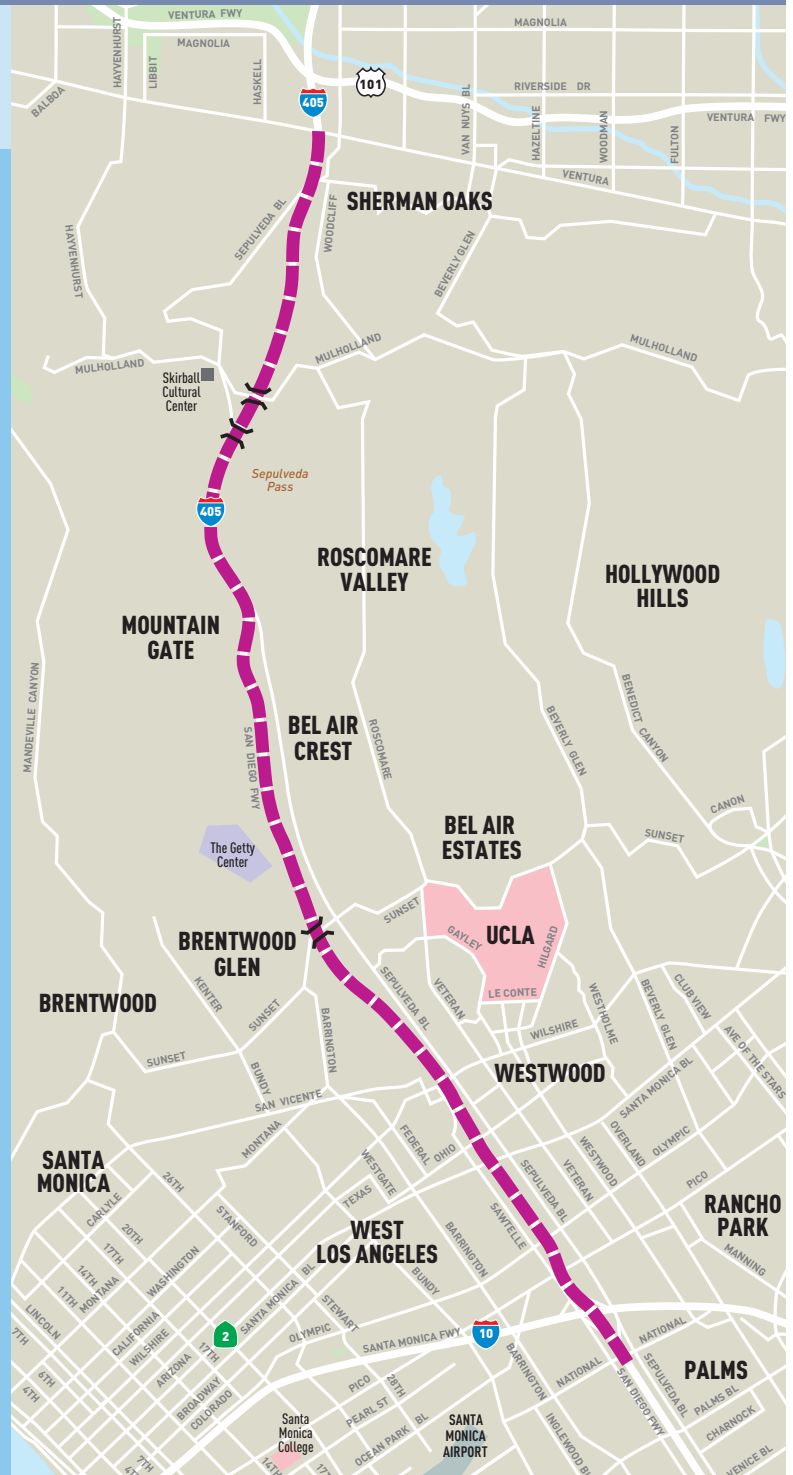




# I-405 Sepulveda Pass Improvements Project

## MONTHLY PROJECT STATUS REPORT



Metro®



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# **INTERSTATE 405 SEPULVEDA PASS IMPROVEMENTS PROJECT**

## **MONTHLY PROJECT STATUS REPORT**


THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH GRANTS FROM THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) AND THE AMERICAN RECOVERY AND REINVESTMENT ACT (AARA) AND FUNDS FROM THE STATE OF CALIFORNIA.

**FEBRUARY 2014**

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**PROJECT SUMMARY**

<b>LOCATION: I-405 Sepulveda Pass Improvements Project</b>				<b>CONSTRUCTION MANAGEMENT CONSULTANT: Stantec</b>			
<b>DESIGN/CONSULTANT: Kiewit (D/B)</b>				<b>CONTRACTOR: Kiewit (D/B)</b>			
<b>PROJECT PHOTO</b>				<b>WORK COMPLETED PAST MONTH</b>			
<p><b>Bridge 21 Skirball Center Drive with Wildlife Crossing - West End</b></p> 				<p>80 Hour Freeway Lane Reduction accomplished.                  Areas 5, 6, &amp; 7 Freeway Pavement Grind &amp; Overlay and Re-striping during 80 hour Lane Reduction completed.                  Lighting Installation throughout all Areas continues.                  Median Construction continues in all Areas.                  Curb &amp; Gutter and Sidewalk Construction on Exposition Ave., Pico Ave, Cotner Ave., Beloit Ave. and Sepulveda Blvd. continues.                  Walls 1720 &amp; 1730 Stenciled Artwork Installation continues.                  Bridge 17 Church Lane Soundwall completed.                  Bridge 23 Valley Vista Bridge Construction Complete.</p>			
<b>EXPENDITURE STATUS</b>				<b>SCHEDULE ASSESSMENT</b>			
<b>(\$ In Millions)</b>							
<b>ACTIVITIES</b>	<b>CURRENT ESTIMATE</b>	<b>EXPENDED AMOUNT</b>	<b>PERCENT EXPENDED</b>	<b>MAJOR SCHEDULE ACTIVITIES</b>	<b>PRIOR PLAN</b>	<b>CURRENT PLAN</b>	<b>VARIANCE WEEKS</b>
<b>DESIGN (Preliminary)</b> (PA&ED/PS&E)	\$47.0	\$47.0	100.0%	<b>Environmental</b>			
<b>RIGHT-OF-WAY</b> (Capital/Support/3rd Party)	\$108.7	\$70.5	65%	End Environmental Phase (PA&ED)	Mar-08	Mar-08	Complete
<b>CONSTRUCTION</b> (Construction Support/Construction)	\$904.4	\$816.3	90%	<b>Design</b>			
<b>Reversible Lane</b>	\$2.6	\$0.0	0%	End Design Support Phase (D/B)	Dec-13	Mar-14	13
<b>Contingency</b>	\$78.7	\$0.0	0%	<b>Right-of-Way</b>			
<b>TOTAL</b>	\$1,141.4	\$933.8	82%	ROW Certification	Dec-13	Mar-14	13
<b>AREAS OF CONCERN</b>							
Global Maintenance of Traffic Bridge 21 Skirball Center Drive - Wildlife Crossing				<b>Construction</b>			
				Substantial Completion	Jun-14	Jun-14	0
				<b>CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD</b>			
<b>ROW ACQUISITION (Caltrans)</b>	<b>PLAN</b>	<b>ACQUIRED</b>	<b>REMAINING</b>	Moraga Ave. On & Off Ramps Open 3/28/14			
PERMANENT PARCELS	14	8	6	Segment 1 Substantial Completion 4/6/14			
TEMPORARY PARCELS	27	20	7	Segment 1 Punchlist Begins 4/7/14			
<b>TOTAL PARCELS</b>	41	28	13	Sepulveda Blvd. from Montana Ave. to Church Lane - Paving Complete 4/30/14			
				Segment 3 Median Work Complete 5/30/14			

## **PROJECT OVERVIEW & STATUS**

*The I-405 Sepulveda Pass Improvements Project will add a 10-mile HOV lane and improve supporting infrastructure such as ramps, bridges, and soundwalls on the San Diego Freeway (I-405); while widening lanes from the Santa Monica Freeway (I-10) to Ventura Freeway (U.S. 101). This project will reduce existing and forecasted traffic congestion on the I-405 and enhance traffic operations by adding freeway capacity in an area that experiences heavy congestion. In addition to these modifications, the project will improve both existing and future mobility and enhance safety throughout the corridor. Project benefits include a decrease in commuter time, reduce air pollution, and promote ridesharing. The I-405 Sepulveda Pass Improvements Project features include:*

- *Add a 10-mile HOV lane on the northbound I-405 between the I-10 and US-101 freeways*
- *Remove and replace the Skirball Center, Sunset Blvd. and Mulholland Dr. Bridges*
- *Realign 20 on and off ramps*
- *Widen 20 existing overpasses and structures*
- *Construct approximately 18 miles of retaining walls and soundwalls*

*Interstate 405 (I-405), also known as the San Diego Freeway, is a north/south route classified as an interstate/interregional loop freeway. It is part of the National Highway System (NHS), originating at the I-5 in Orange County in the City of Irvine and terminating at the I-5 in Los Angeles County, in the City of Los Angeles near the community of Mission Hills.*

*The design-build contract Notice to Proceed (NTP) was issued on June 2, 2009 with a Substantial Completion Deadline of May 31, 2013. Currently, the substantial completion is expected to occur in June 2014.*

Project is making significant construction gains across all three Segments. The effort to complete the project and open the HOV lane this summer requires that all involved Agencies and Kiewit strive to resolve issues on a timely manner and support each other every day on every issue. Currently, the process is working but requires constant monitoring and elevation of unresolved issues.

In relation to Claim 86 or a document that appears to be a claim, Kiewit has agreed to allow the Project to inspect documents that support their claim and copy the documents. We are not sure what these documents are or if they meet Metro's contractual requirements for a claim.

Other claims that have been around for quite some time are being referred to the newly formed DRB by Kiewit with the expectation that DRB will hear all of them even if they may not meet some contract requirements, mainly timely notice from Kiewit to Metro. It appears that this DRB is similar to the previous one, and the Project believes they will decide what constitutes proper notice of claim.

Regardless of the Notice issue which the Project does not agree with DRB, we are committed to resolve as many claims as possible with Kiewit between now and mid-summer. Kiewit was supposed to work with Metro Project Management on deciding an agreed to order of presentation to DRB, but Kiewit decided to go directly to DRB which is their right but Metro still requires that these claims follow reasonable contractual processes. Kiewit's submittal of a discrete claim with certified costs for the actual scope of work that they are claiming is very important in determination of merit and quantum. Even though Kiewit has glossed over these procedural processes that assist Metro in resolving claims prior to DRB hearings, Metro will act in good faith to try and meet the DRB dates for all claims submitted to DRB. But the Project will not engage in a DRB hearing if we do not have adequate time to prepare or cannot determine the nature of the actual dispute. Additionally, if it becomes apparent that Kiewit is asking the DRB to negotiate costs with them against Metro, then it will not be a DRB process that the Project can participate.

## PROJECT OVERVIEW & STATUS (Cont'd)

Over the next 4 months the DRB will hear 7 claims, some of which were rejected years ago. The Project was under the impression that the claims list was shortening and in fact the end was in sight. Recently, Kiewit indicated that they will refer other claims to the DRB as they re-evaluate the disputes. Although Kiewit admits that these claims are not as significant as the 7 above, but only Kiewit can decide the number of claims slated for the DRB.

As discussed last month, labor costs for the Project support staff are exceeding project budget and the Project is using contingency to cover these costs. One year delay is certainly a significant reason and Caltrans who has the most share of the increase has indicated that these costs are appropriate. We are working the issue and expect to obtain some consensus from Caltrans/City/Metro that these support costs can be curtailed as the Project starts to wind down.

Metro has concerns with Kiewit's inability to obtain final approval of Fact-Sheets. Project believes that over-the-shoulder review and comment resolution has developed reasonable alignment that meets the intent of the contract and actually improves the alignments compared to the IFB documents. In regards to remaining Fact-Sheets, Caltrans District 7 and Project are making progress, but we should realize that Caltrans HQ are independent of local Caltrans and final approval will always be a concern. Currently, there are several Fact-Sheets and common issues at Caltrans HQ for determination of acceptability from Caltrans legal side. Recently we heard from Caltrans management that Caltrans legal has some questions to be answered by Caltrans design staff on the Project; Caltrans will not tell us what the questions are or what the issues are or when this will end.

I-405 Team is putting together a list of issues that are considered betterments, excessive mitigations, or just requests from Caltrans, City, and County Agencies that contributed to the LOP Budget increase. Some of these are well documented, some are not. Examples include the Getty work and ramp improvements (Caltrans), widening of Sepulveda and slide repairs at Sepulveda and Homedale (City), and turn pocket SB Sepulveda at Wilshire (County).

Metro completed an initial Time Impact Analysis (TIA) that determined Kiewit to be entitled to 149 calendar days (CD) of excusable but non-compensable delays and a Unilateral Change Order was issued to extend the Project Substantial Completion Deadline by 149 CDs. Additionally, the Project completed another shorter TIA analysis of the impact of the MSE walls failure on the Critical Path. These analyses have been referred to Metro Counsel for review and comments.

Key project activities for February 2014 include:

- MOT issues are being addressed on a daily/weekly basis and it is possible that some modifications to the specifications may be necessary to allow for consecutive ramp closures to take place. Project is also looking at longer closures for weekend or three-day weekends to avoid numerous shorter duration closures.
- The 80-hour lane reduction (Jamzilla) on NB 405 was completed successfully.
- Kiewit has proposed a 1:1 closure of Sepulveda Blvd. to perform roadway reconstruction and paving. This proposal will have significant impacts to local traffic but will reduce long term traffic impacts and help with overall schedule. There was a concern with adopting the 1:1 near the same as the 80-hour lane reduction event strictly from a perception point of view. Project postponed this work until after the

**PROJECT OVERVIEW & STATUS (Cont'd)**

80-hour lane reduction event and will start on March 14, 2014. Project feels that residents are weary of the project and want the project to be completed as fast as possible, therefore the Project supports more impact for shorter time frame.

## MANAGEMENT ISSUES

**Concern No. 1:** Align I-405 Closer to the Getty Parking Structure (96" MWD Waterline)

**Status/Action** (1) 4 vs. 5 lanes for the Getty North Entrance has been resolved. (2) Mitigation of North Canyon road is in process. Bids were received from only one (1) bidder out of six (6) potential bidders with a value about \$7M higher than Metro's estimate. Something appears to be out of sorts – only one bidder with a very high value. Metro has met with Caltrans ROW/Legal and Metro Legal to determine another approach to completing this work, and several plans have been discussed; Pay Getty to self-perform or have Caltrans issue a contract to complete these activities. Additionally, Metro is meeting with Kiewit to try to come to a resolution. As of this report, Getty has stated that they will not self-perform the work, and Caltrans has indicated that they will not remove a large stockpile of material that they claim does not belong to Caltrans. Metro is running out of viable options dealing with these issues and the five groups that have many complaints about each other. Metro sent both Caltrans and Getty a letter asking them to remove the stockpile by March 15, 2014. If they do not, Metro will remove the material and bill both Getty and Caltrans half the expenses each. The remaining work in North Canyon area is being sorted out and we will issue direction to Kiewit 3<sup>rd</sup> week of March.

**Concern No. 2:** Provisional Sums

**Status/Action** There is a significant cost increase in Provisional Sums caused by unknown utility conflicts at bid time. Currently, Project is reviewing Utility scopes to verify their accuracy and identify other issues, such as future changes, that could impact the project later. In addition, the Project is actively pushing Kiewit to forward-price all relocations and stop Time and Material (T&M), except in emergency type situations. Kiewit has exceeded original estimates by double in some cases which has made resolution difficult, but Project is working the issue with Kiewit. Kiewit brings up unsubstantiated Provisional Sum costs at Executive Partnering sessions. Exceeding T&M estimates and lack of timely requests for reimbursement are areas that impact Kiewit and Metro. Without details, Project is left with few options, but to wait on information and keep working with Kiewit to resolve the issues.

**Concern No. 3:** Kiewit and Metro Estimating Approaches

**Status/Action** In the past, the lack of resolution of estimating issues was with Design and to a lesser extent construction. Now this is reversing and Design estimates are being processed and construction estimates (old) are starting to hold things up.

**Concern No. 4:** Project Cost and Schedule Reassessment



## MANAGEMENT ISSUES (Cont'd)

**Status/Action** The current Life-of-Project (LOP) budget stands at \$1,141.4 million. As stated earlier in this report, Claim 86 is outside this discussion, and currently, Project has no way of knowing if any of Claim 86 has merit. Additionally, as noted earlier, Kiewit has been referring to other claims which Project is not aware of, has no idea if they are related to the already denied for merit, or if they are legitimate and could have impact on LOP budget.

**Concern No. 5:** Retaining Walls 1720 and 1730

**Status/Action** Aesthetics was approved by City Cultural Affairs for these two Walls. Shotcreting face is 100% complete and sand blast of aesthetic treatment has been authorized of which 70% is complete.

**Concern No. 6:** Giro Lawsuit

**Status/Action** Caltrans has decided that modifying the existing ramps to tie into new freeway widening and then pursue a new ramp design after I-405 Project is complete, is the preferred resolution. Kiewit is finishing wall 1836 affected by Giro lawsuit and the Project is making improvements to NB On-Ramp along with design plans for new signal at this ramp.

**Concern No. 7:** Landscaping

**Status/Action** Elected Officials have requested the placement of raised medians with trees on Sepulveda Blvd. Currently Project believes this issue to be closed.

**Concern No. 8:** Commercial Issues

**Status/Action** Since the start of the Project, Kiewit has submitted numerous "lists" containing Change Orders or Provisional Sum values that Kiewit may or may not be entitled to. Project has worked diligently with Kiewit to resolve work authorization and payment issues, yet these "lists" are constantly being transmitted. The information on these "lists" may or may not have merit. Project has reviewed the information on numerous occasions, thus expending a large amount of resource time. The Project and Kiewit have instituted bi-weekly meetings to resolve the issues. It should be noted that at these bi-weekly meetings the information that Kiewit is presenting to support their requests for payment is seldom updated. This continues to put pressure on Metro to resolve the financial issues that Kiewit manages with little effort and still complains to Upper Management. This general issue has not changed (it surfaces at various meetings). New lists of costs and potential claims are being elevated by Kiewit at meetings without Project's knowledge or advance copy or notice to allow for meaningful discussion or resolution.

## MANAGEMENT ISSUES (Cont'd)

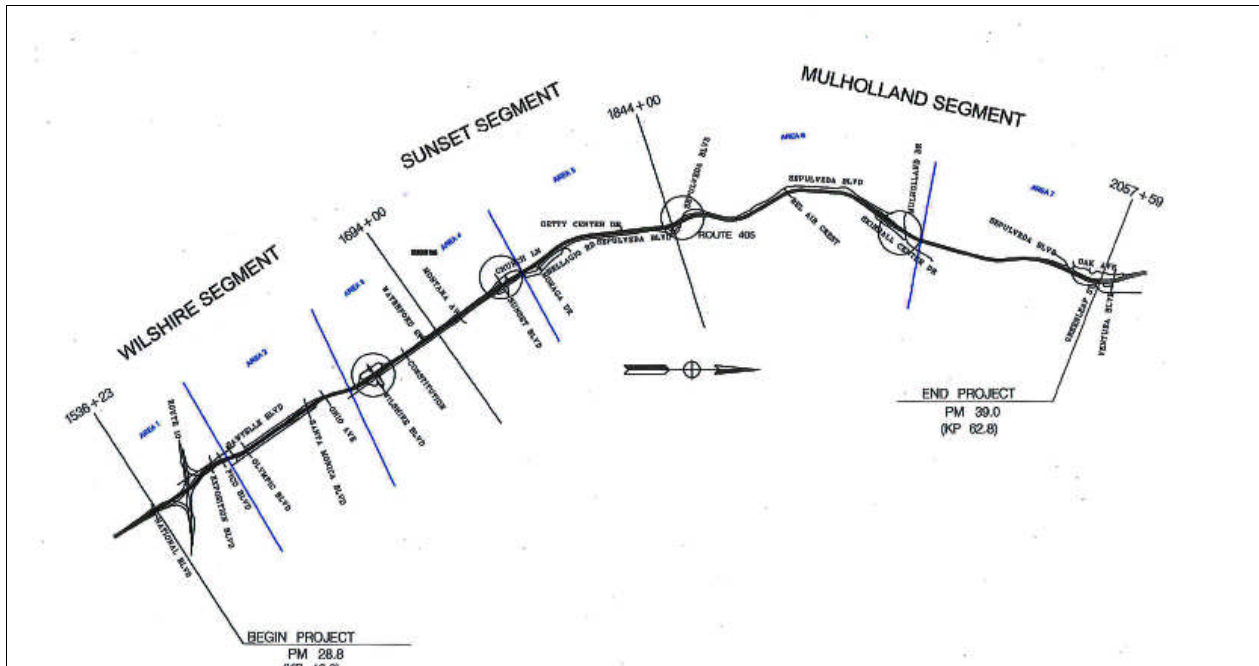
**Concern No. 9:** Caltrans staff and Real Estate Cost

**Status/Action** Recent cost analysis has shown a cost overrun for Caltrans staff budget cost and a potential overrun of ROW cost. Caltrans staff costs have been brought up to Caltrans Executive Management in the past and Caltrans has informed Metro on every occasion that staff charges are appropriate. “Appropriate” versus “required” appear to be an area of concern; the staff may be working on an activity for the project, but is it required when many other reviews of the same activity already have taken place? These overruns are ongoing issues and Project is looking for viable solutions to resolve these issues. Project is also reassessing related potential cost increases.

**Concern No. 10:** Potential Increases to Staffing Costs

**Status/Action** Delays to the project schedule are potentially expected to increase staffing costs. Studies are underway to forecast the remaining staffing costs based on revised staff demobilization plan.

## PROJECT SCOPE



The I-405 Sepulveda Pass Improvements Project is a Design-Build contract to add a 10-mile High Occupancy Vehicle (HOV) lane on the northbound San Diego Freeway (I-405) between the Santa Monica (I-10) and Ventura (US 101) Freeways. The purpose of the project is to reduce congestion by adding the HOV lane and closing the HOV gap, which will provide a continuous HOV lane from the Orange County Line to the I-405/US-101 interchange. The scope entails an 11-foot half median, one 12-foot HOV lane, a 1-foot HOV buffer, five 12-foot mixed-flow lanes (six 12-foot mixed-flow lanes between Mulholland Bridge and Valley Vista), and a 10-foot outside shoulder.

Most of the freeway widening required for this project occurs along the east side of I-405 along Sepulveda Blvd. between Montana Ave. and Moraga Dr. and between Getty Center Drive and the northbound Getty Center off-ramp. Sepulveda Blvd. is going to be slightly realigned at the relocated southbound I-405 Skirball Center Drive on/off-ramps in order to add a dual-left-turn lane to the on-ramp.

Some freeway widening also occurs along the west side of the freeway between Olympic Blvd. and Waterford Street, and between Bel Air Crest to just north of Ventura Blvd. This entails NB and SB lanes and shoulder standardization.

In order to reduce accidents associated with traffic on the ramps, project scope includes several interchange improvements as detailed below:

## PROJECT SCOPE

- Wilshire Blvd. interchange in both directions  
The northbound on-ramp from eastbound Wilshire Blvd. is grade-separated from the northbound off-ramp to westbound Wilshire Blvd. and from Sepulveda Blvd. The southbound off-ramp to eastbound Wilshire Blvd. is grade-separated from the southbound off-ramp to westbound Wilshire Blvd.
- Northbound I-405 Sunset Blvd. interchange  
The northbound I-405 off-ramp to eastbound Sunset Blvd. is widened to include one more lane. Two exclusive 12-foot lanes on the reconstructed Sunset Blvd. overcrossing and two 12-foot lanes on the on-ramp are provided for the northbound I-405 on-ramp from eastbound Sunset Blvd. In the eastbound direction three 12-foot lanes and in the westbound direction three 11-foot lanes are provided which solves the existing reduction from three lanes to two lanes in the eastbound direction. In both directions, 4-foot shoulders and 5-foot sidewalks as well as a 13-foot median are provided on the Sunset Blvd. overcrossing.
- The irregular northbound I-405 on/off-hook ramps at the Getty Center interchange are reconfigured to a standard diamond interchange to increase stopping sight distances in order to improve safety.
- The southbound I-405 Skirball Center Drive interchange is relocated to form a "T" intersection with Sepulveda Blvd. This eliminates the existing intersection at Skirball Off-Ramp and Skirball Center Drive.
- The southbound Valley Vista On and Off Ramps are realigned due to freeway widening and freeway mainline realignment between SB Valley Vista On/Off Ramps. The realignment will improve the stopping sight distance for the SB Valley Vista Off-Ramp. A third lane will be added to the SB Valley Vista On-Ramp to increase the ramp capacity.
- A second NB lane will be added on Skirball Center Drive between the Skirball Bridge and NB Skirball ramps.
- A NB auxiliary lane and bike lanes will be added on Sepulveda Blvd. on each direction, between the new SB Skirball ramps and Skirball Bridge.

A total of 12 soundwalls and 54 retaining walls within the project limits are constructed at embankments where right-of-way is constrained.

A total of 12 undercrossings within the project limits are widened. Three overcrossings at Sunset Boulevard, Skirball Center Drive, and Mulholland Drive are replaced.

**KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD**

	Milestone Date	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
Bridge 19 Sepulveda Blvd. UC - Strip & Patch Closure Pour	2/4/14A	○					
NB I-405 to EB I-10 Ramp (NW4) - North End Paving Complete	2/7/14A	○					
Bridge 23 Sepulveda Blvd. UC - Joint Seal Completed	2/7/14A	○					
NB I-405 to EB I-10 Ramp (NW4) - Metal Beam Guard Rail Complete	2/8/14A	○					
RW 1720 Artwork - Installation of Artwork Begins	2/10/14A	○					
Area 5 & 7 NB - 80 hour Lane Reduction Begins	2/14/14A	○					
Area 5 & 7 NB - Median Barrier Installation and AC Grind & Overlay Begins	2/14/14A	○					
Area 5 & 7 NB - 80 hour Lane Reduction Ends	2/18/14A	○					
Area 5 & 7 NB - Median Barrier Installation and AC Grind & Overlay Complete	2/18/14A	○					
Area 2 Santa Monica - Irrigation and Landscaping Complete	3/4/14		○				
Area 3 Wilshire - Grinding /Saw & Seal Pavement - Median - Complete	3/4/14		○				
I-10 Interchange Area - Irrigation and Landscaping Complete	3/7/14		○				
Area 2 Santa Monica - Permanent Street Light Testing Complete	3/13/14		○				
Moraga Ave. On and Off ramps - Open to Vehicle Traffic	3/28/14		○				
Segment 1 - Substantial Completion & Relief of Maintenance	4/6/14			○			
Segment 1 - Punchlist Work Begins	4/7/14			○			
Area 4 Sunset - Permanent Street Lighting Install Complete	4/11/14			○			
Area 4 Sunset - Permanent Street Light Testing Complete	4/28/14			○			

 Metro Milestone     
  Design/Build     
  Third Parties Approval  
 Caltrans Milestone     
 \* New Date     
  FHWA Federal Highway Administration Approval

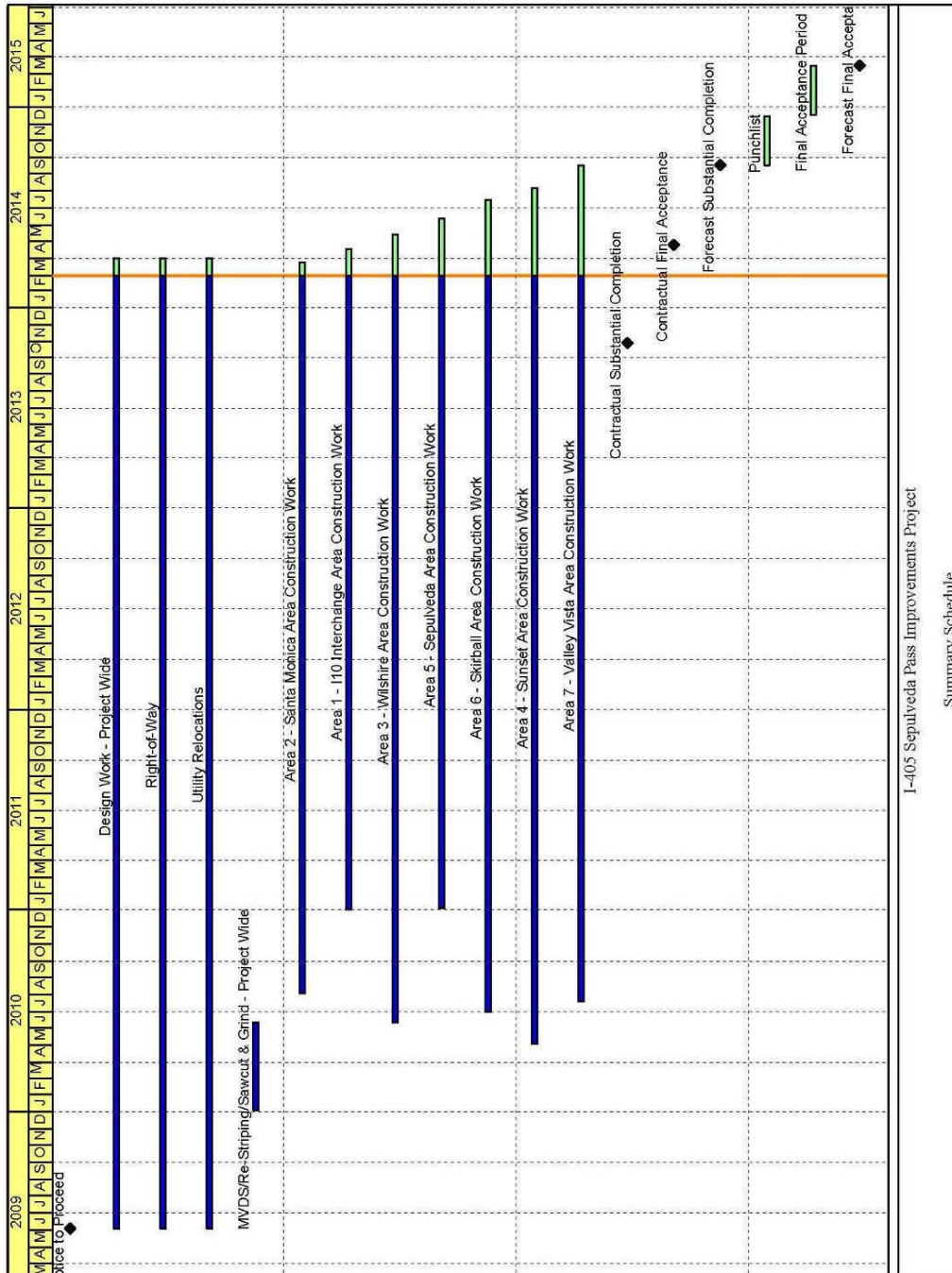
**KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD**

	Milestone Date	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
Sepulveda Blvd from Montana to Church Lane - Paving Complete	4/30/14			○			
Area 4 Sunset - Remove Temporary Widening at Church Lane & Sepulveda Blvd.	5/1/14				○		
Area 5 Sepulveda - Permanent Street Lighting Install Complete	5/1/14				○		
Area 3 Wilshire - GSA Utilities Relocation Complete	5/14/14				○		
Area 5 Getty Center Drive - Permanent Traffic Signals Testing Complete	5/14/14				○		
Area 6 Skirball - Permanent Street Lighting Install Complete	5/21/14				○		
Segment 3 - Median Work Complete	5/30/14				○		
Area 5 Sepulveda - Median Concrete Paving Complete	6/4/14					○	
Area 5 Sepulveda - Substantial Completion	6/11/14					○	
Area 5 Sepulveda - Punchlist Work Begins	6/12/14					○	
Area 4 Sunset - Median Concrete Paving Begins	6/27/14					○	
Area 6 Skirball - Permanent Street Lighting Testing Complete	6/27/14					○	
Segment 1 - Punchlist Work Complete	7/7/14						○
Area 4 Sunset - Median Concrete Paving Complete	7/7/14						○
Area 6 Skirball - Substantial Completion	7/16/14						○
Area 6 Skirball - Punchlist Work Begins	7/17/14						○

 Metro Milestone	 Design/Build	 Third Parties Approval
 Caltrans Milestone	 New Date	 FHWA Federal Highway Administration Approval

## PROJECT SUMMARY SCHEDULE



I-405 Sepulveda Pass Improvements Project

Summary Schedule

## **CRITICAL PATH NARRATIVE**

The project has several critical paths which may potentially change as the work progresses. Based on the current project update, the primary critical path runs through Permanent ITS Conduit/Vaults/Equipment/Cable/Testing at Area 7. The path then continues with Area 7 Median demolition and excavation, installation of drain in the median, and median paving and concrete barrier. The path ends with permanent delineation of Area 7 median.



## PROJECT COST STATUS

**I-405 SEPULVEDA PASS IMPROVEMENTS PROJECT**

FEDERAL PROJECT #: SARRA-405-3(015)N, METRO PRIME CONTRACT# C0882

METRO CONSTRUCTION MANAGEMENT DIVISION / CALTRANS

COMBINED COST REPORT BY PHASE

PERIOD ENDING: FEBRUARY 2014

DOLLARS IN THOUSANDS

PHASE #	PHASE CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET / FORECAST VARIANCE
				PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
0	PA&ED	PROJECT APPROVAL & ENVIRO DOCS	22,000	-	21,457	-	21,078	-	21,078	-	21,457	-
1	PSE	PLANS, SPECS, & ENGINEERING	63,100	-	25,560	-	25,975	-	26,012	-	25,632	72
2	RS	RIGHT-OF-WAY SUPPORT	14,000	-	9,543	11	7,802	11	7,802	-	8,076	(1,467)
3	CS	CONSTRUCTION SUPPORT	28,000	-	67,813	207	101,358	1,995	89,063	-	85,387	17,574
4	C	CONSTRUCTION	823,900	-	915,241	875	891,590	27,007	727,191	-	934,056	18,815
9	RC	RIGHT-OF-WAY CAPITAL	83,000	-	99,186	-	73,141	842	62,713	-	60,792	(38,394)
<b>SUBTOTAL PROJECT</b>			<b>1,034,000</b>	<b>-</b>	<b>1,138,800</b>	<b>1,092</b>	<b>1,120,944</b>	<b>29,854</b>	<b>933,858</b>	<b>-</b>	<b>1,135,400</b>	<b>(3,400)</b>
4	C	CONSTRUCTION OF CITY OF L.A.'S REVERSIBLE LANES PROJECT	-	-	2,600	-	-	-	-	-	6,000	3,400
4	C	CONSTRUCTION OF CALTRANS DRAINAGE SYSTEM REPAIRS	-	-	-	-	-	-	-	-	-	-
<b>TOTAL PROJECT</b>			<b>1,034,000</b>	<b>-</b>	<b>1,141,400</b>	<b>1,092</b>	<b>1,120,944</b>	<b>29,854</b>	<b>933,858</b>	<b>-</b>	<b>1,141,400</b>	<b>-</b>

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JANUARY 31, 2014.  
 KEWIT EXPENDITURES ARE ONLY THROUGH OCTOBER 31, 2013 DUE TO INVOICING LAG.

## PROJECT COST ANALYSIS

### Original and Current Budgets

The Original Budget reflects the Metro Board adopted Life-of-Project (LOP) Budget which was approved in April 2009 in the amount of \$1,034 million. An additional \$6.0 million was approved by the Metro Board in February 2011 to add the City of LA's Reversible Lanes Project Scope funded by the City of Los Angeles, along with \$8.0 million approved by the Metro Board to add Caltrans drainage system repairs to be funded by Caltrans. The Metro Board approved a decrease in the amount of \$3.4 M for the Reversible Lanes and an increase of \$26.1M for betterments. This brings the total Current Budget to \$1,070.7 million. In June and July 2013, the Metro Board approved increases of \$70.7 million which brings the Current Budget to \$1,141.4 million. The Project Cost Report has been updated to reflect this increase.

### Current Budget and Current Forecast

The Current Budget is \$1,141.4 million. Trends 1 through 260 have been approved and are included in the Current Forecast of \$1,141.4 million. Trends are being prepared for all Professional Services (including Metro, Caltrans and Stantec staff) and will be included in next month's report. Project Budget Change Requests (PBCR) 1 through 9 have been issued and included in the Current Budget.

### Commitments

The Commitments increased by \$1.1 million this period primarily for P.O's for City of Los Angeles and Metro/Caltrans staff charges. Total Commitments are \$1,120.9 million.

## PROJECT COST ANALYSIS (Contd)

### Expenditures

Expenditures are cumulative through January 2014. The expenditures increased by a total of \$29.9 million this period. Expenditures within the construction support phase included Metro and Caltrans project staff and miscellaneous consultant contract services. Costs in the right-of-way categories were for 3<sup>rd</sup> party Metro staff costs and for third party and utility relocation expenditures. Caltrans right-of-way expenditures for the period included staff charges for right-of-way support and Caltrans Real Estate acquisitions. One Kiewit invoice was processed by Metro Accounting this period in the amount of \$27.0 million for October 2013. The \$933.9 million in Project Expenditures to date represents 81.8% of the Current Budget.

**FINANCIAL/GRANT STATUS – ORIGINAL SCOPE ACTIVITIES**

FEBRUARY 2014

STATUS OF FUNDS BY SOURCE

SOURCE	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	APPROVED BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	COMMITMENTS \$	%	EXPENDITURES \$	%	BILLED TO FUNDING SOURCE * \$	%
FEDERAL SAFETEA-LU	\$117.000	\$117.000	\$117.000	\$117.000	100%	\$67.329	58%	\$67.329	58%
FEDERAL ARRA	\$189.900	\$189.900	\$189.900	\$189.900	100%	\$189.900	100%	\$189.900	100%
STATE CMIA	\$640.100	\$640.100	\$640.100	\$640.100	100%	\$623.266	97%	\$332.655	52%
STATE TCRP	\$90.000	\$90.000	\$90.000	\$90.000	100%	\$41.138	46%	\$41.138	46%
STATE RSTP	\$10.100	\$10.100	\$10.100	\$10.100	100%	\$10.100	100%	\$10.100	100%
PROPOSITION C 25%	\$13.000	\$88.000	\$13.000	\$73.844	84%	\$2.125	2%	\$2.125	2%
FURTHER COST/REVENUE RECOVERY	\$0.000	\$3.700	\$0.000	\$0.000	0%	\$0.000	0%	\$0.000	0%
<b>SUB TOTAL FUNDS</b>	<b>\$1,060.100</b>	<b>\$1,138.800</b>	<b>\$1,060.100</b>	<b>\$1,120.944</b>	<b>98%</b>	<b>\$933.858</b>	<b>82%</b>	<b>\$643.247</b>	<b>56%</b>
CITY OF LA **	\$2.600	\$2.600	\$0.000	\$0.000		\$0.000		\$0.000	
CALTRANS ***	\$8.000	\$0.000	\$0.000	\$0.000		\$0.000		\$0.000	
<b>TOTAL FUNDS</b>	<b>\$1,070.700</b>	<b>\$1,141.400</b>	<b>\$1,060.100</b>	<b>\$1,120.944</b>		<b>\$933.858</b>		<b>\$643.247</b>	

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH JANUARY 2014  
 TOTAL FUNDS ANTICIPATED BASED ON JUNE 2013 PROJECT COST AND FUNDING PLAN AND JULY 2013 BOARD REPORT.  
 \* BILLING AMOUNT IS LESS THAN EXPENDITURES AMOUNT DUE TO SYSTEM LAG IN SUBMITTING INVOICES TO CALTRANS.  
 \*\* CONSTRUCTION OF CITY OF LA REVERSIBLE LANES PROJECT.  
 \*\*\* CONSTRUCTION OF CALTRANS DRAINAGE SYSTEM REPAIRS.

### STATUS OF FUNDS ANTICIPATED

**FEDERAL SAFETEA-LU:** \$117M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro.

**FEDERAL ARRA:** \$189.9M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro with consultation with FHWA.

**STATE CMIA:** State Proposition 1B Bond sales provided \$254.7M to the project. Funds are available for drawdown. The remaining balance of \$359.3M has been allocated and are available for drawdown. In December 2012, the California Transportation Commission and Metro Board approved the reprogramming of \$26.1M in CMIA funding to the I-405 Project. Funds are available for drawdown.

**STATE TCRP:** \$42M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro. The remaining balance of \$48M has been made available by the CTC and is available for drawdown.

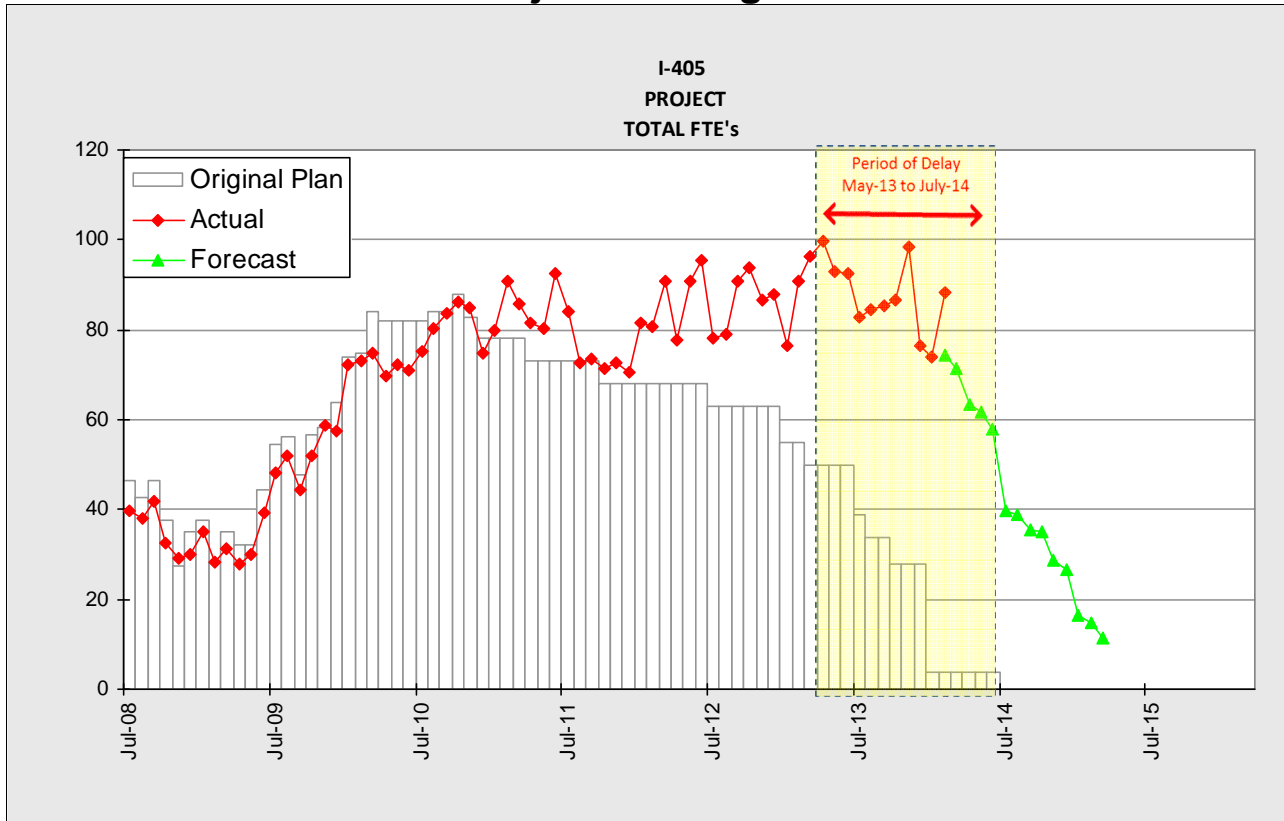
**STATE RSTP:** \$10.1M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro.

**PROPOSITION C 25%:** The Metro Board initially approved the allocation of \$13M to the Project. In June 2013, the Metro Board approved an additional allocation of \$75M.

**CALTRANS:** Metro Board authorized staff in July 2012 to execute a Memorandum of Understanding between Caltrans Maintenance and Metro for a total amount of \$8M for the cleaning and the reconstruction of Caltrans drainage. In March 2013, Caltrans informed Metro that the work and funding have been cancelled.

## STAFFING STATUS

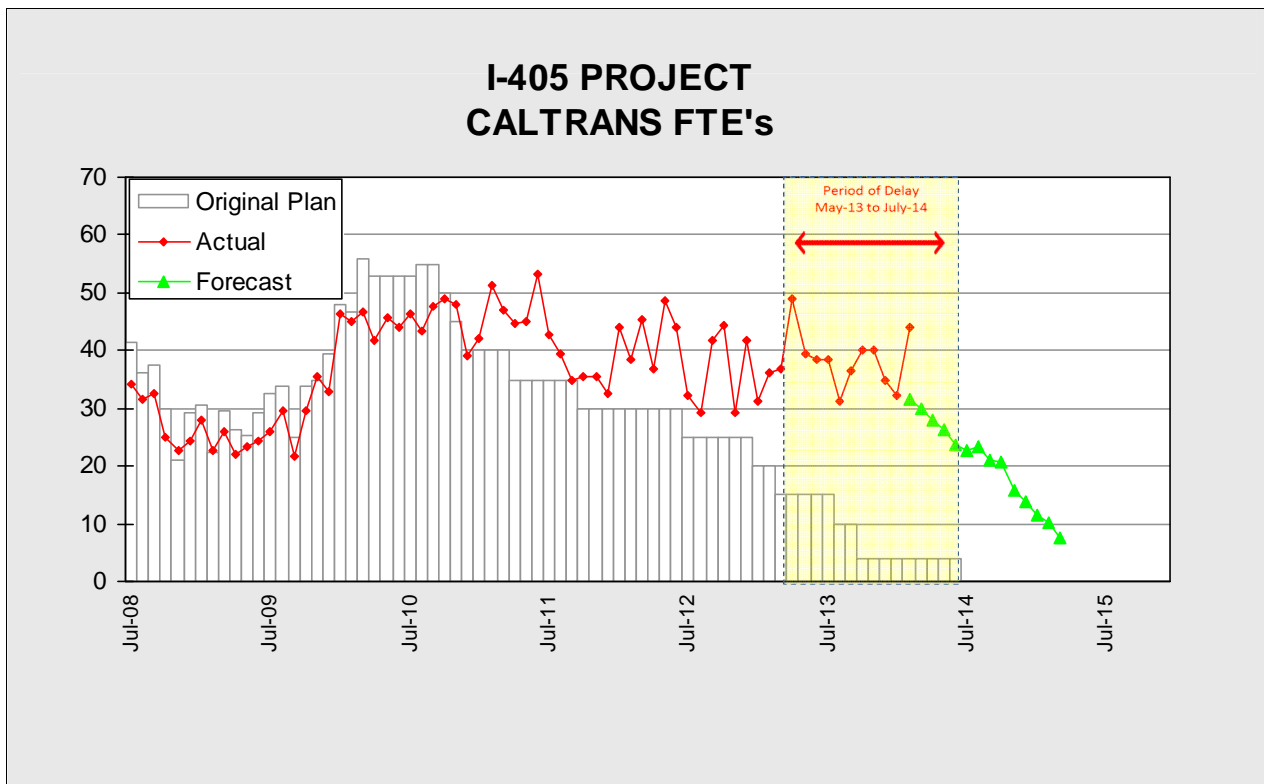
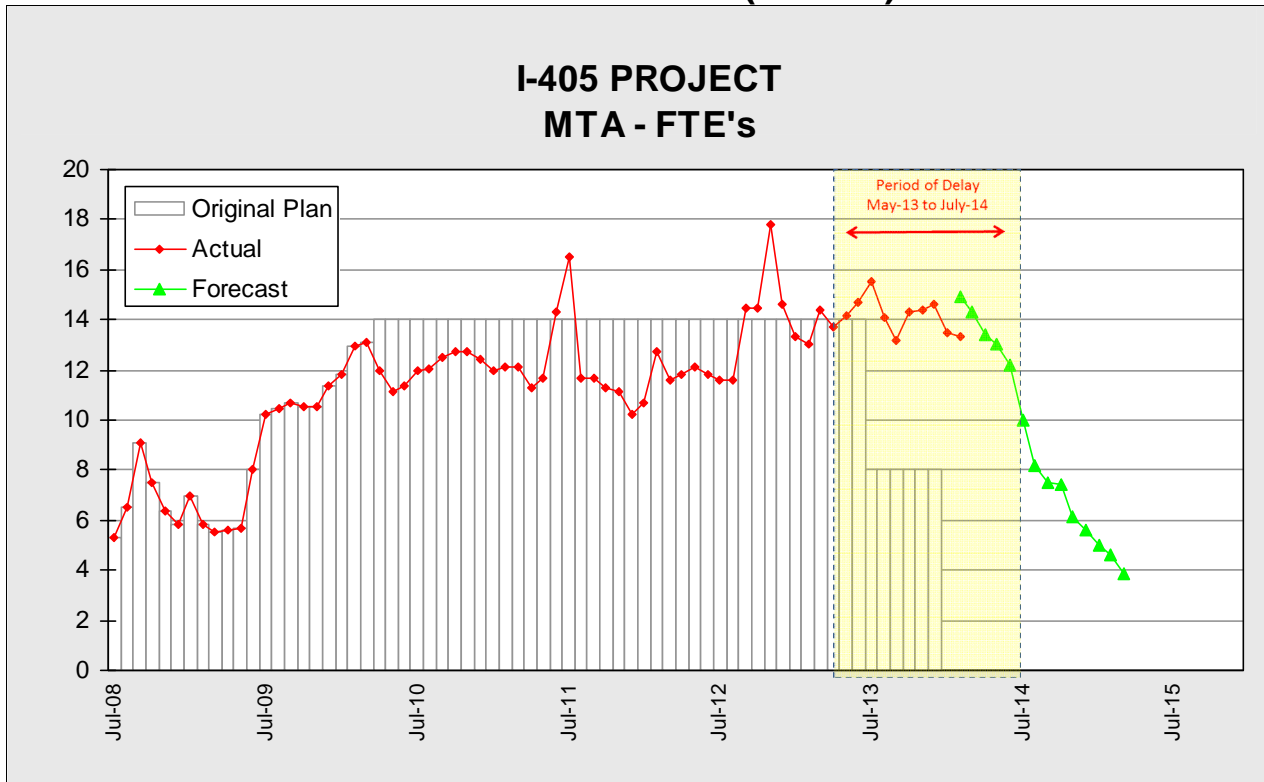
### Total Project Staffing - FTEs



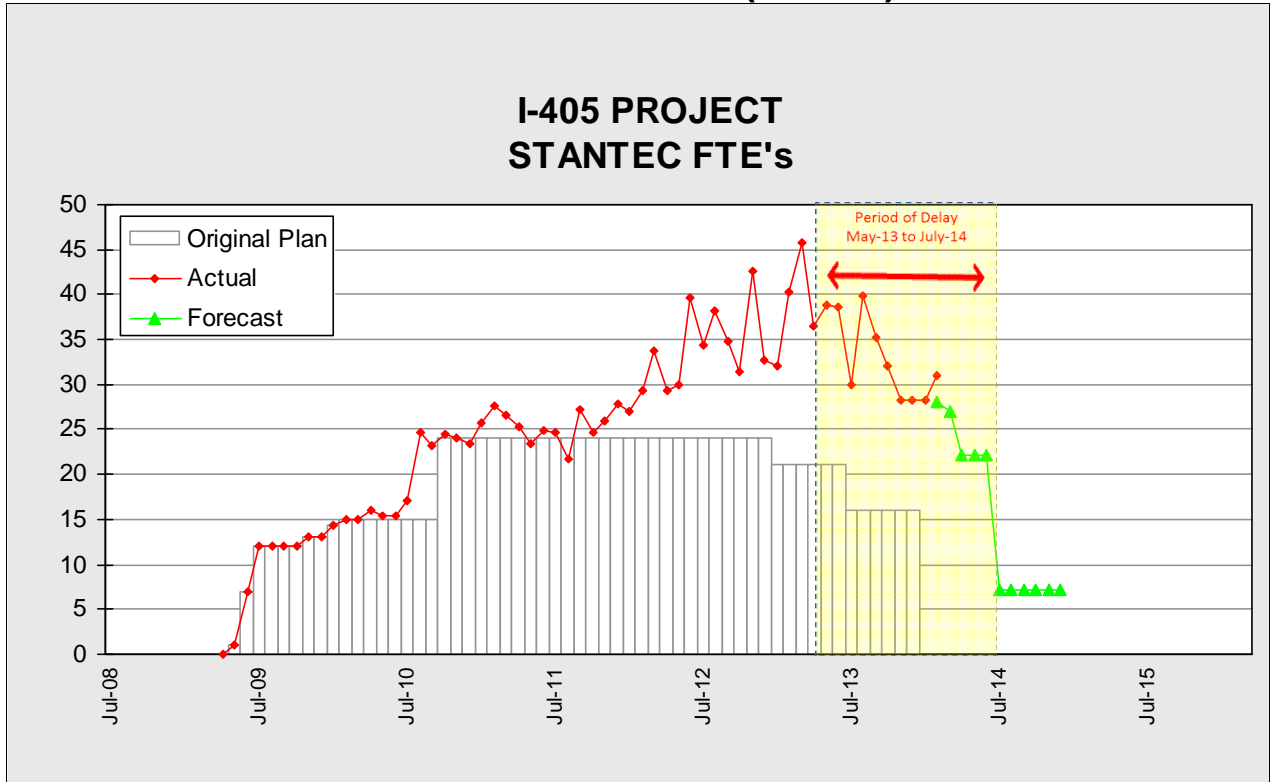
### Total Project Staffing

Due to the project delay, project staffing has been reforecasted through the end of project as shown in the staffing status charts.

### STAFFING STATUS (Cont'd)



### STAFFING STATUS (Cont'd)



## REAL ESTATE STATUS

The Real Estate acquisition process is proceeding and the Project is working on obtaining and releasing the parcels to the Contractor.

- Parcel 79612 (MWD) – Right-of-Entry (ROE) is in place for the SB Skirball Ramps construction. Annual renewal is required. Additional Right-of-Way (ROW) requirements for the drainage and easement have been submitted by Kiewit. Appraisal has been completed and offer has been made.
- ROW Tie-back easements at 1791/1797 – ROE has been provided. Caltrans is in the process of acquiring the permanent rights pending a meeting with the Getty.
- Parcel 79619 (LACMTA) – Access has been provided but parcel has not been acquired yet. Construction has been completed and conversations on final acquisition have commenced.
- Parcel 79692 (Skirball) – ROE has been provided for the additional ROW but the parcel has not been acquired yet and it is currently going through the condemnation process. This parcel has no apparent schedule impact. Order of possession has been recorded.
- Additional TCEs are required to modify the existing drainage system at Curtis School– Caltrans is in process of acquiring the TCE.
- Permanent and Temporary easements are required at the Leo Baeck Temple to install signal foundation at Getty Center Drive and Sepulveda – An ROE has been granted and currently Caltrans is in process of acquiring TCE.



## ENVIRONMENTAL STATUS

- Ongoing coordination with Santa Monica Mountains Conservancy (SMMC) and National Park Service (NPS) on wildlife crossings and the redesign of NB Getty on-ramp. A wildlife culver was proposed as part of the originally proposed design, since the new on-ramp would create a barrier for wildlife. The project provided direction to the Contractor to keep the on/off ramps in their existing location. This design will maintain access for wildlife movement. Therefore, the wildlife culvert has been removed from the project design. Further coordination will be required with SMMC and NPS regarding this project change and will be addressed in the Environmental Addendum. Preparation of a Cooperative Agreement between Caltrans and SMMC to transfer mitigation funds to SMMC will occur after Environmental Addendum approval.
- Ongoing preparation of an Environmental Addendum for changes associated with the final design of the N/B Getty on-ramp. A separate new project has been programmed to modify existing ramps and is currently in the Project Initiation Document Phase. Environmental Addendum submitted to Caltrans HQ for final review. Caltrans HQ has completed final review.
- Ongoing coordination regarding landscaping along Sepulveda Blvd. between Constitution and Sunset and required mitigation associated with tree removal from City and State R/W. Caltrans, Metro and LABSS continue to discuss outstanding tree removal permits and tree replacement plans.
- The Project received a Notice of Violation from the Regional Water Quality Control Board on July 1, 2013. A meeting was held with RWQCB on July 22, 2013 to discuss a path forward. A response to the violation was sent to the RWQCB on September 26, 2013. A meeting was held with RWQCB on November 13, 2013 for further discussion of Notice of Violation. Caltrans is actively submitting documentation requested by RWQCB.

## COMMUNITY RELATIONS STATUS

- Distributed construction notices for the following construction activities: Retaining wall 1730m for artwork installation, Beloit Avenue closure or full-depth roadway replacement and construction of ADA ramps, installation of Sunset Bridge permanent metal barrier railing, catch basin/drainage work at Getty Center's North Canyon Drive, full-depth roadway replacement and construction of ADA construction on Cotner Avenue, Sepulveda Blvd. reduced to one lane to facilitate street lighting and conduit installation, completion of punch list items on Olympic Blvd. Bridge during nighttime closure, completion of punch list items on Ohio Bridge during nighttime closure, completion of punch list items on Santa Monica Blvd. Bridge during nighttime closure, closure of Northbound and southbound Church Lane from Sunset Blvd. to Sepulveda Blvd. for installation of permanent Caltrans lighting and ramp meter conduit and pouring of ramp meter foundation, weekend closure of southbound Sepulveda Blvd from Casiano to Moraga for finish curb and gutter work, street improvement on westbound Pico between Cotner and Sawtelle, nighttime closure of northbound Sunset on-ramp for grading of top slope for retaining wall, drainage work on Cotner Avenue between Santa Monica and Massachusetts, Moraga Drive on and off ramps continuous weekend closure, driveway, curb and gutter work on the south side of Church Lane, full closure of Sepulveda Blvd. for wall construction, closure of southbound Valley Vista Blvd. on-ramp for demolition, excavation and grade work, full closure of the southbound I-405 for shifting of k-rail and lane restriping, 80-hour northbound I-405 closure for the excavation and re-paving the mainline roadway, Verizon Wireless electrical work on Sepulveda Blvd., overhang removal on the west side of the Bel Air Crest Bridge, grinding the Skirball Bridge deck, conduit relocation at Sepulveda Blvd. and Skirball Center Drive, pouring the anchor block wall on Dickens Street, sidewalk, curb and gutter street improvements on Valley Vista, closure of Valley Vista on-ramp to raise inlets and install barrier, installation of the overhead bridge sign spanning across the median to the outside of the freeway and closure of the southbound Skirball on-ramp to facilitate work on several walls.
- Participated in the following meetings: West Los Angeles Traffic Meeting, Brentwood Community Council Meeting, Westwood Neighborhood Council Meeting, Sherman Oaks Neighborhood Council Meeting, Mulholland Education Corridor Association (MECA) Meeting and Skirball Cultural Center Meeting.
- Coordinated the following work activities: Sound wall extension by the eastbound I-10 to southbound I-405 connector, business access concerns on Cotner, vibration and sound complaints on Maraga ramps, opening Skirball off-ramps for Bel Air Crest signage on northbound Sepulveda Blvd. during 80-hour closure and 80-hour closure operation.
- 65,960 page views on Website
- 18,593 likes on Facebook
- 5,050 followers on Twitter

## QUALITY ASSURANCE STATUS

- Metro Quality participated in:
  - Several job walks.
- Nineteen Nonconformance Reports (NCRs) were issued this month.
- Fifteen Reports (DRs) were issued this month.

## SAFETY AND SECURITY STATUS

- There were two injuries on the Project during February 2014. However, currently two injuries from January and one from October have prevented workers from returning to full duty. Two of these cases are days away cases and one is a restricted duty case.
- Safety Staff participated in scheduled pre-activity (readiness review) meetings to ensure compliance with approved Work Plans and contract specifications.
- Construction activities are monitored during day and night shifts to ensure contractor compliance with contract specifications
- Safety staff attended weekly Progress Meeting, Foreman's Weekly Safety Meetings and other project meetings to evaluate Contractors Safety Program compliance with contract requirements.
- February Contractor Work Hours (Design & Construction): 166,656
- Contractor – Project to Date Work Hours (Design & Construction through 2/28/2014): 7,621,432
- Total Project to Date Work Hours (Contractor & the IPO Staff through 2/28/2014): 8,337,087
- Project to Date Recordable Injury Rate: 0.8 (Thirty-two Recordable Injuries) (each rate is per 200,00 work hours)
- Project to Date Total Time Away Injury Rate: 0.3 (Thirteen Time Away From Work Injuries)
- Project to Date Total Days Away Rate: 16.2 (675 Days Away From Work)
- Metro Construction Safety is providing Safety and Security Contract Compliance oversight during both day and night shifts as many as six days a week due to overall project work schedule.

**THIRD PARTY AGREEMENT STATUS**

<b>Third Party</b>	<b>Type of Agreement</b>	<b>Forecast Execution Date</b>	<b>Required Need Date</b>	<b>Status/ Comments</b>
City of Los Angeles	MCA	6/14	6/09	A stand-alone Master Cooperative Agreement (MCA) between the City of Los Angeles and LACMTA is currently being drafted for the I-405 Project.
Los Angeles County Department of Public Works/Los Angeles Flood Control District	MCA	Cancelled	Cancelled	On advice of County Counsel, LACMTA is not required to enter into a Master Cooperative Agreement with the Los Angeles County Department of Public Works/Los Angeles Flood Control District since the I-405 Project is a State Project, not a LACMTA Project.
Utility Owners	Utility Agreements	Various	Various	Caltrans style Utility Agreements (similar to MTA Work Order Authorizations) will be completed as relocation plans are approved for each location.

**CONTRACT STATUS**

<b>I-405 Sepulveda Pass Improvements Project</b> <b>Design/Build Contractor: Kiewit</b>		<b>Contract No.: C0882</b>  <b>Status as of: February 28, 2014</b>																													
<p><b>Progress/Work Completed:</b>  Major work started/completed this period:  - NB I-405 to EB I-10 Ramp: North end paving complete.  - NB I-405 to EBI-10 Ramp: MBGR complete.  - RW 1720 Artwork installation begins..  - 80-hour Lane Reduction accomplished.  - Area 5-7 Median Barrier and AC Grind and Overlay: Completed during 80-hour lane reduction.  - Bridge17 Church Lane UC: Bridge work completed.  - Bridge 23 Sepulveda UC: Bridge work completed.  - Maintenance during construction - SWPPP cleanout and repairs, graffiti removal from k-rails, trash and debris removal.</p> <p><b>Areas of Concern:</b>  - Wildlife crossing at Skirball Bridge.  - Global Maintenance of Traffic (MOT).</p>		<p><b>Major Activities (In Progress):</b>  - Grading and paving.  - Construction of retaining walls and sound walls.  - Utility relocations.  - Median and barrier paving.  - Permanent lighting installation.  - Permanent traffic signals installation.  - Bridge 9 construction.  - Bridge 21 construction.  - Maintenance during construction.</p> <p><b>Major Activities Next Period:</b>  - Bridge 9 Wilshire UC: Complete bridge work.  - Area 3 Wilshire Grinding/Saw and Seal Median: Pavement completed.  - Area 2 and 3 Irrigation and landscaping completed.  - Moraga Avenue: On and Off ramps opened to traffic.  - Area 2 Permanent street lighting testing completed.</p>																													
			Original Baseline	Time Extension	Current Contract	Forecast Completion	Variance Cur-Fcast																								
		Commencement	08/31/09	0	08/31/09	08/31/09	0																								
		Completion	05/31/13	149	10/27/13	09/16/14	-324																								
		Punchlist Complete	08/29/13	149	01/25/14	12/15/14	-324																								
		Final Acceptance	11/27/13	149	04/25/14	03/15/15	-324																								
<p><b>Schedule Summary:</b></p> <table border="0"> <tr> <td>Notice of Award</td> <td>04/29/09</td> </tr> <tr> <td>Notice to Proceed</td> <td>06/02/09</td> </tr> <tr> <td>Original Contract Duration (CD)</td> <td>1640</td> </tr> <tr> <td>Approved Time Extensions (CD)</td> <td>149</td> </tr> <tr> <td>Current Contract Duration (CD)</td> <td>1789</td> </tr> <tr> <td>Elapsed Time from NTP (CD)</td> <td>1,733</td> </tr> <tr> <td>Contract Elapsed Time Percent</td> <td>96.9%</td> </tr> </table>		Notice of Award	04/29/09	Notice to Proceed	06/02/09	Original Contract Duration (CD)	1640	Approved Time Extensions (CD)	149	Current Contract Duration (CD)	1789	Elapsed Time from NTP (CD)	1,733	Contract Elapsed Time Percent	96.9%	<p><b>Cost Summary:</b> <span style="float: right;"><b>\$ In 000's</b></span></p> <table border="0"> <tr> <td>1. Award Value:</td> <td style="text-align: right;">720,922</td> </tr> <tr> <td>2. Executed Modifications:</td> <td style="text-align: right;">144,490</td> </tr> <tr> <td>3. Approved Change Orders:</td> <td style="text-align: right;">36,268</td> </tr> <tr> <td>4. Current Contract Value (1 + 2 + 3):</td> <td style="text-align: right;">901,680</td> </tr> <tr> <td>5. Incurred Cost:</td> <td style="text-align: right;">757,654</td> </tr> <tr> <td>6. Percent Incurred Cost:</td> <td style="text-align: right;">84.0%</td> </tr> </table>				1. Award Value:	720,922	2. Executed Modifications:	144,490	3. Approved Change Orders:	36,268	4. Current Contract Value (1 + 2 + 3):	901,680	5. Incurred Cost:	757,654	6. Percent Incurred Cost:	84.0%
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## CHRONOLOGY OF EVENTS

May 18, 2007	The Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) is issued.
May 22, 2007 to October 1, 2007	Public review of draft EIS.
February 29, 2008	The Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) is issued.
March 10, 2008	The Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) errata with U. S. General Services Administration (GSA) comments is issued.
March 14, 2008 to April 14, 2008	Public review of Final EIS.
April 25, 2008	Record of Decision (ROD) approved.
October 10, 2008	LACMTA issued Invitation For Bid (IFB) for the project.
February 20, 2009	Project bids opened.
April 23, 2009	LACMTA Board authorized the Chief Executive Officer to award Design-Build Contract C0882 to Kiewit Pacific Co.
April 23, 2009	LACMTA Board approved establishing a budget of \$1.034 billion for project 405523.
April 23, 2009	LACMTA awarded Contract C0882 to Kiewit Pacific in the amount \$694,156,000 to include Schedules A, C, and H (Option 4).
April 29, 2009	LACMTA issued a revised NOA to Kiewit Pacific in the amount \$720,922,000 to include Schedules A, C, E (Option 1), F (Option 2), G (Option 3), and H (Option 4).
June 2, 2009	LACMTA issued Notice to Proceed to Kiewit Pacific for the Design-Build Contract C0882.
August 31, 2009	Contract Commencement Date.
September 24, 2009	Kiewit Pacific submitted the Project Baseline Schedule.
October 14, 2009	Project Design Quality Management Plan approved.

## CHRONOLOGY OF EVENTS (Cont'd)

December 14, 2009	Project Quality Management System approved.
January 20, 2010	Project Baseline Schedule was approved.
January 27, 2010	Roadway Restriping commenced.
March 12, 2010	Major Project Permits were obtained; Permit 401 – Water Quality Control Board, Permit 404 – U.S. Army Corps of Engineers, and Permit 1600 – California Department of Fish & Game.
May 31, 2010	The Project completed one year without a Recordable Injury.
July 23, 2010	Sunset Bridge major demolition of the south side top deck and center column.
August 2, 2010	Commenced construction on Bridge 4a/b.
August 16, 2010	Commenced ExxonMobil 16" utility relocation at Bridge 16.
August 20, 2010	Operating Engineers Local 12 initiate labor action by striking.
August 24, 2010	Completed ductbank work on Sepulveda for DWP utility undergrounding.
August 24, 2010	Commenced construction of Walls 1720/1730.
August 24, 2010	ITS Backbone is cut.
September 7, 2010	DWP started pulling wires for utility undergrounding on Sepulveda.
September 9, 2010	Operating Engineers Local 12 Labor action is settled and strike ends.
September 13, 2010	Completed the excavation of Roadway at 1685/1691.
September 15, 2010	Completed the removal of Wall 1665.
September 18, 2010	Completed installation of Temporary walkway at Skirball Bridge.
September 28, 2010	Pioneer access to Sunset on-ramp, Bridge 15 Abutment 1.

### CHRONOLOGY OF EVENTS (Cont'd)

October 12, 2010	Began excavation of Sunset Bridge 16 Abutment 1 Footing.
October 12, 2010	Began demolition of Skirball Bridge 21.
October 15, 2010	Completed demolition Skirball Bridge 21.
October 15, 2010	Began driving piles at Santa Monica Bridge 4.
October 15, 2010	Installed Beams at Sunset Bridge 16, Bent #2.
October 15, 2010	Began driving piles on Santa Monica Bridge 4.
October 19, 2010	Completed demolition of Sunset Bridge 16, Abutment 4.
October 21, 2010	Installed beams at Sunset Bridge 15 On Ramp, Abutment 1.
October 22, 2010	Began Demolition of Sunset Bridge 16, Abutment 1.
October 22, 2010	Installed Piles at Wall 1720.
October 25, 2010	Began Excavation at Walls 1685/1691.
October 28, 2010	Began the relocation of overhead power lines at Ohio Ave Bridge 5.
October 28, 2010	Clear and grub area at Wall 1746.
November 12, 2010	Completed demolition of soundwall, barrier rail, and overhang at Bridge 13.
November 15, 2010	Completed installation of SOE at Abutment 1 NB at Bridge 4 Santa Monica.
November 15, 2010	Completed demolition of existing ExxonMobil 16" Oil Pipeline.
November 17, 2010	Completed excavation of CIP at Wall 1640.
November 18, 2010	Began excavation at Wall 1635.
November 29, 2010	Began Excavation at Bridge 13.
November 30, 2010	Began relocation of SCE underground vault.



### CHRONOLOGY OF EVENTS (Cont'd)

December 7, 2010	Began driving piles at Bridge 13 - Montana Avenue UC.
December 14, 2010	Completed Pile driving at Abutment 1 Bridge 16 Sunset OC.
December 15, 2010	Completed the installation of new power poles and raised the utility wires at Bridge 5 - Ohio Avenue.
December 16, 2010	Completed piles at abutments 1 and 2 for Bridge 13 Montana Ave UC.
December 17, 2010	Began installation of SOE beams at Bridge 15 Sunset on-ramp.
January 3, 2011	Began Construction of Piers and Columns at Bridge 16.
January 11, 2011	Began Construction Activities at Bridge 5.
January 13, 2011	Began Construction Activities at Bridge 12.
January 17, 2011	Began Installation of Footings and Pile Caps at Bridge 16.
February 1, 2011	Began Construction Activities at Bridge 21 – Skirball Center Drive.
February 14, 2011	Began Field Work relocating Storm Drain at Veterans Administration (VA).
February 21, 2011	Began Field Work relocating Chevron Oil Pipeline at Bridge 23 – Sepulveda UC.
February 23, 2011	Began Construction Activities at Bridge 15 – Sunset On-Ramp.
February 25, 2011	Completed Drilling and Placing Beams at NB Abutments 1 & 2 at Bridge 12 – Constitution UC.
February 28, 2011	Completed Pouring Columns at Bent 3, Bridge 16 – Sunset OC.
March 2, 2011	Began Field Work relocating LADWP 4" Waterline at Valley Vista.
March 2, 2011	Completed Driving 14" Square Piles at Bridge 3 Abutment 1.
March 15, 2011	Began Field Work relocating So Cal Gas Line at Wall 1746.

### CHRONOLOGY OF EVENTS (Cont'd)

March 18, 2011	Completed Setting Soldier Beams at Bridge 15 Bent 2 & 3 Mainline.
March 23, 2011	Began Field Work Encasing Sewer Lines 401-403 at Walls 1720, 1730 and 1746.
March 31, 2011	Completed Setting and Backfilling Wall Panels at Wall 1942B.
April 4, 2011	Began Installation of Bent 2 & Bent 3 Columns at Bridge 21 Skirball Center Drive OC.
April 5, 2011	Began Installation of Storm Drain at Walls 1720 and 1730.
April 10, 2011	Completed Installation of Girders at Bridge 13 Montana Ave UC.
April 22, 2011	Completed Bridge 9 Wilshire Blvd. UC demolition for widening.
April 25, 2011	Began Work Relocating Shell Oil Line at Bridge 23 Sepulveda UC.
May 2, 2011	Began Relocation of Area 2 Sewer Lines # 201-203.
May 6, 2011	Completed Setting Girders at Southside of Bridge 16 Sunset OC.
May 11, 2011	Began Construction Work on Bridge 3 Olympic Blvd.
May 25, 2011	Completed Tie Back Installation at Walls 1720 and 1730.
June 3, 2011	Completed Girder Installation on the North Side of Bridge 21 Skirball OC.
June 13, 2011	Began Installation of Precast Deck Panels on Bridge 16 Sunset OC.
June 24, 2011	Began Demolition of Existing Walls 1720 and 1730 along Sepulveda Blvd.
June 30, 2011	Completed Installation of Precast Deck Panels on Bridge 16 Sunset OC.

**CHRONOLOGY OF EVENTS (Cont'd)**

July 6, 2011	Began Relocation of LADWP Overhead Power Lines at Mulholland Bridge.
July 13, 2011	Completed installation of Void Slab Deck at Bridge 12 Constitution UC.
July 14, 2011	Completed Pouring Diaphragms 1, 2, and 3 at Bridge 21 Skirball OC.
July 16, 2011	Began Demolition of South Side of Bridge 22 Mulholland OC.
July 17, 2011	Completed Demolition of South Side of Bridge 22 Mulholland OC.
July 20, 2011	Completed Installation of Pre-cast Girders at Bridge 4SB Santa Monica UC.
July 26, 2011	Began Driving Piling at Bridge 8 NB from EB Wilshire, Bent 8.
August 1, 2011	Began installation of forms and rebar for Top Deck at Bridge 21, Skirball Center Drive.
August 3, 2011	Began work on the Interchange Ramp from Westbound I-10 to Northbound I-405.
August 6, 2011	Began work installing Top Deck at Bridge 4 Santa Monica Blvd.
August 24, 2011	Completed pouring the Top Deck at Bridge 13, Montana Ave.
August 26, 2011	Completed installation of Footing & Pile Cap/Abutment-Wingwalls/Bridge Bearing Bridge 3 Olympic Blvd.
August 31, 2011	Completed pouring the Top Deck at South Side of Bridge 16, Sunset Blvd.
September 15, 2011	Completed installation of Top Deck and Diaphragm on Bridge 16, Sunset Blvd.
September 16, 2011	Completed pouring the Top Deck at Bridge 21, Skirball Center Drive.
September 23, 2011	Began construction of LADWP Power Utilities undergrounding ductbank between Stations 1740 and 1760.

## CHRONOLOGY OF EVENTS (Cont'd)

September 27, 2011	Completed pouring curb and gutter on west side of Bridge 16, Sunset Blvd.
September 29, 2011	Completed pouring Lateral Retaining Walls #6, #7, and #8 at Retaining Wall 1720.
October 14, 2011	Completed pouring footing for Bent 2 at Bridge 22, Mulholland Drive.
October 17, 2011	Began installation of Bent 2 Forms at Bridge 22, Mulholland Drive.
October 18, 2011	Began construction activities at Bridge 18, Bel Air Crest.
October 22, 2011	New Bridge 16, Sunset Blvd. South Side opened to vehicle traffic.
October 27, 2011	Completed pouring Abutment 1 at Bridge 22, Mulholland Drive.
November 1, 2011	Began demolition of Bridge 16 Sunset Blvd. north side.
November 7, 2011	Began installation of CIDH Piles for I-10 Connector.
November 9, 2011	Completed demolition of Bridge 16 Sunset Blvd. north side.
November 22, 2011	Received the VA License to Enter agreement.
November 22, 2011	Completed pouring Bridge 22 Mulholland OC Bent 2 Columns.
November 22, 2011	Completed pouring Bridge 5 Ohio NB Abutments 1 & 2.
December 1, 2011	MSE Wall 1897 along NB Sepulveda Blvd. south of Skirball Center Drive ruptures. Kiewit stops work on all MSE Walls throughout the project and begins investigation into MSE Wall deficiencies.
December 1, 2011	Began 2 <sup>nd</sup> pouring of Bridge 22 Mulholland Abutment 1.
December 8, 2011	Completed subgrade for NM Connector.
December 17, 2011	Began installation of Precast Girders at Bridge 5A Ohio Ave.
December 19, 2011	Began installation of falsework beams for Bridge 15 Sunset on-ramp.

### **CHRONOLOGY OF EVENTS (Cont'd)**

December 19, 2011	Began driving piles for Bridge 16 Sunset Blvd. Bent 3.
January 4, 2012	Began De-construction of MSE Wall 1738A.
January 9, 2012	Began De-construction of MSE Wall 1665.
January 16, 2012	Completed demolition of the I-405 median barrier at Mulholland Bridge and began erection of Falsework.
January 19, 2012	Began pouring footings for Soundwalls at Retaining Walls 1720 and 1730.
January 20, 2012	Completed pouring column # 1 @ Sunset Blvd. Bridge.
January 25, 2012	Began De-construction of MSE Wall 1634.
January 27, 2012	Kiewit stopped work on all Soil Nail Walls due to developing cracks, pending investigation.
January 31, 2012	Poured columns at Bel Air Crest Bridge.
February 13, 2012	Construction activities are started in Area 5 at Bridge 18 Getty Center UC and Bridge 19 Sepulveda UC.
February 15, 2012	De-construction of MSE Wall 1738A at Sunset NB Off-Ramp is completed.
February 18, 2012	Piers and Columns are poured for Bridge 16 Sunset Blvd.
February 18, 2012	LADWP completes installation of new underground cabling in ductbank along Sepulveda Blvd and Wilshire Ave. Final paving of Sepulveda trench is completed.
February 28, 2012	Kiewit submits notification to LACMTA that all remaining MSE Walls, with the exceptions of completed MSE Walls 1619 and 1942B will be de-constructed.
March 2, 2012	Full NB Freeway Closure at Mulholland Bridge to install Falsework Girders.
March 6, 2012	Caltrans identifies a potential Safety Concern during Mulholland Bridge Falsework Girder Installation on the SB Side and orders girders to be removed. Caltrans issues Stop Work Order pending review of Girder Installation Process.

## CHRONOLOGY OF EVENTS (Cont'd)

March 8, 2012	Caltrans completes review of Girder Installation Process and authorizes resumption of installation of Falsework Girders at Mulholland Bridge. SB Side Falsework Girders are installed.
March 22, 2012	Concrete Girders are installed at Bridge 5B Ohio UC SB side.
April 7, 2012	Kiewit completes installation of Mulholland Bridge (South Side) Sheet Decking and begins installation of structural rebar.
April 10, 2012	Kiewit resumes construction of MSE Walls. Construction of Wall 1672 new leveling pad is started.
April 14, 2012	Kiewit begins installation of top deck and diaphragm structural rebar at Bridge 4 Santa Monica UC.
April 20, 2012	Kiewit pours concrete top deck, curb, and gutter at Bridge 9 Wilshire UC.
May 1, 2012	Begin installation of Concrete girders at Bridge 16 Sunset OC North Side.
May 4, 2012	Kiewit resumes construction of MSE Walls using an approved new Wall Panel Vendor and Construction Plan. Construction begins at MSE Wall 1672 along Sepulveda Blvd. north of Wilshire Blvd.
May 4, 2012	Completion of installation of Concrete Girders at Bridge 16 Sunset OC North Side.
May 18, 2012	Construction of MSE Wall 1808 along Sepulveda Blvd. north of Getty Center Drive is started using new Wall Panels and Construction Plan.
May 24, 2012	Structural construction is started within the GSA Property. Construction of Bridge 7 Bent 3 is started.
May 31, 2012	Construction of MSE Wall 1686 along Sepulveda Blvd. north of Constitution Drive is started using new Wall Panels and Construction Plan.

## CHRONOLOGY OF EVENTS (Cont'd)

June 2, 2012	NW1 Ramp from WB I-10 to NB I-405 is opened for traffic.
June 6, 2012	GSA Microwave Security System is installed.
June 7, 2012	Bridge 7 NB I-405 to EB Wilshire Off-ramp Columns for Bents 3 and 4 are constructed on GSA Property.
June 22, 2012	90-Day Shutdown of Bridges 10 & 11 NB I-405 to WB Wilshire and WB Wilshire to NB I-405 commenced.
June 27, 2012	Demolition of existing Bridges 10 & 11 is completed.
July 15, 2012	Bridge 21 Skirball Center Drive, North side, is opened to traffic.
July 20, 2012	Bridge 22 Mulholland Drive, Top Deck is poured.
July 21, 2012	Bridges 10 & 11 Pre-cast Girders are installed.
July 30, 2012	Bridge 21 Skirball Center Drive, South Side, Demolition is started.
August 3, 2012	Bridge 21 Skirball Center Drive, South Side, Demolition is Completed.
August 10, 2012	Bridges 10 & 11 Top Deck is Poured.
August 23, 2012	Bridge 16 Sunset Blvd. Top Deck is Poured.
August 31, 2012	Bridges 10 & 11 are Opened for Traffic.
September 4, 2012	Bridge 7 Falsework installation begins.
September 24, 2012	Bridge 16 is fully opened for traffic.
September 24, 2012	Bridge 22 South Side is opened for traffic.
September 28, 2012	Began demolition of the north side of Mulholland Bridge 22.
September 30, 2012	Complete demolition of the north side of Mulholland Bridge 22.
October 1, 2012	Began construction activities for Bridge 17, Church Lane UC.

## CHRONOLOGY OF EVENTS (Cont'd)

October 1, 2012	Began construction activities for Bridge 22, Mulholland OC north side.
October 15, 2012	MSE Wall 1897 reconstruction is completed.
October 19, 2012	Bridge 15 Sunset NB On-ramp, top deck is poured.
October 23, 2012	RW 1720 punch list work begins.
November 4, 2012	Re-aligned Sepulveda Blvd. to the east at Bronwood Apartments.
November 6, 2012	Begin construction activities for Bridge 14 Sunset NB Off-ramp.
November 8, 2012	Bridges 6A and 6B SB Off-ramp to EB Wilshire abutments poured.
November 28, 2012	Completed re-striping and realignment of Sepulveda Blvd. to the east at walls 1720 & 1730.
November 29, 2012	Completed pouring Top Deck at Bridge 1 I-10 Connector.
December 4, 2012	Completed installation of Pre-Cast Girders at Bridge 2 Exposition.
December 6, 2012	Sepulveda Blvd. is restriped and realigned from Montana Avenue to Bridge 14 NB Sunset Off-Ramp.
December 20, 2012	Completed pouring Top Deck at Bridge 18 Getty Center Drive NB and SB.
December 21, 2012	Completed girder installation at Bridge 6A and 6B SB Wilshire Off-Ramp.
January 4, 2013	False work for Bridge 7 is completed allowing construction of CIP Box Girder to progress from abutment to abutment.
January 4, 2013	Completed installation of 10' diameter CIDH Piles for Bridge 14 Construction of foundation piles is started.
January 15, 2013	Completed pouring outside stems for Bridge 8.



## CHRONOLOGY OF EVENTS (Cont'd)

January 23, 2013	Completed installation of top deck metal decking for Bridge 6A.
February 3, 2013	Opened new SB 405 On-ramp from Skirball Center Drive.
February 11, 2013	Began installation of Falsework for Mulholland Bridge north side.
February 21, 2013	Opened new SB 405 On-ramp from EB Wilshire Blvd.
February 22, 2013	Opened new NB 405 On-ramp from Cotner Ave. at Olympic Blvd.
March 8, 2013	Began 14-day closure of SB I-405 to WB Wilshire Off-ramp to allow construction of new Off-ramp.
March 16, 2013	Completed construction of new SB I-405 to WB Wilshire Off-ramp and re-opened the Off-ramp 6 days early.
March, 22, 2013	Began forming bottom deck of north side of Bridge 22, Mulholland OC.
March 25, 2013	Opened new Bridge 1, I-10 EB to I-405 NB, and began demolition of existing Bridge 2 Span 4 to Abutment 9.
April 6, 2013	Completed paving on NB side of I-10 to I-405 Interchange Area.
April 9, 2013	Completed Bridge 22, Mulholland Dr. OC, Falsework installation.
April 18, 2013	Completed Bridge 7, NB 405 to EB Wilshire Off-ramp, Top Deck installation.
May 3, 2013	Completed NB I-405 paving activities in the Santa Monica Area.
May 23, 2013	Change Order 105.00 is issued extending the Substantial Completion Deadline by 149 days to October 27, 2013.
May 24, 2013	General Purpose Lane opened in Segment 1 from the I-10 to the Santa Monica Area.
May 30, 2013	Began removal of Falsework at Bridge 7 NB I-405 to EB Wilshire Off-ramp.

## CHRONOLOGY OF EVENTS (Cont'd)

June 11, 2013	Additional NB General Purpose Lane is opened to traffic from Santa Monica Blvd. to Wilshire Blvd.
June 20, 2013	Completed work on Bridge 7, NB 405 to EB Wilshire Off-ramp.
June 21, 2013	Completed installation of girders on Bridge 21, Skirball Center Drive OC.
June 22, 2013	Bridge 15, Sunset Blvd. to NB 405 On-ramp, opened to traffic.
June 26, 2013	Bridge 7, NB 405 to EB Wilshire Off-ramp, opened to traffic.
June 29, 2013	Bridge 22, Mulholland OC, completed pouring Top Deck.
July 3, 2013	Bridge 7, NB 405 to EB Wilshire Off-ramp, demolition of existing bridge is completed.
July 18, 2013	Bridge 22, Mulholland OC, Falsework removal is started.
July 30, 2013	Area 2, Santa Monica Area, Median paving is completed.
August 2, 2013	Bridge 14 Sunset NB Off-ramp, 120-Day Closure Window begins.
August 4, 2013	Bridge 14 Sunset NB Off-ramp, Demolition of existing bridge is completed.
August 15, 2013	Bridge 17 Sepulveda UC, Top Deck concrete is poured.
August 22, 2013	Bridge 8 EB Wilshire to NB 405 On-ramp, 90-Day Closure Window begins.
August 22, 2013	Bridge 8 EB Wilshire to NB 405 On-ramp, Demolition of existing bridge is completed.
Sept. 12, 2013	Bridge 14 Sunset Off-ramp, steel girder installation over Sepulveda Blvd. is started.
Sept. 14, 2013	SB I-405 to Valley Vista Off-ramp to EB Wilshire, new Off-ramp is opened to traffic.
Sept. 23, 2013	Bridge 6A and 6B SB I-405 Off-ramp to EB Wilshire, new Off-ramp is opened to traffic.

### **CHRONOLOGY OF EVENTS (Cont'd)**

Sept. 24, 2013	Bridge 14 Sunset Off-ramp, steel girder installation over Sepulveda Blvd. is completed.
Sept. 30, 2013	SB I-405 to Skirball Center Drive Off-ramp, new Off-ramp is opened to traffic.
October 7, 2013	Bridge 8 EB Wilshire Blvd. to NB I-405 On-ramp, top deck and barrier concrete pour completed.
October 8, 2013	Bridge 2 Exposition Avenue UC, top deck concrete pour completed.
October 25, 2013	Bridge 23 Sepulveda Blvd. UC, top deck concrete pour completed.
October 26, 2013	Bridge 21 Skirball Center Dr. OC, top deck concrete pour completed.
October 30, 2013	Bridge 8 EB Wilshire Blvd. to NB On-ramp falsework removed.
November 2, 2013	SB I-405 On-ramp from EB Wilshire Blvd. is opened to full capacity traffic.
November 17, 2013	Bridge 8 EB Wilshire Blvd. to NB I-405 On-ramp is opened to traffic. 90-day closure window is ended.
November 23, 2013	Bridge 14 I-405 NB Off-ramp to Sunset Blvd. Falsework is removed.
November 24, 2013	Bridge 21 Skirball Center Drive OC falsework is removed.
November 25, 2013	Bridge 14 I-405 Off-ramp to Sunset Blvd. is opened to traffic. 120-day closure window is ended.
December 14, 2013	Bridge 17 Church Lane UC, Top Deck Concrete is poured.
December 17, 2013	RW 1720 & 1730, Shotcrete installation is completed.
December 18, 2013	Bridge 22, Mulholland OC, Bridge is opened to full traffic capacity.
December 23, 2013	Bridge 2, Exposition UC, Bridgework is completed.

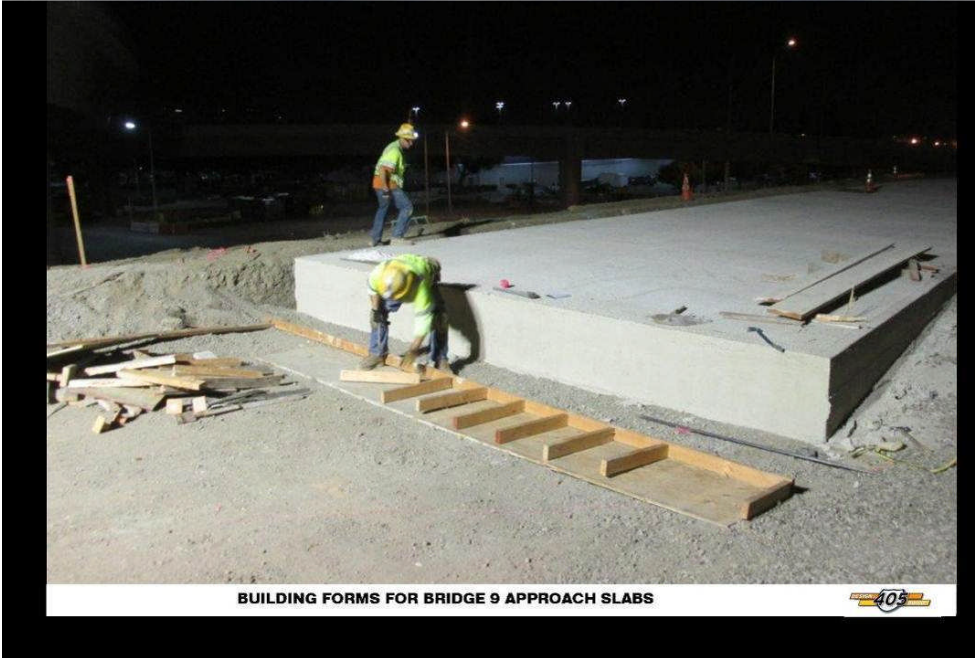
**CHRONOLOGY OF EVENTS (Cont'd)**

January 7, 2014	RW 1730, artwork installation is started.
January 21, 2014	Bridge 21 Skirball Center drive, approach slabs completed.
January 23, 2014	Bridge17 Church Lane, approach slabs completed.
January 24, 2014	Bridge 19 Sepulveda Blvd., bridge work completed.
February 4, 2014	Bridge 23, Sepulveda Blvd., bridge work completed.
February 14, 2014	80-hour lane reduction begins.
February 18, 2014	80-hour lane reduction ends.
February 18, 2014	Area 5-7 median barrier installation and AC grind and overlay, planned during 80-hour lane reduction, completed.

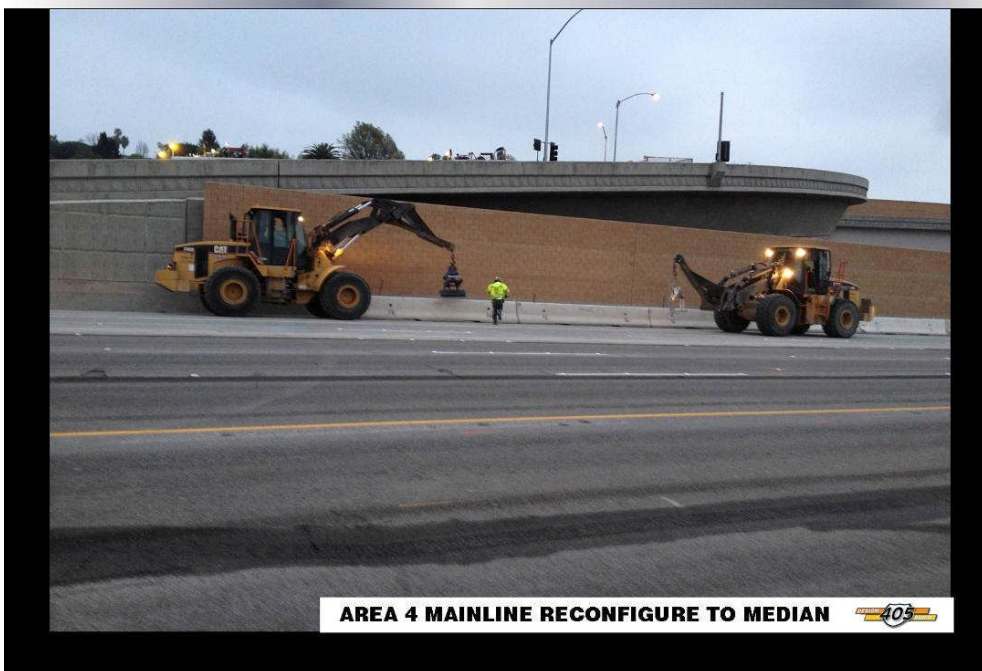
## CONSTRUCTION PHOTOGRAPHS



### FEBRUARY 2014 PROGRESS PHOTOS



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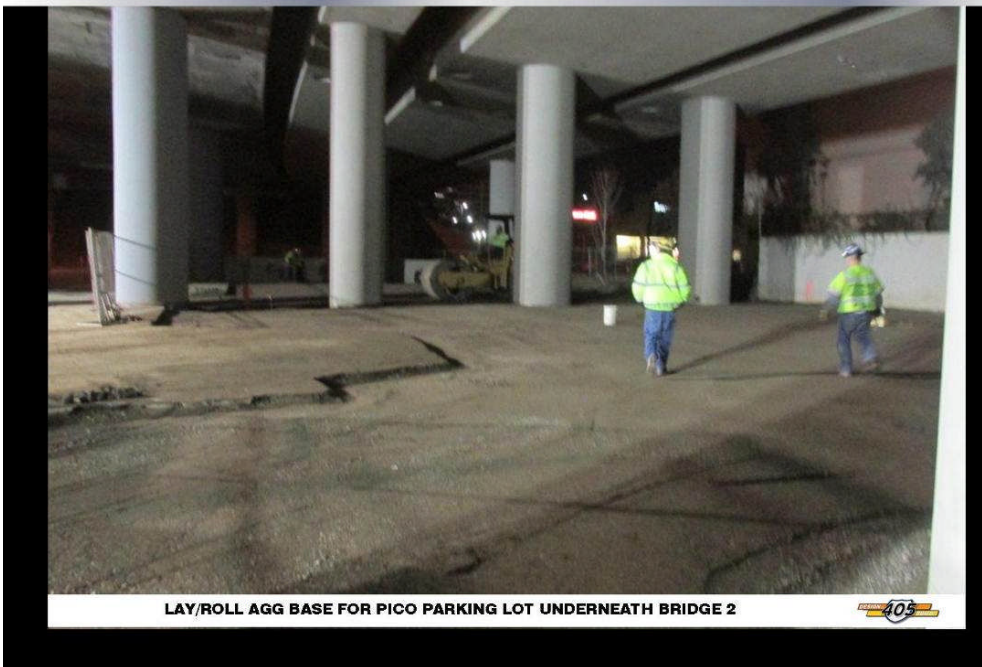
### FEBRUARY 2014 PROGRESS PHOTOS



RECEIVING PIT AT DS 1568, REQUIRED JACKING 24" RCP UNDER SB 405



### FEBRUARY 2014 PROGRESS PHOTOS



LAY/ROLL AGG BASE FOR PICO PARKING LOT UNDERNEATH BRIDGE 2



## CONSTRUCTION PHOTOGRAPHS



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## CONSTRUCTION PHOTOGRAPHS



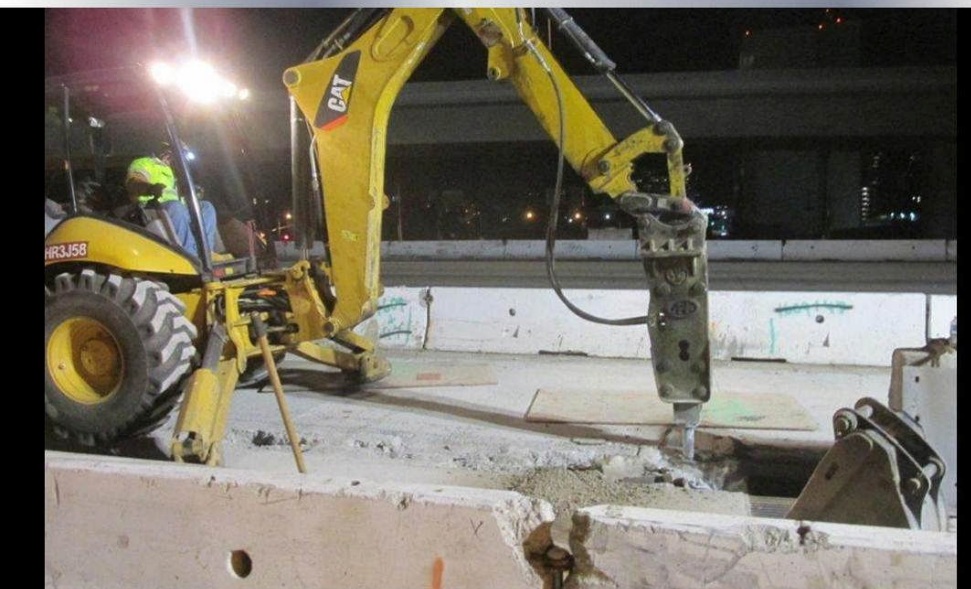
### FEBRUARY 2014 PROGRESS PHOTOS



TACK COAT PRIOR TO ASPHALT CAP AT SANTA MONICA OFF RAMP AND COTNER AVE



### FEBRUARY 2014 PROGRESS PHOTOS



DEMO CONCRETE FOR THE TYPE 60C MEDIAN BARRIER



## CONSTRUCTION PHOTOGRAPHS



### FEBRUARY 2014 PROGRESS PHOTOS



## APPENDICES

### COST AND BUDGET TERMINOLOGY

**APPROVED BUDGET:** The Approved Project Budget as established by Metro Board of Directors at the time it authorizes Construction Project Management Division to commence full design and construction of the project (Project Adoption).

**CURRENT BUDGET:** The Original Budget plus all budget amendments approved by formal Metro action. Also referred to as Approved Budget.

**CURRENT FORECAST:** Evaluation of costs to go combined with actual expenditures.

**COMMITMENTS:** The total of actual contract awards, executed change orders or amendments, approved work orders of Master Cooperative Agreements, offers accepted for purchase of real estate, and other Metro actions which have been spent or result in the obligation of specific expenditures at a future time.

**EXPENDITURES:** The total dollar amount of funds expended by Metro for contractor or consultant invoices, third party invoices, staff salaries, real estate and other expenses that is reported in Metro's Financial Information System (FIS).

**PROJECT APPROVAL & ENVIRONMENTAL DOCUMENTS:** Costs for agency staff and consulting contracts leading to project approval and environmental clearances.

**PLANS, SPECS. & ENGINEERING:** Agency staff and consulting contract costs between the initial project approval and environmental clearances but prior to start of construction.

**RIGHT-OF-WAY SUPPORT:** Costs for agency staff involved in real estate appraisal and parcel purchase activities and agency staff costs involved in utility relocations and third party agreements. Includes real estate appraisal costs.

**CONSTRUCTION SUPPORT:** Agency staff and consulting contract costs occurring during the construction phase of the project.

**CONSTRUCTION:** Costs for highway construction, bridge and on/off ramp construction and modifications, retaining wall and sound wall construction. Includes final design costs by Design/Build Contractor.

**RIGHT-OF-WAY CAPITAL:** Costs for real estate parcel purchases and utility relocations costs after approval of utility company agreements. Includes costs for Master Cooperative Agreements after approval by agencies.

## APPENDIX

### LIST OF ACRONYMS

ARRA	American Recovery & Reinvestment Act
AWIS	Automated Work Zone Information Systems
CADD	Computer Aided Drafting and Design
CALTRANS	California Department of Transportation
CCTV	Closed Circuit Television
CD	Calendar Day
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CM	Construction Manager
CMAC	Congestion Mitigation Air Quality
CMIA	Cash Management Improvement Act
CMS	Changeable Message Signs
CN	Change Notice
CO	Change Order
COE	Corps of Engineers
COLA	City Of Los Angeles
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CR	Camera Ready
CTC	California Transportation Commission
D-B	Design-Build
D-B-B	Design-Bid-Build
DD	Design Development
DEIR	Draft Environmental Impact Report
DR	Deficiency Report
DWP	Department of Water and Power
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FD	Final Design
FEIR	Final Environmental Impact Report
FHWA	Federal Highway Administration
FIS	Financial Information System
FOCT	Fiber Optics Cable Transmission System
FTE	Full Time Equivalent
GDSR	Geotechnical Design Summary Report
GSA	General Services Administration
GSRD	Gross Solids Removal Devices
HAR	Highway Advisory Radio
HOV	High Occupancy Vehicle
IFB	Invitation for Bid
IPO	Integrated Project Office
ITS	Intelligent Transportation Systems



**APPENDIX**  
**LIST OF ACRONYMS (Continued)**

LA	Los Angeles
LABOE	Los Angeles Bureau of Engineering
LACFCD	Los Angeles County Flood Control District
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LARTMC	Los Angeles Regional Transportation Management Center
LFAT	Local Field Acceptance Test
LNTP	Limited Notice To Proceed
LONP	Letter Of No Prejudice
LOP	Life of Project
MCA	Master Cooperative Agreement
METRO	Los Angeles County Metropolitan Transportation Authority
MIS	Major Investment Study
MOT	Maintenance of Traffic
MPSR	Monthly Project Status Report
MSE	Mechanically Stabilized Earth
MVDS	Microwave Vehicle Detection System
MVP	Maintenance Vehicle Pullouts
MWD	Metropolitan Water District
N/A	Not Applicable
NCR	Non-Conformance Report
NEPA	National Environmental Quality Act
NHS	National Highway System
NOA	Notice of Award
NTE	Not to Exceed
NTP	Notice To Proceed
NTSC	National Television System Committee
P6	Primavera Project Planner® (scheduling software)
PC	Project Control
PE	Preliminary Engineering
PIP	Project Implementation Plan
PM	Project Manager
PMA	Project Management Assistance
PMP	Project Management Plan
P&P	Policies & Procedures
PR	Project Report
PS&E	Plans, Specs & Engineering
PSR	Project Study Report
QA	Quality Assurance
QAR	Quality Assurance Report

**APPENDIX**  
**LIST OF ACRONYMS (Continued)**

QC	Quality Control
QPSR	Quarterly Project Status Report
RFC	Request For Change or Released for Construction (based on context)
RFP	Request For Proposal
RMS	Ramp Metering Systems
ROM	Rough Order of Magnitude
ROW	Right-Of-Way
SIT	System Integration Testing
RSTP	Regional Surface Transportation Program
RWQCB	Regional Water Quality Control Board
	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for
SAFETEA-LU	Users
SCE	Southern California Edison
SONET	Synchronous Optical Network
SOV	Schedule Of Value
SOW	Statement Of Work
SP	Special Provision
TBD	To Be Determined
TCRP	Traffic Congestion Relief Program
TMS/CS	Traffic Monitoring Stations/Count Stations
TPM	Transportation Management Plan
VE	Value Engineering
WBS	Work Breakdown Structure
WP	Work Package