

INTERSECTION 15

Anza Avenue/Sepulveda Boulevard Improvement(s)

Forecast Near-Term Conditions Intersection LOS Summary

	Weekday AM Peak Hour	Weekday Mid-Day Peak Hour	Weekday PM Peak Hour	Weekend Mid-Day Peak Hour
Without Improvement(s)	53.3 – D	42.1 – D	71.2 – E	52.1 – D
With Improvement(s)	46.8 – D	40.1 – D	52.3 – D	45.1 – D

Note: Delay shown in seconds per vehicle; Deficient intersection operation shown in *bold italics*.

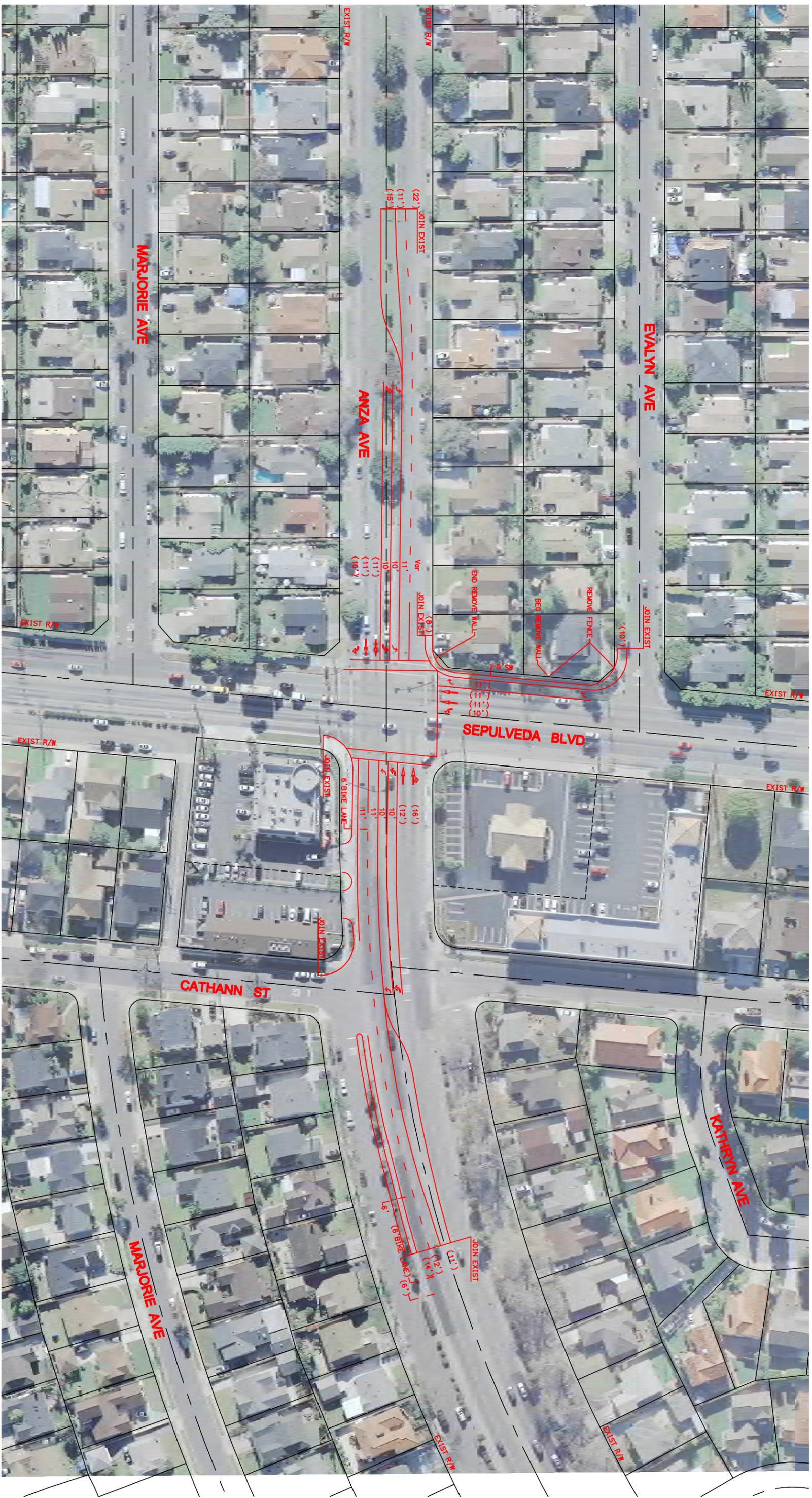
Forecast Long-Range Future Conditions Intersection LOS Summary

	AM Peak Hour	PM Peak Hour
Without Improvement(s)	45.4 – D	55.8 – E
With Improvement(s)	41.3 – D	48.5 – D

Note: Delay shown in seconds per vehicle; Deficient intersection operation shown in *bold italics*.

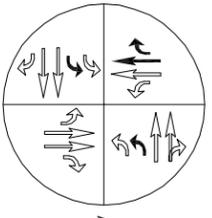
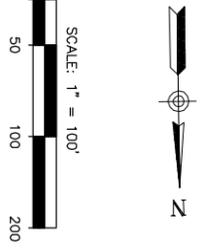
Recommended Improvements:

- Widen the eastbound Sepulveda Boulevard approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane.
- Widen the northbound Anza Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.
- Implementation of the improvements identified at the Anza Avenue/Sepulveda Boulevard intersection will require City acquisition of approximately 12-feet of right-of-way on the northbound Anza Avenue approach and departure to provide adequate alignment of northbound Anza Avenue through lanes and approximately 12-feet of right-of-way on the eastbound Sepulveda Boulevard approach and departure to provide adequate alignment of eastbound Sepulveda Boulevard through lanes. *(Consistent with recommended intersection improvements for forecast near-term conditions.)*
- Additionally, widen the southbound Anza Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.
- Implementation of the improvements identified at the Anza Avenue/Sepulveda Boulevard intersection will require City acquisition of approximately 12-feet of right-of-way on the southbound Anza Avenue approach and departure to provide adequate alignment of southbound Anza Avenue through lanes.



MITIGATIONS:
 NS - ADD LEFT TURN
 SB - ADD THRU & RIGHT TURN
 SB - ELIMINATE THRU/RIGHT
 SB - ADD LEFT TURN

LEGEND:
 EXISTING LANE
 NEW IMPROVEMENT



INTERSECTION 15
ANZA AVE/SEPULVEDA BLVD
 CITYWIDE TRAFFIC ANALYSIS MITIGATION MEASURES

PLANINGS ■ DESIGN ■ CONSTRUCTION

RBF CONSULTING
 1475 ALTON PARKWAY
 IRVINE, CALIFORNIA 92618-2027
 949.472.3905 • FAX 949.837.8007 • WWW.RBF.COM

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DESIGNED: D. CHANLEY
 DRAWN: D. CHANLEY

APPROVED: _____
 DATE: _____

PROJECT ENGINEER: _____
 SCALE: AS SHOWN SHEET 1 OF 1
 PLAN NO. _____

**CITY OF TORRANCE CITYWIDE TRAFFIC ANALYSIS MITIGATION MEASURES
PRELIMINARY COST ESTIMATES**

Location: Intersection 15: Anza Avenue/Sepulveda Boulevard

Date: 3/21/2008

Mitigation: Widen the eastbound Sepulveda Boulevard approach to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the northbound Anza Avenue approach to consist of two left-lanes, two through lanes, and one right-turn lane.

Estimated by: D. Alvarado

	DESCRIPTION OF WORK	UNIT PRICE	QUANTITY	COST
1	Mobilization	10.00% (\$2,000 Min)		\$82,000
2	Clear & Grub	\$10,000.00 / AC	0.15	\$2,000
3	Remove Striping	\$10.00 / LF	1,207	\$12,100
4	Remove Curb & Gutter	\$15.00 / LF	573	\$9,000
5	Remove Median Curb	\$30.00 / LF	1,269	\$38,000
6	Remove PCC Sidewalk	\$3.50 / SF	3,092	\$11,000
7	Remove Pavement	\$4.00 / SF		\$0
8	Remove Wall	\$50.00 / LF	133	\$7,000
9	Remove Channel	\$15.00 / LF		\$0
10	Remove/Replace Chain Link Fence	\$50.00 / LF		\$0
11	Remove/Replace Wrought Iron Fence	\$10.00 / LF	109	\$1,000
12	Remove/Replace Survey Monument	\$800.00 / EA		\$0
13	Reconstruct Metal Beam Guard Rail	\$70.00 / LF		\$0
14	Remove & Relocate Tree	\$3,000.00 / EA	7	\$21,000
15	Sawcut	\$1.00 / LF	854	\$900
16	Relocate Street Light	\$7,500.00 / EA	3	\$22,500
17	Relocate Traffic Signal System	\$300,000.00 / EA	0.25	\$75,000
18	Signal Phase Modification	\$10,000.00 / EA		\$0
19	Relocate Freeway Sign (2 post)	\$1,000.00 / EA		\$0
20	Relocate Sign (1 Post)	\$300.00 / EA	5	\$1,500
21	Reconstruct Overhead Sign	\$50,000.00 / EA		\$0
22	Relocate Call Box	\$2,000.00 / EA		\$0
23	Relocate Power Pole	\$25,000.00 / EA	2	\$50,000
24	Relocate Catch Basin	\$9,000.00 / EA		\$0
25	Relocate Fire Hydrant	\$2,500.00 / EA	1	\$2,500
26	Relocate Bus Shelter	\$2,000.00 / EA		\$0
27	Relocate Bus Bench	\$600.00 / EA		\$0
28	Relocate Monument Sign	\$5,000.00 / EA		\$0
29	Relocate Utility Boxes	\$500.00 / EA		\$0
30	Relocate Main Water Valve	\$10,000.00 / EA		\$0
31	Relocate Utility Vault	\$3,000.00 / EA	3	\$9,000
32	Adjust Manhole to Grade	\$1,000.00 / EA	3	\$3,000
33	Adjust Water Meter	\$2,000.00 / EA		\$0
34	Adjust Water Valve	\$500.00 / EA		\$0
35	Adjust Minor Above Ground Utilities	\$500.00 / EA	1	\$1,000
36	Modify Driveway	\$5,000.00 / EA	2	\$10,000
37	Earthwork	\$40.00 / CY	1,612	\$64,000
38	Construct PCC Pavement	\$15.00 / SF		\$0
39	Construct AC Pavement	\$14.00 / SF	8,702	\$122,000
40	Construct AC Overlay	\$3.00 / SF		\$0
41	Construct Slurry Seal	\$0.25 / SF		\$0
42	Construct Striping & Marking	\$4.00 / LF	1,207	\$4,900
43	Construct AC Dike	\$7.00 / LF		\$0
44	Construct Curb & Gutter	\$40.00 / LF	578	\$23,000
45	Construct Concrete Barrier	\$50.00 / LF		\$0
46	Construct Median Curb	\$20.00 / LF	892	\$18,000
47	Construct Median Concrete	\$10.00 / SF		\$0
48	Construct Median/Parkway Landscaping	\$10.00 / SF	3,992	\$40,000
49	Construct PCC Sidewalk	\$10.00 / SF	1,878	\$19,000
50	Construct Access Ramp	\$5,000.00 / EA	2	\$10,000
51	Construct Retaining Wall	\$50.00 / SF		\$0
52	Construct Storm Drain Main	\$100.00 / LF		\$0
53	Construct RCB	\$1,000.00 / LF		\$0
54	Construct Headwall	\$5,000.00 / EA		\$0
55	Construct Concrete V-Ditch	\$15.00 / LF		\$0
56	Construct Bridge Widening	\$500.00 / SF		\$0
57	Construct Wall	\$70.00 / LF	133	\$9,000
58	Building/Structure Demolition (1-Story Bldg)	\$10.00 / SF		\$0
59	Traffic Control (\$5,000 min)	8%	1	\$47,000
60	Drainage Items	10%	1	\$63,000
61	SWPPP Plan and Implementation	6%	1	\$40,938
	CONSTRUCTION SUBTOTAL			\$819,338
	Right-of-Way	100 / SF		\$0
	Right-of-Way Management	5 / %		\$0
	RIGHT-OF-WAY SUBTOTAL			\$0
	TOTAL CONSTRUCTION & RIGHT-OF-WAY COST			\$820,000
	Preliminary Project Development (10% of total Construction/RW cost)			\$82,000
	Design Engineering/Administration Costs (15% of total Construction/RW cost) (\$10,000 min)			\$123,000
	Construction Engineering Costs/Administration (10% of total Construction/RW cost) (\$5,000 min)			\$82,000
	Contingency (20% of Total Construction/RW cost) (\$5,000 min)			\$164,000
	TOTAL PROJECT COSTS			\$1,271,000