

# **Metro Orange Line Extension**

**MONTHLY PROJECT STATUS REPORT** 





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## **PROJECT OVERVIEW**

The Metro Orange Line (MOL) Extension Project is a four-mile extension of the Metro Orange Line extending from the Canoga park-and-ride lot to the Chatsworth Metrolink Station. The Project includes: busway, new station platforms at the Canoga park-and-ride lot, new stations at Sherman Way (with park-and-ride), Roscoe Boulevard, Nordhoff Street, and the Chatsworth Metrolink Station (with park-and-ride); grade-separation structure over active railroad tracks and Lassen Street (Lassen bridge) providing direct access into the Chatsworth Metrolink Station; Los Angeles River and Santa Susana Wash bridge crossings; and satellite bus parking facility. The project also includes street improvements, bicycle/pedestrian path, systems equipment and landscaping similar to the MOL.

With the MTA Board adoption of the MOL Extension Project in January 2009, the Board directed staff to accelerate the completion of the Project to summer 2012.

### Major Accomplishments:

- Constructed the north parking lot at Chatsworth station,
- Completed final design and obtained approvals of Lassen bridge,
- Relocated tracks and completed new rail signals (by Metrolink),
- Completed all real estate relocations and acquired easements from UP,
- Constructed the Privacy Fence at Chatsworth Mobile Home Park (CMHP),
- Removed known hazardous materials and demolished vacant structures,
- Constructed underground ducts on Lassen Street. Time Warner has relocated overhead communication lines to underground.
- Cleared and grubbed the right of way
- Completed construction of the foundations for Lassen bridge

The design builder, Brutoco Engineering & Construction, Inc, started on March 1, 2010 and is responsible for the construction of the Lassen bridge and Lassen Street improvements as well as for the design and construction of the remaining Project scope of work. The design builder:

- Removed excess vegetation and started removal of trees,
- Removed contaminated soils and majority of excess soils
- Completed 85% of the final design of the busway, street crossings, bikeway, stations and remaining bridges.
- Continued coordination with utility companies for utility relocation including relocation of DWP overhead power lines on Lassen Street.
- Started construction of privacy walls between Parthenia and Nordhoff Streets.
- Started storm drain installation north of Saticoy Street.
- Started grading of the busway along various points of the alignment.

# **PROJECT OVERVIEW (Contd)**

Other Project specific items required for revenue operations includes:

- Purchase and install fare collection equipment The Contractor, Cubic Transportation Systems, Inc., has commenced purchase of long lead material and will begin assembly of required units in February 2011.
- Station Artwork Artwork for five stations is in the design development phase.
- Vehicles Operations, Central Maintenance Department, has completed the prototype Midlife Overhaul on the first Orange Line Bus and has completed procurements for major components including the engines. Central Maintenance started this month and will be completing two to three bus overhauls a month.

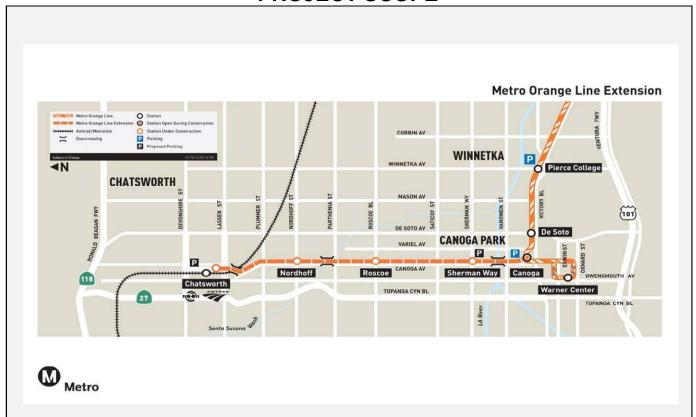
To date, commitments are \$117.2 million or 54.4% of the Original Budget. Expenditures are \$39.5 million or 18.4% of the \$215.6 million Original Budget. Design-builder's final design percent complete is 84% and construction physical percent complete is 11%.

### **MANAGEMENT ISSUES**

**Concern No. 1:** The City of Los Angeles is requesting a design change in the bike path alignment and for MTA to maintain the landscaping along Canoga Avenue. The design builder has completed 85% design based on the previously approved bike path alignment. Changes would likely affect the design completion, and start of schedule critical utility relocation work and Canoga Avenue improvements.

<u>Status/Action</u> Metro and the City agreed to have the design builder proceed with the design per the original scope and alignment. However, Metro and the City are looking at landscape alternatives to reduce maintenance in the City Right-of-Way.

### **PROJECT SCOPE**



C0943: Metro Orange Line Extension (MOL Ext) is a design-build contract to construct the majority of the Project scope of work. This contract will include design and construction of busway, new stations at Sherman Way (with park-and-ride), Roscoe Boulevard, Nordhoff Street, and Chatsworth Metrolink Station (with park-and-ride). The existing MOL Canoga park-and-ride lot will be modified with new station platforms. In addition, the contractor will design and construct approaches to the Lassen bridge, a bridge over the Los Angeles River, a smaller bridge over the Santa Susana Wash, street improvements, bicycle/pedestrian path, satellite bus parking facility, landscaping, systems equipment, and system integration and testing. In August 2009, the Lassen bridge (500' long 3-span bridge over active railroad tracks/Lassen Street) and Lassen Street Improvements were added to Contract C0943.

**C0941: North Parking Lot (Chatsworth Station)** is a construction contract for a new parking lot to be constructed north of the existing Chatsworth Metrolink Station. Completion of this lot is required before the south parking lot is modified to ensure that parking is continuously available for Metrolink patrons during construction of the MOL Extension.

Work Order – Advance Metrolink Rail Signal Modifications, Track Realignment, and At-Grade Lassen Crossing Enhancements is to be substantially completed by Metrolink in advance of the Design-Build Contractor commencing construction of portions of the Lassen bridge.

Work Order - Advance Relocation of power, fiber optic and communication lines on Lassen Street is to be completed by LADWP and the affected utility companies prior to the Design-Build Contractor commencing construction of portions of the Lassen bridge.

### **KEY MILESTONE SCHEDULE SIX-MONTH LOOK AHEAD**

	Milestone						
	Date	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
DESIGN of C0943	00/44/44		ı		I	l	I
Issue Approved For Construction Design Unit 4	03/11/11*						
Issue Approved For Construction Design Unit 2	03/16/11*						
Issue Approved For Construction Design Unit 5	03/29/11*						
Issue Approved For Construction Design Unit 3	05/3/11*						
Issue Approved For Construction Design Unit 1	05/17/11*						
CONSTRUCTION of C0943							
Strip/Cure Bent 3 Column at Lassen St. Bridge	01/04/11 A						
Set Lassen Bridge Falsework from Abutment 4 to Bent 3	01/19/11 A						
Form Abutment 1 at Lassen St. Bridge	01/21/11 A						
Form Bent 2 Column at Lassen St. Bridge	01/28/11 A						
Remove unsuitable soils starting at north end of Orange Line Ext.	01/28/11 A						
Commence Rough Grade at north end of Orange Line Ext.	02/04/11*						
Complete LADWP Underground Relocation of Power Lines on Lassen Street	03/02/11*			Δ			
Commence Intersection Construction at Prairie/Canoga	03/14/11*						
Install foundation piles at Los Angeles River Bridge	03/22/11*						
Procure Station Communication Equipment	03/30/11*						
Remove/Relocate DWP Poles between Marilla and Plummer Street	04/22/11						
Set Superstructure Bearing Pads & Soffit Openings	05/16/11*						
Install foundation piles at Santa Susana Creek Bridge	05/23/11*						
Commence Station construction	06/02/11*						
◆ MTA Staff MTA Board Action	"A" followin	ng date is actu	ual and compl	eted			
Other Agencies Design Builder	* New	Date					

# **SCHEDULE NARRATIVE**

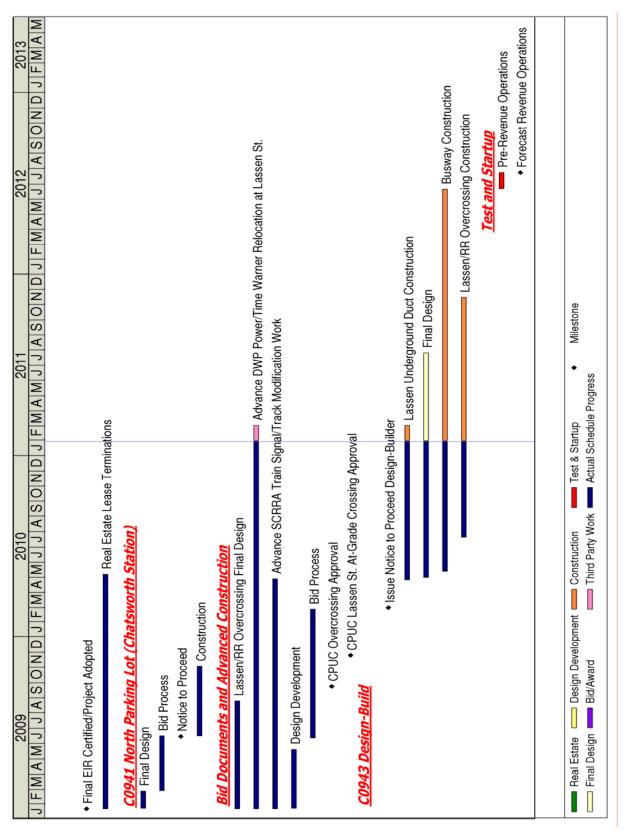
### **Critical Path:**

The Design Builder's schedule update continues with the design of the Parthenia, Nordhoff, and Roscoe Street intersection and the subsequent construction of the intersections as being on the critical path. The Design Builder has submitted 100% design submittals and they are currently being reviewed by Metro and the City.

Concurrently, the secondary critical path is through the relocation of DWP power lines which is followed by the Falsework at Bent 3 on Lassen Street. The setting of the Falsework allows the bridgework to begin from Abutment 4 to Bent 3 and the sequence resumes from Abutment 1 to Bent 2.

The critical path concludes with the construction of the stations along the alignment and systems.

## **SUMMARY SCHEDULE**



## **PROJECT COST STATUS - 800119**

### COST REPORT BY ELEMENT

### UNITS IN MILLIONS

ELE-	. DESCRIPTION	ORIGINAL	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST
MENT		BUDGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
С	CONSTRUCTION	137.3	-	137.3	0.1	90.2	1.4	22.9	-	119.6	(17.7)
R	RIGHT-OF-WAY	8.0	-	8.0	-	4.2	-	1.7	-	4.2	(3.8)
V	VEHICLES / BUSES	9.9	-	9.9	-	2.0	0.1	0.3	-	9.9	-
Р	PROFESSIONAL SERVICES	38.7	-	38.7	0.1	20.8	0.6	14.6	-	33.8	(4.9)
PC	PROJECT CONTINGENCY	21.7	-	21.7	-	1	-	-	-	18.7	(3.0)
PB	PROJECT RESERVE	-	-	-	-	-	-	-	-	29.4	29.4
PR	PROJECT REVENUE	-	-	-	-	-	-	-	-	-	-
	TOTAL	215.6	-	215.6	0.2	117.2	2.1	39.5	-	215.6	-

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH DECEMBER 2010.

### PROJECT COST ANALYSIS

### **Original Budget and Current Budget:**

The Life of Project Budget for the Metro Orange Line Extension Project was adopted in January 2009 for a value of \$215.6 million.

**Current Forecast:** The total project forecast remains the same at \$215.6 million.

### **Commitments:**

The commitments increased by \$0.2 million this period. In the Construction element there was an increase of \$0.1 million for executed contract modifications associated with the Design-Build Contract C0943. In the Professional Services element there was an increase of \$0.1 million for Contract C0943 Design Services. The \$117.2 million in commitments to date represents 54.4% of the Original Budget.

### **Expenditures:**

The expenditures are cumulative through December 2010. The expenditures increased by \$2.1 million this period. In the Construction element there was an increase of \$1.4 million for cost associated with the Design-Build Contract C0943, environmental consultants, and third party scope of work. In the Vehicle element there was an increase of \$0.1 million for midlife overhaul of existing Orange Line buses. In the Professional Services element there was an increase of \$0.6 million for costs associated with final design, construction management support, specialty services, and MTA project administration. The \$39.5 million in expenditures to date represents 18.4% of the current budget.

# FINANCIAL/GRANT STATUS Project 800119 – Metro Orange Line Extension

### **JANUARY 2011**

### STATUS OF FUNDS BY SOURCE

\$ in millions

	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	ORIGINAL	TOTAL	TOTAL	COMMITMENTS		EXPENDITURES		BILLED to FUNDING	
SOURCE	BUDGET	FUNDS	FUNDS						SOURCE
		ANTICIPATED	AVAILABLE	\$	%	\$	%	\$	%
	(1)	(2)							
PROP 1B FUNDS-PTMISEA*	68.0	68.0	40.5	68.0	100%	39.5	58%	34.4	51%
PROP 1B FUNDS-SLTPP**	73.8	73.8	49.2	49.2	67%		0%		0%
PROP C 25%	73.8	73.8			0%		0%		0%
TOTAL	215.6	215.6	89.7	117.2	54%	39.5	18%	34.4	16%

<sup>(1)</sup> Based on January 2009 MTA Board adoption of Life of Project Budget.

NOTE: Expenditures are cumulative through December 2010.

### STATUS OF FUNDS ANTICIPATED

**STATE PROP 1B – PTMISEA:** MTA submitted a request to Caltrans to allocate \$29.5 million of FY10 funds to the Project. The allocation request was expected to be approved in September 2010. However, due to the delay in approving the State Budget, this allocation request has not been approved and approval is now expected in March 2011.

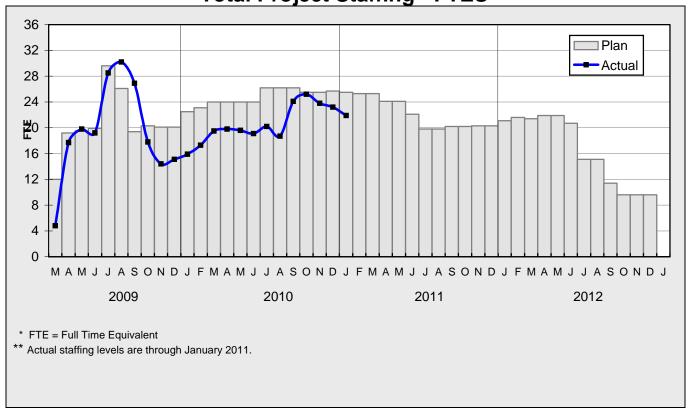
**STATE PROP 1B – SLTPP:** At the January 2011 Meeting, the CTC approved MTA's December 2009 \$14.7M and May 2010 \$34.48M allocation requests. Both Grants are available for drawdown.

<sup>(2)</sup> Based on March 2009 Capital Programming Revised Financial Plan.

<sup>\*</sup> PTMISEA: Public Transportation Modernization and Improvement Surface Enhancement Account

<sup>\*\*</sup> SLTPP: State - Local Transportation Partnership Program

# STAFFING STATUS Total Project Staffing - FTES



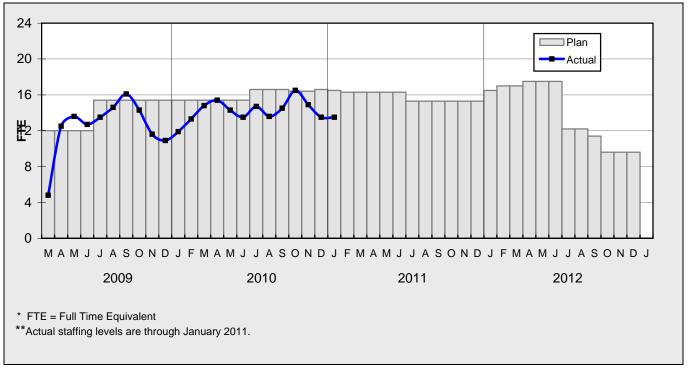
# **Total Project Staffing**

The overall FY11 Total Project Staffing plan averages 25.1 FTE's per month.

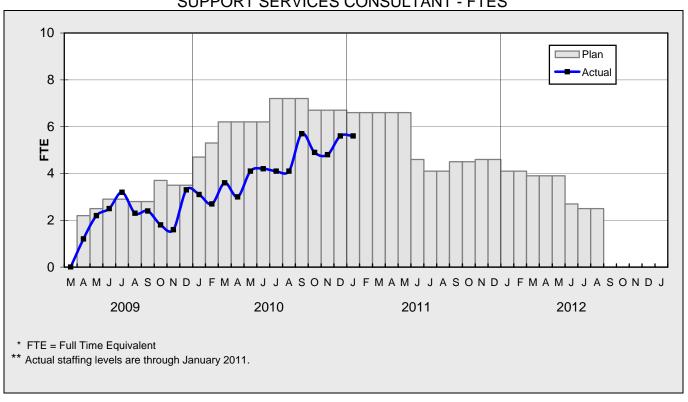
For January 2011, there were a total of 13.5 FTE's for MTA's Project Administration staff and 8.4 FTE's for consulting staff. The total project staffing was 21.9 FTE's for January 2011.

## **STAFFING STATUS**

MTA STAFFING - FTES

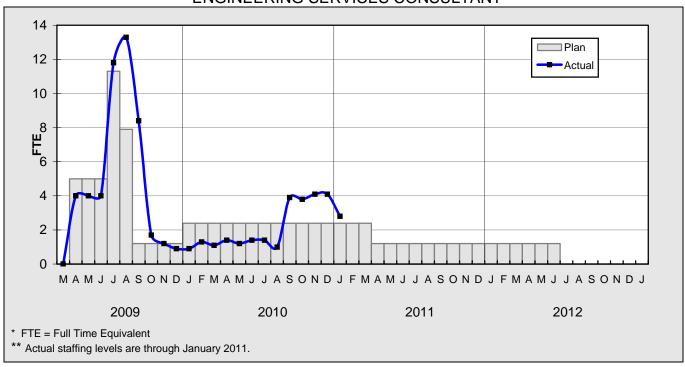


# CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT - FTES



# **STAFFING STATUS**

## **ENGINEERING SERVICES CONSULTANT**



## **REAL ESTATE STATUS**

- UPRR sent the license to LADWP for underground utilities across UPRR property on August 25, 2010 for approval. The License is being routed for City staff approval.
- MTA sent license to LADWP for the installation of underground utilities across MTA property. The License is being routed for City staff approval.

### **LEASES**

All Real Estate work required to clear the ROW is completed.

		Total Leases	Total Leases to	Leases to		Total
	Total	to be	Remain with	Remain Under	Relocations	Signboards
	Leases	Terminated	Modified Lease	Existing Lease	Completed	Removed
Leases	82	78	3	1	52	26

# **QUALITY ASSURANCE STATUS**

- Attended weekly job and readiness review meetings with Brutoco.
- Monitored the construction work along the alignment.

## **ENVIRONMENTAL STATUS**

- Continued air monitoring activities to monitor air quality during construction activities.
- Continued monitoring stormwater Best Management Practices (BMP's) to control stormwater flow from going off-site.
- Reviewing Standard Urban Stormwater Mitigation Plan (SUSMP).

### **COMMUNITY RELATIONS STATUS**

- Distributed 100 construction notices to Riviera and Eton Mobile Home Parks related to privacy wall construction and coordinated efforts regarding shed relocations and/or removal.
- Coordinated meeting with business owner, Project staff and Real Estate regarding ROW encroachment at Canoga and Saticoy.

## **ART DEVELOPMENT STATUS**

- The artwork for four stations, Canoga, Sherman Way, Nordhoff and Chatsworth, is at 50% design.
- The artwork for Roscoe Station is at 100% design.
- Continuing review of design packages submitted by the design builder.

## **SAFETY STATUS**

### CO943:

- Participated in weekly Tool-Box Safety Meeting, progress meetings with Construction Management and Metrolink Safety Training.
- Monitored construction activities on a daily basis to ensure safety compliance with contract specifications.
- Reviewed Job Hazard Analysis/Construction Work Plans for false-work on bent #2 and #3 bridge work.
- Brutoco and their subcontractors reported zero incidents and 11,769 work hours for the month of January 2011. Total project to date work hours are 80,788 and the incident rate is zero.

### THIRD PARTY AGREEMENT STATUS

Third Party	Type of Agreement	Forecast Execution Date	Required Need Date	Status/ Comments
City of Los Angeles	Licensing Agreement	4/11	N/A	LADOT has agreed to continue reviewing design. In parallel, MTA shall work on identifying other options (hardscape in lieu of landscaping) that can lower the cost of maintenance for the City. Once design is agreed upon, that design will be incorporated into the agreement. Intent is to still have the City maintain the bike path and landscaping/hardscape outside the fenceline.
City of Los Angeles	O & M Agreement	4/11	N/A	MTA received comments back from LADOT that contradict the previous agreements. MTA shall meet with LADOT to resolve the issues.

Note: For a list of all Third Party Agreements, that have been executed, please see the May 2010 Monthly Project Status Report.

# Metro Orange Line Extension Monthly Project Status Report

### **CONTRACT C0943 STATUS**

Design Builder Contractor:

Brutoco, Engineering and Construction, Inc.

### Contract No.: C0943

Status as of: January 28, 2011

### **Progress/Work Completed:**

- Metro and the City are currently reviewing 100% Design Units 1, 2, 4, 5 submittal packages.
- Construction of drainage along south end of Canoga alignment.
- Poured bent # 2 columns & flare.
- Strip column forms on Bent 3.
- Began falsework from Abutment 4 to Bent 3.
- Began Formwork on Abutment 1.
- Continued removal of contaminated soils.
- Commence excavating footing for new privacy wall in Segment 7.

#### Areas of Concern:

-Potential Design changes at the Sherman Way station and right turn pockets may impact design completion.

-Contractor's schedule update indicates potential delays in achieving future milestones. Mitigation opportunities such as full street closures at the intersections and early power pole relocation are being implemented. Anticipated schedule variances may be mitigated in the near future.

#### Schedule Assessment:

Continued with the review of 100% design submittal packages. Final design is anticipated to conclude in the Summer of 2011. The preparation of the bus guideway is underway with the rough grading and exporting of excess and contaminated soils from designated segments. Major bridge construction activities continue with the setting of falsework from abutment 4 going south to bent 3 and preparations for formwork on abutment 1.

#### Cost Assessment:

Incurred Cost:

The current construction contract cost forecast is \$83.02 million and is within the Board authorized budget.

The Design Builder submitted their 11th payment application in the approved amount of \$1.6 million.

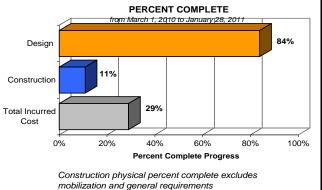
Increase in costs to the construction contract award value are a result of design enhancements and change orders.

### Schedule Summary:

Date of Award:	02/10/10
2. Notice to Proceed:	03/01/10
3. Original Substantial Completion Duration:	730
4. Current Substantial Completion Duration:	730
5. Elapsed Time from NTP:	333

# Cost Summary: \$ In 000's 1. Award Value: 82.49 2. Executed Modifications: 0.39 3. Approved Change Orders: 0.14 4. Current Contract Value (1 + 2 + 3): 83.02

Milestones	Original Contract	Current Contract	Forecast	Calendar Day Variance
Milestone 1 - Contract Substantial Completion	02/29/12	02/29/12	06/18/12	-110
Milestone 2 - Complete Universal Fare System Requirements	11/01/11	11/01/11	10/17/11	15
Milestone 3 - Elect/Communication Requirements Complete	01/30/12	01/30/12	04/11/12	-72
Milestone 4 - Passenger Information System Testing Complete	02/29/12	02/29/12	05/23/12	-84
Milestone 5 - System Assurance Complete	02/28/13	02/28/13	06/05/13	-97
Milestone 6 - Landscape and Planting Maintenance and Warranty	02/28/14	02/28/14	02/28/14	0
Option C - Undergrounding of DWP Power line at Lassen Street	05/30/10	05/30/10	12/6/2010 A	-190



24.10

# **CONSTRUCTION PHOTOGRAPHS**



C0943 Design Build Contractor installing falsework between Abutment # 4 and bent # 3 for the Lassen bridge.



C0943 Design Build Contractor forming bent # 2 column for the Lassen bridge.