07-LA-101, PM s0.0/25.90
1786-0700001842K (EA 28270K)
Program Code 201.015
August, 2011

Project Study Report – Project Report
to
Request Programming in the 2012 SHOPP Collision Reduction Program
and
Request Project Approval

On Route LA-101
Between LA-005 (PM s0.00)
And LA-027, Topanga Blvd (PM 25.90)

I have reviewed the right of way information contained in this Project Study Report-Project Report and the Right of Way Data Sheet attached hereto, and find the data to be complete, current and accurate:

for ANDREW NIERENBERG
Deputy District Director, Division of Right of Way

APPROVAL RECOMMENDED BY:

JAVAD RAHIMZADEH
Project Manager

CONCURRED BY:

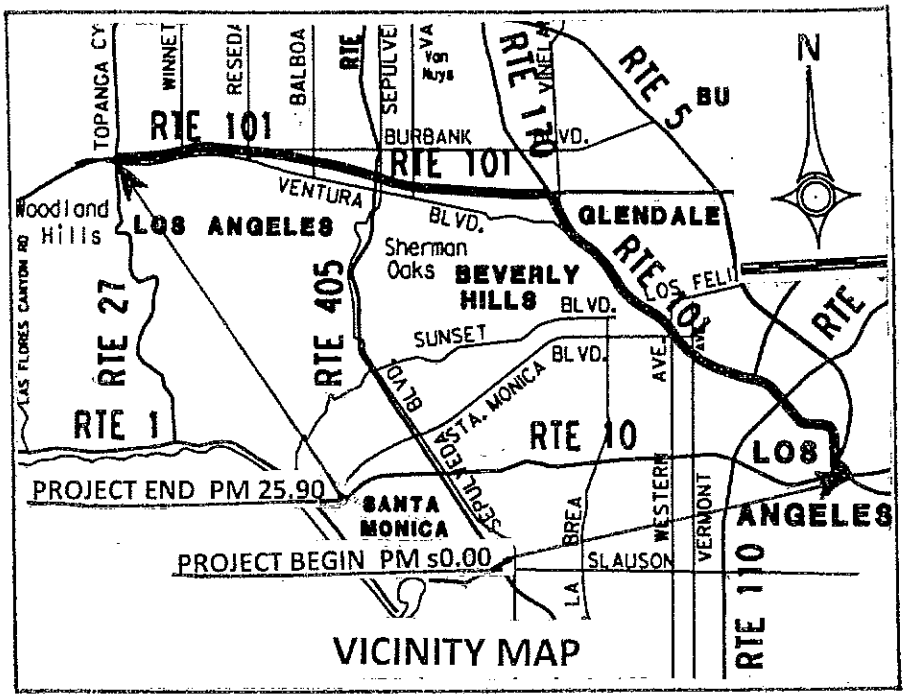
JAMES McCARTHY
Deputy District Director, Division of Planning, Public Transportation, and Local Assistance

WILLIAM REAGAN
Deputy Director, Division of Design

APPROVED:

MICHAEL MILES, District Director

9/19/11
DATE



On Route LA-101

Between LA-005 (PM S-0.00)

And LA-027, Topanga Blvd (PM 25.90)

This Project Study Report-Project Report has been prepared under the direction of the following registered engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

JAMES VU, Project Engineer

8/26/2011
DATE

REGISTERED PROFESSIONAL ENGINEER
JAMES S. VU
C 58683
Exp. 12/31/12
CIVIL
STATE OF CALIFORNIA

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1. INTRODUCTION

This project proposes to install about 26,000 feet of Metal beam Guardrail (MBGR), 1200 feet of Concrete Barrier(CB), and 4 attenuators at 85 locations where MBGR is missing or damaged along Route 101 mainline and adjacent ramps, between Route 5 near downtown Los Angeles (PM s0.0), and Route 27, Topanga Canyon Boulevard (PM 25.9).

Where practical, existing shoulder will be widened to standard width and asphalt concrete dikes will be reconstructed. As needed, the project will modify and reconstruct existing curb and gutter drainage to current MBGR standards, modify stormdrain manholes, reconstruct shoulder, and restripe pavement. A few existing underground electrical lines, ramp meter systems, and/or irrigation systems will be relocated or replaced to allow the installation of the new MBGR. The scope of work will include clearing and grubbing, excavation, and replacement of disturbed landscaping features. All work will be performed within Caltrans right-of-way.

Support cost is $3,229,000. The construction cost is $9,830,000 in year 2011 dollars. The construction cost, escalated at 5% per year, would be $11,950,000 in the proposed program year of 2014/15. See Attachment C, Project Cost Estimate, for details.

Project Limits:	07-LA-101, PM S0.00/25.90
Construction Costs:	$9,830,000
Right of Way Costs:	$20,000
Funding Source:	2014/15 SHOPP Collision Severity Reduction Program 201.015
Number of Alternatives:	One: "Build"
Recommended for Programming:	Alternative One: "Build"
Type of Facility:	Freeway
Number of Structures	Not applicable
Anticipated Environmental Determination/Document	Categorical Exclusion/Categorical Exemption
Legal Description	On U.S. 101 in Los Angeles County, between Interstate Route 005 and State Route 027

2. RECOMMENDATION / PROPOSAL

It is recommended that this Project Study Report-Project Report be approved, and that the project be programmed in the 2014/15 SHOPP Collision Severity Reduction Program, Code 201.015.

3. BACKGROUND

Route 101 is a major north-south arterial highway. In the city and county of Los Angeles, Route 101 is designated as a freeway, and is commonly known as the Hollywood Freeway to the south of the Route 101/170/134 interchange, and as the Ventura Freeway to the north of that interchange. It is part of the Federal Aid Primary (FAP) system, which is a subset of the National Highway System.

Route 101 begins in East Los Angeles, a short distance southeast of Los Angeles Civic Center. The route cuts north through the Santa Monica Mountains via the Cahuenga pass, connecting the downtown Los Angeles and Hollywood neighborhoods with the San Fernando Valley to the northwest; and further, to the Ventura County Line and beyond.

Within the project boundaries, US-101 intersects with:

- Routes 005/010 Interchange (beginning of project);
- Route 110, the Pasadena Freeway / Harbor Freeway;
- Route 002, the Glendale Freeway (Route 002 shares the US-101 facility for a short distance);
- Routes 134/170 Interchange;
- Route 405, the San Diego Freeway;
- Route 27, the Topanga Canyon Highway (end of project).

The adjacent land use is about 2/3 residential, and also includes the Downtown Los Angeles business district and various commercial neighborhoods; studio and entertainment sites including Universal Studios, Hollywood Bowl, and Ford Theater; and the Sepulveda Dam Recreation Center, a major recreational site in the San Fernando Valley.

US-101 has been officially designated "El Camino Real" for most of the location of this project, as it approximately parallels the historic "El Camino Real" - The "Royal Highway" - that linked the California missions from San Diego to Solana. Mission bell markers can be seen along the length of the freeway.

Trucks comprise from 3.22% to 4.66% of the vehicles at this location.

There are no bicycle or pedestrian facilities at the location of the project.

4. PURPOSE AND NEED STATEMENT

The purpose of this project is to lower the incidence, and reduce the severity of run-off-road/over embankment collisions, and collisions involving fixed objects, by installing metal beam guardrails (MBGR) or concrete barrier (CB) where needed, and installing attenuators. These installations will close gaps in the existing MBGR system at selected locations, reduce collision impact severity, and shield fixed objects in the recovery area.

The current high traffic volume is projected to continue to grow. This increases the potential that existing end treatments and/or guardrails will be struck more frequently.

Closing gaps in the MBGR system will improve safety and operations by reducing the number and severity of run-off–road/over-embankment type incidents, dissipating the energy of errant vehicles, and redirecting vehicles from fixed objects onto the roadway.

The low maintenance features of these installations will reduce the exposure of Caltrans workers to traffic.

This collision severity reduction project is consistent with the Caltrans goal of achieving significant reductions in fatalities and injuries on all public roads in California.

5. DEFICIENCIES

Annual Average Daily traffic (AADT) in Year 2009, the most recent year for which counts are available, varies from 126,000 at the Route 101/1st Street interchange (PM s0.307), to 321,000 at the Route 101/Route 405 interchange (PM 17.17). Historically, AADT has steadily increased over the years. If this trend continues, safety of the route will be increasingly compromised.

At the project location, Route 101 consists of four to five lanes in each direction - the lanes varying from 11 feet to 12 feet in width, a concrete median barrier with left shoulders varying from 1 foot to 10 feet in width, and right shoulders varying from 1 foot to 10 feet in width. The ramps have right shoulders varying from 1 foot to 10 feet in width, and left shoulders varying from 2 feet to 4 feet in width.

Existing nonstandard geometric features, as discussed in the Highway Design Manual (HDM), 6th Edition, are shoulder widths and horizontal clearances.

A Fact Sheet Exceptions to Mandatory Design Standards for the nonstandard shoulder widths and horizontal clearances, was approved on August 17, 2011.

Wherever feasible, MBGR, concrete barrier, and attenuators will be constructed at standard horizontal clearance and standard shoulder width. At some sites, however, it is beyond the scope of this project to bring existing geometric conditions to standard. To do so would require bridge widening or replacement, ramp realignment, and right of way acquisition. Such modifications would

seriously delay completion of this needed collision-severity reduction project. The costs alone could kill the project.

The nonstandard project locations are addressed in detail in the Fact Sheet.

See Attachments D1 and D2 for a complete list of project locations, including existing and proposed horizontal clearances and shoulder widths.

6. CORRIDOR AND SYSTEM COORDINATION

This project is consistent with the District System Management Plan.

Adjacent or Related Projects on LA-101, PM s0.00-25.90, in Design Phase

EA	PM/PM	Project Details	Status
251200	s00.2/s00.2	Structure Replacement, betw 101/5 sep and 101/6th IC	RTL Feb 2013
220000	0.4/0.4	Construct Railroad Viaduct	RTL Nov 2018
258931	1.0/1.0	Sand Filters & Infilt. Devices	RTL Jun 2012
265901	1.0/11.0	Upgrade Bridge Rails	RTL Nov 2012
283800	1.4/15.6	Vine Planting Trans Enhancement, various locations	RTL Dec 2014
201900	4.5	Widen St & OC at Vermont St. (oversight, LA Co)	RTL Jul 2012
267300	10.2/10.8	Widen Freeway and Ramps, Lankershim Blvd to S/O LA River Br	RTL Feb 2017
249400	13.0/13.8	Construct Auxiliary Lane, betw Laurel Cyn Blvd and Coldwater Cyn Blvd	RTL Dec 2014
249700	23.4/24.1	Add NB Auxiliary Lane bet. Winnetka and DeSoto	RTL Dec 2014
225900	24.7/25.8	Widen Ramps, NB/O Canoga Ave and SB/O Ven /Topanga Cyn Blvd	RTL Jan 2014
249200	24.9/38.2	Restripe Roadway	RTL Jan 2017

RTL = Ready to List

7. ALTERNATIVES

Viable Alternative:

The "Build" alternative, which comprehensively addresses the MBGR deficiencies at 85 locations within the project boundaries, is addressed in this PSR-PR.

Scope of work includes clearing and grubbing, excavation, modification of some drainage facilities, relocation of electrical facilities, widening shoulders, constructing MBGR, constructing concrete barrier, installing attenuators, placing asphalt concrete pavement, restriping, and replacement of disturbed landscaping features.

Rejected Alternatives:

Several smaller MBGR projects, each of which addressed a portion of the MBGR deficiencies on Route 101, have been rejected in favor of the comprehensive MBGR project addressed in this PSR-PR.

The "no-build" alternative was also rejected. If gaps in the existing MBGR system are not addressed, accident rates for run-off-road and over-embankment type collisions can be expected to increase as future traffic volumes increase.

8. CONSIDERATIONS REQUIRING DISCUSSION

A few locations have been removed from the original scope of this project. Location #8 was not identified. Locations #44, #66, and #67 are located in culturally sensitive areas, and require extensive environmental study that would considerably delay the target approval date of this project. It is suggested that these sites be included in future projects.

Other projects programmed for future construction on LA-101 may include MBGR components in addition to their primary focus and should be checked to avoid duplication.

9. OTHER CONSIDERATIONS AS APPROPRIATE

None evident.

10. COMMUNITY INVOLVEMENT

No public meeting has been scheduled for this project. Public information will be provided prior to project construction. Full public support is anticipated for this collision reduction project.

11. ENVIRONMENTAL DETERMINATION / DOCUMENTATION

The environmental document for this project is Categorical Exemption / Categorical Exclusion / Programmatic Categorical Exclusion (CE/CE). See Attachment F1.

A preliminary Hazardous Waste Assessment was performed for this PSR/PR phase. A site investigation request will be required at the PS&E phase. Funds for Hazardous Waste Mitigation are included in the Cost Estimate (Attachment C).

Project is exempt from Air Quality conformity.

See Attachment F. Environmental Clearance.

12. FUNDING AND PROGRAMMING

Capital Cost

Capital Cost Estimate for 2015 SHOPP

Fiscal Year	Right of Way Capital	Construction Capital
FY11	20,000	**9,830,000**
FY15	28,376	**11,950,000**

Capital Support Estimate -

	PROJECT SUPPORT COMPONENTS								
	PA&ED 0 Phase		Design 1 Phase		Right of Way 2 Phase		Construction 3 Phase		Total
	Dist	DES	Dist	DES	Dist	DES	Dist	DES	
Estimated PY's	3.07		6.27		0.4		8.15		17.9
Estimated PS $'s	474		1,231		99		1,425		3,229
Estimated PYE $'s ($1000's)									0
Total $'s	474	0	1,231	0	99	0	1,425	0	3,229

13. SCHEDULE

HQ Milestones	Delivery Date (Month, Day, Year)
Project PS&E	11/24/2014
Right of Way Certification	7/17/2014
Ready to List	3/11/2015
Approve Contract	9/15/2015
Contract Acceptance	4/20/2017
End Project	7/17/2017

14. FHWA COORDINATION

No federal-aid funding is anticipated and no FHWA action is required for this Collision–Reduction project

15. PROJECT PERSONNEL

Name	Title/Office	Phone
District 7, California Department of Transportation		
Elaheh Yadegar	Supervising Transportation Engineer, Office of Project and Special Studies	213-897-9635
Min Wun	Senior Transportation Engineer, Office of Project and Special Studies	213-897-9565
Javad Rahimzadeh	Project Manager, Division of Program and Project Management	213-897-6846
James Vu	Project Engineer, Office of Project and Special Studies	213-897-0116
Jinous Saleh	Senior Environmental Planner, Division of Environmental Planning	213-897-0683
Samer Momani	Associate Environmental Planner, Division of Environmental Planning	213-897-2777
Sheik Moinuddin	Senior Transportation Engineer, Office of Traffic Investigations	213-897-8092
Son Dao	District 7 Safety Program Liaison	213-897-0273
Albert Yu	Senior Transportation Engineer, Office of District Traffic Manger	213-897-0285
Dan Murdoch	Senior Right of Way Agent, Office of Right of Way Planning & Management	(213) 897-1816
Headquarters, California Department of Transportation		
Shaila Chowdhury	HQ Safety Program Advisor	(916) 654-3748

16. PROJECT REVIEWS

Field Reviews	Project /Special Studies Team	Date: 9-2009/8-2010
District Maintenance Review	Roger Castillo	Date: 12/15/2010
Traffic Investigation Review	Sheik Moinuddin	Date: 6/24/2010
District Design Review	Derek Higa	Date: 8/17/2011
HQ Design Coordinator/Reviewer	JD Bamfield	Date: 8/03/2011
District SHOPP Program Advisor	Son Dao	Date: 6/24/2010

17. ATTACHMENTS

Attachment A Project Vicinity and Location Maps

Attachment B Aerial Photo Layouts

Attachment C Project Cost Estimate

Attachment D Project Locations and Work Descriptions:
- D1: Field Notes, Locations and Work Descriptions, Northbound
- D2: Field Notes, Locations and Work Descriptions, Southbound
- D3: Traffic Investigation Conceptual Report / Conceptual Approval

Attachment E TASAS – Table B

Attachment F Environmental Clearance:
- F1: Categorical Exemption/Categorical Exclusion (CE/CE)
- F2: Preliminary Hazardous Waste Assessment
- F3: Air Quality Review

Attachment G Right of Way Data Sheets

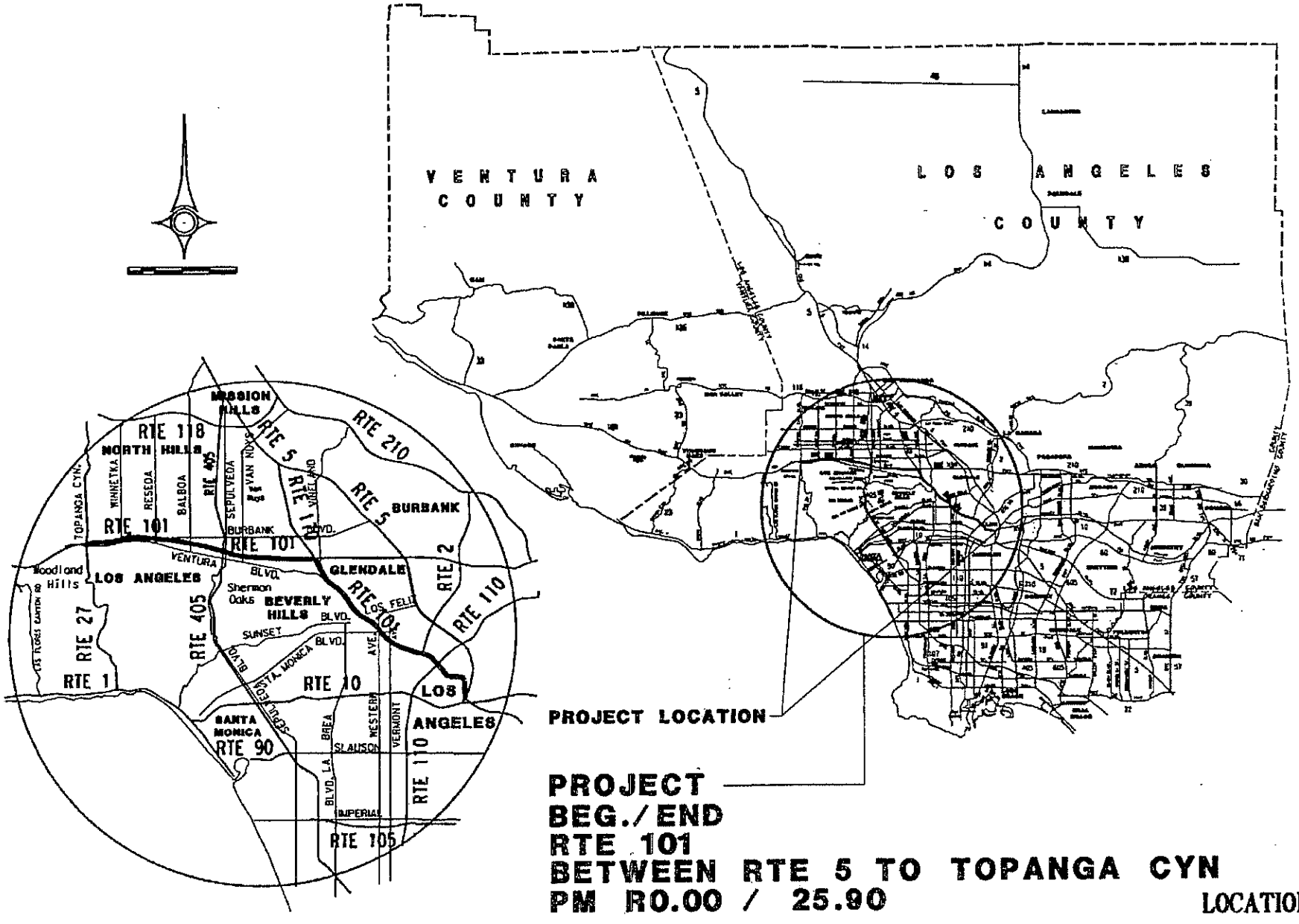
Attachment H Transportation Management Plan (TMP)

Attachment I Stormwater Data Report

Attachment J Project Work Plan and Schedule

Attachment K Risk Management Plan

ATTACHMENT A
Location Map



PROJECT
BEG./END
RTE 101
BETWEEN RTE 5 TO TOPANGA CYN
PM R0.00 / 25.90

LOCATION MAP

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ATTACHMENT B
Aerial Photo Layouts

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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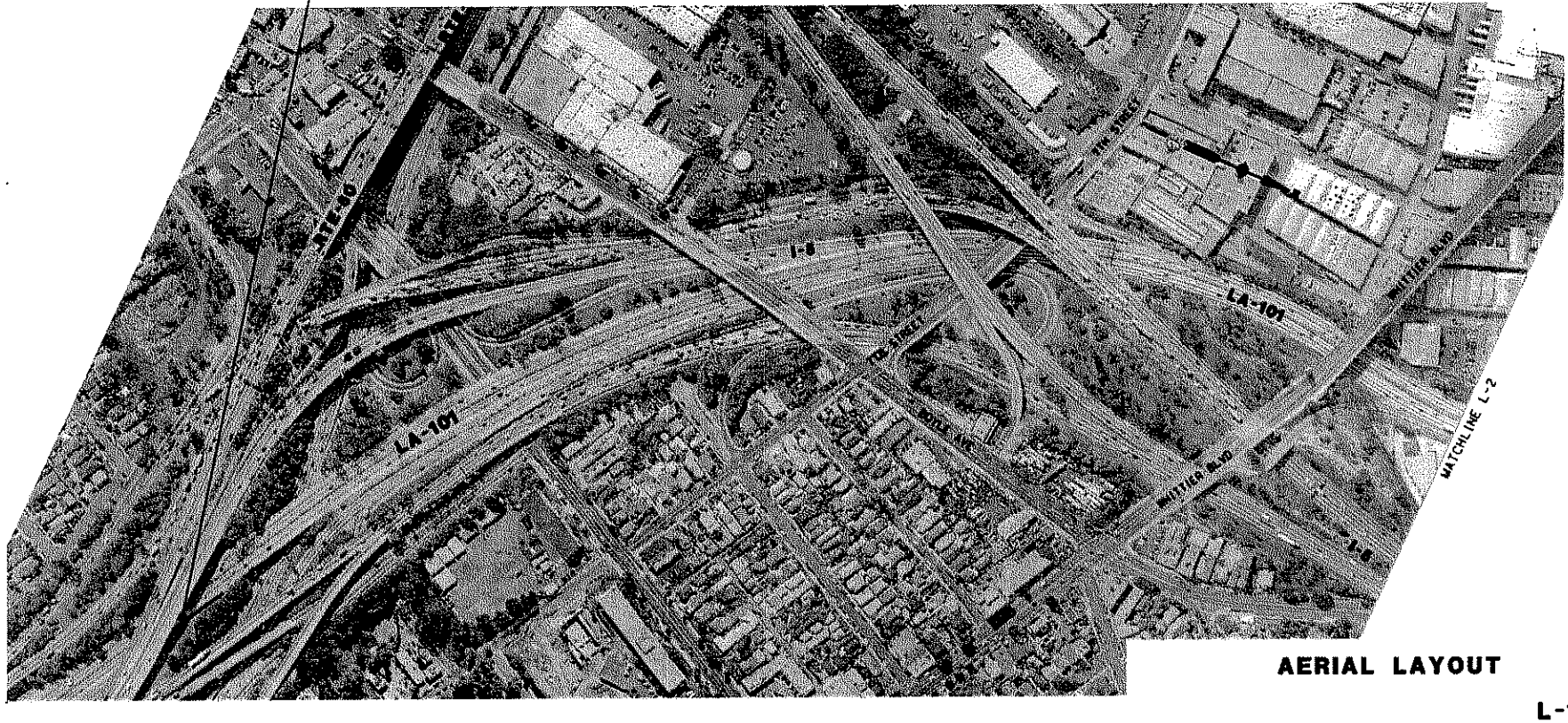
REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

Loc 1A: L=250' (w/ 160' Taper)
Remove Curb & Gutter
Construct 10' Shld & AC Dike. Remove ET
Construct MBGR



AERIAL LAYOUT

L-1

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State of California - Department of Transportation

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Caltrans

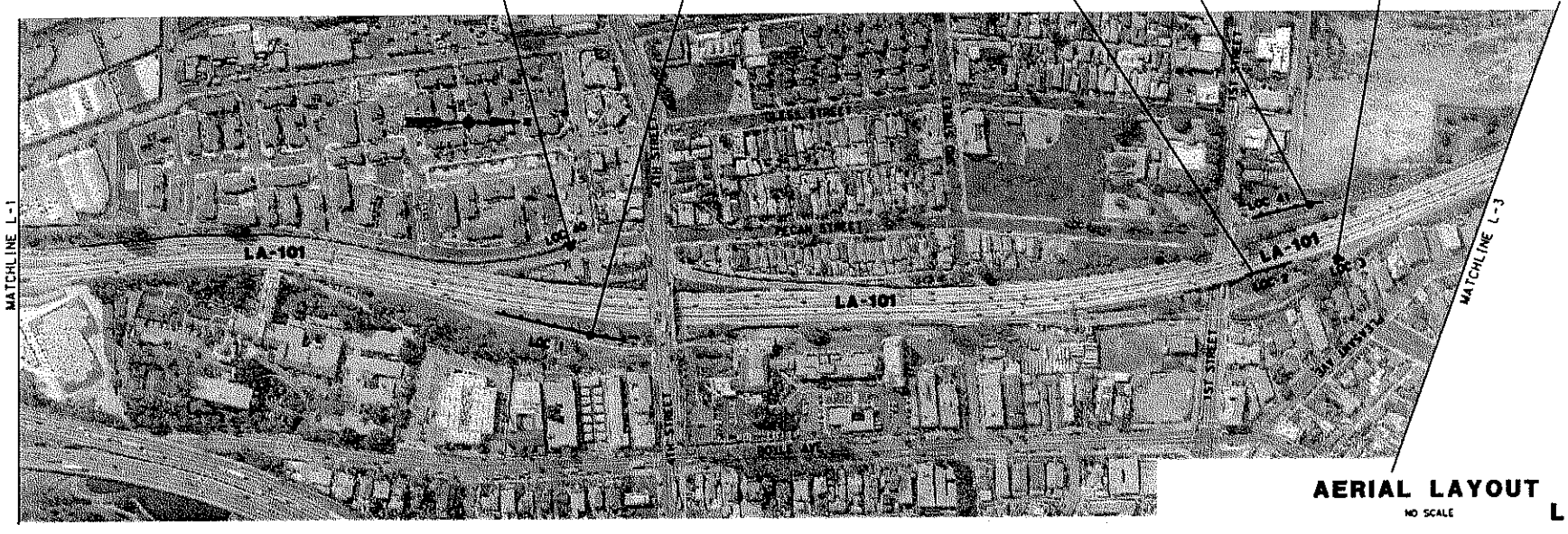
Loc 41: L=317'
Remove end treatment
Construct MBGR

Loc 2: L=190'
Remove Curb
Const 10' Shld, Curb & Gtr
Const MBGR

Loc 3: L=15'
Install attenuator

Loc 40: L=15'
Remove Curb & Gutter
Construct 8' Shld
Install attenuator

Loc 1: L=520'
Remove Curb
Const 4'- Shld, Curb & Gtr
Const MBGR w/ end treatment



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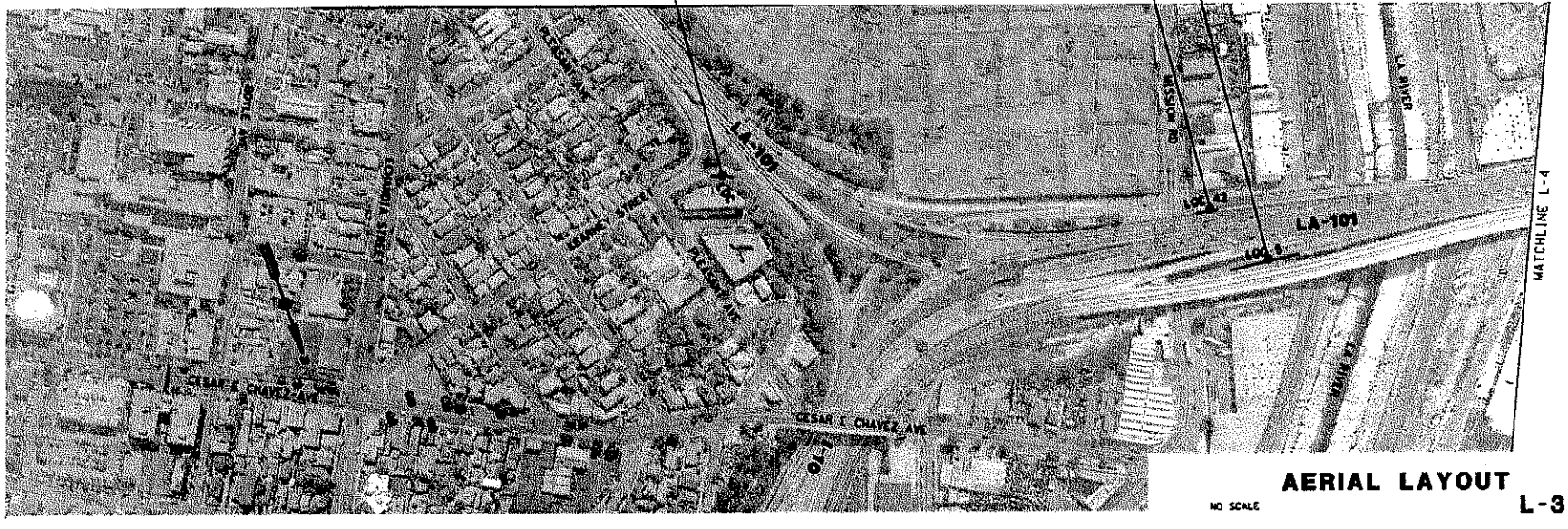
Loc 5: L=220'
Remove Curb & Gutter
Const 8' Shld
Const MBGR w/ end treatment

Loc 4: L=30'
Const Crash Cushion
Restripe 10'-Rt shld

Loc 42: L=135'
Remove Curb & Gutter
Const CB (Type 60)

MATCHLINE L-2



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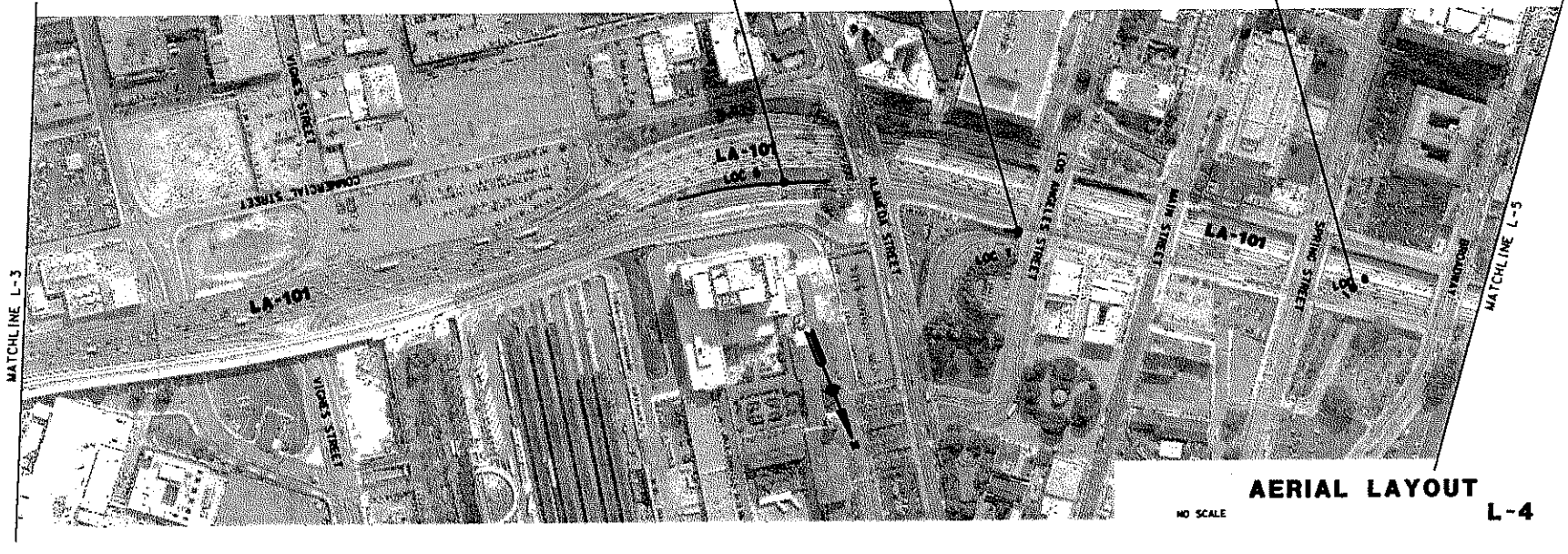
Loc 7: L=40'
Const end treatment

Loc 8
(This site has been removed from the original scope of this project)

Loc 6: L=466'
Reconst 4' Shld
Const MBGR w/ end treatment



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Caltrans

Loc 43: L=100'
Repl Railing w/ similar type

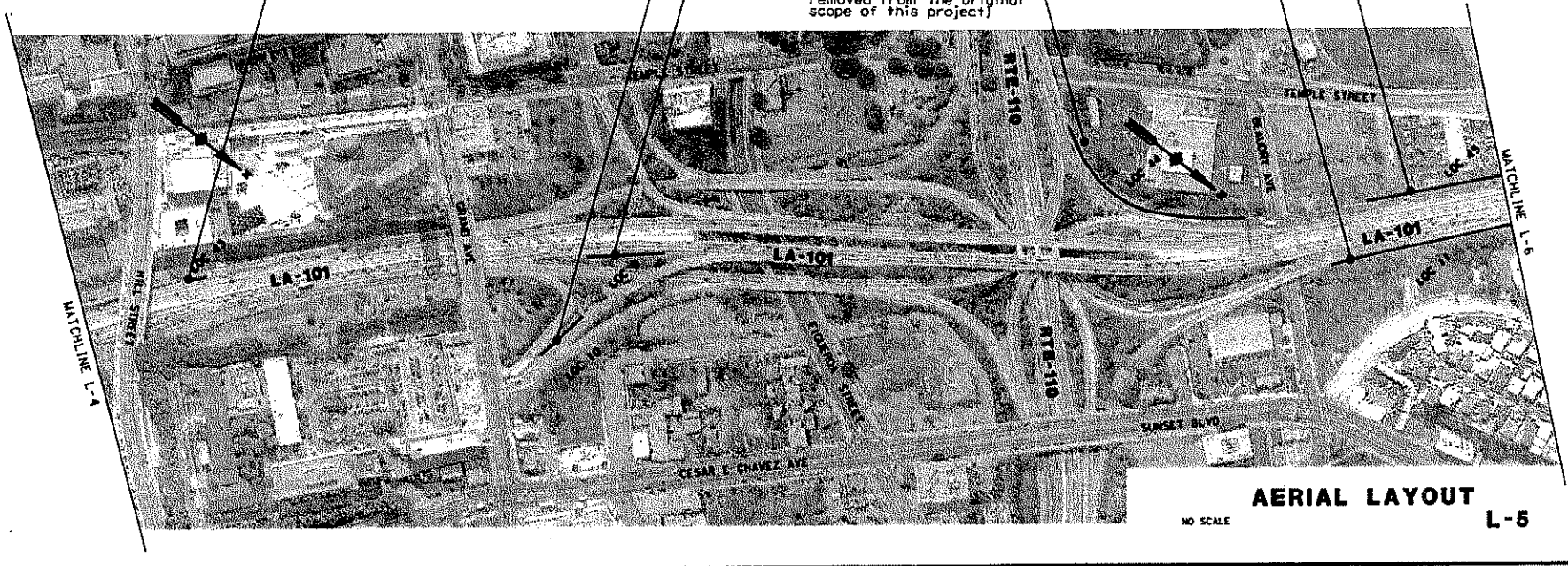
Loc 10: L=100'
Remove end treatment
Const MBGR w/ end treatment

Loc 9: L=140'
Const MBGR w/ end treatment
Reconst 10'-Shld

Loc 44: L=750'
(This site has been removed from the original scope of this project)

Loc 11: L=650'
Const MBGR w/ end treatment
Reconst 10'-Shld

Loc 45: L=950'
Replace MBGR



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REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

Loc 45: L=950'
Repl MBGR

Loc 46: L=240 (with 40' taper)
Relocate elect line
Const CB
Reconst 10'-Shld

Loc 47: L=460'
(To join Loc #46)
Relocate elect. line
Relocate traffic sign
Remove MBGR (340')
Construct CB
Reconst 10' Shld

Loc 48: L=180' (w/ 120' taper)
Remove end treatment
Rel elec & elect lines
Const 8' Shld
Const MBGR w/ end treatment

AERIAL LAYOUT

NO SCALE

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Loc 49: L=163'
Rel elect line
Const MBGR w/ end treatment

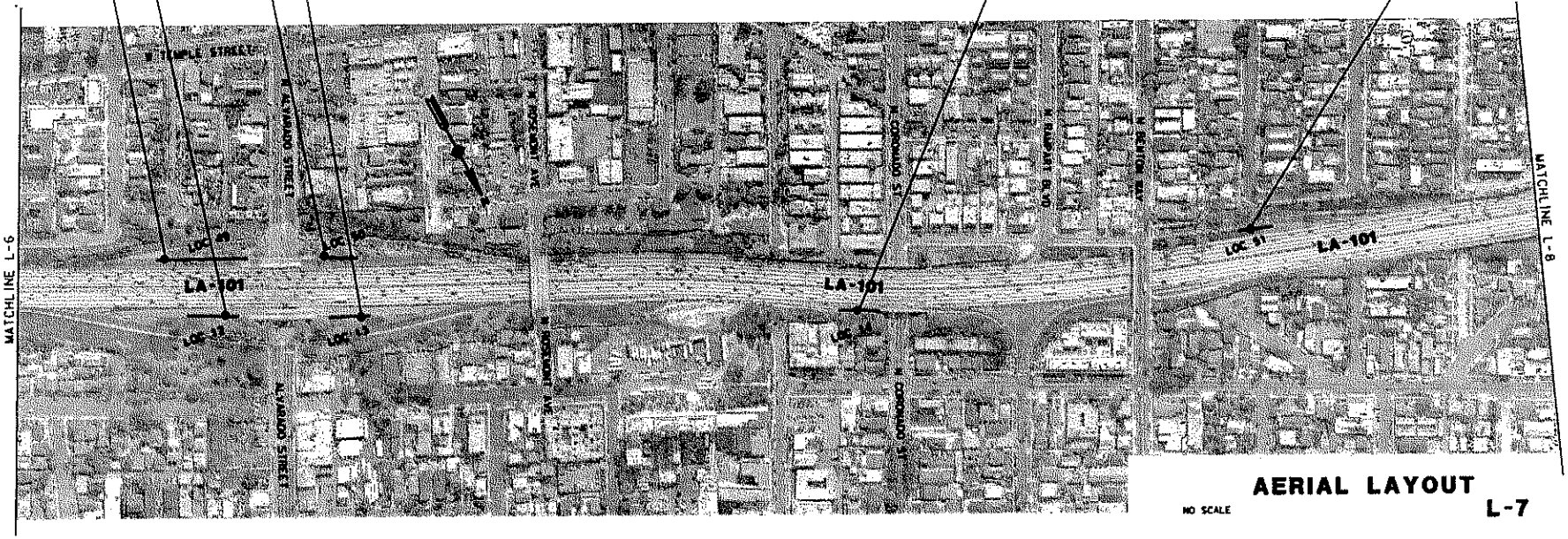
Loc 12: L=200'
Rel elect line
Const MBGR

Loc 50: L=214'
Rel elect line
Const MBGR w/ end treatment

Loc 13: L=163'
Rel elect lines
Const MBGR w/ end treatment

Loc 14: L=214' (w/ 160' taper)
Remove MBGR (60')
Const MBGR w/ end treatment
Reconst 10'-Shld

Loc 51: L=314'
Const MBGR w/ end treatment



AERIAL LAYOUT

NO SCALE

L-7

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

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Loc 54: L=300' (w/ 120' taper)
Modify Drainage
Reconst 10'-Shld
Remove end treatment
Const MBGR w/ end treatment

Loc 53: L=174'
Remove Curb
Const 10' - Shld & AC dike
Const MBGR

Loc 16: L=245'
Const MBGR w/ end treatment

Loc 55: L=274'
Const 8' Shld
Const MBGR

Loc 17: L=168'
Remove Curb & Gtr
Modify irrigation system
Rel elect line
Const 4' - Shld, Curb & Gtr
Const MBGR

Loc 52: L=500'
Remove Curb
Rel SD manhole
Rel ramp meter sys.
Const MBGR w/ end treatment
Const 8'-Shld

LOC. 57
(This site has been removed from the original scope of this project)

Loc 15: L=150'
Remove Curb
Modify Stormdrain manhole
Const 8' - Shld, Curb & Gtr
Const MBGR

Loc 56: L=1000'
Rel ramp meter sys
Remove MBGR (100')
Const 8' - Shld
Const MBGR w/ end treatment

NO SCALE

AERIAL LAYOUT

L-8

Dist	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => MREQUEST

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EA 000000

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TIME PLOTTED => 01:14

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Loc 58: L=746'
Remove MBGR (80')
Rel elect line
Const MBGR

Loc 18: L=239'
Const MBGR w/ end treatment
Reconst 8'-Shld

Loc 59: L=220'
Relocate Elect Line
Reconstruct 10-Shld
Remove End Treatment
Construct MBGR w/ ET

Loc 59A: L=220'
Relocate Elect Line
Reconstruct 10-Shld
Remove End Treatment
Construct MBGR w/ ET

Loc 19: L=70'
Const MBGR w/ end treatment

NO SCALE

AERIAL LAYOUT

L-9

DATE PLOTTED => DATE
TIME PLOTTED => TIME

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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EA 000000

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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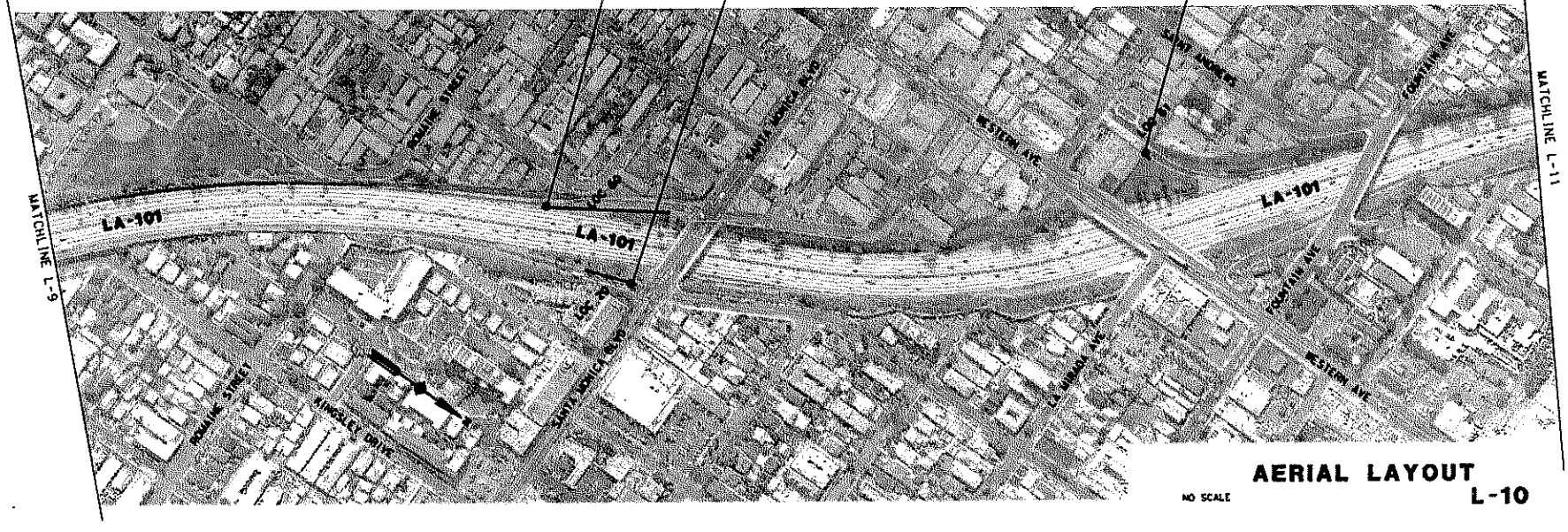
REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

Loc 60: L=227'
Const MBGR w/ end treatment

Loc 20: L=300'
Rel elect line
Modify irrigation system
Remove Curb & Gtr
Const 4' - Shld, Curb & Gtr
Const MBGR

Loc 61 L=15'
Reconstruct Shld
Install attenuator



NO SCALE

AERIAL LAYOUT
L-10

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION

USER NAME DATE PLOTTED
00-00-00 TIME PLOTTED

BORDER LAST REVISED 4/11/2008

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

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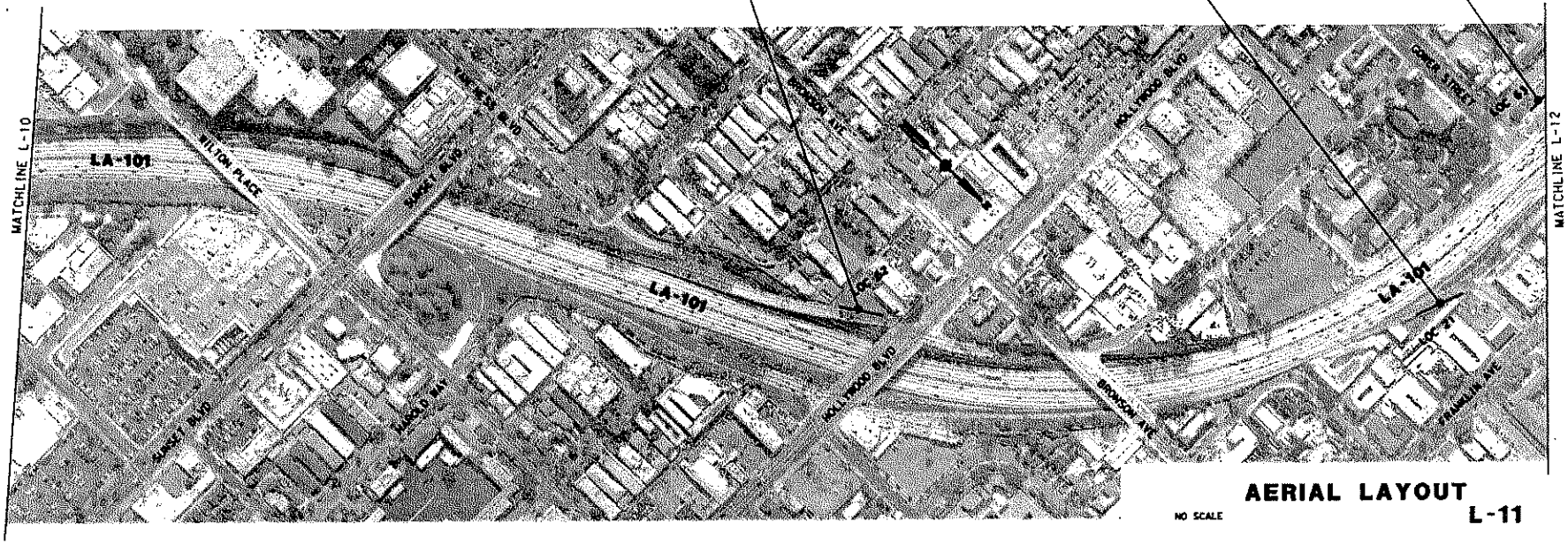
Loc 63: L=139'
Const MBGR

Loc 62: L=74'
Remove Curb & Gtr
Const 8' - Shld & Gtr
Const MBGR w/ end treatment

Loc 21: L=141'
Reconst dike. Const MBGR



AERIAL LAYOUT

NO SCALE

L-11

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION

FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

USER REVISION DATE PLOTTED => MDATE TIME PLOTTED => STIME 00-00-00

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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District	County	Route	Post Miles Total Project	Sheet No.	Total Sheets

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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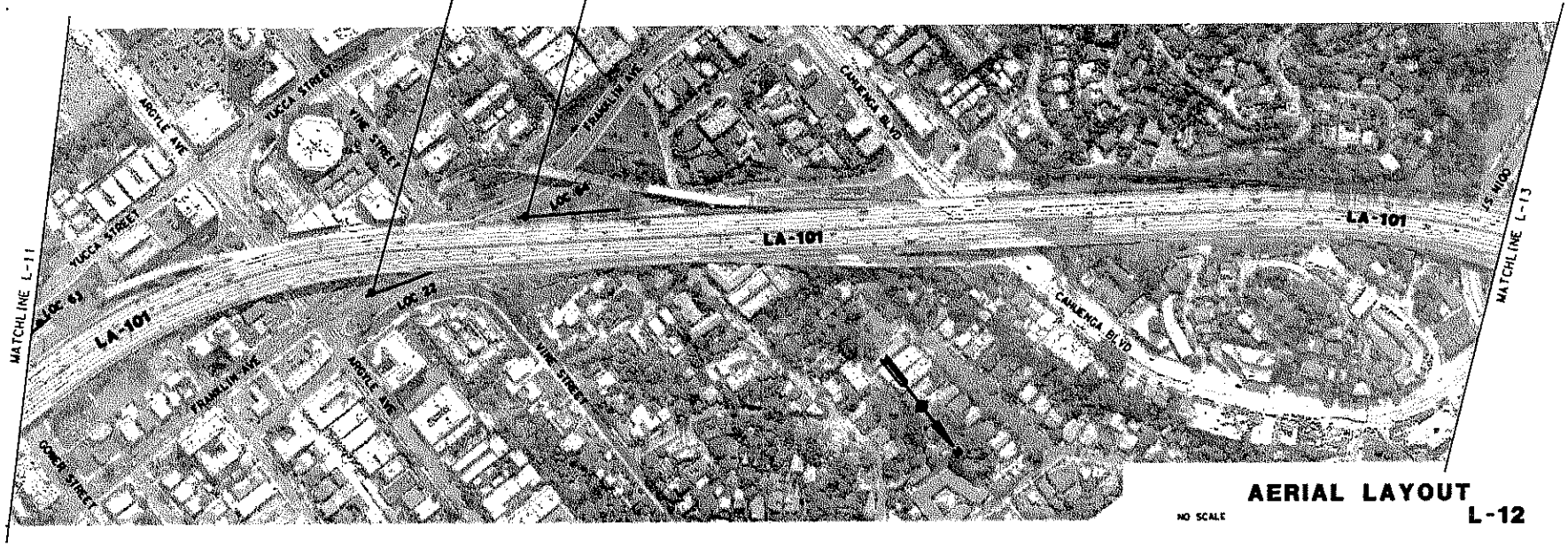

NO SCALE

AERIAL LAYOUT

L-12

DGN: AERIAL DATE PLOTTED => MONTH DAY YEAR
TIME PLOTTED => HR:MIN
00-00-00

BORDER LAST REVISED 4/11/2008

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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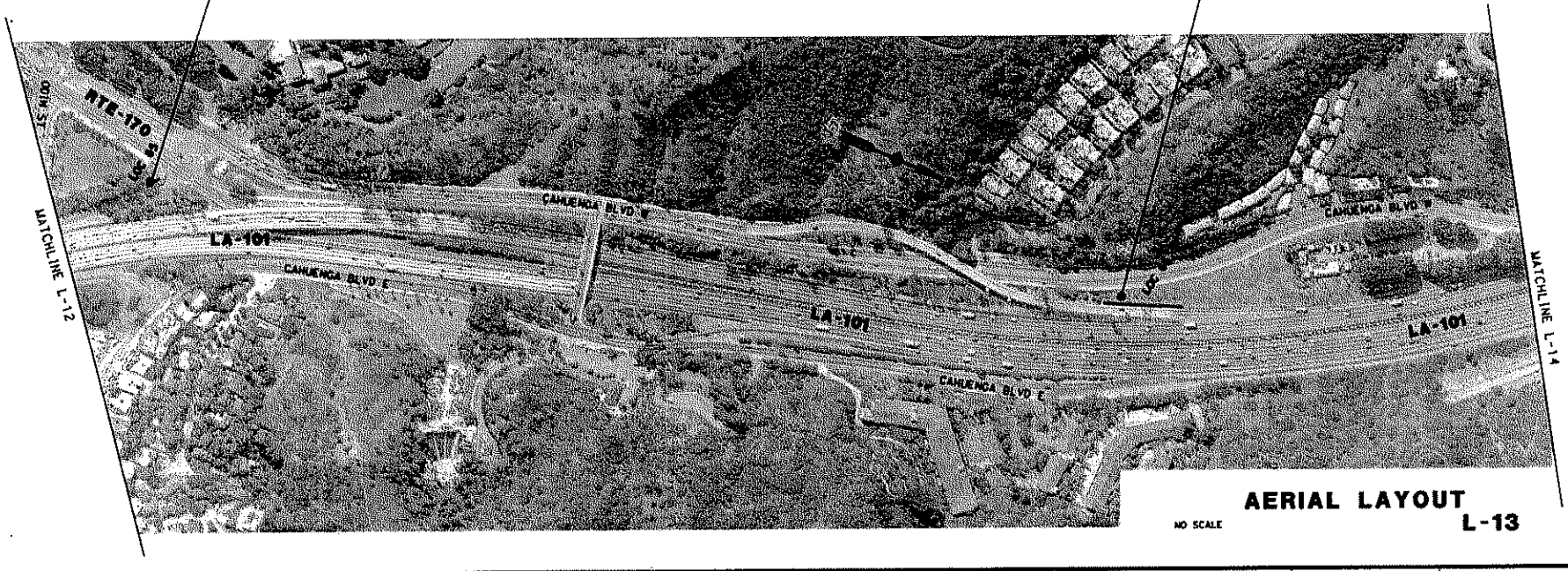
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

Loc 65 L=15'
Modify existing CB
Install attenuator

Loc 66: L=380'
(This site has been removed from the original scope of this project)



AERIAL LAYOUT
L-13

NO SCALE

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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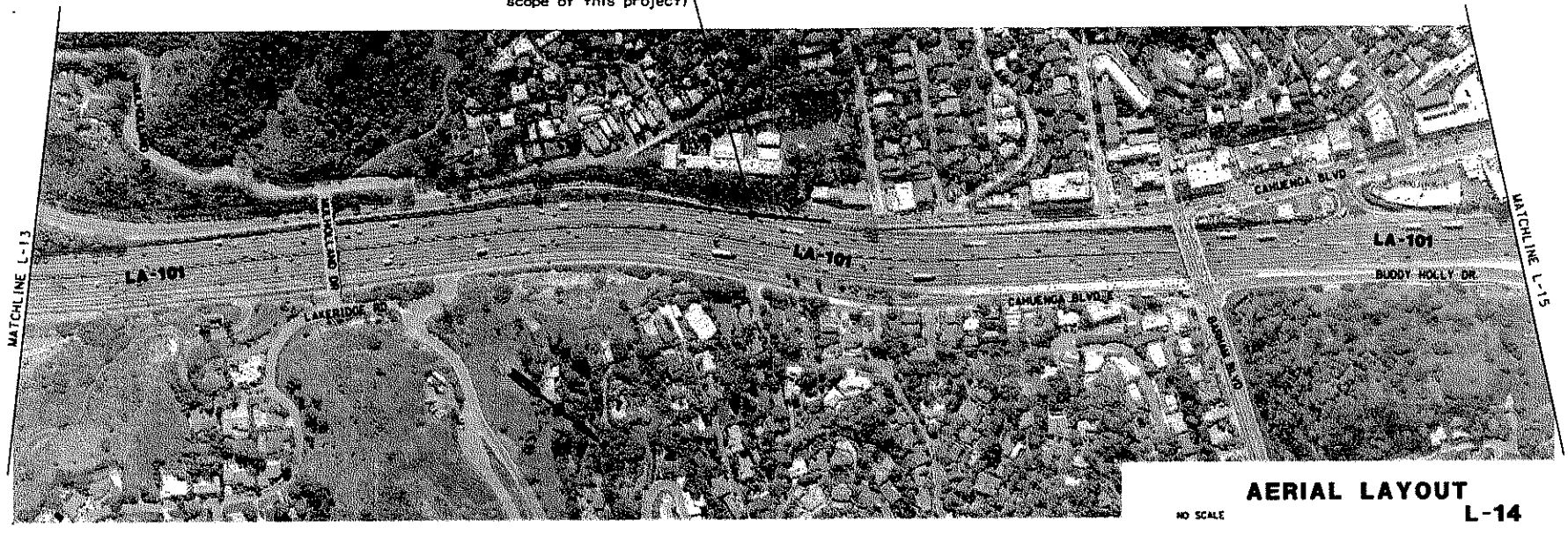
Loc 67
(This site has been removed from the original scope of this project)



NO SCALE

AERIAL LAYOUT
L-14

BORDER LAST REVISED 4/11/2008

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EA 000000

DATE PLOTTED => DATE
TIME PLOTTED => TIME

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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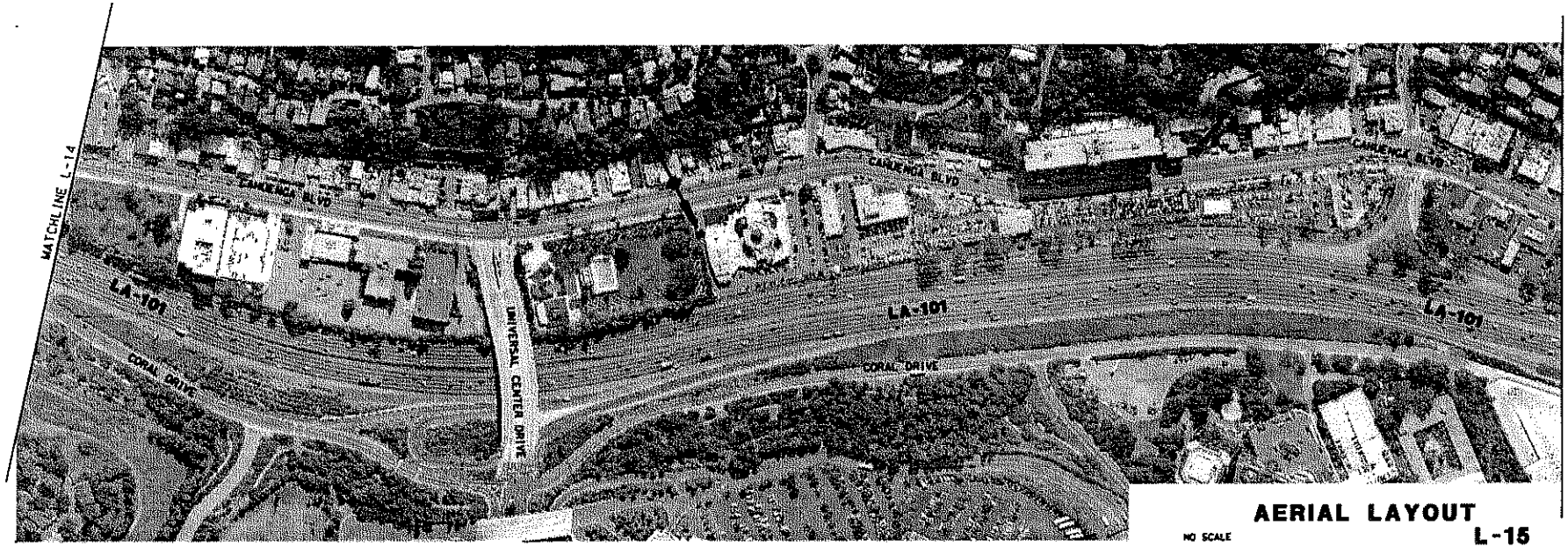
NO WORK ON THIS SHEET. IT IS PROVIDED FOR CONTINUTY PURPOSES ONLY.



AERIAL LAYOUT

NO SCALE

L-15

REVISED BY	
DATE REVISED	

CALCULATED-DESIGNED BY	
CHECKED BY	

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => MMCQUEST

CU 00000

EA 000000

DATE PLOTTED => MONTH DAY YEAR
TIME PLOTTED => HR:MIN

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DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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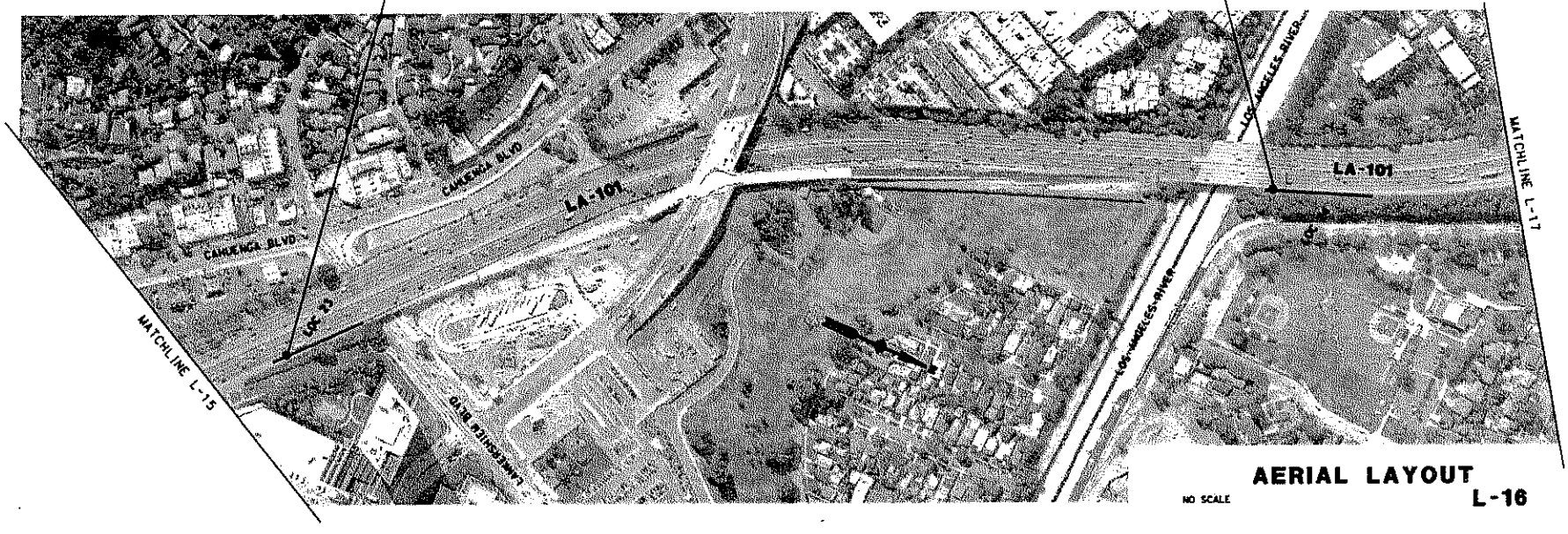
REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

Loc 23: L=390' (w/ 160' taper)
Remove Curb & Gtr
Remove MBGR (50')
Const 10' - Shld, Curb & Gtr
Const MBGR w/ end treatment

Loc 24: L=220'
Construct MBGR
Widen Shld to 10'



NO SCALE

AERIAL LAYOUT

L-16

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => AREQUEST

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EA 000000

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DIST	COUNTY	ROUTE	PROJECT SHEETS TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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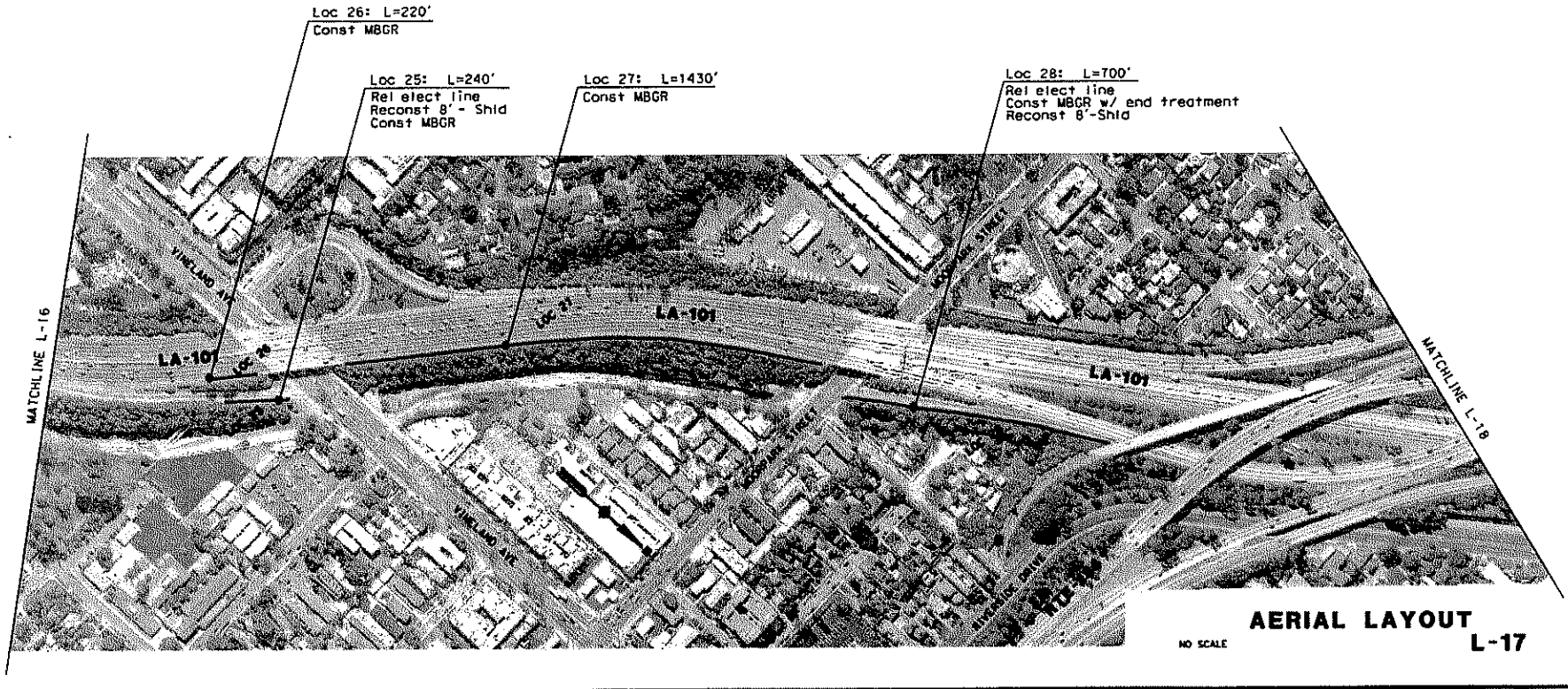
REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA



NO SCALE

AERIAL LAYOUT
L-17

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => AREQUEST

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EA 000000

DATE PLOTTED => MONTH DAY YEAR
TIME PLOTTED => HR:MIN
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	POST MILES PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

REVISED BY	
DATE REVISED	

CALCULATED-DESIGNED BY	
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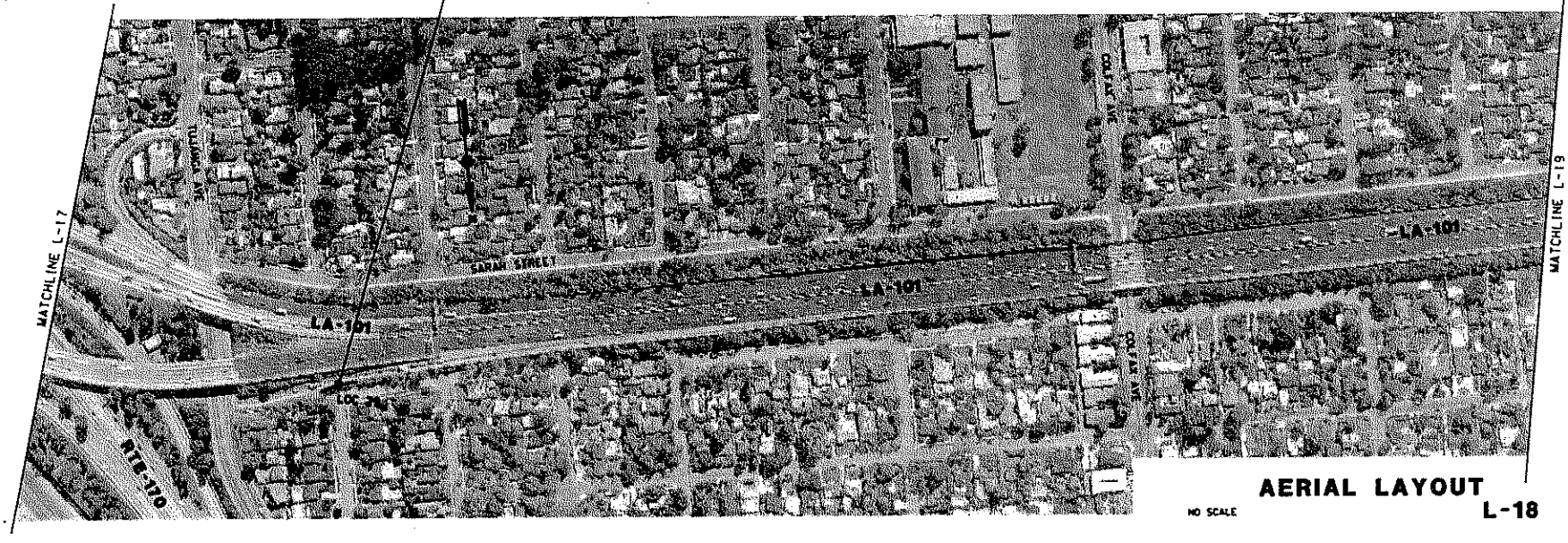
FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Loc 29: L=250'
Rel elect line
Re-anchor Power Pole
Remove end treatment
Const MBGR w/ end treatment
Reconst 8'-Shld



NO SCALE

AERIAL LAYOUT

L-18

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => AREQUEST

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EA 000000

DATE PLOTTED => MONTH
TIME PLOTTED => TIME

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

Loc 30: L=585'
Rel elect line
Remove end treatment
Const MBGR w/ end treatment
Reconst 8'-Shld

Loc 31: L=260'
Remove Curb & Gtr
Rel elect line
Const 8' - Shld, Curb & Gtr
Const MBGR w/ end treatment

NO SCALE

AERIAL LAYOUT
L-19

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
		CHECKED BY	DATE REVISED

DATE PLOTTED => DATE
TIME PLOTTED => TIME

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => ©REQUEST

CU 00000

EA 000000

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Dist	COUNTY	ROUTE	POST MILLS TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

Loc 32: L=260' (w/ 20' taper)
Reconstruct 10'-Shld
Remove end treatment
Rel elect line
Const MBGR w/ end treatment

Loc 33: L=260'
Rel elect line
Reconstruct 10'-Shld
Const MBGR

NO SCALE

AERIAL LAYOUT
L-20

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY

CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION

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DATE PLOTTED => MONTH TIME PLOTTED => TIME 00-00-00

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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EA 000000

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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FUNCTIONAL SUPERVISOR

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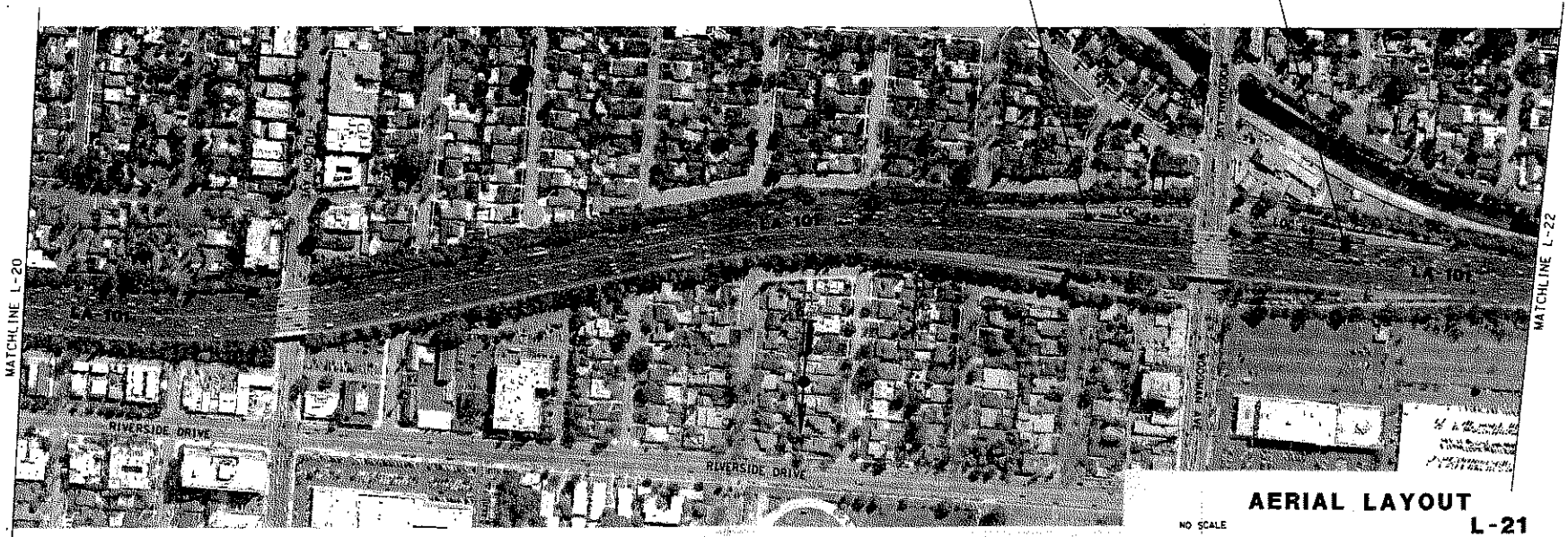
Caltrans

Loc 68: L=170'
Const MBGR

Loc 69: L=330'
Const MBGR



NO SCALE

AERIAL LAYOUT
L-21

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

Loc 71: L=350' (w/ 40' taper)
Construct CB
Widen Shld to 10'

Loc 34: L=150' (w/ 20' taper)
Widen Shld to 10'
Remove end treatment
Rel elect line
Const MBGR w/ end treatment

Loc 70: L=80'
Const MBGR w/ end treatment

NO SCALE

AERIAL LAYOUT
L-22

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
		CHECKED BY	DATE REVISED

BORDER LAST REVISED 4/11/2008

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CU 00000

EA 000000

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00-00-00

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

Loc 35: L=350'
Remove end treatment
Const MBGR w/ end treatment

NO SCALE

AERIAL LAYOUT
L-23

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => WREQUEST

CU 00000

EA 000000

DATE PLOTTED => MONTH DAY YEAR
TIME PLOTTED => HR:MIN

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

REVISED BY

DATE REVISED

CALCULATED-DESIGNED BY

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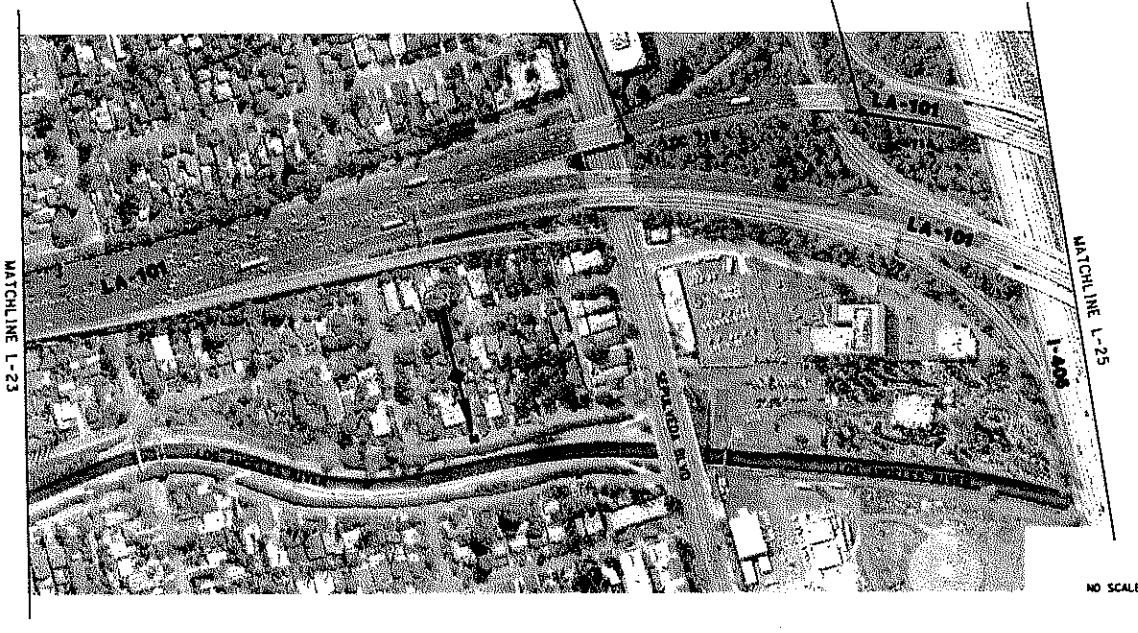
FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

Loc 71B: L=440'
Construct MBGR

Loc 71A: L=290'
Construct MBGR



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AERIAL LAYOUT
L-24

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00-00-00

BORDER LAST REVISED 4/11/2006

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DGN FILE => MREQUEST

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EA 000000

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

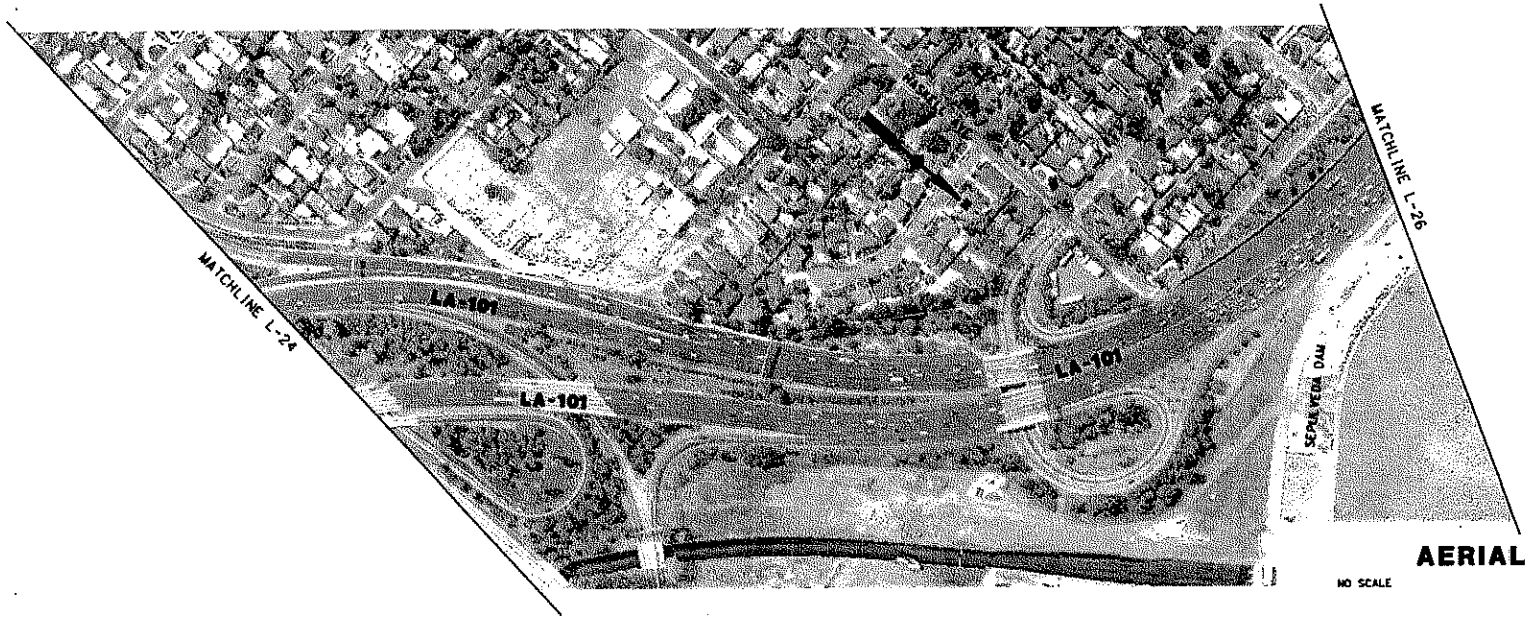
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

NO WORK ON THIS SHEET. IT IS PROVIDED FOR CONTINUITY PURPOSES ONLY.



NO SCALE

AERIAL LAYOUT

L-25

REVISED BY	DATE REVISED

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FUNCTIONAL SUPERVISOR

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DATE PLOTTED => MONTH DAY YEAR
TIME PLOTTED => HR:MIN

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => RUSER
DGN FILE => VREQUEST

CU 00000

EA 000000

AERIAL_MASTER1_x3_28270k_L25A.dgn 6/21/2011 1:07:24 PM

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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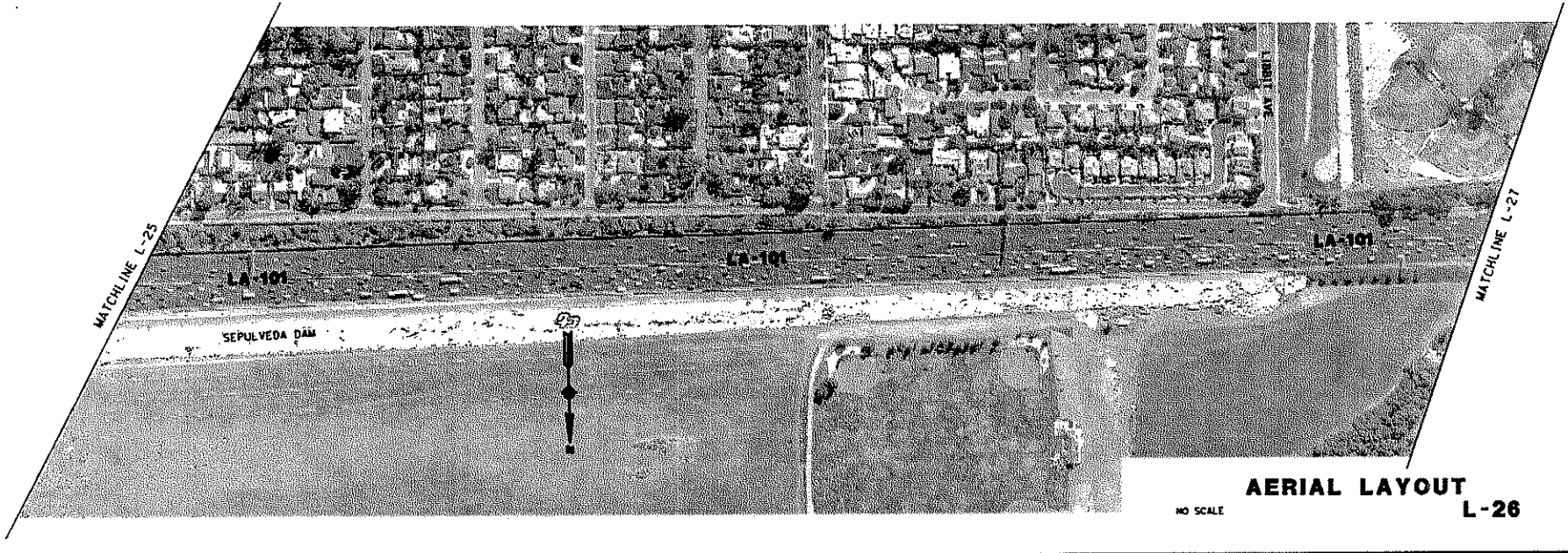

NO SCALE

AERIAL LAYOUT

L-26

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

LEGEND

DATE PLOTTED => MONTH DAY YEAR

TIME PLOTTED => HOUR MINUTE

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BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

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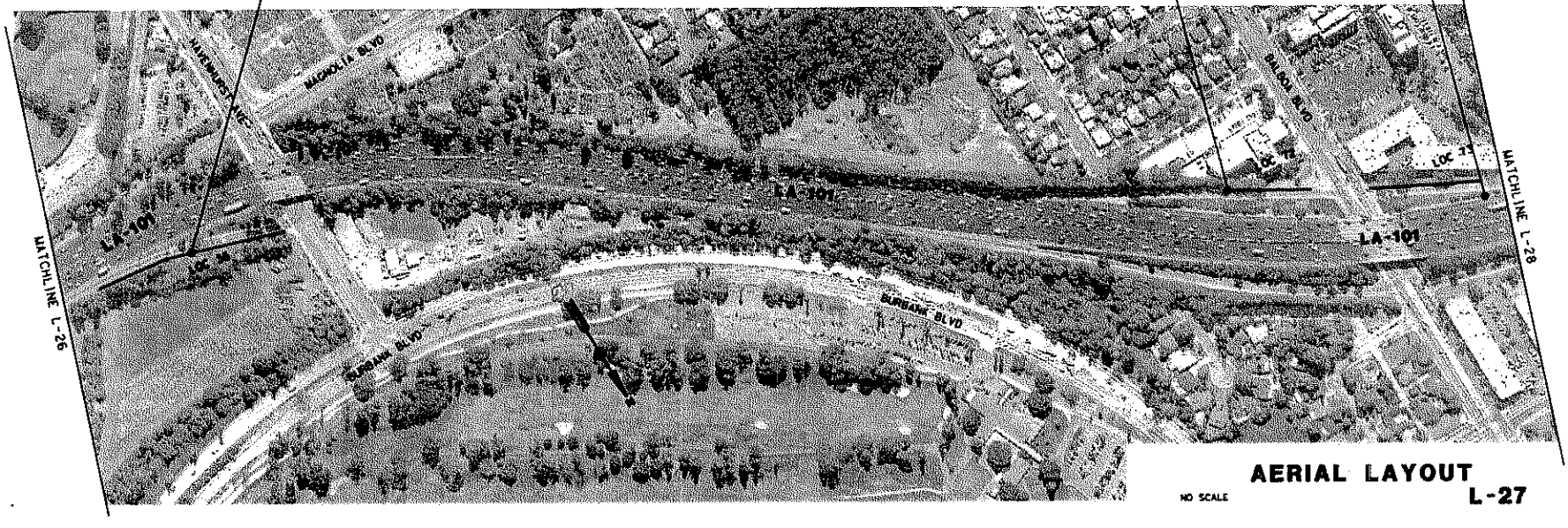
Caltrans

Loc 36: L=500'
Remove end treatment
Remove Curb & Gtr
Rel elect line
Const 8' - Shld, Curb & Gtr
Const MBGR

Loc 72: L=180'
Remove Curb & Gtr
Const 8' - Shld
Const AC dike, MBGR w/ end treatment

Loc 73: L=130'
Remove end treatment
Const MBGR w/ end treatment



NO SCALE

AERIAL LAYOUT
L-27

BORDER LAST REVISED 4/11/2008

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

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NO SCALE

AERIAL LAYOUT
L-28

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FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY

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BORDER LAST REVISED 4/11/2008

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Loc 74: L=680'
Remove AC dike
Rel ramp meter sys
Const 8' - Shld & AC dike
Const MBGR w/ end treatment

Loc 37: L=430'
Remove end treatment
Rel elect lines
Const MBGR w/ end treatment
Reconst 8'-Shld

Loc 75: L=210' (w/ 80' taper)
Widen Shld to 10'
Remove end treatment
Const MBGR

AERIAL LAYOUT
L-29

NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

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REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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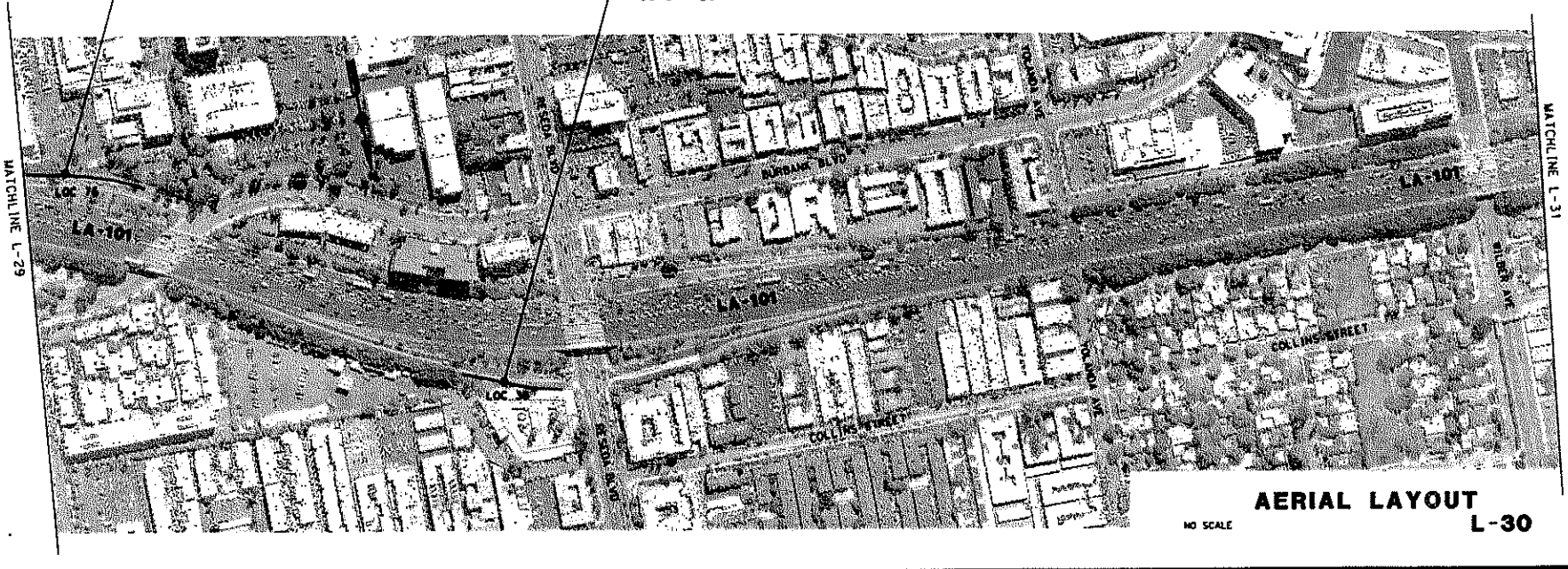
Loc 76: L=400'
Remove AC dike
Rel ramp meter sys
Const 8' - Shld & AC dike
Const MBGR w/ end treatment

Loc 38: L=400'
Remove Curb & Gtr (300')
Rel elect line
Const 8' - Shld, Curb & Gtr
Const MBGR



NO SCALE

AERIAL LAYOUT
L-30

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	FUNCTIONAL SUPERVISOR
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STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION

BORDER LAST REVISED 4/11/2008

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TIME PLOTTED => TIME
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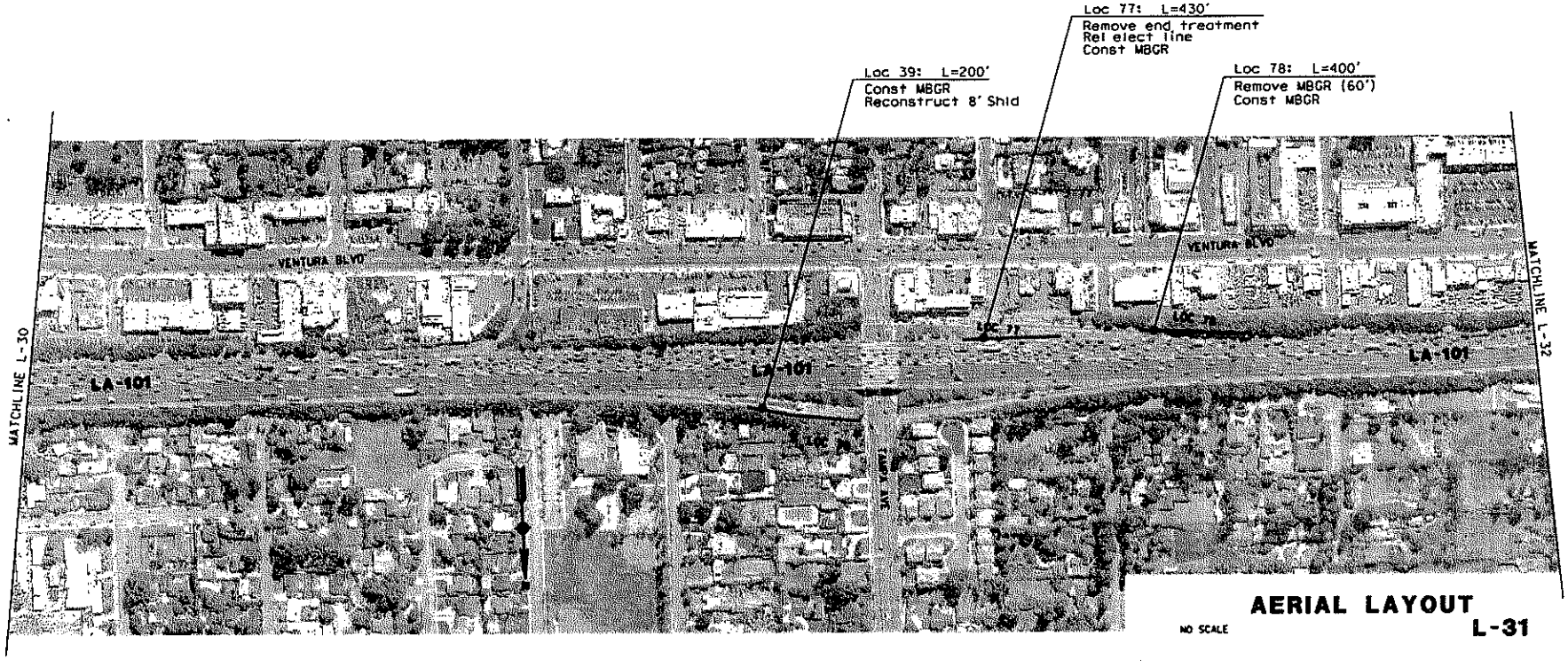

AERIAL LAYOUT

NO SCALE

L-31

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => WREQUEST

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EA 000000

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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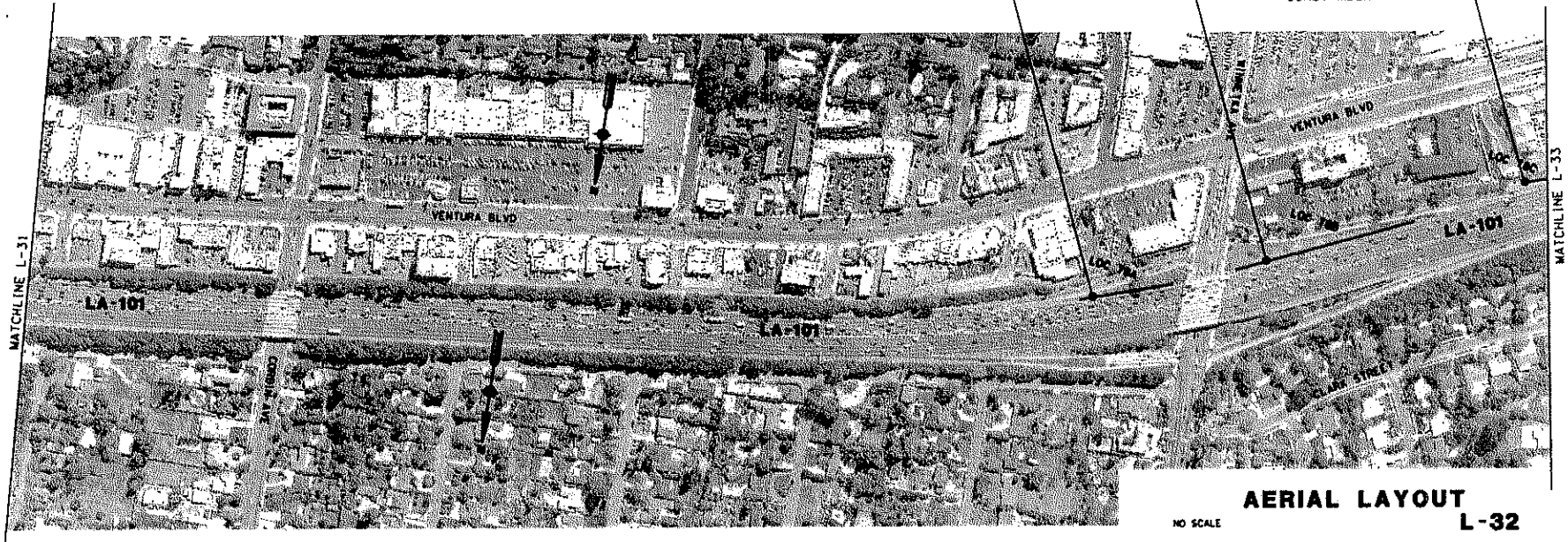

NO SCALE

AERIAL LAYOUT
L-32

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BORDER LAST REVISED 4/11/2008

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

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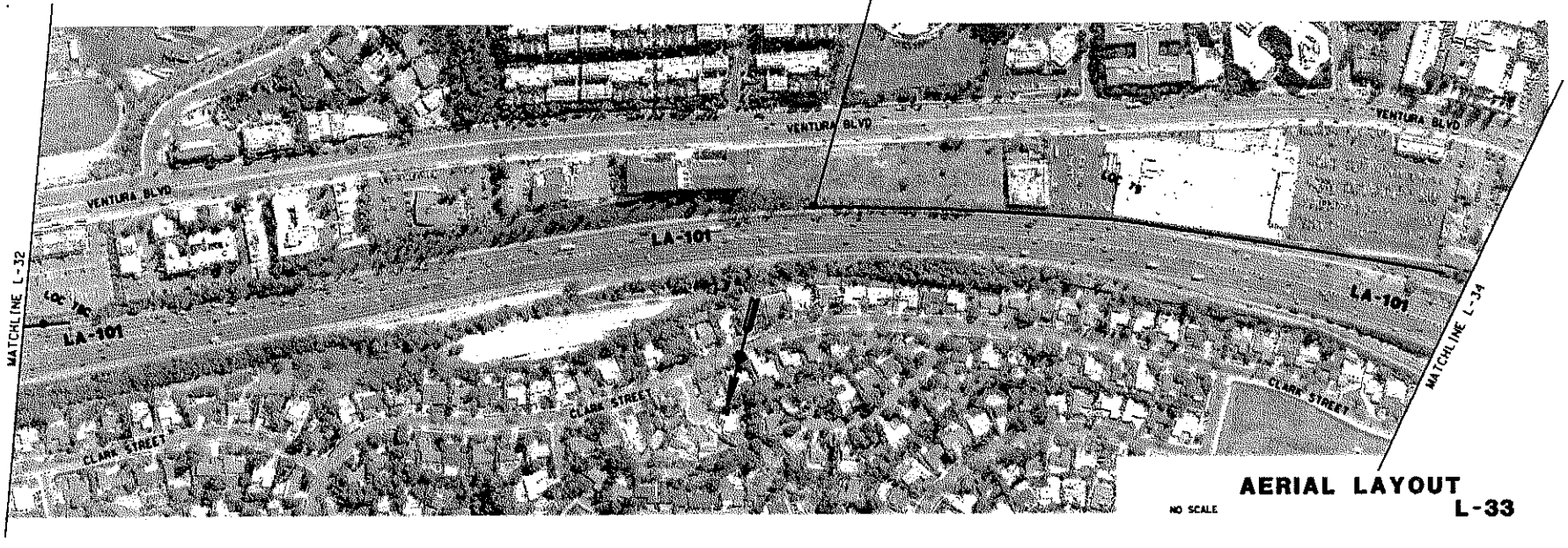

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AERIAL LAYOUT
L-33

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BORDER LAST REVISED 4/11/2008

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DIST	COUNTY	ROUTE	PROJ SECT TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

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Loc 80: L=570'
Remove end treatment
Const MBGR w/ end treatment

AERIAL LAYOUT
L-34

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FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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PLOT DATE => $DATE PLOTTED => $TIME

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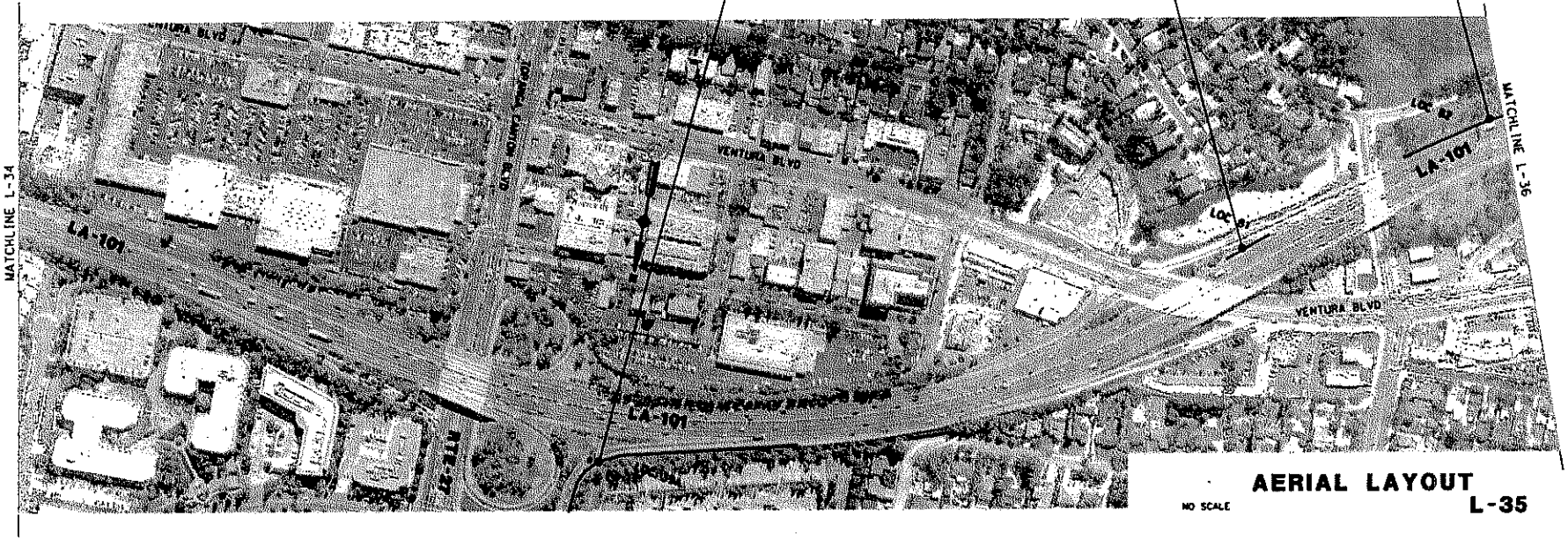
Loc 39A: L=640'
Remove K-rail
Const MBGR w/ end treatment
Reconstruct 8' Shld

Loc 81: L=190'
Remove end treatment
Const MBGR w/ end treatment

Loc 82: L=300'
Remove MBGR (80')
Const MBGR



AERIAL LAYOUT
L-35

NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

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BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => AREQUEST

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EA 000000

LAST REVISED DATE PLOTTED => 00-00-00 TIME PLOTTED => 12:00

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DIST.	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

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MATCHLINE L-35

AERIAL LAYOUT

NO SCALE

L-36

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BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => WRQUEST

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EA 000000

TIME PLOTTED => TIME
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ATTACHMENT C
Project Cost Estimate

PROJECT STUDY REPORT/PROJECT REPORT COST ESTIMATE SUMMARY

DIST-CO-RTE	07-LA-101
Type of Estimate (Pre-PSR, PSR, PR, etc.):	PSR/PR
Program Code:	201.015
PM	R0.0/25.9
EA	28270K
PP NO.	

Project Description:

Limits: Route 101 between Route 5 near downtown Los Angeles and Route 27, Topanga Canyon Boulevard

Proposed Improvement (Scope): About 26,000 feet of metal beam guardrail and 1,200 feet of concrete barrier will be installed at 85 locations where metal beam guardrail is missing or damaged along mainline and on adjacent ramps. Existing shoulder will be widened to standard width at some locations. Scope of work includes clearing and grubbing, excavation, modification of some drainage facilities, replacement of disturbed landscaping features, relocation of underground electrical lines and ramp meter systems, constructing metal beam guardrail or concrete barrier, placing asphalt concrete pavement, and restriping .

Alternate: 1

TOTAL ROADWAY ITEMS	$	9,830,000
TOTAL STRUCTURE ITEMS	$	0
SUBTOTAL CONSTRUCTION COSTS	$	9,830,000
RIGHT OF WAY (Current Value)	$	20,000
TOTAL PROJECT CAPITAL OUTLAY COSTS	$	9,850,000
USE	$	**9,850,000**

Reviewed by Program Manager	Signature	Steve Tran	Phone No. (213) 897 - 0126	Date 9/12/2011
Approved by Project Manager	Signature	Javad Rahimzadeh	Phone No. (213) 897 -6846	Date 9/12/11

PROJECT STUDY REPORT/PROJECT REPORT COST ESTIMATE SUMMARY

DIST-CO-RTE	07-LA-101
PM	R0.0/25.9
EA	28270K

I. ROADWAY ITEMS

Section 1 Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Roadway Excavation	5,500	CY	$75.00	$412,500	
Clearing & Grubbing	1	LS	$30,000.00	$30,000	
Develop Water Supply	1	LS	$5,000.00	$5,000	
Others					
				Subtotal Earthwork	$447,500

Section 2 Structural Section					
Asphalt Concrete (Type B)	3,800	TONN	$120.00	$456,000	
Aggregate Base (Class 3)	2,000	CY	$60.00	$120,000	
Remove AC dike	1,000	LF	$7.00	$7,000	
AC dike	1,800	LF	$10.00	$18,000	
Remove Curb and Gutter	4,200	LF	$20.00	$84,000	
Construct Curb and Gutter	4,200	LF	$60.00	$252,000	
				Subtotal Structural Items	$937,000

Section 3 Drainage					
Modify Drainage Facilities	1	LS	$100,000.00	$100,000	
				Subtotal Drainage	$100,000

PROJECT STUDY REPORT/PROJECT REPORT COST ESTIMATE SUMMARY

DIST-CO-RTE	07-LA-101
PM	R0.0/25.9
EA	28270K

Section 4 Specialty Items	Quantity	Unit	Unit Price	Unit Cost
Remove ET (MBGR)	20	EA	$1,000.00	$20,000
Install ET (MBGR)	45	EA	$3,500.00	$157,500
Install attenuator	4	EA	$15,000.00	$60,000
Remove Metal Beam Guard Railing	2,000	LF	$30.00	$60,000
Metal Beam Guard Railing	26,000	LF	$39.00	$1,014,000
Guard Railing Weed Control Mat	26,000	LF	$33.00	$858,000
Replace Bridge Railing	100	LF	$300.00	$30,000
Concrete Barrier	1,200	LF	$150.00	$180,000
Minor Concrete (Misc Construction)	500	CY	$400.00	$200,000
Relocate Ramp Meter System	5	EA	$40,000.00	$200,000
Electrical Lighting	1	LS	$730,000.00	$730,000
Fiber Optic communication system repairs	1	LS	$150,000.00	$150,000
Salvage K-Rail	640	LF	$20.00	$12,800
Storm Water Compliance	1	LS	$440,000.00	$440,000
Hazardous Waste Mitigation Plan	1	LS	$100,000.00	$100,000
Intial Site Assement	1	LS	$40,000.00	$40,000

Subtotal Specialty Items $4,252,300

Section 5 Traffic Items				
Temporary Railing (Type K)	5,200	FT	$40.00	$208,000
Temporary Traffic Stripe	1	LS	$10,000.00	$10,000
Thermoplastic Traffic Stripe	1	LS	$30,000.00	$30,000
Construction Area Signs	1	LS	$3,000.00	$3,000
Traffic Control System	1	LS	$170,000.00	$170,000

Subtotal Traffic Items $421,000

PROJECT STUDY REPORT/PROJECT REPORT COST ESTIMATE SUMMARY

DIST-CO-RTE	07-LA-101
PM	R0.0/25.9
EA	28270K

Section 6 Planting and Irrigation

Highway Planting	1	LS	$15,000.00	$15,000	
Replacement Planting	1	LS	$15,000.00	$15,000	
Irrigation Modification	1	LS	$5,000.00	$5,000	
Relocate Existing Irrigation Facilities	1	LS	$20,000.00	$20,000	
				Subtotal Planting and Irrigation Section	$55,000

Section 7 Roadside Management and Safety Section

Vegetation Control Treatments	1	LS	$5,000.00	$5,000	
Erosion Control/Slope Protection	1	LS	$10,000.00	$10,000	
Side Slopes/Embankment Slopes	1	LS	$50,000.00	$50,000	
Relocating roadside facilities/features	1	LS	$50,000.00	$50,000	
				Subtotal Roadside Management and Safety Section	$115,000
				SUBTOTAL SECTIONS 1-7	$6,327,800

PROJECT STUDY REPORT/PROJECT REPORT COST ESTIMATE SUMMARY

DIST-CO-RTE	07-LA-101
PM	R0.0/25.9
EA	28270K

				Item Cost	Section Cost
Section 8 Minor Items					
Subtotal Sections 1-7	$6,327,800	X	5.00% (5% - 10%)	$316,390	
			TOTAL MINOR ITEMS		$316,390
Section 9 Roadway Mobilization					
Subtotal Sections 1-7	$6,327,800				
Subtotal Section 8 Minor Items	$316,390				
Sum of Subtotal Sections 1-8	$6,644,190	X	10.00% (5% - 10%)	$664,419	
			TOTAL ROADWAY MOBILIZATION		$664,419
Section 10 Roadway Additions					
Supplemental Work					
Value Analysis	$10,000				
Maintain Traffic	$150,000				
Partnering	$20,000				
Bird Protection	$10,000				
State Furnished Materials					
COZEEP	$35,000				
RE Office	$72,800				
Contingencies					
Subtotal Sections 1-8	$6,644,190				
Sum	$6,644,190	X	20.00% (*)	$1,328,838	
			TOTAL ROADWAY ADDITIONS		$1,626,638
			SUB-TOTAL ROADWAY ITEMS (Subtotals Sections 1-10)		$8,935,247
			Time-Related Overhead (10%)		$893,525
			TOTAL ROADWAY ITEMS		$9,828,772
			USE		$9,830,000

		Phone #	Date
Estimate Prepared By	Mary MacGillivray (Print Name)	(213) 897-5448	8/18/2011
Estimate Checked By	James Vu (Print Name)	(213) 897-0116	8/18/2011

*Use appropriate Percentage per Chapter 3-50 of Project Development Procedures Manual.

PROJECT STUDY REPORT/PROJECT REPORT COST ESTIMATE SUMMARY

DIST-CO-RTE	07-LA-101
PM	R0.0/25.9
EA	28270K

II. STRUCTURES ITEMS

	STRUCTURE No. 1	No. 2	No. 3	No. 4	
Bridge Name					
Structure Type					
Width (out to out) - (ft)					
Span Lengths - (ft)					
Total Area - (ft^2)					
Footing Type (Pile/Spread)					
Cost Per ft^2 (include 10% mobilization and 20% contingency)					
Total Cost for Structure					
Removal Cost					
				SUBTOTAL STRUCTURES ITEMS	
Railroad Related Costs					
				SUBTOTAL RAILROAD ITEMS	
				TOTAL STRUCTURES ITEMS	
				USE	

COMMENTS:

		Phone #	Date
Estimate Prepared By	Mary MacGillivray (Print Name)	(213) 897-5448	8/18/2011

PROJECT STUDY REPORT/PROJECT REPORT COST ESTIMATE SUMMARY

DIST-CO-RTE	07-LA-101
PM	R0.0/25.9
EA	28270K

III. RIGHT OF WAY

	Current Values (Future Use)	Escalation Rates	Escalated Values*
A. Acquisition, including excess lands, damages to remainder(s), and Goodwill			
B. Utility Relocation (State share)	$20,000	8.00%	$28,376
C. Relocation Assistance			
C. Clearance/Demolition			
E. Title and Escrow Fees			

TOTAL RIGHT OF WAY ITEMS $28,376
(Escalated Value)

Anticipated Date of Right of Way Certification 7/17/2014
(Date to which Values are Escalated)

F. CONSTRUCTION CONTRACT WORK

Brief Description of Work:

Right of Way Branch Cost Estimate for Work* _____

*This dollar amount is to be included in the Roadway and/or Structures Items of Work, as appropriate.

COMMENTS:

Estimate Prepared By Mary MacGillivray (Print Name) Phone # (213) 897-5448 Date 8/18/2011

Please see Attachment G for Right of Way Data Sheet.

ATTACHMENT D1
Field Notes, Locations and
Work Descriptions, Northbound

Table D1: Northbound Locations and Work Descriptions

Site #, Postmile		Location	Descriptions (from Traffic Investigation Report)	Shoulder (Ft)			Horizontal Clr (Ft)			Length(Ft) Total/ Taper	Work Descriptions (as shown on Layout Plan)
				Std	Exist	Prop	Std	Exist	Prop		
1	s0.52	Ramp	Extend MGBR left shld off-ramp to 4th	4	0	4	4	4	4	520	Remove Curb. Const 4'-Shld, Curb & Gtr. Const MBGR w/ ET
1A	s0.05	Mainline	Extend - Rt Shldr at 5/60 Sep Br 53-0599	10	2	10to2	10	10to2	10to2	* 250/**160**	Remove Curb & Gtr. Const 10'-Shld & AC dike. Remove ET. Const MBGR
2	s0.907	Mainline	Install Rt Shldr n/o 1st St. Br#53-0582	10	2	10	10	10	10	190	Remove Curb. Const 10'-Shld, Curb & Gtr. Const MBGR
3	s1.016	Ramp	Install Rt. Shldr; attch to SdWall on 1st St. on-ramp	8	1	1	8	6.5	6.5	**15**	Install attenuator
4	s1.216	Ramp	Install Rt. Shldr Seg NB fr Macy to EB-10	8	8	8	8	8	8	30	Const crash cushion. Restripe 10'-Rt-Shld
5	0.189	Ramp	Extend exist MBGR NB on Mission	8	3	8	8	8	8	220	Remove Curb&Gtr.. Const 8'-Shld. Const MBGR w/ ET.
6	0.621	Ramp	Extend exist MBGR NB off to Alameda	4	3	4	4	4	4	466	Reconst 4'-Shld, Const MBGR w/ ET
7	0.91	Ramp	Install in front of columns Lt. Side of ramp b4 merge	4	4	4	4	4	4	40	Const ET
~~8~~	~~1.03~~	~~Ramp~~	~~Install Crash Cushion (Barrels) NB off to Spring~~								(This site has been removed from the original scope of this project)
9	1.36	Mainline	Install n/o of Gore area; Rte 101/110 conn	10	10	10	10	10	10	140	Reconst 10'Shld. Const MBGR w/ ET
10	1.456	Ramp	Extend left side NB on from Grand	4	2	2	4	2	2	**100**	Remove ET. Const MBGR w/ ET
11	1.798	Connector	Install NB on fr Rte 110, meet SdWall	10	10	10	10	10	10	650	Const MBGR w/ ET. Reconst 10'-Shld
12	2.741	Bus Lane	Install Rt. Shldr of Bus Lane s/o Alvarado Br + WB + ET	8	8	8	8	8	8	200	Rel elect line. Const MBGR
13	2.84	Bus Lane	Install Rt Shldr of Bus lane n/o Alvarado Br	8	8	8	8	8	8	163	Rel elect lines. Const MBGR w/ ET
14	3.195	Mainline	Close Gap rt shldr; attach to s/o Coronoad Br + remove 60' MBGR+ET	10	9to2	10to2	10	10to2	10to2	* 214/**160**	Remove MBGR (60'). Const MBGR w/ ET. Reconst 10'-Shld
15	3.643	Ramp	Install Rt Shldr NB of Silver Lk Blvd	8	2	8	8	8	8	150	Remove Curb .Modify stormdrain manhole. Const 8'-Shld, Curb & Gtr. Const MBGR
16	3.863	Ramp	Install on Rt Shldr in front of SdWall + ET on SilverLk On	8	8	8	8	8	8	245	Const MBGR w/ ET

Site #, Postmile		Location	Descriptions (from Traffic Investigation Report)	Shoulder (Ft)			Horizontal Clr (Ft)			Length(Ft)	Work Descriptions (as shown on Layout Plan)
				Std	Exist	Prop	Std	Exist	Prop	Total/ Taper	
17	4.291	Ramp	Extend on Lt. shldr@ NB off to Vermont Ave	4	2	4	4	4	4	168	Remove Curb & Gtr. Modify irrigation system. Rel elect line. Const 4'-Shld, Curb & Gtr. Const MBGR
18	4.736	Ramp	Install Rt shldr + WB @NB off to Melrose Av	8	8	8	8	8	8	239	Const MBGR w/ ET. Reconst 8'-Shld
19	5.114	Ramp	Attach to SdWall on the NB Normandie On-ramp	8	8	8	8	8	8	70	ConstMBGR w/ ET
20	5.445	Ramp	Install Lt side RdwayNB off to Santa Monica Bl	4	2	4	4	4	4	300	Rel elect line. Modify irrigation system. Remove Curb & Gtr. Const 4'-Shld, Curb & Gtr. Const MBGR
21	6.816	Ramp	instal Rt Shldr atach to wall + WB to Franklin/Gower	8	6to2	6to2	8	6	6to2	**141**	Reconst dike. Const MBGR
22	7.209	Ramp	Estend on Lt Shldr NB on Argyle/Franklin	4	4	4	4	4	4	244	Rel ramp meter sys. Modify irrigation sys. Const MBGR w/ ET
23	10.343	Mainline	Extend, Rt shldr s/o Lankershim Blvd UC	10	2	10to2	10	10to2	10to2	* 390/**160**	Remove Curb & Gtr. Remove MBGR (50'). Const 10'-Shld, Curb & Gtr. Const MBGR w/ ET
24	10.859	Mainline	Close gap Rt. Shldr at north end of Br 53-1224	10	8	10	10	10	10	220	Const MBGR. Widen shld to 10'
25	10.999	Ramp	Extend, Rt shldr @ NB off Vineland Av	8	8	8	8	8	8	240	Rel elect line. Reconst 8'-Shld. Const MBGR
26	11.112	Mainline	Install Rt. Shldr s/o Vineland Av UC 53-1225	10	10	10	10	10	10	220	Const MBGR
27	11.143	Mainline	Install Rt.Shldr betw Vineland UC & Moorpark St	10	10	10	10	10	10	1430	Const MBGR
28	11.546	Ramp	Begin at Street level at NB on Moorpark St	8	8	8	8	8	8	700	Rel elect line. Const MBGR w/ ET. Reconst 8'-Shld
29	12.013	Ramp	Extend ET on Rt shldr on NB on Tujunga Av	8	8	8	8	8	8	250	Rel elect line. Re-anchor Power Pole. Remove ET. Const MBGR w/ ET. Reconst 8'-Shld
30	12.72	Ramp	Extend to pave area on NB off Laurel Cyn Av UC	8	8	8	8	8	8	585	Rel elect line. Remove ET. Const MBGR w/ ET. Reconst 8'-Shld
31	12.987	Ramp	Extend - on Rt Shldr NB on Laurel Cyn Ave UC	8	2	8	8	6	8	260	Remove Curb & Gtr. Rel elect line. Const 8'-Shld, Curb & Gtr. Const MBGR w/ ET

Site #, Postmile		Location	Descriptions (from Traffic Investigation Report)	Shoulder (Ft)			Horizontal Clr (Ft)			Length(Ft) Total/ Taper	Work Descriptions (as shown on Layout Plan)
				Std	Exist	Prop	Std	Exist	Prop		
32	13.878	Mainline	Rt Shldr before BR @ Coldwater Cyn Ave UC	10	9	10to9	10	9	10to9	* 260/**20**	Reconst 10'-Shld. Remove ET. Rel elect line. Const MBGR w/ ET
33	13.895	Mainline	Rt Shldr after Coldwater Cyn Ave Br	10	9	10	10	10	10	260	Rel elect line. Reconst 10'-Shld. Const MBGR
34	15.908	Mainline	Extend - Rt Shldr at Van Nuys Bl UC	10	9	10to9	10	9	10to9	* 150/**20**	Reconst 10'-Shld. Remove ET. Rel elect line. Const MBGR w/ ET
35	16.06	Ramp	Extend - Rt Shldr NB on Van Nuys Bl	8	8	8	8	8	8	350	Remove ET. Const MBGR w/ ET
36	18.497	Ramp	Extend Rt Shldr NB off Hayvenhurst Av	8	8to2	8	8	8	8	500	Remove ET. Remove Curb & Gtr. Rel elect line. Const 8'-Shld, Curb & Gtr. Const MBGR
37	20.375	Ramp	Extend Rt Shldr NB on White Oak Ave	8	8	8	8	8	8	430	Remove ET. Rel elect lines. Const MBGR w/ ET. Reconst 8'-Shld
38	21.104	Ramp	Entend Rt Shldr NB off Reseda Blvd	8	8to0	8	8	8	8	400	Remove Curb & Gtr (300'). Rel elect line. Const 8'-Shld, Curb & Gtr. Const MBGR
39	22.149	Ramp	Atach to wall at NB off-ramp to Tampa	8	8to2	8	8	8	8	200	Const MBGR. Reconst 8'-Shld
39A	25.47	Ramp	Attach to SdWall On-ramp from Topanga Cyn/Burbank Bl	8	8	8	8	8	8	640	Remove K-rail. Const MBGR w/ ET. Reconst 8'-Shld

Notes:

Lengths of proposed MBGR with non-standard shoulder width / horizontal clearance are shown in bold.

(*). New MBGR to be built at standard shoulder width and horizontal clearance, tapers to existing installations are non-standard

ATTACHMENT D2
Field Notes, Locations and
Work Descriptions, Southbound

Table D2: Southbound Locations and Work Descriptions

Site #, Postmile		Location	Descriptions (from Traffic Investigation Report)	Shoulder (Ft)			Horizontal Clr (Ft)			Length(Ft) Total/ Taper	Work Descriptions (as shown on Layout Plan)
				Std	Exist	Prop	Std	Exist	Prop		
40	s0.509	Ramp	Install Rt. Shldr attach to SdWall on 4th St on-ramp	8	2	8to2	8	8	8	**15**	Remove Curb&Gtr.. Construct 8'-Shld. Install attenuator
41	s1.018	Ramp	Extend MBGR Rt Shld @ off-ramp to 1st Street	8	8	8	8	8	8	317	Remove ET. Const MBGR
42	0.196	Ramp	Install Lt. Shldr attach to columns @ SB off to Mission	4	2	2	4	2	2	**135**	Remove Curb&Gtr.. Const CB (Type 60)
43	1.181	Ramp	Install attach railing SB off to broadway	4	4	4	4	4	4	100	Repl railing w/ similar type
44	~~1.647~~	~~Ramp~~	~~Install PCC Rt Shld Seg SB off to SB Rte 110**~~	~~10~~	~~8~~	~~10~~	~~10~~	~~8~~	~~10~~	~~750~~	(This site has been removed from the original scope of this project)
45	1.744	Mainline	Install SB betw. Boyleston & Beaudry ***	10	10	10	10	10	10	950	Repl MBGR
46	2.2	Mainline	Close Gap rt shldr s/o Glendale Blvd UC	10	8	10to8	10	8	10to8	*240/**40**	Rel elect line. Const CB. Reconst 10'-Shld
47	2.32	Mainline	Close Gap rt shldr s/o Glendale Blvd UC	10	8to2	10	10	8to2	10	460	(To join Loc.#46). Rel elect line. Rel traffic sign. Remove MBGR (340'). Const CB. Reconst 10'-shld.
48	2.545	Ramp	Extend @ north end of Glendale UC from Glendale on-ramp	8	2	8to2	8	8to2	8to2	* 180/**120**	Remove ET. Rel elec & elect lines. Const 8'-Shld. Const MBGR w/ ET
49	2.879	Bus Lane	Install rt shldr of Bus Lane b4 Alvarado Br + WB+ET	8	8	8	8	8	8	163	Rel elect line. Const MBGR w/ ET
50	2.962	Bus Lane	Install rt shldr of Bus Lane at Alvarado Br + WB	8	8	8	8	8	8	214	Rel elect line. Const MBGR w/ ET
51	3.443	Ramp	Install left shldr SB of Benton Way	4	3	3	4	3	3	**314**	Const MBGR w/ ET
52	3.688	Ramp	Install MBGR rt shldr w/ ET of Silver Lk On-ramp	8	2	8	8	8	8	500	Remove Curb. Rel SD manhole. Rel ramp meter sys. Const MBGR w/ ET. Const 8'-Shld
53	3.7	Mainline	Install rt shldr attach to silver Lk UC south end	10	2	10	10	10	10	174	Remove Curb. Const 10'-Shld & AC dike. Const MBGR
54	3.76	Mainline	Extend (rt side) Silver Lk Bl UC 53-0613	10	8to4	10to4	10	10to4	10to4	* 300/**120**	Modify drainage. Reconst 10'-Shld. Remove ET. Const MBGR w/ ET.
55	3.921	Ramp	Extend (Rt shldr) SB of Hoover St.	8	8to4	8	8	8to4	8	274	Construct 8'-Shld. Const MBGR
56	4.135	Ramp	Extend beg.On-ramp to Virgil OC+ET+remove 100' MBGR	8	0	8	8	8	8	1000	Rel ramp meter sys. Remove MBGR (100'). Const 8'-Shld. Const MBGR w/ ET

Site #, Postmile		Location	Descriptions (from Traffic Investigation Report)	Shoulder (Ft)			Horizontal Clr (Ft)			Length(Ft) Total/ Taper	Work Descriptions (as shown on Layout Plan)
				Std	Exist	Prop	Std	Exist	Prop		
~~57~~	~~4.484~~	~~Ramp~~	~~Install beg. So end Heliotrope UC along rt shldr off-ramp~~	~~8~~	~~8~~	~~8~~	~~8~~	~~8~~	~~8~~	~~746~~	(This site has been removed from the original scope of this project)
58	4.58	Ramp	Attach to s/o Br 53-0672 + WB & remove 100' MBGR	8	8	8	8	8	8	746	Remove MBGR (80'). Rel elect line. Const MBGR
59	4.851	Mainline	Attach to s/o Br Melrose Ave UC 53-0673	10	10to2	10	10	10	10	220	Rel elect line. Reconst 10'-Shld. Remove ET. Const MBGR w/ ET
59A	4.98	Mainline	Install rt shldr betw Melrose Av UC and Normandie Av UC	10	10to2	10	10	10	10	220	Rel elect line. Reconst 10'-Shld. Remove ET. Const MBGR w/ ET
60	5.457	Ramp	Install Lt side rdwy SB on from Santa Monica Blvd	4	2	2	4	2	2	**227**	Const MBGR w/ ET
61	5.881	Ramp	Install ET Lt side of ramp - attach to wall	4	2	4to2	4	4	4	**15**	Reconst Shld. Install attenuator
62	6.373	Ramp	Extend - rt shldr SB on Hollywood Bl	8	2	8	8	8	8	74	Remove Curb & Gtr. Const 8'-Shld & Gtr. Const MBGR w/ ET
63	7.059	Ramp	Install Rt shldr SB off Gower St.	8	2	2	8	2	2	**139**	Const MBGR
64	7.277	Ramp	Close gap at bridge and extend @ on-ramp from Cahuenga	8	8	8	8	8	8	185	Remove ET. Const MBGR
65	7.75	Ramp	Install ET no exist @ SB on fr rte 170	8	4to2	4	8	4to2	4	**15**	Modify exist CB. Install attenuator
~~66~~	~~8.4~~	~~Ramp~~	~~Extend - rt shldr SB off to Pilgrimage OC~~	~~8~~	~~8~~	~~8~~	~~8~~	~~8~~	~~8~~	~~380~~	(This site has been removed from the original scope of this project)
~~67~~	~~9.096~~	~~Mainline~~	~~Install concrete barrier on rt shldr betw fwy & Cahuenga~~ ~~**~~	~~10~~	~~10~~	~~10~~	~~10~~	~~10~~	~~10~~	~~300~~	(This site has been removed from the original scope of this project)
68	14.885	Mainline	Rtshldr s/o BR Woodlman Ave UC	10	10	10	10	10	10	170	Const MBGR
69	14.905	Mainline	Rt shldr n/o BR Woodman Ave UC	10	10	10	10	10	10	330	Const MBGR
70	15.772	Ramp	Extend - rt shldr SB on Van Nuys Blvd	8	8	8	8	8	8	80	Const MBGR w/ ET
71	15.943	Mainline	Rt shldr s/o BR Van Nuys Blvd UC	10	8	10to8	10	8	10to8	*350/**40**	Const CB. Widen Shld to 10'.
71A	17.1	Mainline	Install lft shldr @ bridge	10	2	2	10	2	2	**290**	Const MBGR
71B	16.93	Mainline	Install MBGR with new ET in L shld n/o Sepulveda	10	2	2	10	2	2	**440**	Const MBGR
72	19.05	Ramp	Extend rt shldr SB on Balboa Bl	8	8-2	8	8	8	8	180	Remove Curb & Gtr. Const 8'-Shld. Const AC dike, MBGR w/ ET

Site #, Postmile		Location	Descriptions (from Traffic Investigation Report)	Shoulder (Ft)			Horizontal Clr (Ft)			Length(Ft) Total/ Taper	Work Descriptions (as shown on Layout Plan)
				Std	Exist	Prop	Std	Exist	Prop		
73	19.217	Mainline	Extend rt shldr Balboa Bl UC 53-1052	10	10	10	10	10	10	130	Remove ET. Const MBGR w/ ET
74	20.11	Ramp	Extend rt shldr SB on White Oak Ave	8	8to0	8	8	8to2	8	680	Remove AC dike. Rel ramp meter sys. Const 8'-Shld & AC dike. Const MBGR w/ ET
75	20.728	Mainline	Close gap on rt n/o Lindley Ave UC 53-1055	10	8	10to8	10	8	10to8	*210/**80**	Remove ET. Widen Shld to 10'. Const MBGR
76	20.91	Ramp	Extend on rt shldr @ SB on Burbank / Reseda Ave	8	0	8	8	4	8	400	Remove AC dike. Rel ramp meter sys. Const 8'-Shld & AC dike. Const MBGR w/ ET
77	22.354	Mainline	Extend - rt shldr @ Tampa Ave UC north end	10	10	10	10	10	10	430	Remove ET. Rel elect line. Const MBGR
78	22.4	Mainline	Close Gap on rt shldr n/o/ Tampa off-ramp	10	10	10	10	10	10	400	Remove MBGR (60'). Const MBGR
78a	23.5	Mainline	install rt shldr S end of Winnetka	10	10	10	10	10	10	200	Const MBGR
78b	23.6	Mainline	install rt shldr N end of Winnetka	10	10	10	10	10	10	650	Remove ET. Const MBGR
78c	23.7		install rt shldr approaching off ramp to Winnetka	10	10	10	10	10	10	320	Remove ET. Const MBGR
79	23.9	Ramp	install rt shldr s/o SB DeSoto on-ramp	8	8	8	8	8	8	1150	Const MBGR w/ ET
80	24.311	Mainline	Install n/o BR DeSoto Ave UC	10	10	10	10	10	10	570	Remove ET. Const MBGR w/ ET
81	25.788	Mainline	Extend - rt shldr n/o end of Ventura Bl Br 53-1065	10	10	10	10	10	10	190	Remove ET. Const MBGR w/ ET
82	25.889	Mainline	Close gap rt shldr n/o SB off-ramp to Ventura UC and remove 50' MBGR-remove 100' exist.	10	10	10	10	10	10	300	Remove MBGR (80'). Const MBGR

Notes:

Lengths of proposed MBGR with non-standard shoulder width / horizontal clearance are shown in bold.

(*). New MBGR to be built at standard shoulder width and horizontal clearance, tapers to existing installations are non-standard

ATTACHMENT D3
Traffic investigation Conceptual Report / Conceptual Approval

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: FRANK QUON
Deputy District Director
Traffic Operations
District 07

Date: January 7, 2010

File: 3.1.23
07-LA-101
PM S0.0/R25.58
Install MBGR

Attention: Sameer Haddadeen

From: JANICE BENTON
Chief
Office of Traffic Safety Program

Subject: Conceptual Approval for the Funding of 201.015 – Collision Severity Reduction Project

The project proposed for the State Highway Operation and Protection Program (SHOPP) is to install metal beam guardrail (MBGR)/concrete barrier and upgrade MBGR end treatments at various locations between PM S0.0 and PM R25.58 on State Route 101 in Los Angeles County. The proposed improvement is approved at the estimated cost of $5,000,000.

Please send the draft Project Initiation Document (PID) for our review and approval prior to signing the final PID. Final project approval will be granted after review of the PID. This project will compete for funding allocation on a statewide basis in the State Highway Operation and Protection Program.

If you have any questions regarding the above, please contact Shaila Chowdhury at (916) 654-3748.

cc:

Jerry Champa
Rick Guevel
Shaila Chowdhury
Mary Payyappilly
Curt Davis

Memorandum

To: Janice Benton, Chief
HQ, Office of Traffic Safety Programs

Date: January 4, 2010
07 – LA – 101 – PM S00.0 – R25.90
07-372-28270K
MBGR Gap Closure

Attn: Shaila Chowdhury

From: Sameer Haddadeen, Chief
Office of Traffic Investigations
Department of Transportation District 7

Subject: Revised Conceptual Approval For A Major Project To Close Several MBGR Gaps.

1. **Proposal**

It is proposed to initiate a project to install and close several Metal Beam Guard Rail (MBGR) gaps, construct a concrete barrier, and upgrade MBGR end treatments along Ventura Freeway (Route 101) from Route 5 junction (PM S00.0) to Topanga Canyon Blvd (PM 25.90)

2. **Purpose**

The improvements will minimize the accident severity by reducing the potential of run-off the road and over the embankment type of accidents, thereby, improving the overall safety and operation of the Route 101 freeway. The proposed project limit is from the Route 5/101 interchange in the vicinity of downtown Los Angeles to Topanga Canyon Blvd along the edge of shoulder. Several minor projects to install MBGR have been initiated in the last three years. Therefore, to reduce the number of future minor projects, it is proposed to evaluate longer segments of the freeway.

The scope of the project is to: install 28,154 ft of MBGR on both the mainline and the ramps, upgrade MBGR end treatments within the project limits, upgrade the approach transition railings and install a concrete barrier at one location.

3. **Performance Measure**

It is anticipated that the project would reduce and/or eliminate run-off the road/over embankment accidents.

4. **Justification**

The Department of Transportation had received several complaints regarding vehicles leaving the roadway and going over the embankment. In addition, several minor projects have been initiated in the last couple of years; therefore, in order to reduce the number of future projects, it is proposed to initiate one project for the entire route.

5. **Accident History**

The latest TASAS data (10/01/2005 to 09/30/2008) indicates that within the proposed project limits there were: 524 run-off the road accident on the northbound direction of which 8 were fatalities and 577 run-off the road accidents on the southbound direction of which 5 were fatalities. The actual accident rate is 1.21/MVM for northbound and 1.46/MVM for southbound while the average rate for similar facilities is 1.20/MVM for both directions. The facility has a higher accident rate compared to other similar facilities.

6. **Cost Estimate**

The cost of this project is estimated at $ 5,000,000 in year 2014 dollar It is proposed that this project be funded in the 13/14 Fiscal Year, using Major improvement under the Statewide Highway Operations and Protection Program (SHOPP) as part of the Collision Reduction Program and to be categorized as 201.015.

Should you have any questions or need additional information, please contact Sheik Moinuddin, Senior Transportation Engineer, at (213) 897-8092.

for SAMEER HADDADEEN, Chief
District 7, Office of Traffic Investigations

Traffic Investigation Report

LOCATION INFORMATION

Dist	County	Route	Suffix	Prefix	Begin PM	Highway	Prefix	End PM	Dir	Highway	Log Number
07	LA	101		S	0			25.9	T		E094-01840

Location Description: Route 101 Freeway between 4th Street and +/- 0.6 miles n/o Topanga Canyon (Route 27).

Invalid Facility: [X] No [ ] Yes

~~Facility Type H64 Freeway 5-6 Lanes, Urban~~

[ ] Improvement Recommended [ ] No Action

Investigation By	Date	Reviewed By	Date	Approved By	Date
E Trujillo	01/04/10	J Kibe	01/08/10	S. Moinuddin	1/6/10
E TRUJILLO		J KIBE		S MOINUDDIN	

Attachments: TASAS, EA Request, cost estimate, aerials photos

INITIATION INFORMATION What initiated this investigation? Initiation Date: 12/31/09

Initiation Comments: To amend the project limits as shown on Log #E093-03450

HISTORICAL INFORMATION Are there any previously approved investigations of this location on record? [X] No [ ] Yes

Relevant Log #'s: E093-03450

If yes, what has occurred, if anything, since the last investigation sufficient to justify a re-analysis?

Reanalysis

EXISTING CONDITIONS What are the existing conditions?

From To

Traffic Data Date

ADT (1000)		Col/Y	Col Rate	
State Hwy	Cross St		Actual	Average
		F+I		
		Total		

Speed Zone | Advisory Speed | Alignment | Shoulder Width | Shoulder | Median Width | Median

ANALYSIS and COMMENT

Field Review Date	Review Participants	Data Collected
08/03/09	TRUJILLO, KIBE	

LOCATION INFORMATION

Dist	County	Route	Suffix	Prefix	Begin PM	Highway	Prefix	End PM	Dir	Highway	Log Number
07	LA	101		S	0			25.9	T		E094-01840

alysis

This Traffic Investigation Report was initiated to amend Log# E093-03450 by extending the post mile limits to P.M. S 00.0 to 25.89.

Within the last few years, during field investigations for Table "C"s, public concerns and surveilllance it was noted that there were several sections along the Route 101 Freeway that required the installation of metal beam guardrail to either reduce run-off-the-road accidents or close gaps. 4-5 different metal beam guardrail projects were initiated which prompted a re-evaluation of the entire Route 101. Our findings indicated many more locations required the installation of metal beam guardrails. Therefore, in order to reduce the number of future projects, it was proposed to initiate one large guardrail project. The length of the project limits is from P.M. S00.0 to P.M. 25.538.

The latest TASAS data (10/01/2005 to 09/30/2008) indicates that within the proposed project limits there were: 524 run-off the road accident on the northbound direction of which 8 were fatalities and 577 run-off the road accidents on the southbound direction of which 5 were fatalities. The actual accident rate is 1.21 for northbound and 1.46 for southbound while the average rate for similar facilities is 1.20 for both directions. The facility has a higher accident rate compared to other similar facilities.

Therefore, it is recommended that metal beam guardrail project be initiated. The proposed project cost is $5,000,000.

Attachments:
Table B
TASAS
Aerial photos
Cost Estimate

Comments After Approval

- [ ] Congestion Related
- [ ] Improvement Under Construction
- [ ] Improvement Under Design
- [ ] Improvement Pending Permits
- [ ] Improvement Pending Maintenance

TRACKING RECOMMENDATIONS

Investigation Closed Date

07-LA-ROUTE 101 MBGR/CONCRETE BARRIER PROJECT P.M. 00.0 TO 25.9

* Install Tubs

**Install Concrete Barrier, remove exist mbgr

***Install mbgr & remove existing mbgr

LOC.	No.	P.M	DIR		Length	End Treatment		Description
						Install	Remove	
LOC.	1	S000.520	NB	Off-ramp	378	√	√	Extend mbgr Lt shldr off-ramp to 4th St.
LOC.	2	S000.807	NB	Mainline	134	√		Install rt. Shldr n/o First Street Br 53-582
LOC.	3	S001.016	NB	On-ramp		√		Install rt. Shldr attach to sdwall on First Street on-ramp
LOC.	4	S001.216	NB	On-ramp	50	√		Install rt. Shldr Seg NB fr Macy to EB 10
LOC.	5	0.189	NB	On-ramp	219	√	√	Extend exist mbgr NB on Mission
LOC.	6	0.621	NB	Off-ramp	466	√	√	Extend exist mbgr NB off to Alameda St
LOC.	7	0.91	NB	On-ramp	50	√		Install in front of columns Lt. Side of ramp b4 merge
LOC.	8	1.03	NB	Off-ramp				Install crash cushion (barrels) NB off to Spring ST*
LOC.	9	1.38	NB	Mainline	140	√		Install n/o of gore area of Rte 101/110 conn.
LOC.	10	1.456	NB	On-ramp	100	√	√	Extend (Lft side) NB on from Grand Ave
LOC.	11	1.798	NB	Conn	950	√		Install NB on fr Rte 110, meet sdwll
LOC.	12	2.741	NB	Bus lane	200	√		Install rt shldr of Bus lane s/o Alvarado Br + WB+ET
LOC.	13	2.84	NB	Bus lane	163'	√		Install rt shldr of Bus lane n/o Alvarado Br
LOC.	14	3.195	NB	Mainline	214	√	√	Close Gap rt shldr, attach to s/o Coronado Br + remove 60' mbgr + ET
LOC.	15	3.643	NB	Off-ramp	149	√	√	Install rt shldr NB off Silver LK Blvd
LOC.	16	3.863	NB	On-ramp	245	√		Install on rt shldr in front of sdwll + ET on SilverLk on
LOC.	17	4.291	NB	Off-ramp	168	√	√	Extend on Lt shldr @ NB off to Vermont Ave
LOC.	18	4.736	NB	Off-ramp	239	√		Install rt shldr + wb @ NB off to Melrose Ave
LOC.	19	5.114	NB	On-ramp	70	√		Attach to sdwall on the NB Normandie on-ramp
LOC.	20	5.446	NB	Off-ramp	166	√		Install Lt side rdwy NB off to Santa Monica Bl
LOC.	21	6.816	NB	Off-ramp	141	√	√	Install Rt. Shldr attach to wall + wb to Franklin/Gower
LOC.	22	7.209	NB	On-ramp	244	√	√	Extend on Lt shldr NB on Argyle/Franklin
LOC.	23	10.343	NB	Mainline	390	√	√	Extend, rt shldr s/o Lankershim Bl UC
LOC.	24	10.859	NB	Mainline	365	√		Close gap rt. Shldr at north end of Br 53-1224
LOC.	25	10.999	NB	Off-ramp	240	√	√	Extend, rt shldr @ NB off Vineland Ave
LOC.	26	11.112	NB	Mainline	347	√	√	Install rt shldr s/o Vineland Ave UC 53-1225
LOC.	27	11.143	NB	Mainline	1430	√	√	Install rt shldr betw Vineland UC & Moorpark UC
LOC.	28	11.546	NB	On-ramp	840	√	√	Begin at street level at NB on Moorpark Street
LOC.	29	12.013	NB	On-ramp	280	√	√	Extend ET on rt shldr on NB on Tujunga Ave
LOC.	30	12.72	NB	Off-ramp	585	√	√	Extend to pave area on NB off Laurel Cyn Ave UC
LOC.	31	12.987	NB	On-ramp	260	√	√	Extend - on rt shldr NB on Laurel Cyn Ave UC
LOC.	32	13.878	NB	Mainline	390	√	√	Rt shldr before BR @ Coldwater Cyn Ave UC
LOC.	33	13.895	NB	Mainline	260	√		Rt shldr after Coldwater Cyn Ave Br
LOC.	34	15.908	NB	Mainline	150	√	√	Extend - rt shldr at Van Nuys Bl UC
LOC.	35	16.06	NB	On-ramp	150	√	√	Extend - rt shldr NB on Van Nuys Bl
LOC.	36	18.497	NB	Off-ramp	500	√	√	Extend-rt shldr NB off Hayvenhurst Ave
LOC.	37	20.375	NB	On-ramp	430	√	√	Extend-rt shldr NB on White Oak Ave
LOC.	38	21.104	NB	Off-ramp	395	√		Extend-rt shldr NB Off Reseda Blvd
LOC.	39	22.149	NB	Off-ramp	300			Attach to wall at NB off-ramp to Tampa Ave
LOC.	39A	25.47	NB	On-ramp	640	√	√	Attach to the sdwall on-ramp from Topanga Cyn/Burbank Bl
LOC.	40	S000.509	SB	On-ramp		√		Install rt. Shldr attach to sdwall on 4th Street on-ramp
LOC.	41	S001.018	SB	Off-ramp	134	√	√	Extend mbgr Rt shldr @ off-ramp to First Street
LOC.	42	0.196	SB	Off-ramp	135	√		Install Lt. Shldr attach to columns @ SB off to Mission
LOC.	43	1.181	SB	Off-ramp	100	√		Install,attach railing SB off to Broadway
LOC.	44	1.647	SB	Off-ramp	750			Install PCC Rt shldr seg SB off to SB Rte 110**
LOC.	45	1.744	SB	Mainline	1100			Install SB betw. Boyleston & Beaudry***
LOC.	46	2.2	SB	Mainline	173	√		Close Gap rt shldr s/o Glendale Blvd UC
LOC.	47	2.32	SB	Mainline	250	√		Close Gap rt shldr s/o Glendale Blvd UC
LOC.	48	2.545	SB	On-ramp	286	√	√	Extend @ north end of Glendale UC from Glendale on-ramp
LOC.	49	2.879	SB	Bus lane	163	√		Install rt shldr of Bus lane b4 Alvarado Br + WB+ET
LOC.	50	2.962	SB	Bus lane	214	√		Install rt shldr of Bus lane aer Alvarado Br + WB
LOC.	51	3.443	SB	Off-ramp	314	√	√	Install left shldr SB off Benton Way
LOC.	52	3.688	SB	On-ramp	500	√		Install mbgr rt shldr & ET of Silver LK on-ramp
LOC.	53	3.7	SB	Mainline	174	√		Install Rt shldr attach to Silver Lk UC south end
LOC.	54	3.76	SB	Mainline	300	√	√	Extend (rt side) Silver LK Bl UC 53-613
LOC.	55	3.921	SB	Off-ramp	274	√	√	Extend(rt shldr) SB off Silver Lk Blvd
LOC.	56	4.135	SB	On-ramp	747	√	√	Extend-beg.On-ramp to Virgil OC+ET+remove 100' mbgr
LOC.	57	4.484	SB	Off-ramp	746	√	√	Install beg. So.end Heliotrope UC along rt shldr off-ramp
LOC.	58	4.58	SB	Mainline	746	√	√	Attach to s/o Br 53-672 + WB & remove 100' mbgr
LOC.	59	4.851	SB	Mainline	221	√		Attach to s/o Br Melrose Ave UC 53-673
LOC.	60	5.457	SB	On-ramp	227	√		Install Lt side rdwy SB on from Santa Monica Bl
LOC.	61	5.881	SB	Off-ramp		√		Install ET Lt side of ramp - attach to wall
LOC.	62	6.373	SB	On-ramp	74	√	√	Extend - rt shldr SB on Hollywood Bl
LOC.	63	7.059	SB	Off-ramp	139	√		Install Rt shldr SB off Gower St
LOC.	64	7.277	SB	On-ramp	185	√	√	Close gap at bridge & extend @on-ramp from Cahuenga

LOC.	No.	P.M	DIR		Length	End Treatment		Description
						Install	Remove	
LOC.	65	7.75	SB	On-ramp		√		Install ET no exist @SB on lr Rte 170.
LOC.	66	8.4	SB	Off-ramp	115	√	√	Extend - rt shldr SB off to Pilgrimage O.C.
LOC.	67	9.096	SB	Mainline	300	√		Install concrete barrier on rt shldr betw fwy & Cahuenga**
LOC.	68	14.885	SB	Mainline	370	√	√	Rt shldr s/o BR Woodman Ave UC 53-1355
LOC.	69	14.905	SB	Mainline	330	√		Rt shldr n/o BR Woodman Ave UC
LOC.	70	15.772	SB	On-ramp	80	√	√	Extend - rt shldr SB on Van Nuys Blvd
LOC.	71	15.943	SB	Mainline	350	√		Rt shldr s/o BR Van Nuys Bl UC
LOC.	71A	17.1	SB	Mainline	290	√	√	Install lft shldr @ bridge
LOC.	72	19.05	SB	On-ramp	275	√	√	Extend-rt shldr SB on Balboa Bl
LOC.	73	19.217	SB	Mainline	130	√	√	Extend-rt shldr Balboa Bl UC 53-1052
LOC.	74	20.11	SB	On-ramp	680	√	√	Extend-rt shldr SB on White Oak Ave
LOC.	75	20.728	SB	Mainline	210	√	√	Close gap on rt n/o Lindley Ave UC 53-1055
LOC.	76	20.91	SB	On-ramp	400	√	√	Extend on Rt shldr @ SB on Burbank/Reseda Ave
LOC.	77	22.354	SB	Mainline	430	√	√	Extend - rt shldr @ Tampa Ave UC north end
LOC.	78	22.4	SB	Mainline	200	√	√	Close Gap on rt shldr n/o Tampa off-ramp
LOC.	78A	23.5	SB	Mainline	200	√	√	Install rt shldr south end of Winnetka Br
LOC.	78B	23.6	SB	Mainline	650	√	√	Install rt shldr north end of Winnetka Bridge
LOC.	78C	23.7	SB	Off-ramp	320		√	Install rt shldr approaching off-ramp to Winnetka
LOC.	79	23.9	SB	Mainline	1150			Install rt shldr s/o SB De Soto on-ramp
LOC.	80	24.311	SB	Mainline	800	√	√	Install n/o BR De Soto Ave UC
LOC.	81	25.788	SB	Mainline	190	√	√	Extend - rt shldr n/o end of Ventura Bl Br 53-1065
LOC.	82	25.889	SB	Mainline	457	√	√	Close gap rt shldr n/o SB off-ramp to Ventura UC and remove 50' mbgr-remove 100' exist.
				Totals	28154	80	49	

ATTACHMENT E
TASAS – Table B

California Department of Transportation

OTM22130

Table B - Selective Accident Rate Calculation

Policy controlling the use of Traffic Accident Surveillance and Analysis System (TASAS) - Transportation Systems Network (TSN) Reports

1. TASAS - TSN has officially replaced the TASAS - "Legacy" database.

2. Reports from TSN are to be used and interpreted by the California Department of Transportation (Caltrans) officials or authorized representative.

3. Electronic versions of these reports may be emailed between Caltrans' employees only using the State computer system.

4. The contents of these reports shall be considered confidential and may be privileged pursuant to 23 U.S.C. Section 409, and are for the sole use of the intended recipient(s). Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message. Do not print, copy or forward.

OTM22130

Table B - Selective Accident Rate Calculation

Report Parameters-

Event ID: 3008266
Request Name: EDNA ALL
Ref Date: 07/29/2010

Request-& Line	LOC	DIR	LSC	Route/Location	Begin Date	End Date	Rate Type	Out Seq	Override Rates Rate	Override Rates Inj%	Override Rates Fat%	Override ADT Main	Override ADT Cross	Req. Type	Com-bine?	Excl Ramp?
1 1		H	N	I 07 LA 101 S000.000 - 07 LA 101 025.901	01-JUL-06	30-JUN-09	N	L						N	N	N
1 2		H	S	I 07 LA 101 S000.000 - 07 LA 101 025.901	01-JUL-06	30-JUN-09	N	L						N	N	N

Event Log:

Job id is : 101016 Accidents Table B Request EDNA ALL Submitted by T7YSFAIL
07 LA 101 S 0 - 07 LA 101 25.901 07/01/2006 TO 06/30/2009
07 LA 101 S 0 - 07 LA 101 25.901 07/01/2006 TO 06/30/2009

California Department of Transportation
Table B - Selective Accident Rate Calculation

Location Description	Rate Group (RUS)	No. of Accidents / Significance Tot	Fat	Inj	F+I	Multi Veh	Wet	Dark	Pers Kid Inj	ADT Main X-St	Total MV+ or MVM	Accident Rates Actual Fat	F+I	Average Tot	Fat	F+I	Tot
07 LA 101 S000.000 - 07 LA 101 025.900	27.260 MI H	4451	18	1371	1389	3838	218	1528	18	125.0	3736.08	0.005	.37	1.19	0.012	.36	1.19
0001-0001 2006-07-01 2009-06-30	*36 mo.* NORTH U			H92					1993								
07 LA 101 S000.000 - 07 LA 101 025.900	27.233 MI H	5222	18	1664	1682	4556	257	1768	19	125.0	3732.38	0.005	.45	1.40	0.012	.36	1.19
0001-0002 2006-07-01 2009-06-30	*36 mo.* SOUTH U	H99		H99	H99			H95	2475								

Accident Rates expressed as: **# of accidents / Million vehicle miles**

+ denotes that **Million Vehicles** (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

ATTACHMENT F1
Categorical Exemption/Categorical Exclusion (CE/CE)

CATEGORICAL EXEMPTION/ CATEGORICAL EXCLUSION DETERMINATION FORM

07-LA-101	S0.00/25.90	07-28270_		201010010
Dist.-Co.-Rte. (or Local Agency)	P.M/P.M.	E.A. (State project)	Fed-Aid Proj No. (Local proj.)/ Proj. No.	CE Number

PROJECT DESCRIPTION:

(Briefly describe project, purpose, location, limits, right-of-way requirements, and activities involved.)

Enter project description in this box. Use Continuation Sheet, if necessary

Caltrans District 7 is proposing to install about 27,000 feet of Metal Beam Guard Rail (MBGR) at approximately 80 locations where MBGR is missing or damaged along Route 101 mainline and on adjacent ramps. The project will include installing 300 feet of double thrie-beam barrier at one location.

Continue on Page 2.

CEQA COMPLIANCE *(for State Projects only)*

Based on an examination of this proposal, supporting information, and the following statements (See 14 CCR 15300 et seq.):

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

CALTRANS CEQA DETERMINATION (Check one)

☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)

Based on an examination of this proposal, supporting information, and the above statements, the project is:

☒ **Categorically Exempt. Class** 1(C). (PRC 21084; 14 CCR 15300 et seq.)

☐ **Categorically Exempt. General Rule exemption.** [This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (CCR 15061[b][3])

Jinous Saleh	Javad Rahimzadeh
Print Name: Environmental Branch Chief	Print Name: Project Manager/DLA Engineer
Signature — Date 10/20/10	Signature — Date 10/21/10

NEPA COMPLIANCE

In accordance with 23 CFR 771.117, and based on an examination of this proposal and supporting information, the State has determined that this project:

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b) (http://www.fhwa.dot.gov/hep/23cfr771.htm - sec.771.117).

In non-attainment or maintenance areas for Federal air quality standards, the project is either exempt from all conformity requirements, or conformity analysis has been completed pursuant to 42 USC 7506(c) and 40 CFR 93.

CALTRANS NEPA DETERMINATION (Check one)

☐ **Section 6004:** The State has been assigned, and hereby certifies that it has carried out, the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding (MOU) dated June 7, 2010, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

- 23 CFR 771.117(c): activity (c)(_____)
- 23 CFR 771.117(d): activity (d)(2)
- Activity _____ listed in the MOU between FHWA and the State

☐ **Section 6005:** Based on an examination of this proposal and supporting information, the State has determined that the project is a CE under Section 6005 of 23 U.S.C. 327.

Jinous Saleh	Javad Rahimzadeh
Print Name: Environmental Branch Chief	Print Name: Project Manager/DLA Engineer
Signature — Date 10/20/10	Signature — Date 10/21/10

Briefly list environmental commitments on continuation sheet. Reference additional information, as appropriate (e.g., air quality studies, documentation of conformity exemption, FHWA conformity determination if Section 6005 project; §106 commitments; §4(f); §7 results; Wetlands Finding; Floodplain Finding; additional studies; and design conditions). **Revised June 7, 2010**

ATTACHMENT F2
Initial Site Assessment

State of California

Business Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: Min Wun, STE
Office of Project and Special Studies

Date: August 9, 2010
File: 07-101, PM 0.00/25.90
Upgrade MGBR System
& Collision Reduction
Program, 20.XX201.015
PPNo. 4293, EA 28270K

From: Ayubur Rahman, STE
DEPARTMENT OF TRANSPORTATION
OEEFS- HAZARDOUS WASTE BRANCH - NORTH REGION

Subject: Hazardous Waste Assessment of: Upgrade MGBR System on Route 101, between LA-005 (PM 0.00) and LA-027, Topango Blvd (PM 25.90), for PSR-PR

Based on your request dated June 17, 2010, we have completed our review of the subject PSR-PR after meeting with your staff, David Wue on June 30, 2010.

We understand, this Collision-Reduction Project proposes to upgrade the Route 101 MGBR system in both northbound and southbound directions between Route 5 near downtown Los Angeles and Route 27, Topango Canyon Blvd. An estimated 27,000 feet of new MGBR will be installed in over 80 locations, for closing gaps in the existing systems where they are missing or damaged, as listed in the attached Tables Number D-1 and D-2.

Upgrading of the Route 101 MGBR System & Collision Reduction Program include the following construction activities:

- Constructing MGBRs along modified roadway and their end treatments,
- Clearing/grubbing, constructing new curbs and gutters, and standardizing the shoulders,
- Replacement of disturbed landscaping features,
- Modification of some drainage manholes,
- Relocation of electrical facilities,
- Remove white thermoplastic traffic stripes, and
- Other minor modification.

The hazardous waste issues for these construction activities are discussed below:

Lead Impacted Soil

Based on our recorded information, most of the proposed construction activities that will take place next to the north and southbound LA-101 are impacted with aerially deposited lead (ADL). Based on the Geocon Consultants' ADL Site Investigation Report for PM

11-45, dated March 1996, Geocon's ADL Investigation Report for PM 15-16, dated June 2003 Geocon's ADL Investigation Report for PM 17-25, dated March 1996, Ninyo &Moore Lead investigation Report PM 15-16 dated July 2001 and ten other reports, the total lead concentration (TTLC) and soluble lead concentration (STLC) exceed CCR Title 22 thresholds for lead. The disturbance of the lead impacted soil varies with the type of construction activities that are planned for this project. Some of the construction activities produce large amounts of waste soil that need to be removed from the site, but most are minimal disturbances that can be spent on site. These two situations are discussed below:

Major Soil Removals

Constructing new curbs and gutters, and standardizing the shoulders by adding 4-10 feet on the south and northbound LA-101 is planned at 14 of the 86 locations where collision-reduction are needed. Most of the excavated soil generated from standardizing the shoulders and constructing new curbs and gutters will have hazardous waste issues. Based on existing data, almost 70% 0f the excavated soil may be considered Type Y-1 or Y-2 soils per Caltrans DTSC Lead Variance that can be reused under 1 foot of clean soil or pavement and 5 feet above groundwater level. But, if it cannot be reused on site, it should be hauled to Class I waste facility.

Based on the information from most of the past 14 ADL Site Investigations that were carried in the project area, an estimated 30% of the excavated soil may fail Federal threshold TCLP concentration of 5mg/l for lead. These soils that are either from near surface and/or close to travel-way are considered Type Z-3, require disposal to a Class I waste facility.

Minor Soil Distrubances

Clearing and grubbing and constructing new MGBRs and their end treatments in the existing gaps and repairing the damaged ones along the adjusted edges of the roadway are the dominant construction activities for this project. Such construction work will take place at 72 of the estimated 86 locations where collision reduction is needed. As clearing and grubbing and installation of MGBRs produce minor amount of soil over an extended length of the project area, there is no hazardous waste issue related to such activities, provided soils generated can be spent locally.

In 3 of the 86 locations, the collision reduction plans require modification of the landscaped areas that is next to the shoulder. The proposed modification in one of the three sites is limited to positioning of its irrigation lines. In the other two the outer edge of the landscaped area will also recede by 2 feet in their width. As the recessed edge will not generate significant amount of soil, the soil disturbance in the three landscaped areas may fall under "minor soil disturbance". Therefore, if it can be spent on site it is considered a minor soil disturbance, otherwise it will be a hazardous waste issues and variance may be applicable.

The electrical facilities that will be relocated consist of: buried high-powered utility cables and their galvanized steel conduits and electrical boxes. These cables run inside a

galvanized steel conduit, buried 2-3 feet below surface that connect to the electrical boxes. The cables and the electrical boxes will be pulled from 22 of the 86 sites where collision reduction are planned. Their relocation will consist of: pulling out the cable or the entire facility and replacing it further out from the travel-way. Installing signposts, traffic operation systems and constructing trenches for electrical cables are considered minor soil disturbances. All disturbed soils should remain in the area of disturbance and not be transported elsewhere.

There are also other roadway facilities that need to be removed and replaced or re-anchored, that require minor shallow excavations. These facilities are few in number and include: storm drain manholes, AC dikes, traffic control box, (TCB), traffic signal or tubular steel (TS), double threi beam barrier (DTBB), Bridge Rail, k-rail, and power pole. Their waste soil, if any, should remain in the area of disturbance and not be transported elsewhere.

Treated Wood Waste

The MGBRs will be pulled or replaced from four sites that are located along 480 feet of the south and northbound LA-101 travel-ways. Once, the wood posts are removed and unless reused, they are considered treated wood waste (TWW). TWW is a potential source of hazardous chemicals as they are treated woods and pose a risk to human health and environment. Among the three primary methods of wood treatment currently prevail, chromated copper arsenate (CCA) is the most popular wood treatment product available today. CCA is a preservative containing chromium, copper and arsenic. CCA has been used to pressure treat lumber since the 1940s. TWW can be handled as a solid waste, testing and sampling of TWW is not required. However, the proper safety and health practices for handling TWW should be included in the Contractor's Project Code of Safety and Health Practices. Instead of disposal in a Class 1 hazardous waste landfill, TWW may be disposed in a municipal solid waste landfill certified by the Regional Water Quality Control Board (RWQCB).

Asbestos Containing Material

Older MGBRs consist of crescent–shaped railing and ACM containing shims that are bolted to wooden post. However, based on our field inspection, these MGBRs have W-shaped railings and metallic shims. Therefore, these MGBRs don't have any ACM related hazardous waste issues.

White Thermoplastic Traffic Stripes

Removal of white thermoplastic traffic stripes will be required on both sides of LA-101 that will be modified where collision reduction is required. It includes, where constructing new curbs and gutters, and standardizing the shoulders will take place. The waste product from removal of white thermoplastic traffic stripes is not considered hazardous waste. It can be hauled to Class III waste facility.

Conclusion

The PSR-PR should consider ADL impacted soil and its disposal as its primary hazardous waste issues. It has a major impact where excess soil will be generated, as the existing shoulder of the north and southbound LA-101 are standardized with new curb and gutters. ADL is also a hazardous waste issue where MGBRs are to fill the gaps or replace damaged one, and where electrical facilities and other related facilities are relocated. However, its impact is limited to health/safety issue of the workers, provided the excess soils are locally spent. Beside ADL, there are also treated wood waste and white thermoplastic traffic stripes.

Fourteen ADL investigations have been carried out in the project area between 1996-2003. Therefore, the existing ADL information may be adequate for classifying the soils per CCR Title 22 and Caltrans DTSC Variance for possible reuse or disposal to Class I waste facility. However, some ADL site investigation may still be necessary during PS&E phase by which we will quantify the portion of the excavated exposed soil that may fail in the Federal or State Standards. The estimated $100,000 cost for hazardous waste investigation included in Appendix C of the PSR-PR for hazardous waste mitigation needs to be reevaluated based on this hazardous waste assessment.

The project will require lead compliance plan (LCP) that is prepared and signed by Certified Industrial Hygienist (CIH). Please refer to the latest Contract Cost Database (http://t8web/design/contractcost/) for the funds that need to be allocated for the lump sum cost of the Contractor's Lead Compliance Plan, and handling and disposal of the lead impacted soil.

The PSR-PR did not include, the PYs support costs for this project. Please include 300 hrs for Activity Code165.10.50 and 800 hrs for Activity Code 235.10.15 for this project.

Please inform us of the revisions to the scope of work and if you have questions regarding this memorandum, contact me at 213-897 0670 or Ali Nili 213 897 3640.

Ayubur Rahman

Ayubur Rahman, STE
District Hazardous Waste Coordinator
Office of Environmental Engineering and Corridor Studies

Attachment: Tables D-1 and D-2, Locations and Work Descriptions, North and Southbound LA-101 Collision Reduction Program Project

Table D1: Locations and Work Descriptions - Northbound

Loc. #	PM	ML/Ramp/ Connector	Descriptions (from Traffic Investigation Report)	Shoulder Std	Shoulder Exist	Shoulder Prop	Horizontal Clr Std	Horizontal Clr Exist	Horizontal Clr Prop	Dgn Exc Req Shlder	Dgn Exc Req Hor Clr	Length (Ft)	Work Descriptions (as shown on Layout Plan)
1	s0.52	off-ramp	Extend MGBR left shld off-ramp to 4th	4	0	4	4	4	4			520	Remove Curb. Const 4'-Shld, Curb & Gtr. Const MBGR & ET
2	s0.907	mainline	Install Rt Shldr n/o 1st St. Br#53-0582	10	2	2	10	10	10	Yes		190	Remove Curb. Const 10'-Shld, Curb & Gtr. Const MBGR
3	s1.016	on-ramp	Install Rt. Shldr; attch to SdWall on 1st St. on-ramp	8	1	1	8	8	8	Yes		40	Const ET
4	s1.216	on-ramp	Install Rt. Shldr Seg NB fr Macy to EB-10	8	8	8	8	8	8			40	Const ET
5	0.189	on-ramp	Extend exist MBGR NB on Mission	8	3	8	8	8	8			220	Const MBGR & ET. Restripe 8'-Rt-Shld
6	0.621	off-ramp	Extend exist MBGR NB off to Alameda	4	3	3	4	4	4	Yes		466	Const MBGR & ET
7	0.91	on-ramp	Install in front of columns Lt. Side of ramp b4 merge	4	4	4	4	4	4			40	Const ET
8	1.03	off-ramp	Install Crash Cushion (Barrels) NB off to Spring										*(Not enough space for crash cushion. Location eliminated)*
9	1.36	mainline	Install n/o of Gore area; Rte 101/110 conn	10	10	10	10	10	10			140	Const MBGR & ET
10	1.456	on-ramp	Extend left side NB on from Grand	4	2	2	4	4-2	4-2	Yes	Yes	100	Remove ET. Const MBGR & ET
11	1.798	connector	Install NB on fr Rte 110, meet SdWall	10	10	10	10	10	10			950	Const MBGR & ET
12	2.741	Bus Lane	Install Rt. Shldr of Bus Lane s/o Alvarado Br + WB + ET	8	8	8	8	8	8			200	Rel elect line. Const MBGR
13	2.84	Bus Lane	Install Rt Shldr of Bus lane n/o Alvarado Br	8	8	8	8	8	8			163	Rel elect lines. Const MBGR & ET
14	3.195	mainline	Close Gap rt shldr; attach to s/o Coronoad Br + remove 60' MBGR+ET	10	10-2	10-2	10	10-2	10-2	Yes	Yes	214	Remove MBGR (60'). Const MBGR & ET
15	3.643	off-ramp	Install Rt Shldr NB of Silver Lk Blvd	8	2	8	8	8	8			150	Remove Curb .Modify stormdrain manhole. Const 8'-Shld, Curb & Gtr. Const MBGR
16	3.863	on-ramp	Install on Rt Shldr in front of SdWall + ET on SilverLk On	8	8	8	8	8	8			245	Const MBGR & ET

Loc. #	PM	ML/Ramp/ Connector	Descriptions (from Traffic Investigation Report)	Shoulder Std	Shoulder Exist	Shoulder Prop	Horizontal Clr Std	Horizontal Clr Exist	Horizontal Clr Prop	Dgn Exc Req Shlder	Dgn Exc Req Hor Clr	Length (Ft)	Work Descriptions (as shown on Layout Plan)
17	4.291	off-ramp	Extend on Lt. shldr@ NB off to Vermont Ave	4	2	4	4	4	4			168	Remove Curb & Gtr. Modify irrigation system. Rel elect line. Const 4'-Shld, Curb & Gtr. Const MBGR
18	4.736	off-ramp	Install Rt shldr + WB @NB off to Melrose Av	8	8	8	8	8	8			239	Const MBGR & ET
19	5.114	on-ramp	Attach to SdWall on the NB Normandie On-ramp	8	8	8	8	8	8			70	ConstMBGR & ET
20	5.445	off-ramp	Install Lt side RdwayNB off to Santa Monica Bl	4	2	4	4	4	4			300	Rel elect line & pull box. Modify irrigation system. Remove Curb & Gtr. Const 4'-Shld, Curb & Gtr. Const MBGR
21	6.816	off-ramp	instal Rt Shldr atach to wall + WB to Franklin/Gower	8	8-2	8-2	8	8	8-2	Yes	Yes	141	Const MBGR
22	7.209	on-ramp	Estend on Lt Shldr NB on Argyle/Franklin	4	4	4	4	4	4			244	Rel elect. Modify irrigation sys. Const MBGR & ET
23	10.343	mainline	Extend, Rt shldr s/o Lankershim Blvd UC	10	2	10-2	10	10-2	10-2	Yes	Yes	390	Remove Curb & Gtr. Remove MBGR (50'). Const 10'-Shld, Curb & Gtr. Const MBGR & ET
24	10.859	mainline	Close gap Rt. Shldr at north end of Br 53-1224	10	10	10	10	10	10			220	Const MBGR
25	10.999	off-ramp	Extend, Rt shldr @ NB off Vineland Av	8	8	8	8	8	8			240	Rel elect line. Reconst 8'-Shld. Const MBGR
26	11.112	mainline	Install Rt. Shldr s/o Vineland Av UC 53-1225	10	10	10	10	10	10			220	Const MBGR
27	11.143	mainline	Install Rt.Shldr betw Vineland UC & Moorpark St	10	10	10	10	10	10			1430	Const MBGR
28	11.546	on-ramp	Begin at Street level at NB on Moorpark St	8	8	8	8	8	8			700	Rel elect line. Const MBGR & ET
29	12.013	on-ramp	Extend ET on Rt shldr on NB on Tujunga Av	8	8	8	8	8	8			250	Rel elect line. Re-anchor Power Pole. Remove ET. Const MBGR & ET
30	12.72	off-ramp	Extend to pave area on NB off Laurel Cyn Av UC	8	8	8	8	8	8			585	Rel elect line. Remove ET. Const MBGR & ET
31	12.987	on-ramp	Extend - on Rt Shldr NB on Laurel Cyn Ave UC	8	2	8	8	6	8			260	Remove Curb & Gtr. Rel elect line. Const 8'-Shld, Curb & Gtr. Const MBGR & ET

Table D1: Locations and Work Descriptions - Northbound

Loc. #	PM	ML/Ramp/ Connector	Descriptions (from Traffic Investigation Report)	Shoulder Std	Shoulder Exist	Shoulder Prop	Horizontal Clr Std	Horizontal Clr Exist	Horizontal Clr Prop	Dgn Exc Req Shlder	Dgn Exc Req Hor Clr	Length (Ft)	Work Descriptions (as shown on Layout Plan)
1	s0.52	off-ramp	Extend MGBR left shld off-ramp to 4th	4	0	4	4	4	4			520	Remove Curb. Const 4'-Shld, Curb & Gtr. Const MBGR & ET
2	s0.907	mainline	Install Rt Shldr n/o 1st St. Br#53-0582	10	2	2	10	10	10	Yes		190	Remove Curb. Const 10'-Shld, Curb & Gtr. Const MBGR
3	s1.016	on-ramp	Install Rt. Shldr; attch to SdWall on 1st St. on-ramp	8	1	1	8	8	8	Yes		40	Const ET
4	s1.216	on-ramp	Install Rt. Shldr Seg NB fr Macy to EB-10	8	8	8	8	8	8			40	Const ET
5	0.189	on-ramp	Extend exist MBGR NB on Mission	8	3	8	8	8	8			220	Const MBGR & ET. Restripe 8'-Rt-Shld
6	0.621	off-ramp	Extend exist MBGR NB off to Alameda	4	3	3	4	4	4	Yes		466	Const MBGR & ET
7	0:91	on-ramp	Install in front of columns Lt. Side of ramp b4 merge	4	4	4	4	4	4			40	Const ET
8	1.03	off-ramp	Install Crash Cushion (Barrels) NB off to Spring										*(Not enough space for crash cushion. Location eliminated)*
9	1.36	mainline	Install n/o of Gore area; Rte 101/110 conn	10	10	10	10	10	10			140	Const MBGR & ET
10	1.456	on-ramp	Extend left side NB on from Grand	4	2	2	4	4-2	4-2	Yes	Yes	100	Remove ET. Const MBGR & ET
11	1.798	connector	Install NB on fr Rte 110, meet SdWall	10	10	10	10	10	10			950	Const MBGR & ET
12	2.741	Bus Lane	Install Rt. Shldr of Bus Lane s/o Alvarado Br + WB + ET	8	8	8	8	8	8			200	Rel elect line. Const MBGR
13	2.84	Bus Lane	Install Rt Shldr of Bus lane n/o Alvarado Br	8	8	8	8	8	8			163	Rel elect lines. Const MBGR & ET
14	3.195	mainline	Close Gap rt shldr; attach to s/o Coronoad Br + remove 60' MBGR+ET	10	10-2	10-2	10	10-2	10-2	Yes	Yes	214	Remove MBGR (60'). Const MBGR & ET
15	3.643	off-ramp	Install Rt Shldr NB of Silver Lk Blvd	8	2	8	8	8	8			150	Remove Curb .Modify stormdrain manhole. Const 8'-Shld, Curb & Gtr. Const MBGR
16	3.863	on-ramp	Install on Rt Shldr in front of SdWall + ET on SilverLk On	8	8	8	8	8	8			245	Const MBGR & ET

Loc. #	PM	ML/Ramp/ Connector	Descriptions (from Traffic Investigation Report)	Shoulder Std	Shoulder Exist	Shoulder Prop	Horizontal Clr Std	Horizontal Clr Exist	Horizontal Clr Prop	Dgn Exc Req Shlder	Dgn Exc Req Hor Clr	Length (Ft)	Work Descriptions (as shown on Layout Plan)
32	13.878	mainline	Rt Shldr before BR @ Coldwater Cyn Ave UC	10	10	10	10	10	10			260	Remove ET. Rel elect line. Const MBGR & ET
33	13.895	mainline	Rt Shldr after Coldwater Cyn Ave Br	10	10	10	10	10	10			260	Rel elect line. Const MBGR
34	15.908	mainline	Extend - Rt Shldr at Van Nuys Bl UC	10	10	10	10	10	10			150	Remove ET. Rel elect line. Const MBGR & ET
35	16.06	on-ramp	Extend - Rt Shldr NB on Van Nuys Bl	8	8	8	8	8	8			350	Remove ET. Const MBGR & ET
36	18.497	off-ramp	Extend Rt Shldr NB off Hayvenhurst Av	8	8-2	8	8	8	8			500	Remove ET. Remove Curb & Gtr. Rel elect line. Const 8'-Shld, Curb & Gtr. Const MBGR
37	20.375	on-ramp	Extend Rt Shldr NB on White Oak Ave	8	8	8	8	8	8			430	Remove ET. Rel elect lines. Const MBGR & ET
38	21.104	off-ramp	Entend Rt Shldr NB off Reseda Blvd	8	8-0	8	8	8	8			400	Remove Curb & Gtr (300'). Rel elect line. Const 8'-Shld, Curb & Gtr. Const MBGR
39	22.149	off-ramp	Atach to wall at NB off-ramp to Tampa	8	8-2	8	8	8	8			200	Const MBGR
39A	25.47	on-ramp	Attach to SdWall On-ramp from Topanga Cyn/Burbank Bl	8	8	8	8	8	8			640	Remove K-rail. Const MBGR & ET

and treatment - with curbed typical - 1.10 per BR.

Table D2: Locations and Work Descriptions - Southbound

Loc. #	PM	ML/Ramp/ Connector	Descriptions (from Traffic Investigation Report)	Shoulder Std	Shoulder Exist	Shoulder Prop	Horizontal Clr Std	Horizontal Clr Exist	Horizontal Clr Prop	Dgn Exc Req Shlder	Dgn Exc Req Hor Clr	Length (Ft)	Work Descriptions (as shown on Layout Plan)
40	s0.509	on-ramp	Install Rt. Shldr attach to SdWall on 4th St on-ramp	8	8	8	8	8	8			40	Const ET
41	s1.018	off-ramp	Extend MBGR Rt Shld @ off-ramp to 1st Street	8	8	8	8	8	8			134	Remove ET. Const MBGR
42	0.196	off-ramp	Install Lt. Shldr attach to columns @ SB off to Mission	4	2	2	4	2	2	Yes	Yes	135	Const MBGR
43	1.181	off-ramp	Install attach railing SB off to broadway	4	4	4	4	4	4			100	Repl Br Rail
44	1.647	off-ramp	Install PCC Rt Shld Seg SB off to SB Rte 110**	10	10	10	10	10	10			750	Repl MBGR
45	1.744	mainline	Install SB betw. Boyleston & Beaudry ***	10	10	10	10	10	10			1100	Repl MBGR
46	2.2	mainline	Close Gap rt shldr s/o Glendale Blvd UC	10	10	10	10	10	10			240	Rel elect line. Const MBGR
47	2.32	mainline	Close Gap rt shldr s/o Glendale Blvd UC	10	10-2	10-2	10	10-2	10-2	Yes	Yes	250	Remove ET. Const MBGR
48	2.545	on-ramp	Extend @ north end of Glendale UC from Glendale on-ramp	8	2	8-2	8	2	8-2	Yes	Yes	286	Remove ET. Rel elec & elect lines. Const MBGR & ET
49	2.879	bus lane	Install rt shldr of Bus Lane b4 Alvarado Br + WB+ET	8	8	8	8	8	8			163	Rel elect line. Const MBGR & ET
50	2.962	bus lane	Install rt shldr of Bus Lane at Alvarado Br + WB	8	8	8	8	8	8			214	Rel elect line. Const MBGR & ET
51	3.443	off-ramp	Install left shldr SB of Benton Way	4	4	4	4	4	4			314	Const MBGR & ET
52	3.688	on-ramp	Install MBGR rt shldr & ET of Silver Lk On-ramp	8	2	8	8	8	8			500	Remove Curb. Rel SD manhole, elect lines. Const MBGR & ET
53	3.7	mainline	Install rt shldr attach to silver Lk UC south end	10	2	10-2	10	10-2	10-2	Yes	Yes	174	Remove Curb. Const 10'-Shld & AC dike. Const MBGR
54	3.76	mainline	Extend (rt side) Silver Lk Bl UC 53-0613	10	10	10	10	10	10			300	Const MBGR & ET
55	3.921	off-ramp	Extend (Rt shldr) SB of Silver Lk Blvd	8	8	8	8	8	8			274	Const MBGR
56	4.135	on-ramp	Extend beg.On-ramp to Virgil OC+ET+remove 100' MBGR	8	0	8	8	8	8			1000	Rel elect lines. Remove MBGR (100'). Const 8'-Shld. Const MBGR & ET
~~57~~	4.484	off-ramp	Install beg. So end Heliotrope UC along rt shldr off-ramp										*(Not found. Location eliminated)*
58	4.58	off-ramp	Attach to s/o Br 53-0672 + WB & remove 100' MBGR	8	8	8	8	8	8			746	Remove MBGR (80'). Rel elect line. Const MBGR

Loc. #	PM	ML/Ramp/ Connector	Descriptions (from Traffic Investigation Report)	Shoulder Std	Shoulder Exist	Shoulder Prop	Horizontal Clr Std	Horizontal Clr Exist	Horizontal Clr Prop	Dgn Exc Req Shlder	Dgn Exc Req Hor Clr	Length (Ft)	Work Descriptions (as shown on Layout Plan)
59	4.851	mainline	Attach to s/o Br Melrose Ave UC 53-0673	10	10-2	10-2	10	10-2	10-2	Yes	Yes	221	Const MBGR
60	5.457	on-ramp	Install Lt side rdwy SB on from Santa Monica Blvd	4	2	2	4	4	4	Yes		227	Const MBGR & ET
61	5.881	off-ramp	Install ET Lt side of ramp - attach to wall	4	2	2	4	4	4	Yes			Const ET
62	6.373	on-ramp	Extend - rt shldr SB on Hollywood Bl	8	2	8	8	8	8			74	Remove Curb & Gtr. Const 8'-Shld & Gtr. Const MBGR & ET
63	7.059	off-ramp	Install Rt shldr SB off Gower St.	8	2	2	8	2	2	Yes	Yes	139	Const MBGR
64	7.277	on-ramp	Close gap at bridge and extend @ on-ramp from Cahuenga	8	8	8	8	8	8			185	Remove ET. Const MBGR
65	7.75	on-ramp	Install ET no exist @ SB on fr rte 170	8	2	2	8	2	2	Yes	Yes		Const ET
66	8.4	off-ramp	Extend - rt shldr SB off to Pilgrimage OC	8	8	8	8	8	8			380	Const MBGR & ET
67	9.096	mainline	Install concrete barrier on rt shldr betw fwy & Cahuenga **	10	10	10	10	10	10			300	Remove CL-6. Rel elect lines. Const DTBB w/ CL
68	14.885	mainline	Rtshldr s/o BR Woodlman Ave UC	10	10	10	10	10	10			170	Const MBGR
69	14.905	mainline	Rt shldr n/o BR Woodman Ave UC	10	10	10	10	10	10			330	Const MBGR
70	15.772	on-ramp	Extend - rt shldr SB on Van Nuys Blvd	8	8	8	8	8	8			80	Const MBGR & ET
71	15.943	mainline	Rt shldr s/o BR Van Nuys Blvd UC	10	10	10	10	10	10			350	Const MBGR & AC dike
71a	17.1	connector	Install lft shldr @ bridge	10	2	2	10	2	2	Yes	Yes	290	Replace MBGR
72	19.05	on-ramp	Extend rt shldr SB on Balboa Bl	8	8-2	8	8	8	8			180	Remove Curb & Gtr. Const 8'-Shld. Const AC dike, MBGR & ET
73	19.217	mainline	Extend rt shldr Balboa Bl UC 53-1052	10	10	10	10	10	10			200	Const MBGR & ET
74	20.11	on-ramp	Extend rt shldr SB on White Oak Ave	8	8-0	8	8	8-2	8			680	Remove AC dike. Rel elect line, TCB, TS. Const 8'-Shld & AC dike. Const MBGR & ET
75	20.728	mainline	Close gap on rt n/o Lindley Ave UC 53-1055	10	10	10	10	10	10			210	Remove ET. Const MBGR
76	20.91	on-ramp	Extend on rt shldr @ SB on Burbank / Reseda Ave	8	0	8	8	4	8			400	Remove AC dike. Rel elect line, TCB, TS. Const 8'-Shld & AC dike. Const MBGR & ET
77	22.354	mainline	Extend - rt shldr s/o SB DeSoto on-ramp	10	10	10	10	10	10			430	Remove ET. Rel elect line. Const MBGR
78	22.4	mainline	Close Gap on rt shldr n/o/ Tampa off-ramp	10	10	10	10	10	10			400	Remove MBGR (60'). Const MBGR
78a	23.5	mainline	install rt shldr S end of Winnetka	10	10	10	10	10	10			200	Const MBGR
78b	23.6	mainline	install rt shldr N end of Winnetka	10	10	10	10	10	10			650	Remove ET. Const MBGR

Loc. #	PM	ML/Ramp/ Connector	Descriptions (from Traffic Investigation Report)	Shoulder			Horizontal Clr			Dgn Exc Req		Length (Ft)	Work Descriptions (as shown on Layout Plan)
				Std	Exist	Prop	Std	Exist	Prop	Shlder	Hor Clr		
78c	23.7	mainline	install rt shldr approaching off ramp to Winnetka	10	10	10	10	10	10			320	Remove ET. Const MBGR
79	23.9	on-ramp	install rt shldr s/o SB DeSoto on-ramp	8	8	8	8	8	8			1150	Const MBGR & ET
80	24.311	mainline	Install n/o BR DeSoto Ave UC	10	10	10	10	10	10			570	Remove ET. Const MBGR & ET
81	25.788	mainline	Extend - rt shldr n/o end of Ventura Bl Br 53 1065	10	10	10	10	10	10			190	Remove ET. Const MBGR & ET
82	25.889	mainline	Close gap rt shldr n/o SB off-ramp to Ventura UC and remove 50' MBGR-remove 100' exist.	10	10	10	10	10	10			300	Remove MBGR (80'). Const MBGR

ATTACHMENT F3
Air Quality Review

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: Min Wun, STE
Office of Project and Special Studies

Date: June 24, 2010

File: 07-LA-101
PM S00.0/R25.90
MBGR Gap Closure

EA: 07-335-28270K

From: ANDREW YOON
Senior Transportation Engineer
Air Quality Branch
Office of Environmental Engineering and Corridor Studies

Subject: *Air Quality Review of the Metal Beam Guard Rail (MBGR) Gap Closure Project on United States Route 101(US-101) in Los Angeles County from Interstate 5 (I-5) Junction (PM S00.0) to State Route 27 (SR-27)/Topanga Canyon Blvd. (PM 25.90)*

This memorandum has been prepared in response to your request dated June 17, 2010, for an Air Quality review of the above referenced project. The proposed scope of the project includes:

- Installation of about 27,000 feet of MBGR in over 80 locations
- Installation of 300 feet of double thrie-beam barrier at one location
- Widening existing shoulder to standard width at some locations
- Clearing and grubbing, excavation, modification of some drainage facilities, replacement of disturbed landscaping features, relocation of electrical facilities, placing asphalt concrete pavement, and restriping.

The Office of Environmental Engineering and Corridor Studies (OEECS), Air Quality Branch (AQB) has completed the review and provides the comments below.

Per 40 CFR 93.126 published in the Federal Register (volume 69, page 40004) on July 1, 2004, Table 2 allows certain projects to be exempt from all emissions analyses. Based on the scope of work provided in the June 2010 PSR-PR and the State Highway Operation and Protection Program (SHOPP) project category of 201.015, Collision Severity Reduction Program, the proposed project is deemed listed in Table 2 under the subtitle "Safety" and classification "Guardrails, median barriers, crash cushions." Therefore, pursuant to 40 CFR 93.126, this project is deemed classified and is exempt from the requirement to determine conformity.

The *Transportation Project-Level Carbon Monoxide Protocol* (published by Institute of Transportation Studies, University of California, Davis, Revised December 1997) indicates that a project-level air quality analysis is not required for projects exempt pursuant to 40 CFR 93.126; and it is unlikely that the proposed project will result in an adverse impact to ambient CO.

Proposed project is located in Los Angeles County, which is in a federal non-attainment area for PM_{10} and $PM_{2.5}$. The project, however, is exempt from the conformity requirements per 40 CFR 93.126 and it is a type of project that is not anticipated to involve a significant number or result in an increase in the number of diesel vehicles or increase in vehicle idling. The proposed project is expected to have a neutral influence on PM_{10} and $PM_{2.5}$ emissions; and thus is not anticipated to be of air quality concern for PM_{10} and $PM_{2.5}$. The proposed project is unlikely to result in adverse impacts to ambient PM_{10} and $PM_{2.5}$.

The proposed project is not anticipated to result in any meaningful changes to traffic volumes, vehicle mix, location of the existing facility, or any other factors that would cause an increase in mobile source air toxic (MSAT) emissions impacts relative to the no-build alternative. Pursuant to the *FHWA's Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents* dated September 30, 2009, projects that are CE under 23 CFR 771.117 (c) or are exempt under the Clean Air Act pursuant to 40 CFR 93.126, do not require an analysis or discussion of MSAT.

The proposed project is located within the boundary of South Coast Air Quality Management District (SCAQMD); therefore this project must comply with the SCAQMD Fugitive Dust Implementation Rule 403 to minimize temporary emissions during construction of the project as applicable and appropriate.

It is requested that the AQB be informed of any changes to the proposed scope or class of action determination. Such changes may require update or reassessment of air quality issues for the proposed project.

If you have any questions, please contact me at (213) 897-6117 or Liberty San Agustin at (213) 897-4638.

Cc: Jinous Saleh, Division of Environmental Planning

ATTACHMENT G
Right of Way Data Sheets

TO Min Wun
ATTN James Vu
PHONE (213) 897-0116
SENIOR R/W P&M
ROUTE LA-101
PM_KM PM s0.0/25.9
EA 28270K
ALT

R/W DATA SHEET

Date of Data Sheet 9/8/2011
WBS
REVISED
UPDATED
PROJ._DESC Metal Beam Guardrail

ID NO
1888

This cost estimate is pursuant to the following statements which are based on information provided by Min Wun.

This cost estimate is valid for the above scoping report only. This is an estimate only and not an appraisal. It may be based on worse case scenarios. The estimate is subject to change and revision.

The mapping did not provide sufficient nor adequate detail to determine the limits of thr Right of Way required and effects on the improvements.

The transportation facilities have not been sufficiently designed for our estimator to determine the damages to any of the remainder parcels affected by the project.

Residential displacement is not involved .

Utility facilities or Utility Right of Way are not affected.

Railroad facilities or R.R. Right of Way are not affected.

Right of Way work will not be performed by Caltrans staff.

Major items of Construction Contract Work are not anticipated.

It is not known at this time whether there are any material borrow and/or disposal sites are required.

There are no potential relinquishments and/or abandonments.

Hazardous waste parcels are not evident

Time constraints precluded a detailed cost estimate.

The time schedule provided by the requesting party allowed for a field inspection.

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/ w acq.(incl.contingency G.w-condem.-adm.s'tl.)Permits	NONE	NONE
Clearance	NONE	NONE
RAP (cont rate.)	NONE	NONE
Escrow costs (cont rate.)	NONE	NONE
Utility relocation costs	$20,000	$28,376
Estimate of Reimbursed Appraisal Fee	NONE	NONE
Total estimated cost	$20,000	$28,376

ESCALATION RATE RW .07
ESCALATION RATE Utilities .08
CERT.DATE 7/17/14

RR INFORMATION

Are RR affected: no

Describe affected RR: Although the Red line appears on the location map. All work will be done from the top of the deck and will not require railroad coordination with MTA, BNSF or UPRR

WHEN BRANCH LINES OR SPURS ARE AFFECTED ,WOULD ACQUISITION AND OR PAYMENT OF DAMAGES TO BUSINESSES AND OR INDUSTRIES SERVED BY THE RAILROAD FACILITY BE MORE COST EFFECTIVE THAN SERVICE CONTRACTS ,OR GRADE SEPARATIONS REQUIRING CONSTRUCTION AND MAINTENANCE AGREEMENTS INVOLVED? NONE

Explain Branch lines: N/a

DISCUSS TYPES OF AGREEMENTS AND RIGHTS REQUIRED FROM THE RAILROADS. ARE GRADE XING REQUIRING SERVICE CONTRACTS ,OR GRADE SEPARATIONS REQUIRING CONSTRUCTION AND MAINTENANCE AGREEMENTS INVOLVED.

N/A

ESTIMATED COST TO THE STATE FOR ALL R.R. INVOLVEMENTS. $0

		DATE
Right of Way Estimate prepared by	**Roy Gallegos**	**9/8/11**
Railroad Estimate prepared by	**Lowell W Anderson**	**7/1/10**
Utilities Estimate prepared by	**Sonya Carter**	**9/27/10**

I have personally reviewed this R/W Data Sheet and all supporting information I certify that the probable highest and best use estimated values and assumptions are reasonable and proper subject to the limiting conditions set forth and I find this Data Sheet complete and current.

This Data Sheet is not to be signed by Chief unless accompanied by final scoping report(PR,PSR,PSSR) for review and/or signature.

Senior Right of Way Agent _____ 9.9.2011

ROUTE LA-101
PM_KM PM s0.0/25.9
EA 26270K
ALT

PARCEL COUNT

PARCEL TYPES	DUAL APPR.
A	
B	
C	
D	
F	
W	

RIGHTS NEEDED	
FEE	
EASE	
TCE	

TAKES	
FULL	
PART	
TOTAL	

DISPLACEMENT OF UNITS	
SFR	
MULTI	
BUS	

PARCELS WITH RAP
0

POTENTIAL CLEARANCE PARCELS

POTENTIAL CONDEMNATION PARCELS

POTENTIAL EXCESS PARCELS
not known at this time.

ESTIMATE OF PY'S

APPRAISALS

	PY	HOURS
A		
B		
C		
D		
F		
W		
Dual		

ACQUISITIONS

	PY	HOURS
A		
B		
C		
D		
F		

UTILITIES

	PY	HOURS
PY U4 1	0.0256	55
PY U4 2		
PY U4 3	0.0934	170
PY U4 4		
PY U5 7		
PY U5 8		
PY U5 9	0.0546	150

RAILROAD

	PY	HOURS
C & M		
SC		
LIC/RE		

CONDEMNATION

PY	HOURS

CLEARANCE

PY	HOURS

RELOCATION

PY	HOURS

PERMITS

PY	HOURS

UTILITY INFORMATION

Are Utilities affected: no

	Quantities	Estimated Costs	Escalated Costs
1 Guy Wire (SCE), on 101 W On Ramp from Tujanga Ave, about 6' away from the Curb and Gutter on th right side of	1	$10,000	$14,188
1 Cabinet (SCE), on 101 W On Ramp from Tuanga Ave, about 7' away from the Curb and Gutter on th right side of the	1	$10,000	$14,188

Are utility easements required _____ No. of easements _____ Are Utility agreements required no

Types of Util. Facilities & agrmts. required Description _____

TOTAL CURRENT COST $20,000

CONST. COMPLETION DATE 4/13/2015

UTILITY ESCALATION RATE 8%

ESCALATED VALUE TO UTILITY CONSTRUCTION COMPLETION DATE $28,376

ATTACHMENT H
Transportation Management Plan (TMP)

State of California

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: James Vu, Project Engineer

Date: July 7, 2010

File: 07-LA-101, S0.00/25.90
07-28270K

From: **Albert K. Yu, TMP Manager (West Region)**
Office of District Traffic Manager
DEPARTMENT OF TRANSPORTATION

Subject: Approved Transportation management Plan (TMP) Data Sheet

Attached is the approved Transportation Management Plan (TMP) Data Sheet for your use.

If you have any questions, please contact Gary Young of my staff at 7-1834 or myself at 7-0285.

ALBERT K. YU, P.E., S.T.E.
TMP, West
Office of District Traffic Manager

Attachments: TMP Data Sheet
Preliminary Lane Requirement Charts

cc: File
Min Wun, Design Manager
Javad Rahimzadeh, Project Manager

TRANSPORTATION MANAGEMENT PLAN DATA SHEET
(Preliminary TMP Elements and Costs)

Co/Rte/PM LA-101, S0.00/25.90 EA 28270K Alternative No. NA

Project Limit Route 5 to Route 27 (Topanga Canyon Blvd)

Project Description Upgrade metal beam guardrail.

1) Public Information

- [x] a. Brochures and Mailers $0
- [x] b. Press Release
- [ ] c. Paid Advertising $
- [ ] d. Public Information Center/Kiosk $
- [ ] e. Public Meeting/Speakers Bureau
- [ ] f. Telephone Hotline
- [x] g. Internet
- [ ] h. Others _____ $

2) Motorists Information Strategies

- [x] a. Changeable Message Signs (Fixed) $0
- [ ] b. Changeable Message Signs (Portable) $
- [ ] c. Ground Mounted Signs $
- [ ] d. Highway Advisory Radio $
- [ ] e. Caltrans Highway Information Network (CHIN)
- [ ] f. Others _____ $

3) Incident Management

- [x] a. Construction Zone Enhanced Enforcement Program (COZEEP) $35,000
- [ ] b. Freeway Service Patrol $
- [ ] c. Traffic Management Team
- [ ] d. Helicopter Surveillance $
- [ ] e. Traffic Surveillance Stations (Loop Detector and CCTV) $
- [ ] f. Others _____ $

4) Construction Strategies

- [x] a. Lane Closure Chart
- [ ] b. Reversible Lanes
- [ ] c. Total Freeway Mainline Closure
- [ ] d. Extended Weekend Closure
- [ ] e. Contra Flow
- [ ] f. Truck Traffic Restrictions $ _____
- [ ] g. Reduced Speed Zone $ _____
- [ ] h. Connector and Ramp Closures
- [ ] i. Incentive and Disincentive $ _____
- [ ] j. Moveable Barrier $ _____
- [ ] k. Others _____ $ _____

5) Demand Management

- [ ] a. HOV Lanes/Ramps (New or Convert) $ _____
- [ ] b. Park and Ride Lots $ _____
- [ ] c. Rideshare Incentives $ _____
- [ ] d. Variable Work Hours
- [ ] e. Telecommute
- [ ] f. Ramp Metering (Temporary Installation) $ _____
- [ ] g. Ramp Metering (Modify Existing) $ _____
- [ ] h. Others _____ $ _____

6) Alternative Route Strategies

- [ ] a. Add Capacity to Freeway Connector/Ramps $ _____
- [ ] b. Street Improvement (widening, traffic signal... etc) $ _____
- [ ] c. Traffic Control Officers $ _____
- [ ] d. Parking Restrictions
- [ ] e. Others _____ $ _____

7) Other Strategies

- [ ] a. Application of New Technology $ _____
- [ ] e. Others _____ $ _____

TOTAL ESTIMATED COST OF TMP ELEMENTS = $35,000

Project Notes:

1. Project does not require any PAC funding per Judy Gish on July 2, 2010.
2. Motorist Information Strategies:

Existing CMS that may be used:

CMS #9 (NB 5 @ Indiana St).

CMS #13 (SB 101 @ Melrose Ave).

CMS #24 (NB 101 @ Melrose Ave).

CMS #89 (NB 101 @ Barham Blvd).

CMS #7 (SB 101 N/o Laurel Canyon Blvd).

CMS #8 (NB 101 @ Woodman Ave).

CMS #12 (SB 101 @ White Oak Ave).

CMS #108 (NB 101 @ De Soto Ave).

CMS #114 (SB 101 @ Parkway Calabasas).

CMS # 46 (SB 110 @ Academy Rd).

CMS #78 (WB 134 W/o Hollywood Way).

CMS #56 (SB 170 @ Burbank Blvd).

CMS #19 (NB 405 S/o Mulholland Dr).

CMS # 29 (SB 405 N/o Victory Blvd).

3. Incident Management:

COZEEP provided by Amjad Obeid, Construction Traffic Advisor, on June 23, 2010.

FSP is not required since no long term closures are required and only shift closures involved.

4. Construction Strategies:

It is anticipated all work will be performed behind routine lane closures. All closures shall conform with the hours provided in the Maintaining Traffic specifications.

5. Demand Management is not required since there are no long term closures reducing freeway capacity in this project.

6. Alternative Route Strategies are not required since there are no long term closures reducing freeway capacity in this project.

PREPARED BY Jocelyn Chiang, T.E. DATE 7/7/10

APPROVAL RECOMMENDED BY Albert Yu, S.T.E. DATE 7-7-10.

APPROVED BY John Yang, Dist. Traffic Mgr. DATE 7/7/10

PRELIMINARY CHART

Chart No. 1
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/North

Closure Limits: Route 5/60/101 Interchange to Route 10/101 Interchange

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	2	2	1	
Fridays	1	1	1	1	1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	2	
Saturdays	1	1	1	1	1	1	2	2	2	S	S	S	S	S	S	S	S	S	S	S	S	S	S	2	
Sundays	2	1	1	1	1	1	1	1	2	2	S	S	S	S	S	S	S	S	S	S	S	S	2	2	

Legend:

1	Provide at least one through freeway lane open in direction of travel
2	Provide at least two adjacent through freeway lanes open in direction of travel
S	Shoulder closure permitted

REMARKS: Number of Through Traffic Lanes – 2 or 3

PRELIMINARY CHART

Chart No. 2
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/North

Closure Limits: Route 10/101 Interchange to Route 101/110 Interchange

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	S	N	N	N	N	N	N	N	N	N	N	N	N	N	S	S	S	3	2	
Fridays	2	2	2	2	2	S	N	N	N	N	N	N	N	N	N	N	N	N	N	S	S	S	S	3	
Saturdays	2	2	2	2	2	2	3	3	S	N	N	N	N	N	N	N	N	N	N	S	S	S	S	3	
Sundays	3	2	2	2	2	2	2	2	3	S	N	N	N	N	N	N	S	S	S	S	S	S	3	2	

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
S	Shoulder closure permitted
N	No work permitted

REMARKS: Number of Through Traffic Lanes – 3, 4 or 4*
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 3
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/North

Closure Limits: Route 101/110 Interchange to Santa Monica Blvd OC

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3	
Fridays	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Saturdays	3	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Sundays	N	3	2	2	2	2	2	3	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3	

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
N	No work permitted

REMARKS: Number of Through Traffic Lanes – 3, 4 or 4*
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 4
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/North

Closure Limits: Santa Monica Blvd OC to Route 101/134/170 Interchange

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	2	4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4	4	3	
Fridays	2	2	2	2	2	2	4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4	4	4	
Saturdays	3	3	3	2	2	2	2	3	4	4	4	4	N	N	N	N	N	N	N	N	N	4	4	4	
Sundays	4	3	3	2	2	2	2	2	2	3	4	4	4	4	N	N	N	N	N	N	N	4	4	3	

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
4	Provide at least four adjacent through freeway lanes open in direction of travel
N	No work permitted

REMARKS: Number of Through Traffic Lanes – 4, 4*, 5 or 5*
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 5
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/North

Closure Limits: Route 101/134/170 Interchange to Route 101/405 Interchange

FROM HOUR TO HOUR	24-1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	3	S	N	N	N	N	N	N	N	N	N	N	N	N	N	S	S	4	3
Fridays	2	2	2	2	2	3	S	N	N	N	N	N	N	N	N	N	N	N	N	N	S	S	4	4
Saturdays	3	2	2	2	2	2	2	4	S	N	N	N	N	N	N	N	N	N	N	N	S	S	S	4
Sundays	3	3	2	2	2	2	2	2	3	4	S	N	N	N	N	N	N	N	N	N	S	S	4	3

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
4	Provide at least four adjacent through freeway lanes open in direction of travel
S	Shoulder closure permitted
N	No work permitted

REMARKS: Number of Through Traffic Lanes - 4* or 5
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 6
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/North

Closure Limits: Route 101/405 Interchange to Ventura Blvd UC

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	3	S	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	5	3	
Fridays	2	2	2	2	2	3	S	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	5	4	
Saturdays	3	2	2	2	2	2	3	5	N	N	N	N	N	N	N	N	N	N	N	N	N	5	5	5	
Sundays	3	2	2	2	2	2	2	3	4	5	N	N	N	N	N	N	N	N	N	N	N	4	4	3	

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
4	Provide at least four adjacent through freeway lanes open in direction of travel
5	Provide at least five adjacent through freeway lanes open in direction of travel
S	Shoulder closure permitted
N	No work permitted

REMARKS: Number of Through Traffic Lanes – 4, 5, 5*or 6
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 7
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/South

Closure Limits: Ventura Blvd UC to Route 101/405 Interchange

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	S	N	N	N	N	N	N	N	N	N	N	N	N	N	N	S	5	4	3	
Fridays	2	2	2	2	2	S	N	N	N	N	N	N	N	N	N	N	N	N	N	N	S	5	5	4	
Saturdays	2	2	2	2	2	2	3	5	S	N	N	N	N	N	N	N	N	N	N	N	S	S	S	4	
Sundays	3	2	2	2	2	2	2	3	4	S	N	N	N	N	N	N	N	N	N	N	S	5	4	3	

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
4	Provide at least four adjacent through freeway lanes open in direction of travel
5	Provide at least five adjacent through freeway lanes open in direction of travel
S	Shoulder closure permitted
N	No work permitted

REMARKS: Number of Through Traffic Lanes – 4, 5, 5*or 6
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 8
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/South

Closure Limits: Route 101/405 Interchange to Route 101/134/170 Interchange

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	S	S	4	3	
Fridays	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	S	S	S	4	
Saturdays	3	2	2	2	2	2	3	4	S	N	N	N	N	N	N	N	N	N	N	N	S	S	S	4	
Sundays	3	2	2	2	2	2	2	2	3	S	N	N	N	N	N	N	N	N	N	N	S	S	4	3	

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
4	Provide at least four adjacent through freeway lanes open in direction of travel
S	Shoulder closure permitted
N	No work permitted

REMARKS: Number of Through Traffic Lanes – 5 or 5*
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 9
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/South

Closure Limits: Route 101/134/170 Interchange to Santa Monica Blvd OC

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4	4	3	
Fridays	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4	4	3	
Saturdays	2	2	2	2	2	2	3	3	4	N	N	N	N	N	N	N	N	N	N	N	N	N	4	4	
Sundays	3	2	2	2	2	2	2	2	3	4	N	N	N	N	N	N	N	N	N	N	N	4	3	2	

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
4	Provide at least four adjacent through freeway lanes open in direction of travel
N	No work permitted

REMARKS: Number of Through Traffic Lanes – 4, 4*, 5 or 5*
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 10
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/South

Closure Limits: Santa Monica Blvd OC to Route 101/110 Interchange

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3	
Fridays	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3	
Saturdays	3	3	3	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Sundays	3	3	3	2	2	2	2	2	3	N	N	N	N	N	N	N	N	N	N	N	N	N	3	2	

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
N	No work permitted

REMARKS: Number of Through Traffic Lanes – 3, 4 or 4*
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 11
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/South

Closure Limits: Route 101/110 Interchange to Route 10/101 Interchange

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	2	2	2	2	2	2	3	3	3	3	3	3	3	3	S	S	S	S	S	S	3	3	3	2	
Fridays	2	2	2	2	2	2	3	3	3	3	3	3	3	3	S	S	S	S	S	S	3	3	3	3	
Saturdays	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Sundays	3	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	

Legend:

2	Provide at least two adjacent through freeway lanes open in direction of travel
3	Provide at least three adjacent through freeway lanes open in direction of travel
S	Shoulder closure permitted

REMARKS: Number of Through Traffic Lanes – 3, 4 or 4*
* - Traffic lanes outside of the through traffic lanes delineated with a double line of pavement markers as shown on "Pavement Markers and Traffic Lines Typical Details (Detail 37 series)," may be closed at the same time as adjacent through traffic lane.

PRELIMINARY CHART

Chart No. 12
Freeway Lane Requirements and Hours of Work

County: LA | Route/Direction: 101/South

Closure Limits: Route 10/101 Interchange to Route 5/60/101 Interchange

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	1	1	1	1	1	2	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	2	2
Fridays	1	1	1	1	1	2	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	2
Saturdays	2	1	1	1	1	1	1	2	2	2	S	S	S	S	S	S	S	S	S	S	S	S	S	2
Sundays	2	2	2	1	1	1	1	1	2	2	2	S	S	S	S	S	S	S	S	S	S	S	S	2

Legend:

1 Provide at least one through freeway lane open in direction of travel

2 Provide at least two adjacent through freeway lanes open in direction of travel

S Shoulder closure permitted

REMARKS: Number of Through Traffic Lanes – 2 or 3

ATTACHMENT I
Storm Water Data Report

Caltrans

Dist-County-Route: 07-LA-101
Post Mile Limits: PM S0.00/25.9
Project Type: Install MBGR
Project ID (or EA): 0700001842 (EA 28270k)
Program Identification: 201-015
Phase: ☒ PID
☐ PA/ED
☐ PS&E

Regional Water Quality Control Board(s): Region 4 – Los Angeles

Is the Project required to consider Treatment BMPs? Yes ☒ No ☐
If yes, can Treatment BMPs be incorporated into the project? Yes ☒ No ☐
If No, a Technical Data Report must be submitted to the RWQCB at least 30 days prior to the projects RTL date. List RTL Date: 07/01/12

Total Disturbed Soil Area: 3.00 acres (1.21 hectares) Risk Level: N/A
Estimated: Construction Start Date: 10/01/12 Construction Completion Date: 8/01/13
Notification of Construction (NOC) Date to be submitted: 09/01/12

Erosivity Waiver	Yes ☐	Date:	No ☒
Notification of ADL reuse (if Yes, provide date)	Yes ☐	Date:	No ☒
Separate Dewatering Permit (if yes, permit number)	Yes ☐	Permit #	No ☒

This Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the date upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.

James Vu, Registered Project Engineer/Landscape Architect — Date: 12-8-10

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

Javad Rahimzadeh, Project Manager — Date: 12/13/10

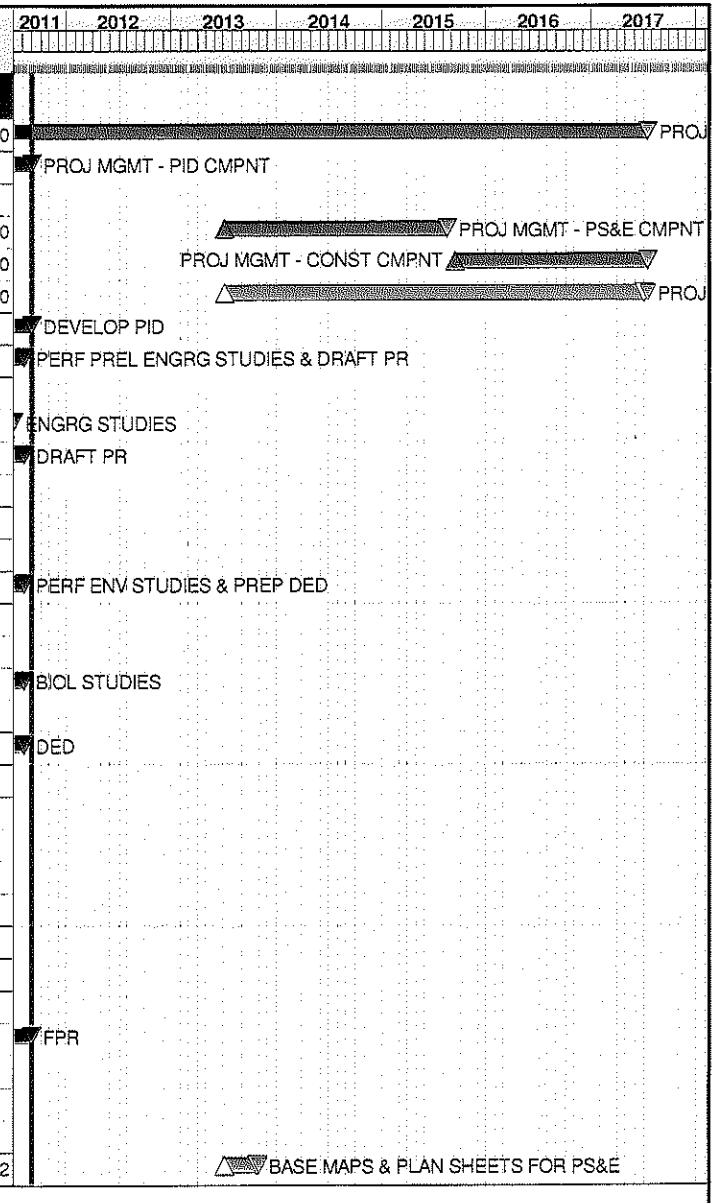
Roger Castillo, Designated Maintenance Representative — Date: 12-16-10

Ron Russak, Designated Landscape Architect Representative — Date: 02.15.11

[Stamp Required for PS&E only) *Shirley Pak, District/Regional Design SW Coordinator or Designee* — Date: 2/16/2011

ATTACHMENT J
Project Work Plan and Schedule

WBS Code	Activity Description	Task Mgr	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
28270	**LA-101-00.0/39.5:INST MBGR-GAP CLOSURES (CO:JR**									
0.100	PROJ MGMT	JR	8	1,799*	1,473*	04/06/10A	07/17/17	04/06/10A	07/17/17	0
0.100.05	PROJ MGMT - PID CMPNT	JR	100	327*	0*	04/06/10A	09/01/11A	04/06/10A	09/01/11A	
0.100.10	PROJ MGMT - PA&ED CMPNT	JR	100	209*	0*	02/02/10A	01/10/11A	02/02/10A	01/10/11A	
0.100.15	PROJ MGMT - PS&E CMPNT	JR	0	534*	534*	07/02/13	08/17/15	07/05/13	08/17/15	0
0.100.20	PROJ MGMT - CONST CMPNT	JR	0	460*	460*	09/16/15	07/17/17	04/14/16	07/17/17	0
0.100.25	PROJ MGMT - R/W CMPNT	JR	0	1,004*	1,004*	07/02/13	06/30/17	07/05/13	07/17/17	10
1.150	DEVELOP PID	MW	100	120	0	04/06/10A	09/01/11A	04/06/10A	09/01/11A	
2.160	PERF PREL ENGRG STUDIES &	MW	100	343*	0*	02/02/10A	08/03/11A	02/02/10A	08/03/11A	
2.160.05	UPDD PROJ INFO	MW	100	40	0	02/02/10A	03/09/11A	02/02/10A	03/09/11A	
2.160.10	ENGRG STUDIES	MW	100	80	0	02/02/10A	06/16/11A	02/02/10A	06/16/11A	
2.160.15	DRAFT PR	MW	100	50	0	06/17/10A	08/03/11A	06/17/10A	08/03/11A	
2.160.20	ENGRG & LAND NET SRVYS	MW	100	75	0	02/03/10A	06/14/10A	02/03/10A	06/14/10A	
2.160.30	ESR	NA	100	1	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
2.160.40	NEPA DLGN	N/A	100	1	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
2.165	PERF ENV STUDIES & PREP DED	JS2	100	310*	0*	03/29/10A	08/03/11A	03/29/10A	08/03/11A	
2.165.05	ENV SCPG OF ALTS IFS IN PID	JS2	100	20	0	03/29/10A	08/03/10A	03/29/10A	08/03/10A	
2.165.10	GENL ENV STUDIES	JS2	100	20	0	03/29/10A	08/03/10A	03/29/10A	08/03/10A	
2.165.15	BIOL STUDIES	JS2	100	20	0	03/29/10A	08/03/11A	03/29/10A	08/03/11A	
2.165.20	CLTRL RSRC STUDIES	JS2	100	20	0	03/29/10A	07/28/10A	03/29/10A	07/28/10A	
2.165.25	DED	JS2	100	80	0	07/29/10A	08/03/11A	07/29/10A	08/03/11A	
2.165.30	NEPA DLGN	N/A	100	1	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
2.175	CIRC DED & SLT PRFD PROJ ALT	NA	100	1*	0*	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
2.175.05	DED CIRCN	NA	100	50	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
2.175.10	PUB HRG	N/A	100	54	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
2.175.15	PUB CMNT RESPS & CRNC	N/A	100	24	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
2.175.20	PROJ PRFD ALT	NA	100	6	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
2.175.25	NEPA DLGN	N/A	100	1	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
2.180	PREP & APV PR & FED	MW	100	78*	0*	09/01/10A	01/10/11A	09/01/10A	01/10/11A	
2.180.05	FPR	MW	100	10	0	09/01/10A	09/01/11A	09/01/10A	09/01/11A	
2.180.10	FED	MW	100	10	0	03/15/10A	09/01/10A	03/15/10A	09/01/10A	
2.180.15	CMPLTD ENV DOC	JS2	100	30	0	09/02/10A	01/10/11A	09/02/10A	01/10/11A	
2.180.20	NEPA DLGN	N/A	100	1	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
3.185	BASE MAPS & PLAN SHEETS	DTH	0	82*	82*	07/02/13	10/25/13	07/05/13	10/29/13	2



Start Date	01/01/73
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Early Bar
Float Bar
Progress Bar
Critical Activity

MODL - 8N00

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Caltrans District 7

Dynamic Workplan Model

Classic Schedule Layout

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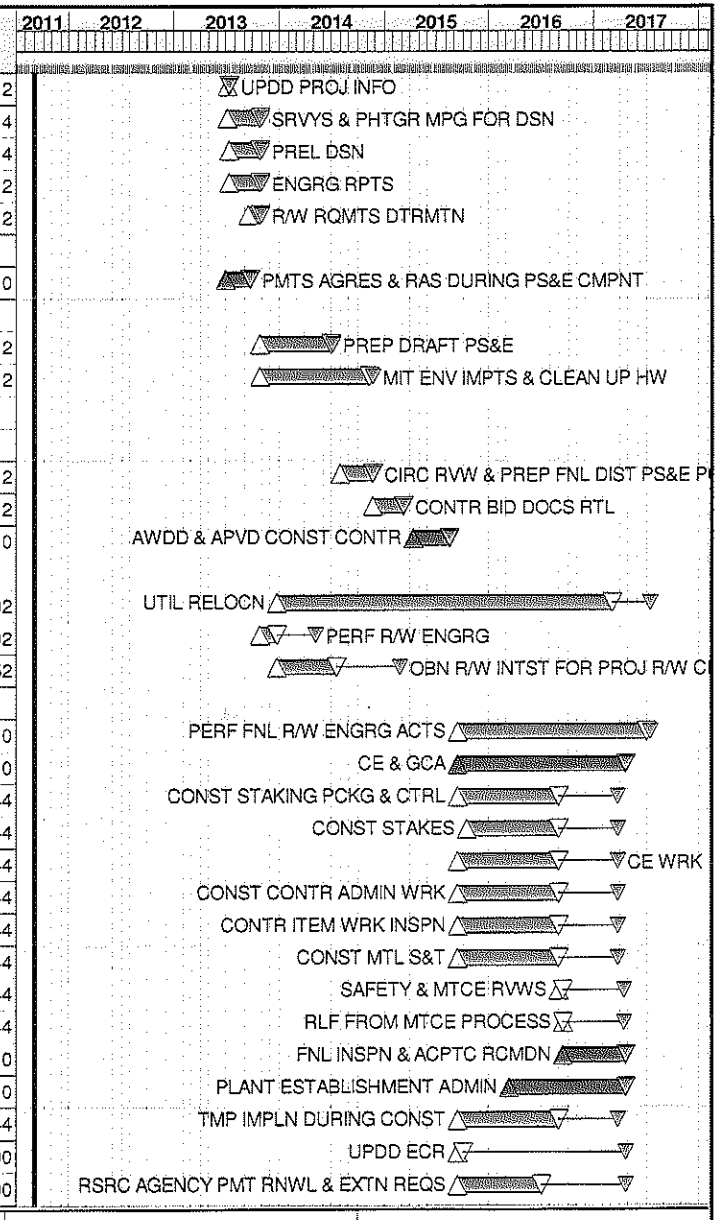
WBS Code	Activity Description	Task Mgr	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
3.185.05	UPDD PROJ INFO	DTH	0	5	5	07/02/13	07/09/13	07/05/13	07/11/13	2
3.185.10	SRVYS & PHTGR MPG FOR DSN	DTH	0	80	80	07/02/13	10/23/13	07/09/13	10/29/13	4
3.185.15	PREL DSN	DTH	0	75	75	07/10/13	10/23/13	07/16/13	10/29/13	4
3.185.20	ENGRG RPTS	DTH	0	75	75	07/10/13	10/25/13	07/16/13	10/29/13	2
3.185.25	R/W RQMTS DTRMTN	DTH	0	30	30	09/16/13	10/25/13	09/18/13	10/29/13	2
3.185.30	STRUC SITE PLANS	DTH	100	1	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
3.205	PMTS AGRES & RAS DURING	DTH	0	60	60	07/01/13*	09/24/13	07/01/13*	09/24/13	0
3.215	STRUCS GENL PLANS & PREL	NA	100	1	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
3.230	PREP DRAFT PS&E	DTH	0	170	170	10/28/13	07/02/14	10/30/13	07/07/14	2
3.235	MIT ENV IMPTS & CLEAN UP HW	JS2	0	260	260	10/28/13	11/07/14	11/14/13	11/26/14	12
3.240	DRAFT STRUCS PS&E	N/A	100	1	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
3.250	PREP FNL STRUCS PS&E PCKG	NA	100	1	0	01/11/00A	01/01/10A	01/11/00A	01/01/10A	
3.255	CIRC RVW & PREP FNL DIST	GLF	0	80	80	08/01/14	11/24/14	08/05/14	11/26/14	2
3.260	CONTR BID DOCS RTL	BL	0	70	70	11/25/14	03/09/15	12/01/14	03/11/15	2
3.265	AWDD & APVD CONST CONTR	BL	0	90	90	04/10/15	08/17/15	04/10/15	08/17/15	0
4.195	R/W PROP MGMT & EXCS LAND	N/A	100	0	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
4.200	UTIL RELOCN	NCA	0	800	800	12/27/13	03/06/17	05/09/14	07/17/17	92
4.220	PERF R/W ENGRG	DEM	0	40	40	10/28/13	12/26/13	03/13/14	05/08/14	92
4.225	OBN R/W INTST FOR PROJ R/W	DEM	0	140	140	12/27/13	07/17/14	08/05/14	02/25/15	152
4.245	POST R/W CERTN WRK	N/A	100	0	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
4.300	PERF FNL R/W ENGRG ACTS	-	0	450	450	09/16/15	06/30/17	09/30/15	07/17/17	10
5.270	CE & GCA	MA2	0	400*	400*	09/16/15	04/20/17	04/14/16	04/20/17	0
5.270.10	CONST STAKING PCKG & CTRL	MA2	0	240	240	09/16/15	08/29/16	04/14/16	03/28/17	144
5.270.15	CONST STAKES	MA2	0	220	220	10/14/15	08/29/16	05/12/16	03/28/17	144
5.270.20	CE WRK	MA2	0	240	240	09/16/15	08/29/16	04/14/16	03/28/17	144
5.270.25	CONST CONTR ADMIN WRK	MA2	0	240	240	09/16/15	08/29/16	04/14/16	03/28/17	144
5.270.30	CONTR ITEM WRK INSPN	MA2	0	240	240	09/16/15	08/29/16	04/14/16	03/28/17	144
5.270.35	CONST MTL S&T	MA2	0	240	240	09/16/15	08/29/16	04/14/16	03/28/17	144
5.270.40	SAFETY & MTCE RVWS	MA2	0	10	10	08/30/16	09/13/16	03/29/17	04/12/17	144
5.270.45	RLF FROM MTCE PROCESS	MA2	0	1	1	09/14/16	09/14/16	04/13/17	04/13/17	144
5.270.55	FNL INSPN & ACPTC RCMDN	MA2	0	5	5	09/15/16	04/20/17	04/14/17	04/20/17	0
5.270.60	PLANT ESTABLISHMENT ADMIN	MA2	0	280	280	03/10/16	04/20/17	03/10/16	04/20/17	0
5.270.65	TMP IMPLN DURING CONST	MA2	0	240	240	09/16/15	08/29/16	04/14/16	03/28/17	144
5.270.70	UPDD ECR	MA2	0	10	10	09/16/15	09/29/15	04/07/17	04/20/17	390
5.270.75	RSRC AGENCY PMT RNWL &	MA2	0	200	200	09/16/15	07/01/16	07/05/16	04/20/17	200



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Early Bar
Float Bar
Progress Bar
Critical Activity

MODL - 8N00

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Caltrans District 7

Dynamic Workplan Model

Classic Schedule Layout

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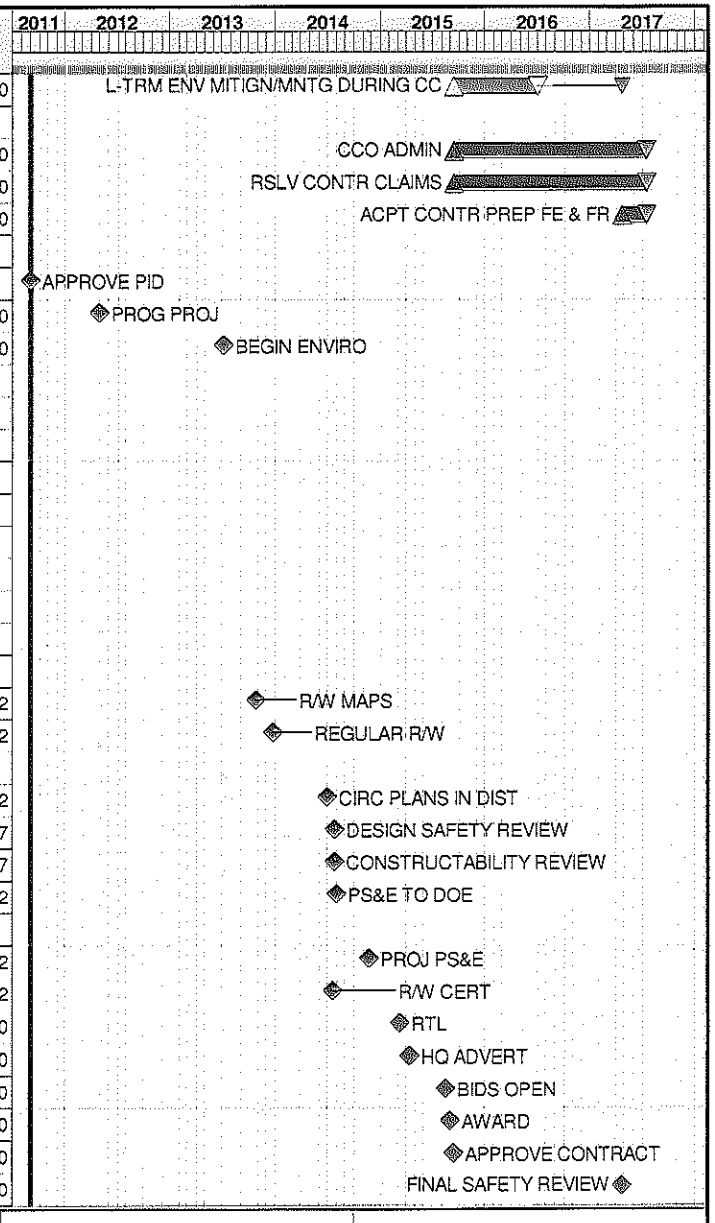
WBS Code	Activity Description	Task Mgr	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
5.270.80	L-TRM ENV MITIGN/MNTG	JS2	0	200	200	09/16/15	07/01/16	07/05/16	04/20/17	200
5.275	CE & GCA OF STRUCS WRK	NA	100	200	0	01/01/10A	01/01/10A	01/01/10A	01/01/10A	
5.285	CCO ADMIN	MA2	0	460*	460*	09/16/15	07/17/17	04/14/16	07/17/17	0
5.290	RSLV CONTR CLAIMS	MA2	0	460*	460*	09/16/15	07/17/17	04/14/16	07/17/17	0
5.295	ACPT CONTR PREP FE & FR	MA2	0	60	60	04/21/17	07/17/17	04/21/17	07/17/17	0
M000	ID NEED	MW	100	0	0		01/27/10A		01/27/10A	
M010	APPROVE PID	MW	100	0	0		09/01/11A		09/01/11A	
M015	PROG PROJ	ST	0	0	0		04/25/12*		04/25/12*	0
M020	BEGIN ENVIRO	JS2	0	0	0		07/01/13*		07/01/13*	0
M030	NOP	NA	100	0	0		01/01/10A		01/01/10A	
M035	NOI	NA	100	0	0		01/01/10A		01/01/10A	
M040	BEGIN PROJ	MW	100	0	0		02/02/10A		02/02/10A	
M060	CIRC DPR & DED	MW	100	0	0		08/03/10A		08/03/10A	
M100	APPROVE DPR	MW	100	0	0		08/03/10A		08/03/10A	
M120	CIRC DED	MW	100	0	0		08/30/10A		08/30/10A	
M160	APPROVE FED	MW	100	0	0		01/18/11A		01/18/11A	
M200	PA&ED	MW	100	0	0		01/20/11A		01/20/11A	
M221	BRIDGE SITE DATA ACCEPTED	NA	100	0	0		01/01/10A		01/01/10A	
M222	BEGIN BRIDGE	MW	100	0	0		01/01/10A		01/01/10A	
M224	R/W MAPS	DEM	0	0	0		10/25/13		03/12/14	92
M225	REGULAR R/W	DEM	0	0	0		12/26/13		05/08/14	92
M275	GENERAL PLANS	NA	100	0	0		01/01/10A		01/01/10A	
M300	CIRC PLANS IN DIST	DTH	0	0	0		07/02/14		07/07/14	2
M318	DESIGN SAFETY REVIEW	JR	0	0	0		07/24/14		08/04/14	7
M328	CONSTRUCTABILITY REVIEW	JR	0	0	0		07/24/14		08/04/14	7
M377	PS&E TO DOE	DTH	0	0	0		07/31/14		08/04/14	2
M378	DRAFT STRUC PS&E	NA	100	0	0		01/01/10A		01/01/10A	
M380	PROJ PS&E	GLF	0	0	0		11/24/14		11/26/14	2
M410	R/W CERT	DEM	0	0	0		07/17/14		02/25/15	152
M460	RTL	BL	0	0	0		03/11/15*		03/11/15*	0
M480	HQ ADVERT	BL	0	0	0		04/09/15		04/09/15	0
M490	BIDS OPEN	BL	0	0	0		08/17/15		08/17/15	0
M495	AWARD	BL	0	0	0		08/31/15		08/31/15	0
M500	APPROVE CONTRACT	BL	0	0	0		09/15/15		09/15/15	0
M588	FINAL SAFETY REVIEW	MA2	0	0	0		04/20/17		04/20/17	0



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Early Bar
Float Bar
Progress Bar
Critical Activity

MODL - 8N00

Caltrans District 7

Dynamic Workplan Model

Classic Schedule Layout

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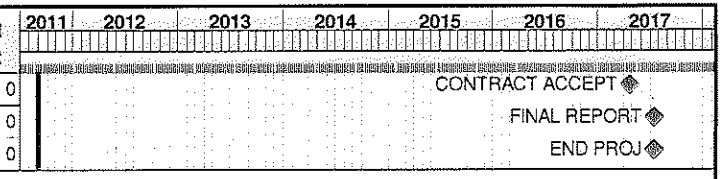
WBS Code	Activity Description	Task Mgr	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
M600	CONTRACT ACCEPT	MA2	0	0	0		04/20/17		04/20/17	0
M700	FINAL REPORT	MA2	0	0	0		07/17/17		07/17/17	0
M800	END PROJ	JR	0	0	0		07/17/17		07/17/17	0



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Early Bar
Float Bar
Progress Bar
Critical Activity

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Caltrans District 7

Dynamic Workplan Model

Classic Schedule Layout

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ATTACHMENT K
Risk Management Plan

Risk Detail

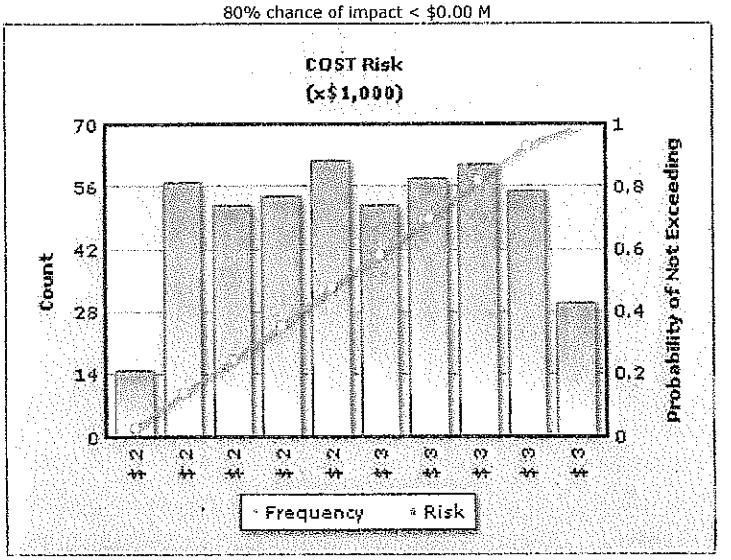
Project: 07-28270
Risk Created: 09/16/2010
Risk Created By: Javad Rahimzadeh
Risk Last Modified: 08/24/2011

Risk ID	22305
Risk Description	Unidentified utilities
Risk Owner	NCA
Created Date	09/16/2010
Last Modified Date	08/24/2011

Functional Category	CON
Risk Type	Threat
Impact Consequnce	Cost
Qualitative Probability	Very Low (1-9%)
Qualitative Impact	Med
Impact Description	Cost and Schedule Delay
Overall Risk Rank	L

Quantitative Risk Impact

20% chance of impact < $0.00 M
50% chance of impact < $0.00 M
80% chance of impact < $0.00 M



Risk Response	Mitigate
Mitigation Strategy	
This Strategy will minimize	
Risk Triggers	
Secondary Risks	
Risk Interaction	

Risk Detail

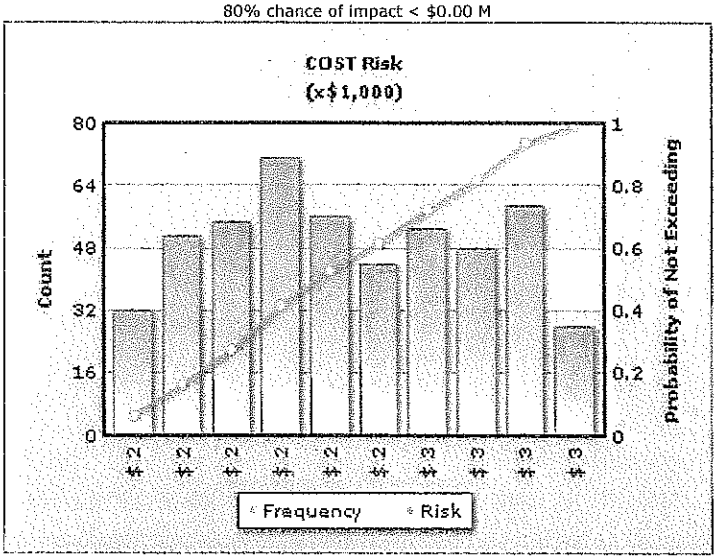
Project: 07-28270
Risk Created: 09/16/2010
Risk Created By: Javad Rahimzadeh
Risk Last Modified: 08/24/2011

Risk ID	22306
Risk Description	Interference from other projects
Risk Owner	DTH
Created Date	09/16/2010
Last Modified Date	08/24/2011

Functional Category	CON
Risk Type	Threat
Impact Consequnce	Cost
Qualitative Probability	Low (10-19%)
Qualitative Impact	Very Low
Impact Description	Cost
Overall Risk Rank	VL

Quantitative Risk Impact

20% chance of impact < $0.00 M
50% chance of impact < $0.00 M
80% chance of impact < $0.00 M



Risk Response	Avoid
Mitigation Strategy	
This Strategy will minimize	
Risk Triggers	
Secondary Risks	
Risk Interaction	

Risk Detail

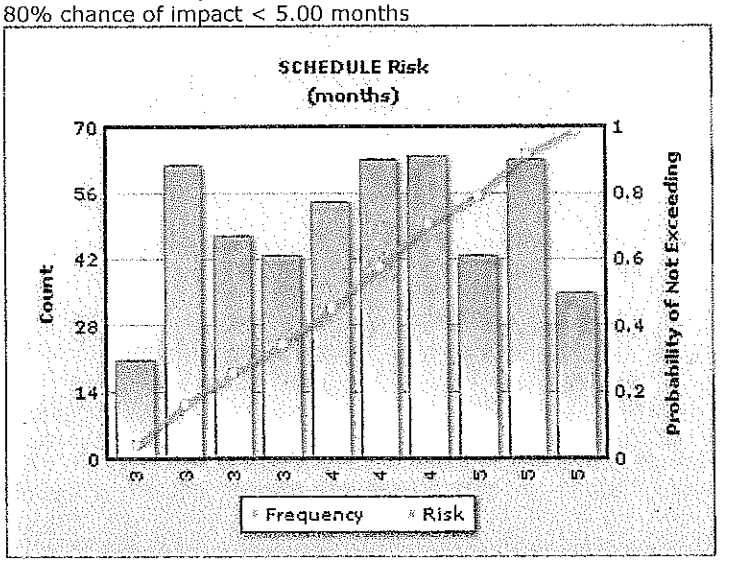
Project: 07-28270
Risk Created: 09/16/2010
Risk Created By: Javad Rahimzadeh
Risk Last Modified: 08/24/2011

Risk ID	22308
Risk Description	We may need to re-anchor or relocate Existing Power Pole.
Risk Owner	DTH
Created Date	09/16/2010
Last Modified Date	08/24/2011

Functional Category	DGN
Risk Type	Threat
Impact Consequnce	Time
Qualitative Probability	Low (10-19%)
Qualitative Impact	Low
Impact Description	Schedule Delay During Design Phase
Overall Risk Rank	L

Quantitative Risk Impact

20% chance of impact < 3.00 months
50% chance of impact < 4.00 months
80% chance of impact < 5.00 months



Risk Response	Mitigate
Mitigation Strategy	We might be able to by pass the power pole by reducing the lenght of the proposed MBGR.
This Strategy will minimize	yes
Risk Triggers	
Secondary Risks	
Risk Interaction	