	EA	4
32	150608	REMOVE CHAIN LINK FENCE	LF	4,300
33	150662	REMOVE METAL BEAM GUARD RAILING	LF	2,310

Potential Subcontracting Work Items – Page 2

34	150711	REMOVE PAINTED TRAFFIC STRIPE	LF	86,700
35	150712	REMOVE PAINTED PAVEMENT MARKING	SQFT	180
36	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	31,400
37	150715	REMOVE THERMOPLASTIC PAVMENT MARKING	SQFT	260
38	150722	REMOVE PAVEMENT MARKER	EA	8,570
39	150742	REMOVE ROADSIDE SIGN	EA	110
40	150757	REMOVE SIGN STRUCTURE (EA)	EA	4
41	150771	REMOVE ASPHALT CONCRETE DIKE	LF	250
42	150809	REMOVE CULVERT (LF)	LF	57
43	150820	REMOVE INLET	EA	49
44	150826	REMOVE MANHOLE	EA	6
45	180832	REMOVE RETAINING WALL (CY)	CY	220
46	150841	REMOVE SEWER PIPE	LF	460
49	152379	RELOCATE FENCE	LF	350
52	152610	MODIFY MANHOLE	EA	6
56	155003	CAP INLET	EA	6
57	155232	SAN BACKFILL	CY	340
62	160102	CLEARING AND GRUBBING (LS)	LS	LUMP SUM
64	190101	ROADWAY EXCAVATION	CY	34,900
66	192003 (F) B	STRUCTURE EXCAVATION (BRIDGE)	CY	5,704
67	192037 (F) B	STRUCTURE EXCAVATION (RETAINING WALL)	CY	5,674

Potential Subcontracting Work Items – Page 3

69	193001	STRUCTURE BACKFILL	CY	4,570
70	193003 (F) B	STRUCTURE BACKFILL (BRIDGE)	CY	3,160
71	193013 (F) B	STRUCTURE BACKFILL (RETAINING WALL)	CY	3,485
75	200001	HIGHWAY PLANTING	LS	LUMP SUM
79	203002	EROSION CONTROL (COMPOST BLANKET)	CY	62
80	203032	EROSION CONTROL (HYDROSEED) (ACRE)	ACRE	4
81	204096	MANITAIN EXISTING PLANTED AREAS	LS	LUMP SUM
82	204099	PLANT ESTABLISHMENT WORK	LS	LUMP SUM
83	206401	MAINTAIN EXISTING IRRIGATION FACILITIES	LS	LUMP SUM
84	208000	IRRIGATION SYSTEM	LS	LUMP SUM
85	208310	IRRIGATION SLEEVE	LF	270
90	220101	FINISHING ROADWAY	LS	LUMP SUM
100	394073	PLACE HOT MIX ASLPHALT DIKE (TYPE A)	LF	250
101	394074	PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	46
103	394077	PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF	23
127	510502	MINOR CONCRETE (MINOR STRUCTURE)	CY	310
128	510526	MINOR CONCRETE (BACKFILL)	CY	330
144	560203	FURNISH SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	LB	6,713
145	560204	INSTALL SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	LB	6,713

Potential Subcontracting Work Items – Page 4

146	560213	FURNISH SIGN STRUCTURE (LIGHTWEIGHT)	LB	11,100
147	560214	INSTALL SIGN STRUCTURE (LIGHTWEIGHT)	LB	11,100
149	560219	INSTALL SIGN STRUCTURE (TRUSS)	LB	40,450
157	566011	ROADSIDE SIGN – ONE POST	EA	62
158	566012	ROADSIDE SIGN – (TWO POST)	EA	11
159	568001	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	74
160	5681015	INSTALL SIGN (MAST-ARM HANGER METHOD)	EA	15
161	568017	INSTALL ROADSIDE SIGN PANEL ON EXISTING POST	EA	4
163	620061	12” ALTERNATIVE PIPE CULVERT (TYPE A)	LF	390
182	709531A	SIDEWALK DRAIN	LF	61
183	714034A	8” CLAY SEWER PIPE	LF	210
184	714038A	18” CLAY SEWER PIPE	LF	230
185	719200A	SEWER MANHOLE	EA	4
192	800103	TEMPORARY FENCE (TYPE CL-6)	LF	7,270
193	800320	CHAIN LINK FENCE (TYPE CL-4)	LF	680
194	800360	CHAIN LINK FENCE (TYPE CL-6)	LF	1,840
195	802560	10’ CHAIN LINK GATE (TYPE CL-6)	EA	4
197	820107	DELINEATOR (CLASS 1)	EA	57
202	833032 (F) B	CHAIN LINK RAILING (TYPE 7)	LF	4,033
204	839514	HANDRAILING	LF	750
205	839541	TRANSITION RAILING (TYPE WB)	EA	5

Potential Subcontracting Work Items – Page 5

209	839703	CONCRETE BARRIER (TYPE 60C)	LF	510
229	840656	PAINT TRAFFIC STRIPE (2-COAT)	LF	105,000
230	840666	PAINT PAVEMENT MARKING (2-COAT)	SQFT	1,120
231	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	5,560
232	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	3,160
234	860201	SIGNAL AND LIGHTING	LS	LUMP SUM
235	860297	SIGNAL AND LIGHTING (CITY)	LS	LUMP SUM
236	860298A	SIGNAL AND LIGHTING (STAGE CONSTRUCTION)	LS	LUMP SUM
237	860299A	SIGNAL AND LIGHTING (CITY) (STAGE CONSTRUCTION)	LS	LUMP SUM
238	860402	LIGHTING (CITY STREET)	LS	LUMP SUM
239	860415	LIGHTING (STAGE CONSTRUCTION)	LS	LUMP SUM
240	860460	LIGHTING AND SIGN ILLUMINATION	LS	LUMP SUM
241	860705A	INTERCONNCECTION SYSTEM (CITY STREET)	LS	LUMP SUM

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