

LA- 1, PM 0.1/4.0
LA- 19, PM 3.9/8.4
LA- 22, PM 0.9/1.3
LA- 91, PM 13.5/16.1
LA- 405, PM 0.4/6.3

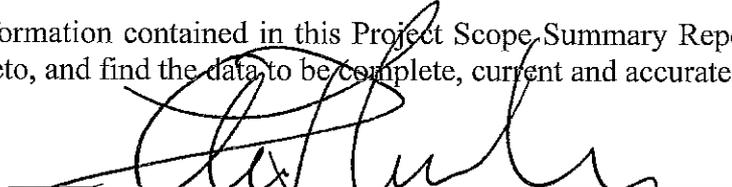
Storm Water Mitigation Program – 20.20.201.335
Project No: 0700020900 (EA 28660K)

August 2011

**PROJECT SCOPE SUMMARY REPORT
(STORM WATER MITIGATION) to
Request Programming in the 2012 SHOPP and
Provide Project Approval**

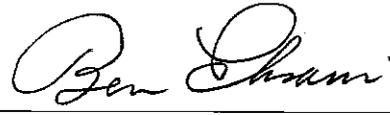
On LA- 1 between Studebaker Rd and Redondo Ave.,
LA- 19 between Del Amo Blvd. and Priscilla St.,
LA- 22 between Flint Ave. and Studebaker Rd.,
LA- 91 between Obispo Ave. and Woodruff Ave.,
And LA- 405 between Studebaker Rd. and Atlantic Ave.

I have reviewed the right of way information contained in this Project Scope Summary Report and the R/W Data Sheet attached hereto, and find the data to be complete, current and accurate:



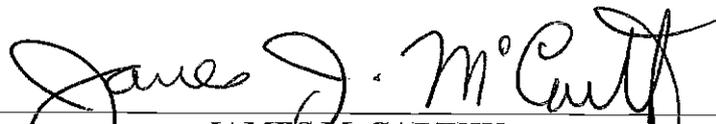
ANDREW P. NIERENBERG
DEPUTY DISTRICT DIRECTOR OF RIGHT OF WAY

**APPROVAL
RECOMMENDED:**

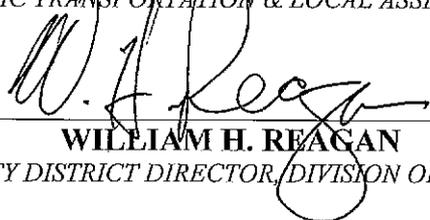


for **OJAS SHETH**
PROJECT MANAGER

CONCURRED BY:



JAMES McCARTHY
DEPUTY DISTRICT DIRECTOR, DIVISION OF PLANNING,
PUBLIC TRANSPORTATION & LOCAL ASSISTANCE



WILLIAM H. REAGAN
DEPUTY DISTRICT DIRECTOR, DIVISION OF DESIGN

APPROVED:



MICHAEL MILES
DISTRICT DIRECTOR

8/17/11

DATE

LA- 1, PM 0.1/4.0

LA- 19, PM 3.9/8.4

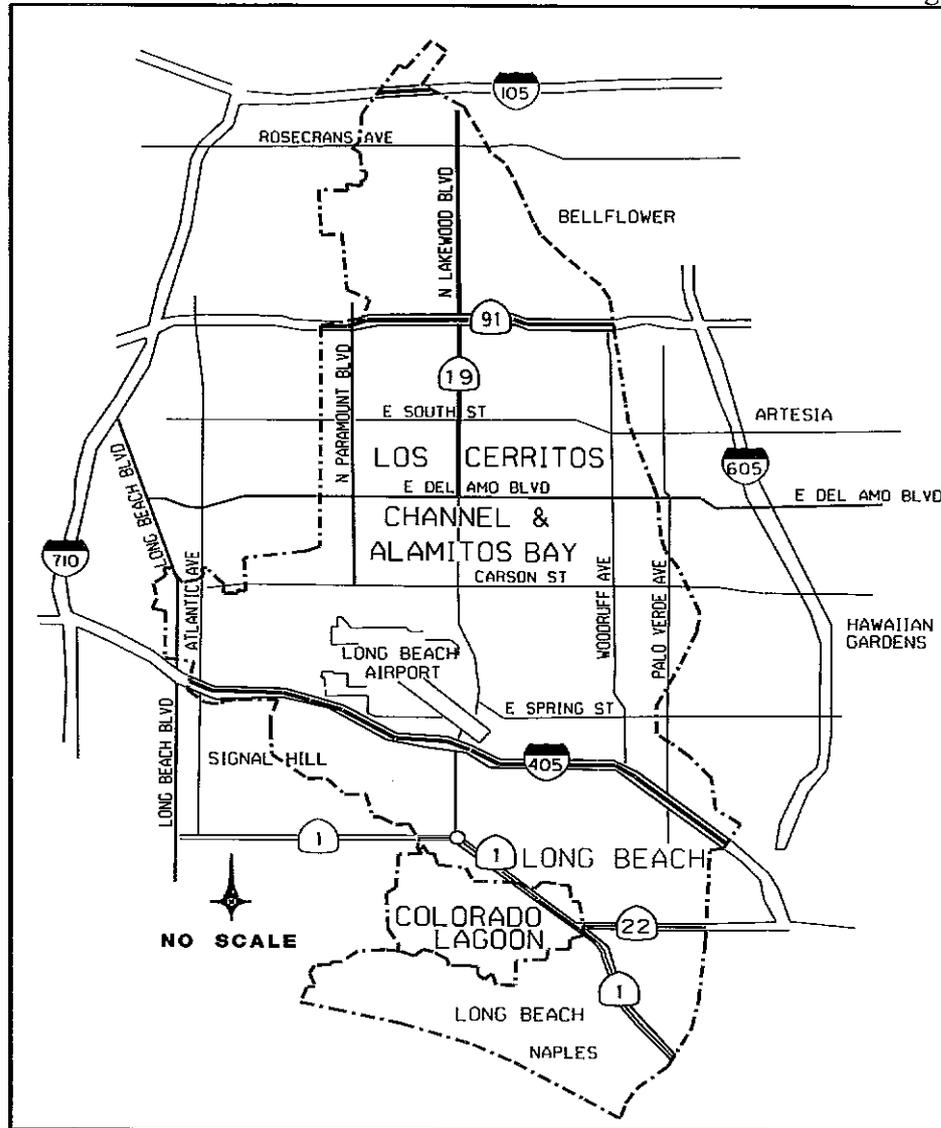
LA- 22, PM 0.9/1.3

LA- 91, PM 13.5/16.1

LA- 405, PM 0.4/6.3

Project No: 0700020900 (EA 28660K)

August 2011



Watershed Location Map

- On LA- 1 between Studebaker Rd and Redondo Ave.,
LA- 19 between Del Amo Blvd. and Priscilla St.,
LA- 22 between Flint Ave. and Studebaker Rd.,
LA- 91 between Obispo Ave. and Woodruff Ave.,
And LA- 405 between Studebaker Rd. and Atlantic Ave.

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LA- 19, PM 3.9/8.4
LA- 22, PM 0.9/1.3
LA- 91, PM 13.5/16.1
LA- 405, PM 0.4/6.3

Project No: 0700020900 (EA 28660K)

August 2011

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



REGISTERED CIVIL ENGINEER

8/8/11

DATE



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1. INTRODUCTION

This Project Scope Summary Report (PSSR) proposes storm water mitigations on the Los Cerritos Channel & Alamitos Bay (LCC&AB) and Colorado Lagoon (CL) watersheds in Los Angeles County with the installation of Best Management Practices (BMPs) devices at Caltrans outfall/discharge points in response to the Los Cerritos metals TMDL and Colorado Lagoon OC Pesticide, PCBs, Sediment Toxicity, PAHs, and Metals TMDL. State approved devices such as bio-filtration swales/strips, infiltration/detention basins, media filters, and gross solid removal devices (GSRDs) are being considered. All proposed work is within Caltrans right-of-way (R/W).

The capital cost for the proposed work is estimated at \$17.5 million in 2011 dollars. It includes Time Related Overhead (TRO), hazardous waste mitigation and disposal, construction site management, storm water pollution related, and other essential costs. No additional Right of Way (R/W) acquisition is anticipated (see Attachment H – R/W Data Sheet).

The Environmental Determination Document for this project is Categorical Exemption/Categorical Exclusion (CE), approved on April 11, 2011 (see Attachment G – Environmental Clearance).

Los Cerritos Channel & Alamitos Bay Watershed	
Regulation Effective Date:	March 17, 2010 (EPA TMDL)
Pollutants of Concern:	Metals TMDL
Estimate of Acres to be Treated:	120
Number of Alternatives:	One
Scope of Work	BMPs Proposed
LA- 1, PM 0.1/1.8 and 2.7/4.0	None ¹
LA- 19, PM 3.9/8.4	None ¹
LA- 22, PM 0.9/1.3	Yes ^{1&2}
LA- 91, PM 13.5/16.1	Yes ²
LA- 405, PM 0.4/6.3	Yes ²

¹ See Section 2B

² See Table 2.C.2

Colorado Lagoon Watershed	
Regulation Effective Date:	June 14, 2011 (State TMDL)
Pollutants of Concern:	Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals
Estimate of Acres to be Treated:	11
Number of Alternatives:	One
Scope of Work	BMPs Proposed
LA- 1, PM 1.8/2.7	None ¹

¹ See Section 2B

2. BACKGROUND

Under Section 303(d) of the Federal Clean Water Act (CWA), states, territories and authorized tribes (the “Jurisdictions”) are required to develop a list of impaired waters. These waters on the list do not meet water quality standards that the Jurisdictions have set for them, even after point sources of pollution have installed the minimum required levels of pollution control technology. The CWA requires that the Jurisdictions establish priority rankings for water on the lists and develop Total Maximum Daily Loads (TMDL) for these waters.

2A. Routes in Project Area:

The LCC&AB watersheds are geographically traversed by LA-1, LA-19, LA-22, LA-91, LA-105, and LA-405, while the CL watershed is geographically traversed by LA-1.

LA-1, LA-19, and LA-22 are conventional highways within the project limit. The Local agencies have expressed an interest in State relinquishment of the conventional highways. EA53790K is a K-phase project currently in progress to relinquish LA-19 PM 7.8/8.4 to the local agency.

LA-91, LA-105, and LA-405 are freeways within the project limits. However, the effluent from LA105 is not discharged into the LCC&AB watersheds, instead the LA-105 storm water is collected and drained into the Los Angeles River watershed via the Los Angeles River. And as such, LA-105 is not included in this PSSR.

2B. Commingled Outfalls:

The commingled outfalls are all located on conventional highways and the local agencies have expressed an interest in Relinquishment of the Conventional Highways. There are projects currently in progress to relinquish conventional highways within the project limits to the local agencies.

LA-1, LA-19, and portions of LA-22 within the LCC&AB watershed will need a partnership agreement with local agencies to comply with TMDL requirements because of R/W issues and difficulties of separating Caltrans effluent from other agencies’ effluent. Independent of this PSSR, a Metal TMDL Technical Committee among involved agencies is established in an effort to develop appropriate resolutions. The committee meets on a regular basis to discuss and share resources to achieve the common objective of compliance with the Numeric Targets and Waste Load Allocations of the Metal TMDL. A monthly meeting is held, when possible, to share resources in producing an Implementation Plan, a Monitoring Program, and potential Special Studies to demonstrate compliance with Metals TMDL.

The portion of LA-1 within the CL watershed possesses similar issues as stated in the previous paragraph. Caltrans initiated discussions with the City of Long Beach

on similar approach regarding TMDL compliance. District TMDL Unit will continue the coordination effort with the city on CL watershed

Therefore, this PSSR proposes BMP devices only on LA-91, LA-405, and a section of LA-22 within the LCC&AB watershed, to allow for effective and flexible TMDL implementation, as concurred by the District TMDL Unit (see Section 3 for Scope of Work).

2C. Treatment BMPs:

A list of pollutants that can be treated by the proposed Treatment BMPs is summarized in Table 2.C.1.

Table 2.C.1: State Approved Treatment BMP Categories and Targeted Pollutants of Concern

Pollutants	Treatment BMPs			Gross Solids Removal Devices (GSRD)
	Infiltration Devices	Biofiltration Systems	Media Filters ²	
Total Suspended Solids	✓	✓		
Nutrients	✓			
Pesticides	✓		✓	
Particulate Metals	✓	✓	✓	
Dissolved Metals	✓	✓		
Pathogens	✓		✓	
Litter	✓	✓		✓
Biochemical Oxygen Demand	✓			
Total Dissolved Solids	✓			

Notes:

¹ Reference - Table 2.2 of Caltrans Storm Water Quality Handbook, Project Planning and Design Guide, May 2007.

² Phosphorus and Nitrogen for the Austin Sand Filter; Phosphorus only for the Delaware Sand Filter.

Upon a detailed field scoping/review and analysis of the outfall locations within the project limits and the recommendations in LA-91 and LA-405 Corridor Storm Water Management Studies, 2 (two) locations on LA-22, 11 locations on LA- 91, and 17 locations on LA- 405 were identified for Treatment BMPs as listed on Table 2.C.2. The Corridor Storm Water Management Studies for LA- 91 and LA-405 are on file.

Table 2.C.2: Recommended LA-22, LA-91, and LA-405 Treatment BMP Devices

	Detention Basin	Biofiltration Swale	Media Sand Filter	GSRD
LA-22			2	
LA-91	1	5	2	3
LA-405		12	5	

(See Attachment B – Outfall Location Map)

3. PURPOSE AND NEED STATEMENT

Need:

The project areas within the LCC&AB and CL watersheds need to comply with 2 adopted TMDLs as explained in the following paragraphs.

The Los Cerritos metals TMDL was adopted by the US Environmental Protection Agency (USEPA) TMDL dated March 17, 2010. The TMDL assigns dry weather Copper and wet weather Copper, Lead and Zinc mass-based waste load allocations (g/day) to the Responsible Agencies, including Caltrans to reduce amount of metals in the waterbody.

The Colorado Lagoon OC Pesticide, PCBs, Sediment Toxicity, PAHs, and Metals TMDL became effective on June 14, 2011 when the USEPA approved the TMDL.

Among several point sources, Caltrans, along with City of Long Beach, is required to mitigate pollutant concentrations in the runoff from Line I Storm Drain due to drainage from State Route LA-1, Pacific Coast Highway. Targeted pollutants are Chlordane, Dieldrin, Pb, Zn, PAHs, PCBs and DDTs.

Purpose:

This PSSR proposes applicable mitigations on pollutant concentration for the compliance of the TMDL requirement on storm water discharge from Caltrans facilities within the limits listed below:

Scope of Work	BMPs Proposed
LA- 1, PM 0.1/4.0	None ¹
LA- 19, PM 3.9/8.4	None ¹
LA- 22, PM 0.9/1.3	Yes ^{1&2}
LA- 91, PM 13.5/16.1	Yes ²
LA- 405, PM 0.4/6.3	Yes ²

¹ See Section 2B

² See Table 2.C.2

Proposed BMPs devices include detention basins, bio-filtration systems, media sand filters, and GSRDs. Independent of this PSSR, the technical committees from involved agencies

will evaluate TMDL resolutions on watershed areas that are not covered by this report as mentioned in Section 2B.

4. DEFICIENCIES

Within the project limits, LA-1, LA-19, LA-22, LA-91, and LA-405 are Caltrans facilities that are required to comply with the Federal Clean Water Act in regards to storm water discharge from the roadway. This PSSR proposes to implement applicable mitigation on selected routes and limits (see Section 3 for details).

5. CORRIDOR AND SYSTEM COORDINATION

5A. Regional Planning:

This project is not yet listed in the Regional Transportation Plan (RTP) 2008 or the draft version of the RTP 2012.

No conformity determination required at this stage at both the regional and project level. This project has not been programmed for funding -- no Federal Transportation Improvement Program (FTIP) ID is assigned. Project sponsor(s) should take steps in the next phase to attain funding and gain admission into FTIP documents.

5B. Other Agencies Involved (Permits/Approvals From Fish & Game, Corps Of Engineers, Coastal Commission, Etc.):

The Los Angeles Regional Water Quality Control Board (LARWQCB) will enforce and monitor the implementation of the various TMDLs. Some outfall locations might be within the jurisdiction or require permits from the County Flood Control District, LARWQCB, or other Local Government Agencies.

5C. Transportation Concept Report (TCR):

The proposed treatment BMPs do not conflict with any known concept facility in the TCR.

6. ALTERNATIVES

The build alternative in this PSSR proposes the construction of infiltration basins as the preferred method to comply with the various TMDL requirements, as these devices effectively remove the most pollutants. Media filters are the next preferred devices when infiltration basins are not feasible due to space considerations and/or geotechnical study

findings. Biofiltration systems are considered when there is not sufficient space available for the above Treatment BMP types. GSRDs are being considered as the least preferred BMP device. Attachment B shows the outfall locations and the Treatment BMPs recommended for each location. It is anticipated that construction of BMPs for this project could have environmental issues and would impact existing traffic & underground utilities. Full-scale investigations on detail impacts at all locations should be done during the next phase of this project. It is anticipated that most of the recommended BMPs are feasible as stated in this report. The determination of the most suitable BMPs will be finalized in the next project phase. The BMPs are planned for construction within the existing Caltrans R/W.

The No-Build Alternative would be considered non-compliant by the LARWQCB. Furthermore, the cost and resources needed for implementation would likely be significantly higher in the future.

7. COMMUNITY INVOLVEMENT

All work will be performed within the existing R/W and no acquisitions will be required for the proposed project. The project is not expected to result in any changes in traffic pattern and is not expected to affect the surrounding community. However, public project information will be provided as noted in the Transportation Management Plan (TMP).

8. ENVIRONMENTAL DETERMINATION DOCUMENT

A Categorical Exemption/Categorical Exclusion (CE) determination document for the project was approved on 4/11/2011 (see Attachment G - Environmental Clearance).

8A Hazardous Waste Disposal Site Required? If Yes, Where Are Sites?

This project involves excavation for the construction of Media Filters, GSRDs, and/or Bio-Strips/Swales. According to the Preliminary Hazardous Waste Assessment (Attachment K) by the District's Hazardous Waste Unit, aerially deposited lead (ADL) contamination may exist at locations where Treatment BMPs will be installed based on the available information in the project corridor.

Further ADL site investigations will need to be conducted at the PS&E phase. It is recommended that excavated ADL contaminated soils be reused on site if possible.

A Lump Sum of \$500,000 has been included for Hazardous Waste Mitigation Work in the Cost Estimate (Attachment E). It includes the costs to initiate site investigations, a lead compliance plan, and for properly handling and disposal of contaminated soils not being reused and other hazardous materials. Hazardous Waste Disposal site locations if needed will be determined at the PS&E phase.

8B Highway Planting And Irrigation:

Highway planting and irrigation were observed at some locations considered for the BMPs during the detailed field scoping/review.

The Cost Estimate (Attachment E) includes a total of \$1,000,000 for Highway Replacement Planting. See other landscaping considerations in Item 9G for the next phase of the project.

8C Roadside Design And Management:

Since the work for constructing Treatment BMP devices occurs mostly off the traveled way, it is anticipated that the need for lane closures, detours and traffic control would be minimal.

8D Stormwater Compliance:

A Long Form Storm Water Data Report was prepared in accordance with the Storm Water Quality Handbook-PPDG, June 2007 and was approved on August 1, 2011, by the District National Pollutant Discharge Elimination System (NPDES), TMDL and other appropriate Coordinators (See Attachment J).

8E Right-of-Way:

No Right-of-Way acquisition is anticipated because all construction work is within Caltrans R/W and no funds have been allocated for R/W.

9. OTHER PROJECT CONSIDERATIONS

9A. Design Exceptions:

The proposed BMP devices are off the existing roadway. No negative impact on existing clear recovery zones and stopping sight distances are anticipated and no new metal beam guard railing (MBGR) or other railings or changes to the shoulders are proposed.

It is beyond the scope of this project to address any geometric standard. Concurrence from the Headquarters Design Coordinator was received on 3/24/2011.

9B. Air Quality and Conformity:

Per 40 CFR 93.126 published in the Federal Register (volume 69, page 40004) on July 1, 2004, certain projects are allowed to be exempt from all emissions analyses. The proposed project is listed under the subtitle "Other" and classification "Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)." Therefore, pursuant to

40 CFR 93.126, this project is deemed classified and is exempt from the requirement to determine conformity.

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 emissions impacts relative to the no-build alternative. The proposed project is therefore expected to have minimal influence on emissions of criteria pollutants and MSAT.

The proposed project is located within the boundaries of South Coast Air Quality Management District; and will need to comply with the Fugitive Dust Rule 403 to minimize temporary emissions during construction of the project as applicable.

9C. Noise:

Noise Impact- The project is not considered a Type 1 project and is not expected to result in traffic noise impacts per Caltrans Traffic Noise Protocol.

9D. Railroad Involvement:

No railroad involvement is anticipated because the outfall locations are not located near any railroad track.

9E. Transportation Management Plan (TMP):

No prolonged temporary ramp or lane closures are anticipated for this project, and any closures affecting local streets should be coordinated with local agencies. A TMP Data Sheet for the project has been prepared and approved by the District Traffic Manager on 1/18/11 (see Attachment I).

9F. Intelligent Traffic Systems (ITS):

ITS may be affected by this project. \$850,000 has been allocated for potential ITS electrical and fiber-optic system mitigation (Cost Estimate -Attachment E).

9G. Graffiti Prevention:

Past projects in the District experience vandalism issues involving graffiti on GSRD on existing slopes along fill sections of freeways. Design project engineer is recommended to pay attention on the determination of GSRD final locations to minimize visual impacts on neighborhood, potential vandalism, and maintenance effort from Caltrans maintenance crews.

9H. Current Projects:

The table below lists the status of current projects within this project’s limits:

EA	Route & Post Mile	Project Scope	PAED	RTL	CCA
07-4T1504	LA-22 PM 1.1/1.4	Landscaping (LID)	Complete	Complete	Dec 2011
07-53790K	LA-19 PM 7.8/8.4	Relinquishment	On-going	On-going	On-going

9I. Risk Management:

The Project Manager concurs that no risk associated with this project is identified or anticipated at the project initiation stage.

10. FUNDING

This project is proposed to be included in the 2012 State Highway Operation Protection Program (SHOPP) and funded from the Storm Water Mitigation Program 20.20.201.335. The total project cost, including capital and support cost is \$22.9 million in 2011 dollars (see Sections 10A and 10B). To provide sufficient programming flexibility to match future uncertainty on available funding, this project may be:

- a) Programmed as a whole,
- b) Programmed by route.
- c) Programmed partially to install only 9 media sand filters on LA-22, LA-91, and LA-405 as listed on Table 2-2.

10A. Capital Cost:

- a) The capital cost for the Build Alternative including 10% Time Related Overhead (TRO) is \$17.5 million in 2011 dollars (see Attachment E – Cost Estimate). The capital cost of the project in the proposed 2014/2015 program year is \$21.0 million. The escalation factor used is 5% per year non-compounded.
- b) The approximate capital cost to program this project by route are \$2.9 million for LA-22, \$7.2 million for LA-91, and \$9.6 million for LA-405 in 2011 dollars. The corresponding escalated costs for 2014/2015 are \$3.5 million, \$8.7 million and \$11.6 million respectively.
- c) The approximate capital cost to install media sand filters at 9 outfall locations is \$10.9 million in 2011 dollars. The escalated cost for 2014/2015 is \$13.1 million.

10B. Capital Support:

	Project Support Components								
	PA&ED		Design		Right of way		Construction		Total
	0 Phase		1 Phase		2 Phase		3 Phase		
Dist	DES	Dist	DES	Dist	DES	Dist	DES		
Total \$'s (\$1000's)	-	-	2,450		300		2,600		5,350

Note: Support Costs are 2011 dollars (not escalated).

11. SCHEDULE

Milestones	Delivery Date
Project PS&E	07/08/2014
Right of Way Certification	11/01/2014
Ready to List (RTL)	12/01/2014
Approve Contract	01/19/2016
Contract Acceptance	11/01/2016
End Project	10/18/2017

12. FHWA COORDINATION

No federal-aid funding is anticipated and no FHWA coordination or action is required for this project.

13. DISTRICT CONTACTS

Elaheh Yadegar – Office of Project & Special Studies Office Chief	(213) 897-9635
Jai Paul Thakur – District Program Advisor	(213) 897-7546
Kelvin Yuen - Office of Project & Special Studies Senior Transportation Engineer	(213) 897-4637
David Oen – Office of Project & Special Studies Project Engineer	(213) 897-5995
Ojas Sheth – Program & Project Management Project Manager	(213) 897-8595
Karl Price – Environmental Planning Senior Environmental Planner	(213) 897- 9116
John Njoroge – Senior Right of Way Agent Project Coordination	(213) 897-1685
Denis Katayama – TMP Manager, South Region Senior Transportation Engineer	(213) 897-6143

14. PROJECT REVIEW:

This project was reviewed by:

D7 201.335 Program Advisor _____ Robert Wu _____ Date: March 23, 2011

D7 Right-of -Way _____ John Njoroge _____ Date: March 23, 2011

Office of Maintenance Support _____ Richard Gordon _____ Date: March 23, 2011

District Storm Water
Mitigation Program Advisor _____ Jai Paul Thakur _____ Date: March 23, 2011

Quality Review _____ Project Development Team _____ Date: June 30, 2011

15. SCOPING TEAM FIELD REVIEW:

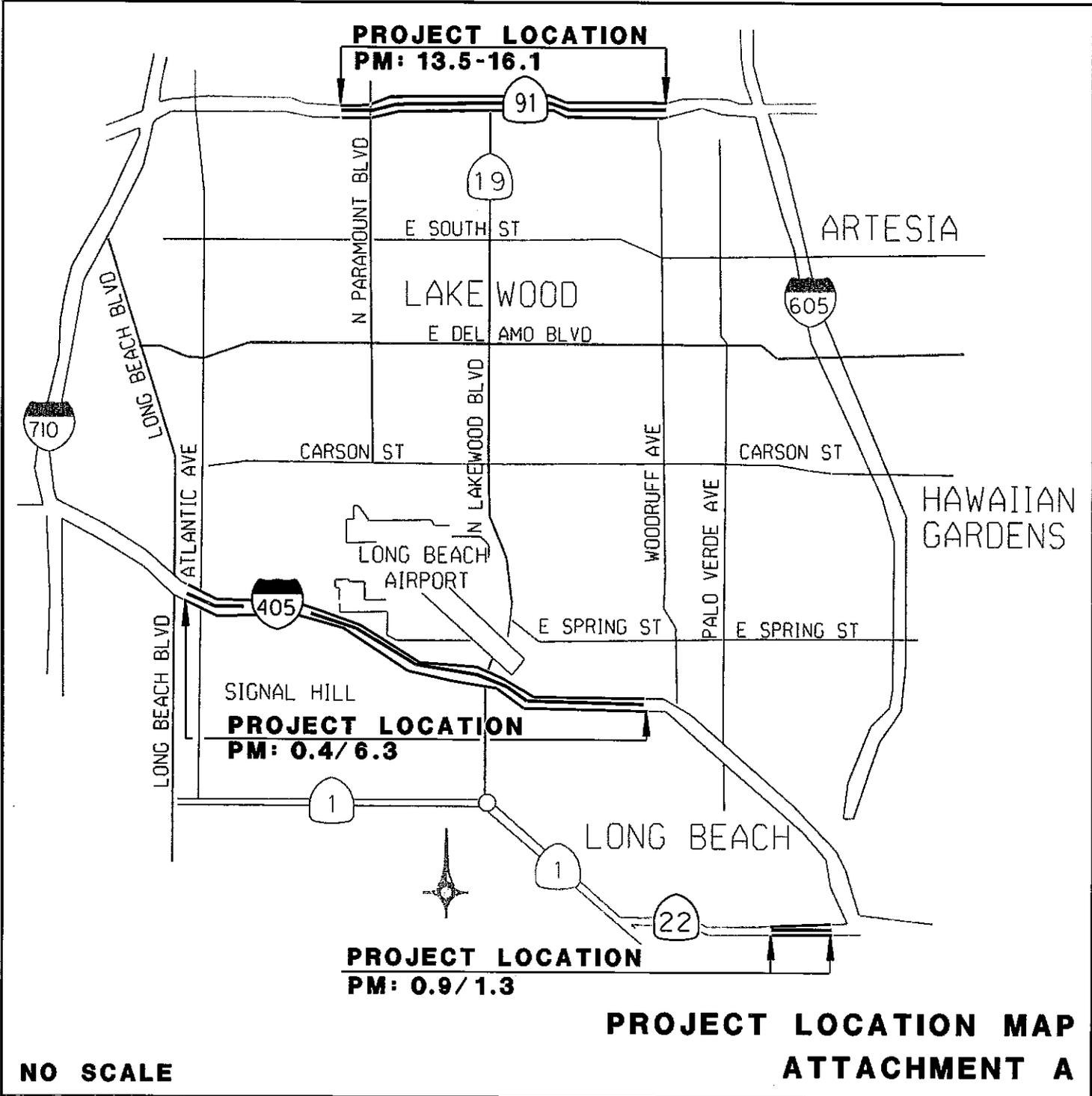
Several field reviews for the project scope were conducted on September 23, 29 and October 7, 2010 by Field Scoping Team members Dan Cortez, Lac Tran, and David Oen from the Office of Project and Special Studies and on December 2, 2010 with David Lawrence and Levin Katanian from Maintenance.

16. ATTACHMENTS:

- A. Project Location Map
- B. Outfall Location Map
- C. Performance Indicators
- D. Project Schedule
- E. Cost Estimate
- F. Schematic Diagrams of Treatment BMPs
- G. Environmental Clearance
- H. Right Of Way Data Sheet
- I. TMP Data Sheet
- J. Storm Water Data Report
- K. Hazardous Waste
- L. Air Quality and Conformity

07-LA- 01, PM 0.1/4.0
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Project Location Map



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Outfall Location Map

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

Performance Indicators

SHOPP Project Performance Output

Update Date:		Source		Program	Fiscal	RTL	Programming Information (\$1,000)			
District - County - Rte -PM		EA	PPNO	Code	Year	Date	R/W \$0, Construction \$17,500 Support \$5,350			
07-LA-1 PM 0.1/4.0, LA-19 PM		28660K	4390	201.335	2014/15	12/3/13	Project Manager : Ojas Sheth			
3.9/8.4, LA-22 PM 0.9/1.3, LA-91 PM 13.5/16.1, and LA-405 PM 0.4/6.3						HQ Program Manager: Jagiwan Grewal				
Project Discription: Los Cerritos Channel/Alamitos Bay and Colorado Basin Storm Water Mitigation in LA County										
PROGRAM	ACCT. CODE 20.XX.	Ten Year Plan	Quantity of Performance Output				CCA	After Constr uction	PERFORMANCE units	
			PID	PA&ED	RTL	CCA				
Approval Date										
Construction Cost (\$1,000)				Output Cost (\$1,000)			Output Cost (\$1,000)			
Right of Way Cost (\$1,000)										
Support Cost Cost (\$1,000)										
Major Damage Restoration	201.130								Locations	
Permanent Restoration	201.131								Locations	
COLLISION REDUCTION										
Safety Improvements	201.010								Collision Reduce	
Collision Severity Reduction	201.015								Collision Reduce	
Median Barrier Upgrade	201.020								Centerline Miles	
MANDATES										
Relinquishments	201.160								Lane Miles	
Noise Attenuation for Schools	201.270								Locations	
Railroad	201.325								Locations	
Hazardous Waste Mitigation	201.330								Locations	
Storm Water	201.335	2015	138						Acres Treated - Pollutant	
ADA Compliance	201.361								Curb Ramps	
SHOPP TEA	201.736								Locations	
BRIDGE PRESERVATION										
Bridge Rehabilitation	201.110								Bridges	
Bridge Scour Mitigation	201.111								Bridges	
Bridge Rail Replacement/Upgrade	201.112								Linear Feet	
Bridge Seismic Restoration	201.113								Bridges	
Bridge Widening	201.114								Bridges	
Trans Permit Requirements for Bridges	201.322								Bridges	
ROADWAY PRESERVATION										
Roadway Rehabilitation (3R)	201.120								Lane Miles	
Pavement Preservation (CAPM)	201.121								Lane Miles	
Pavement Rehabilitation (2R)	201.122								Lane Miles	
Long-Life Pavement Corridors (4R)	201.125								Lane Miles	
Roadway Protective Betterment	201.150								Locations	
Drainage System Restoration	201.151								Culverts	
Signs and Lighting Rehabilitation	201.170								Signs Light Fixtures	
MOBILITY										
Operational Improvements	201.310								Daily Vehicle Hours of delay	
Transportation Management Systems	201.315								Field Elements Miles of fiber	
Truck Inspection & WIM Facilities	201.321								Locations	
ROADSIDE PRESERVATION										
Highway Planting Restoration	201.210								Acres	
Freeway Maintenance Access	201.230								Locations	
Roadside Enhancement	201.240								Locations	
Beautification and Modernization	201.245								Centerline Miles	
Safety Roadside Rest Area Restoration	201.250								Locations	
New Safety Roadside Rest Areas	201.260								Locations	
FACILITIES										
Equipment Facilities	201.351								Locations	
Maintenance Facilities	201.352								Locations	
Office Buildings	201.353								Locations	
Materials Lab	201.354								Locations	
Additional Performance Units										
Paved Shoulders										

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

Project Schedule

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

Cost Estimate

PROJECT SCOPE SUMMARY REPORT

COST ESTIMATE

DIST-CO-RTE	07-LA- 22, PM 0.9/1.3
	07-LA- 91, PM 13.5/16.1
	07-LA- 405, PM 0.4/6.3
Project:	0700020900 (EA28660K)
Program Code:	20.20.201.335

Project Description:

Limits: LA- 22 between Silvera Ave. and Studebaker Rd.,
LA- 91 between Obispo Ave. and Woodruff Ave.,
LA- 405 between Studebaker Rd. and Atlantic Ave.

Proposed Improvement (Scope): Treatment BMPs for Storm Water Mitigation within the project limits

TOTAL ROADWAY ITEMS (including 10% TRO)	\$	17,380,000
TOTAL STRUCTURE ITEMS	\$	
SUBTOTAL CONSTRUCTION COSTS	\$	17,400,000
RIGHT OF WAY ITEMS	\$	
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$	17,400,000
USE (incl 10% TRO)		\$17.5 million

Program Manager	Jai Paul Thakur	213-897-7546
		Phone No.

Project Manager	Ojas Sheth	213-897-8595
		Phone No.

DIST-CO-RTE 07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3
Project: 0700020900 (EA28660K)

Section 6 Minor Items

\$11,390,000	X	5.00%	\$570,000
Subtotal Sections 1-5		(x%)	
TOTAL MINOR ITEMS			\$570,000
SUBTOTAL SECTIONS 1-6			\$11,960,000

Section 7 Roadway Mobilization

\$11,960,000	X	10.00%	\$1,196,000
Subtotal Sections 1-6		(x%)	
TOTAL ROADWAY MOBILIZATION			\$1,200,000
SUBTOTAL SECTIONS 1-7			\$13,160,000

Section 8 Roadway Additions

Supplemental			
\$13,160,000	X	5.00%	\$658,000
Subtotal Sections 1-7		(x%)	
Contingencies			
\$13,160,000	X	15.00%	\$1,974,000
Subtotal Sections 1-7		(x%)	
TOTAL ROADWAY ADDITIONS			\$2,640,000
TOTAL ROADWAY ITEMS			\$15,800,000
(Total of sections 1-8)			
TOTAL ROADWAY ITEMS + 10%TRO			\$17,380,000

Estimate Prepared By Lac Tran Phone # 7-5426 Date: 04/18/11
(Print Name)

Estimate Checked By David Oen Phone # 7-5995 Date: 04/18/11
(Print Name)

II. STRUCTURES ITEMS

STRUCTURE

Bridge Name	_____	_____	_____	_____
Structure Type	_____	_____	_____	_____
Width (Replacement) - (ft)	_____	_____	_____	_____
Widening Width - (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	_____	_____	_____	_____
Remove Approach/Departure Slabs	_____	_____	_____	_____
Approach/Departure Slabs	_____	_____	_____	_____
Joint Seal	_____	_____	_____	_____

Railroad Related Costs **SUBTOTAL STRUCTURES ITEMS** _____

SUBTOTAL RAILROAD ITEMS _____

TOTAL STRUCTURES ITEMS _____

USE _____

Estimate Prepared By Lac Tran 7-5426 Date: 04/18/11
 (If appropriate, attach additional Print Name Phone #
 pages and backun)

III. RIGHT OF WAY

	Current Values	Escalated Values*
A. R/W Acquisition	_____	_____
B. Utility Relocation (State Share)	_____	_____
C. RAP (cont rate.)	_____	_____
D. Clearance/Demolition	_____	_____
E. Title and Escrow Fees	_____	_____
TOTAL ESTIMATE COST	_____	_____

Anticipated Date of Right of Way Certificaiton 12/1/2014
 (Date to which Values are escalated)

F. Construction Contract 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.
 Do not include in Righth of Way Items.)

COMMENTS:

Estimate Prepared By Lac Tran 7-5426 Date: 04/18/11
 (If appropriate, attach additional Print Name Phone # Date
 pages and backun)

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

Schematic Diagrams of Treatment BMPs

Biofiltration Swale

- Swales are conveyances (typically trapezoidal channels) where the flow passes through vegetation at some specified depth.
- Strips are broad vegetated surfaces that receive and discharge flow in relatively thin sheets.

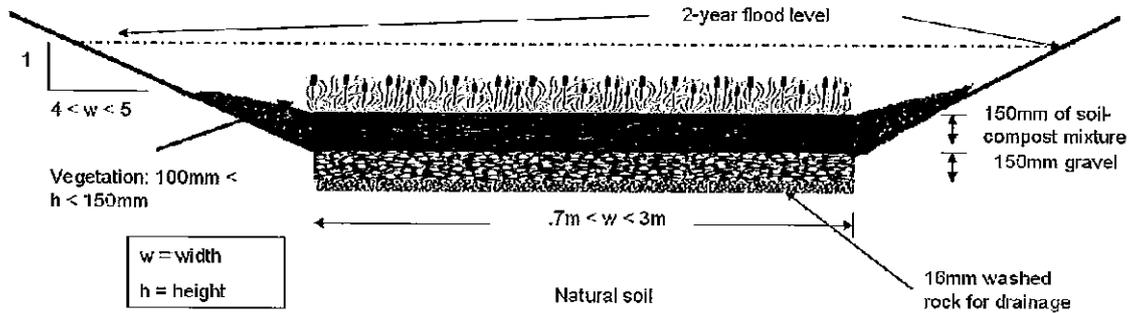


Figure A (Cross Section - Biofiltration Swale)

Gross Solid Removal Devices (GSRD)

- Physical or mechanical methods to remove litter and solids 0.20 inch nominal and larger from the storm water runoff, usually done using various screening technologies.
- Designed to handle flows generated by the peak drainage facility design event.

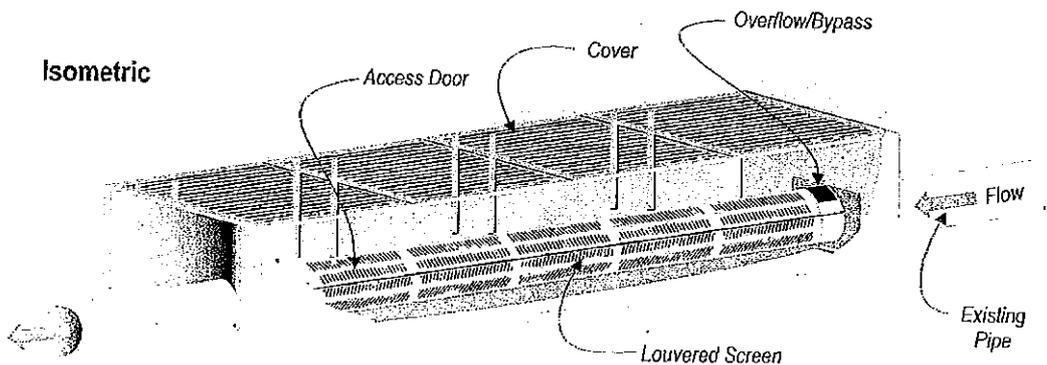


Figure B (Isometric View - Gross Solid Removal Devices)

Media Filter

- Primary removes TSS pollutants (sediments and metals) from runoff by sedimentation and filtering.
- Also is effective for dissolved metals, litter and some nutrients.

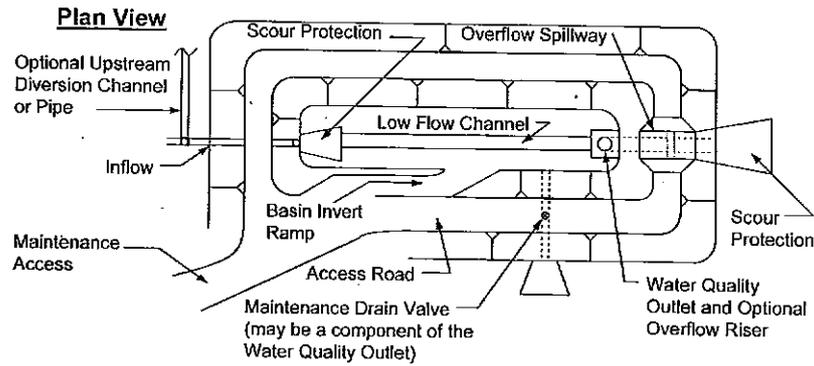


Figure C (Plan View – Media Filter, Austin Sand Filter)

Detention Device

- Permanent treatment BMP designed to reduce the sediment and particulate loading in runoff from the water quality design storm.
- WQV is temporarily detained in the device sediment and particulates settle out under the quiescent conditions prior to the runoff being discharged.

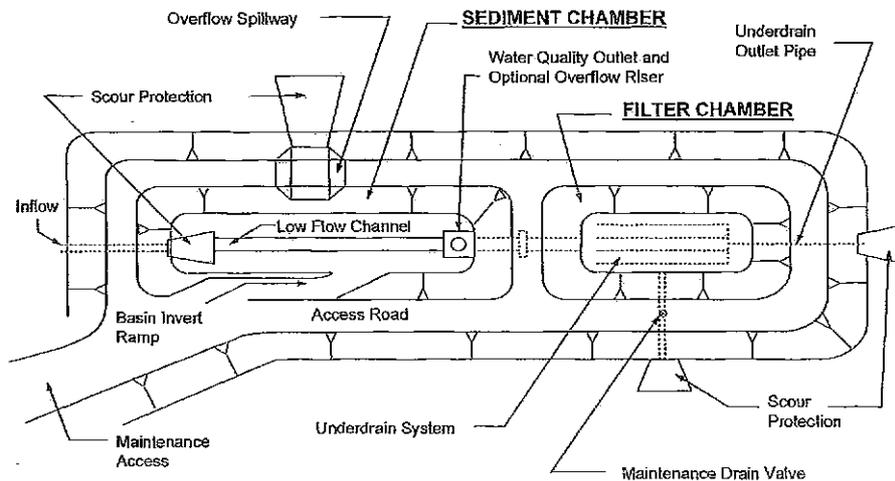


Figure D (Plan View - Detention Basin)

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

Environmental Clearance

CATEGORICAL EXEMPTION/ CATEGORICAL EXCLUSION DETERMINATION FORM

07-LA-91, 405, 22 various 28660K 201103002
 Dist.-Co.-Rte. (or Local Agency) P.M/P.M. E.A. (State project) Federal-Aid Project No. (Local project)/ Proj. No.

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

The Office of Project and Special Studies is currently preparing a Project Scope Summary Report for Storm Water Mitigation at various locations along SR-405 & SR-091, and 22 to comply with Regional Board TMDL requirements/resolution.

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 1b. (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])]

Karl Price

Print Name: Environmental Branch Chief

Karl Price
Signature

4/10/11
Date

Ojas Sheith

Print Name: Project Manager/DLA Engineer

Ojas Sheith
Signature

4/10/11
Date

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) ()

Activity 1 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.

Karl Price

Print Name: Environmental Branch Chief

Karl Price
Signature

4/10/11
Date

Ojas Sheith

Print Name: Project Manager/DLA Engineer

Ojas Sheith
Signature

4/10/11
Date

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**

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

07-LA-91, 405, 22	various	28660K	201103002
Dist.-Co.-Rta. (or Local Agency)	P.M/P.M.	E.A. (State project)	Federal-Aid Project No. (Local project)/ Proj. No.

Continued from page 1

To avoid any impacts to nesting birds, grubbing should occur outside the bird nesting season, Mar 1 to Sept 1. If this is not possible, a bird nesting survey will be required no more than 5 days prior to construction. If any nests are found within the project impact area, no work will be allowed within 150 feet of a songbird nest or 500 feet of a raptor nest, until such time that the young have fledged and left the nest.

As well as the long-term BMPs which are the goal of this project, short-term BMPs will be implemented to control any construction-related sediment loads.

ROUTE	POSTMILE	ACTIVITY
91	13.66	Biofiltration Swale
91	14.18	Biofiltration Swale
91	14.28	GSRD-LR-2
91	14.51	Biofiltration Swale
91	14.56	Delaware Sand Filter
91	14.61	Biofiltration Swale
91	14.68	Detention Basin
91	14.73	Earthen Austin Sand Filter
91	15.69	Biofiltration Swale
91	15.95	GSRD IS 1-A
91	16.08	GSRD IS 1-A
22	1.07	Austin Sand Filter
22	1.2	Austin Sand Filter
405	0.60	Austin Sand Filter
405	0.70	Austin Sand Filter
405	1.00	Biofiltration Swale
405	1.50	Biofiltration Swale
405	1.80	Biofiltration Swale
405	1.90	Biofiltration Swale
405	2.30	Biofiltration Swale
405	2.50	Biofiltration Swale
405	2.90	Biofiltration Swale
405	3.00	Biofiltration Swale
405	3.30	Austin Sand Filter
405	3.50	Austin Sand Filter
405	3.60	Austin Sand Filter
405	4.00	Biofiltration Swale
405	4.70	Biofiltration Swale
405	5.60	Biofiltration Swale
405	6.20	Biofiltration Swale

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

Right of Way Data Sheet

TO Kelvin Yuen
 ATTN David Oen
 PHONE (213) 897-5995
 SENIOR R/W P&M
 ROUTE LA-001, LA-022, LA-091 &
 PM_KM Various
 EA 28660K
 ALT N/A

R/W DATA SHEET

Date of Data Sheet 4/13/2011

ID NO
1795

WBS
 REVISED
 UPDATED
 PROJ_DESC HA42 201.335 SHOPP Project Storm Water Mitigation
 PSSR

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

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 the 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.

It is not known at this time whether all Right of Way work will be performed by Caltrans staff.

Major items of Construction Contract Work are anticipated

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

It is not known at this time whether there are 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	NONE	NONE
Estimate of Reimbursed Appraisal Fee	NONE	NONE
Total estimated cost	NONE	NONE

ESCALATION RATE RW .07

ESCALATION RATE Utilities

CERT.DATE 11/1/14

According to David Oen, no RW is required for this job.

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

TMP Data Sheet

TRANSPORTATION MANAGEMENT PLAN DATA SHEET

(Preliminary TMP Elements and Costs)

Co/Rte/PM 07-LA-91, 405 & 22 (Var) EA 28660K Alternative No. PSSR

Project Limit Route 91, Route 405 & Route 22 at various locations.

Project Description Storm Water Mitigation in the Los Cerritos Channel.

1) Public Information

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

2) Motorists Information Strategies

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

3) Incident Management

- a. Construction Zone Enhanced Enforcement Program (COZEEP) \$25,000.00 _____
- b. Freeway Service Patrol _____
- c. Traffic Management Team _____
- d. Helicopter Surveillance \$ _____
- e. Traffic Surveillance Stations (Loop Detector and CCTV) \$ _____
- f. Others _____ \$ _____

4) Construction Strategies

- 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

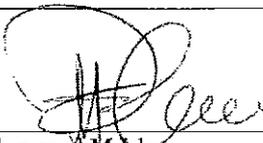
- a. Application of New Technology \$ _____
- e. Others _____ \$ _____

TOTAL ESTIMATED COST OF TMP ELEMENTS = \$25,000.00

Project Notes:

1. The work shall be done in accordance with the Lane Requirement Charts provided in the Maintaining Traffic Specifications.
2. COZEEP cost estimate of \$25,000 was provided by Construction Traffic Manager. The COZEEP funding shall be included under State Furnished Materials, BEES Item # 066062.
3. Public Affairs Campaign cost estimate was provided by the Caltrans Office of Public Affairs and Media Relations and there are no associated cost.
4. Construction Division is to notify the Office of Media Relations 1 month in advance of construction to issue a press release.
5. To get access to the job site, main line, ramp and local street closure charts will be required in order to perform the work.
6. Any changes to the scope of this project will require a re-evaluation of the TMP costs and strategies.

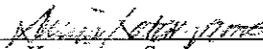
PREPARED BY


Mohammad M Islam
Transportation Engineer

DATE

1/18/2011

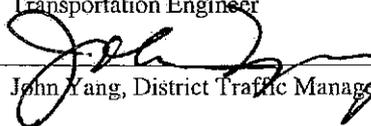
APPROVAL RECOMMENDED BY


Denis Katayama, Senior
Transportation Engineer

DATE

1/18/11

APPROVED BY


John Yang, District Traffic Manager

DATE

1/18/11

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

Storm Water Data Report

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

Hazardous Waste

Memorandum

*Flex your power!
Be energy efficient!*

To: Kelvin Yuen, STE
Office of Project and Special Studies
Division of Planning

Date: February 24, 2011

Attn: David Oen, P.E.
Project Engineer

File: 07-LA-91, 405 & 22
PM: Various
BMP for Storm Water
Mitigation at Various Sites
in Los Angeles County

EA: 07-333-28660K
PN: 1846-0700020900-K

From: **DEPARTMENT OF TRANSPORTATION
OEECS- HAZARDOUS WASTE BRANCH, SOUTH REGION, MS-16**

Subject: *Preliminary Hazardous Waste Assessment for Draft Project Scope Study Report (PSSR)*

The Office of Environmental Engineering and Corridor Studies is in receipt of your memorandum dated December 6, 2010 requesting a Preliminary Hazardous Waste Assessment for the draft Project Scope Study Report (PSSR). The project proposes to construct Best Management Practice (BMP) devices as required for storm water mitigation in the Los Cerritos Channel along I-405, SR-091, and SR-22 to comply with the Regional Water Quality Control Board's Order.

Project Background:

The United States Environmental Protection Agency (USEPA) established the Los Cerritos Channel (LCC) Metals Total Maximum Daily Load ("Metals TMDL") on March 17, 2010, with the intent of protecting and improving water quality in the LCC Watershed. Since cities of Bellflower, Cerritos, Downey, Lakewood, Long Beach, Paramount, and Signal Hill, as well as the California Department of Transportation (Caltrans) all manage and/or drain stormwater into at least a portion of the LCC Watershed, they have established a Metals TMDL Technical Committee consisting of representatives of the aforementioned public agencies as well as stormwater experts to meet on a regular basis to discuss and share resources to achieve the common objective of compliance with the Numeric Targets and Waste Load Allocations of the Metals TMDL.

Project Scope of Work:

This PSSR proposes for four (4) general types of BMP devices:

1. Media Sand Filter (Austin Sand Filter)
2. Gross Solids Removal Devices (GSRDs); mainly Linear Radial Device.
3. Detention Basin.
4. Bio-filtration Swale.

Presently there are 17 BMP devices proposed for I-405(PM 0.42/5.95), 11 BMP devices for SR-91(PM 13.87/16.05) and two on SR-22 (PM 1.06/1.16).

Table 1 shows the specific BMP devices locations and device selected at each location:

Table 1

Route	Outfall No.	Postmile	Direction	Cross St.	Recommended BMP
91	91-1366	13.66	WB	N Paramount	Biofiltration Swale
91	91-1418	14.18	WB	Downey	Biofiltration Swale
91	91-1428	14.28	WB	Downey	GSRD-LR-2
91	91-1451	14.51	WB	Lakewood Blvd	Biofiltration Swale
91	91-1456	14.56	EB	Lakewood Blvd	Delaware Sand Filter
91	91-1461	14.61	EB	Lakewood Blvd	Biofiltration Swale
91	91-1468	14.68	WB	Lakewood Blvd	Detention Basin
91	91-1473	14.73	WB	Lakewood Blvd	Earthen Austin Sand Filter
91	91-1569	15.69	EB	Bellflower Blvd	Biofiltration Swale
91	91-1595	15.95	EB	Bixby Ave	GSRD IS 1-A
91	91-1608	16.08	EB	Woodruff Ave	GSRD IS 1-A
22	22-0107	1.07	MEDIAN	Near Channel View Park	Austin Sand Filter
22	22-0120	1.2	WB	N Studerbaker Rd	Austin Sand Filter
405	405-0600	0.60	SB	East of Los Cerritos Channel	Austin Sand Filter
405	405-0700	0.70	NB	West of Los Cerritos Channel	Austin Sand Filter
405	405-0100	1.00	SB	East of Palo Verde Ave	Biofiltration Swale
405	405-0150	1.50	SB	Onramp from Woodruff Ave	Biofiltration Swale
405	405-0180	1.80	NB	West of Woodruff Ave	Biofiltration Swale
405	405-0190	1.90	NB	West of Woodruff Ave	Biofiltration Swale
405	405-0230	2.30	SB	East of Bellflower	Biofiltration Swale
405	405-0250	2.50	SB	West of Bellflower	Biofiltration Swale
405	405-0290	2.90	SB	East of Los Cerritos Channel	Biofiltration Swale
405	405-0300	3.00	SB	West of Los Cerritos Channel	Biofiltration Swale
405	405-0330	3.30	SB	West of North Lake wood Blvd	Austin Sand Filter
405	405-0350	3.50	SB	Onramp from Alhambra Ave	Austin Sand Filter

405	405-0360	3.60	SB	West from Alhambra Ave	Austin Sand Filter
405	405-0400	4.00	SB	West from Redondo Ave	Biofiltration Swale
405	405-0470	4.70	SB	East from Walnut Ave	Biofiltration Swale
405	405-0560	5.60	SB	West from Orange Ave.	Biofiltration Swale
405	405-0620	6.20	SB	East of Atlantic Ave	Biofiltration Swale

Finding:

Based on the review of the State Water Resources Control Board (SWRCB) environmental database (GEOTRACKER) in the project vicinity, the project site has a history of oil production and heavy industrial use including aerospace companies. All the areas have the potential for hydrocarbons, metals, and VOCs contamination and potentially methane and hydrogen sulfide as well as groundwater contamination. There are numerous locations identified in the surrounding area having a history of underground storage tanks (USTs) and above ground storage tanks (ASTs), including sites where leaking tanks have been discovered/reported as well as open cleanup hazardous waste sites.

Aerially Deposited Lead (ADL) contaminated soils:

Surface soil that is located in the existing unpaved areas is suspected of containing ADL due to historical Tetraethyl lead was added to gasoline as an additive that was phased out in the mid 1980's. The degree of ADL concentrations will determine whether the excavated excess soil can be re-used on the project by invoking the DTSC Lead Variance (DTSC, 2009), re-used or relinquish to contractor as non-hazardous waste, or disposed of as hazardous waste at a permitted disposal facility.

Regional Groundwater Contamination:

Due to shallow groundwater table along SR-22, the construction of BMP devices along this State Route may encounter groundwater (GW) during construction. The GW depth reported in the general vicinity is approximately 5 feet to 13 feet below ground surface (bgs) (Gregg Drilling & Testing Inc.). If construction dewatering is required, the excess water shall be properly contained, profiled, transported, and disposed of at a permitted disposal facility in accordance with Local, State, and Federal regulations.

Recommendation:

In order to determine the potential contamination in soil and groundwater, OEECS recommends that a site investigation is required to evaluate the sub-surface condition. The site investigation should be performed as soon as the project detailed design features are available. Based on the scope of work and the BMP locations, the site investigation will require 4-5 months to complete. The estimated staff support resources for the site investigation and to complete the hazardous waste assessment is 400 hours. The Project Manager is allocated this support cost to our cost center accordingly.

For the PSSR planning purpose, since a site investigation has not been performed, it is recommended that all estimated excess soil and/or extracted groundwater shall be treated as hazardous waste that require off-site disposal. The unit cost for these bid items can be retreated at (<http://t8web/design/contractcost/>). Furthermore, a site specific Lead Compliance Plan will required for the ADL soil handling.

Please note that this is a preliminary hazardous waste assessment for the PSSR and does not consider as a final clearance for the project PS&E. A formal Hazardous Waste Assessment Request shall be required during PS&E in order to perform a required site investigation and to provide the necessary standard special provisions.

If you have any question, I can be reached at steve.chan@dot.ca.gov (213) 897-3646, or contact Oscar Osorio of my staff at oscar.osorio@dot.ca.gov (213) 897-0688.



Steve Chan, P.E., STE
District Hazardous Waste Coordinator, South Region
Office of Environmental Engineering and Corridor Studies

cc: File

Attachments: (1) *RWQCB Geotracker Map*;

Reference: (1) http://www.greggdrilling.com/Resources/water_table.html;
(2) <http://www.geotracker.swrcb.ca.gov/>.

07-LA- 01, PM 0.1/4.0
07-LA- 19, PM 3.9/8.4
07-LA- 22, PM 0.9/1.3
07-LA- 91, PM 13.5/16.1
07-LA- 405, PM 0.4/6.3

Air Quality and Conformity

Memorandum

*Flex your power!
Be energy efficient!*

To: KELVIN YUEN
Senior Transportation Engineer
Office of Project and Special Studies

Date: August 8, 2011

File: 07-LA-091, 405, & 022
Various Locations
EA 28660K
BMP's for Storm Water
Mitigation

From: ANDREW YOON
Senior Transportation Engineer
Air Quality Branch

Subject: *Air Quality Review of Project Scope Summary Report (PSSR) and Issuance of exemption from air transportation conformity requirements per Title 40, Code of Federal Regulations, Section 93.126, Table 2 (Exempt Projects) for BMP's for Storm Water Mitigation in the Los Cerritos Channel at various locations on State Route 91 (SR-91), SR-405 and SR-22.*

This memorandum has been prepared in response to your request dated December 3, 2010, for air quality review of the above referenced project which includes sixteen (17) proposed BMP devices for SR-405 (PM 0.42/5.95), ten (11) BMP devices for SR-091 (PM 13.87/16.05), and two (2) possible BMP location on SR-22 (at PM 1.06 and 1.16). Specific locations of BMP devices are listed in the Table 1:

Table 1 (Proposed BMP device locations)

Route	Postmile	Direction	Cross St.	Recommended BMP
405	0.60	SB	East of Los Cerritos Channel	Austin Sand Filter
405	0.70	NB	West of Los Cerritos Channel	Austin Sand Filter
405	1.00	SB	East of Palo Verde Ave	Biofiltration Swale
405	1.50	SB	On ramp from Woodruff	Biofiltration Swale
405	1.80	NB	West of Woodruff Ave	Biofiltration Swale
405	1.90	NB	West of Woodruff Ave	Biofiltration Swale
405	2.30	SB	East of Bellflower	Biofiltration Swale
405	2.50	SB	West of Bellflower	Biofiltration Swale
405	2.90	SB	East of Los Cerritos Channel	Biofiltration Swale
405	3.00	SB	West of Los Cerritos Channel	Biofiltration Swale
405	3.30	SB	West of North Lake wood Blvd	Austin Sand Filter
405	3.50	SB	Onramp from Alhambra Ave	Austin Sand Filter
405	3.60	SB	West from Alhambra Ave	Austin Sand Filter
405	4.00	SB	West from Redondo Ave	Biofiltration Swale
405	4.70	SB	East from Walnut Ave	Biofiltration Swale
405	5.60	SB	West from Orange Ave.	Biofiltration Swale
405	6.20	SB	East of Atlantic Ave.	Biofiltration Swale

91	13.66	WB	N Paramount	Biofiltration Swale
91	14.18	WB	Downey	Biofiltration Swale
91	14.28	WB	Downey	GSRD-LR-2
91	14.51	WB	Lakewood Blvd	Biofiltration Swale
91	14.56	EB	Lakewood Blvd	Delaware Sand Filter
91	14.61	EB	Lakewood Blvd	Biofiltration Swale
91	14.68	WB	Lakewood Blvd	Detention Basin
91	14.73	WB	Lakewood Blvd	Earthen Austin Sand Filter
91	15.69	EB	Bellflower Blvd	Biofiltration Swale
91	15.95	EB	Bixby Ave	GSRD IS 1-A
91	16.08	EB	Woodruff Ave	GSRD IS 1-A
22	1.064	EB	Studebaker Rd	Media Sand Filter
22	1.156	EB	Studebaker Rd	Media Sand Filter

The Office of Environmental Engineering and Corridor Studies (OBECS), Air Quality Branch (AQB) has completed the review and provides 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. The proposed project is listed in Table 2 under the subtitle "Other" and classification "Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)." 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 the project is unlikely to result in an adverse impact to ambient CO based on the proposed scope.

According to the *Qualitative Hot Spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas* in response to EPA's Final Rule on March 10, 2006 (71 FR 12468, revised November 13, 2009), the project is located in a federal non-attainment area for PM₁₀ and PM_{2.5}. Nevertheless, it 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 of or to result in an increase in the number of diesel vehicles or increase in vehicle idling. The proposed project is therefore expected to have minimal influence on PM₁₀ and PM_{2.5} emissions. Thus the project is not anticipated to be of air quality concern and it is unlikely to result in adverse impacts to ambient PM₁₀ 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

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emissions impacts relative to the no-build alternative. A qualitative MSAT analysis for the proposed project is therefore deemed not required pursuant to the FHWA's *Interim Guidance on Air Toxics Analysis in NEPA Documents* dated September 2009.

The proposed project is located within the boundaries of South Coast Air Quality Management District; and will need to comply with the Fugitive Dust Rule 403 to minimize temporary emissions during construction of the project as applicable.

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

If you have any questions, please contact me at (213) 897-6117 or Andy Woods at (213) 897-4638.