

# RECLAMATION

*Managing Water in the West*

## MP CONSTRUCTION OFFICE

Willows, California

Construction Progress Report – L29

March 2012



This photo shows MDCI placing concrete on the south wall of Bay F and drilling on the north wall. The second BG40 drill-rig is down.

**“Doing It Right from the Start”**



U.S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region

CONSTRUCTION PROGRESS REPORT (L-29)  
 MP CONSTRUCTION OFFICE  
 MID-PACIFIC REGION  
 March 2012

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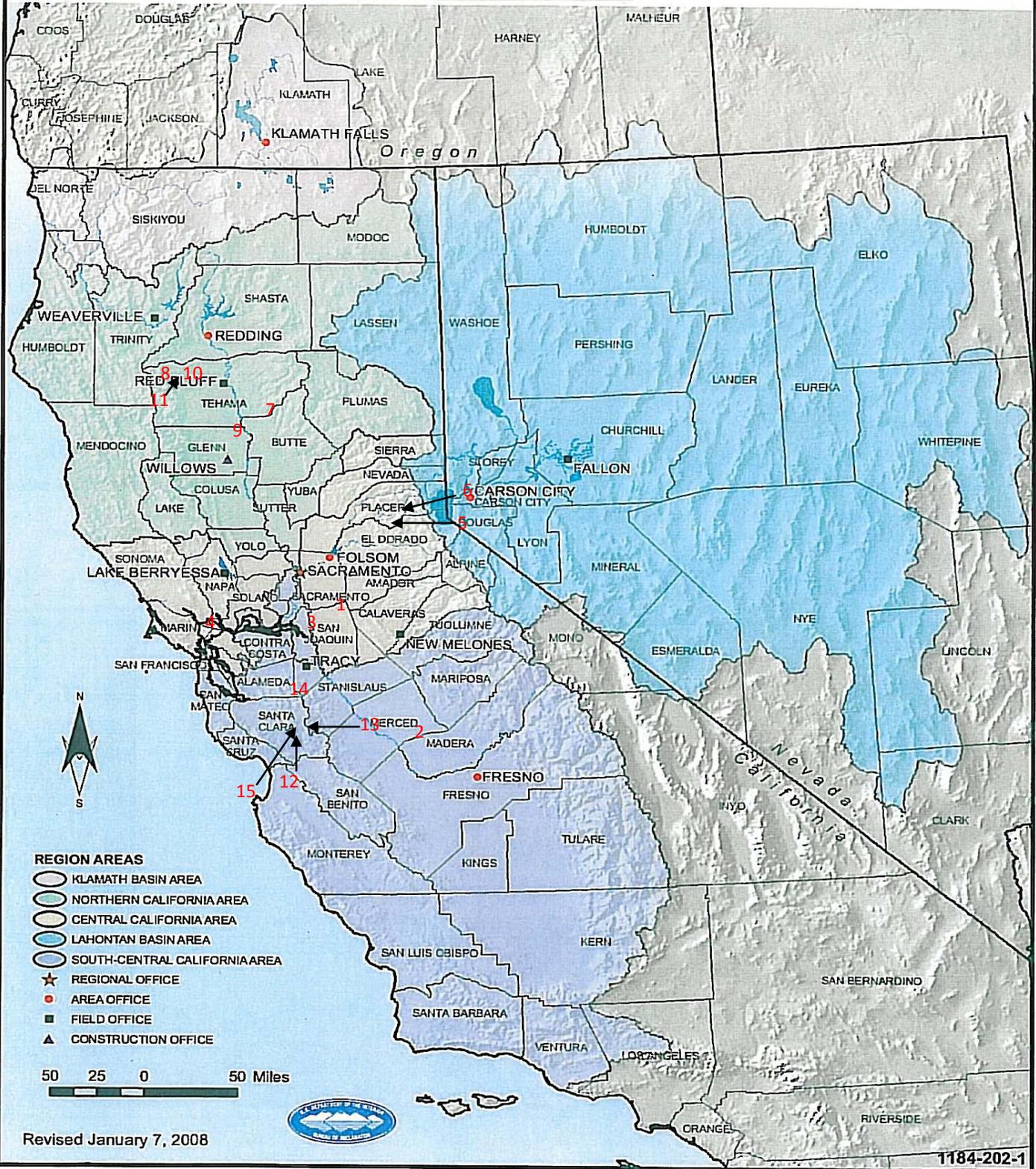
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MIAD Lab Reports

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# Mid-Pacific Region

**RECLAMATION**  
Managing Water in the West



## **STAFFING – MID PACIFIC CONSTRUCTION OFFICE**

The Mid Pacific Construction Office had 95 construction and administrative employees at the close of this month as follows:

Construction Engineer's Office	2
Preaward & Project Management Group	4
Administrative Management	12
Division of Field Engineering	40
Division of Office Engineering	17
Materials Lab Branch	12
Detail/Contract Employees	8

## **GLOSSARY OF ACRONYMS AND ABBREVIATIONS**

### MEANING

ARRA	American Recovery and Reinvestment Act
CCAO	Central California Area Office
CVP	Central Valley Project
LBAO	Lahontan Basin Area Office
MP	Mid Pacific Regional Office
MPCO	Mid-Pacific Construction Office
NCAO	Northern California Area Office
SCCAO	South Central California Area Office
TO	Tracy Office

CCAO

Contract No. R10PC20R15

Specification No. 20-C0649A

Fixed Wheel Gate Rehabilitation–Folsom Dam River Division–Central Valley Project,

California

Abide International, Inc., Sonoma, CA

Work Performed:	March	0%
	Time Elapsed	52.8%
	Work Completed	24.7%
Contractor Earnings:	March	\$0
	Previous	\$2,018,053.97
	Total to Date	\$2,018,053.97
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$60,408.00
	2 <sup>nd</sup> Quarter Expenditures:	\$81,722.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$142,130.00
	FY 12 Budgeted:	\$195,015.00
	Amount Remaining:	\$52,885.00
	Percent Remaining:	27.14%

Area Office Project Management

Project Manager: Jesse Castro, CC-607

Office Engineering

Contract Administrator: Larry Bowman, MPCO-240

No invoice was received this period.

Modification 3 was fully executed on September 22, 2011. This modification extended the contract's legal completion date to August 2, 2013. The revised legal completion date reduces the reported time lapsed and work completed amounts above.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Bill Linder, MPCO-312

Number of Contract Employees: 3

Work performed:

Subcontractor, American Crane, provided crane operators for the Folsom gantry crane and rented crane during the stop log moving operation. Subcontractor, C and W Diving, was responsible for installing the trash racks on all the units. Subcontractor, Crane America, worked on fixing the mechanism that releases the stop logs from the lifting beam. Monterey

Mechanics finally exercised the mechanism on the stop logs and got it to work properly for the upcoming installation at Unit 1.

Subcontractor, Safway Scaffolding, disassembled and hoisted all three hanging scaffolding platforms, took apart the scaffolding tower that provided access to the trash rack opening at 428-foot elevation, and removed the plank that provided access from Unit 2 to Unit 1. This was followed by the C and W Diving crew installing the trash racks on all three units.

The week following these activities, American Crane started moving the stop logs. All the stop logs located at the CCAO yard were hoisted with a rental crane and transported to the top of the dam where they were off-loaded with the Gantry crane and set on top of the bridge deck. Then Monterey Mechanical exercised the stop log latch mechanism in preparation for installing the stop log at Unit 1. Crane America fixed the electrical motor that activates the stop log releasing mechanism on the lifting beam.



Transporting the Stop logs to the top of the dam  
Fixed Wheel Gate Rehabilitation

Contract No. R09PC20R03  
Specification No. 20-C0677  
Transformer K1A and K2A Replacements–Folsom Power Plant–American River Division–  
Central Valley Project, California  
Koontz Electric Company Inc., Morrilton, AR

Work Performed:	March	0%
	Time Elapsed	94.5%
	Work Completed	100%
Contractor Earnings:	March	\$0
	Previous	\$4,685,935.66
	Total to Date	\$4,739,712.66
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$5,574.00
	2 <sup>nd</sup> Quarter Expenditures:	\$8,254.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$13,828.00
	FY 12 Budgeted:	\$37,261.00
	Amount Remaining:	\$23,433.00
	Percent Remaining:	62.89%

Area Office Project Management  
Project Manager: Jesse Castro, CC-607

Office Engineering  
Contract Administrator: Madelyn Giles, MPCO-210

Invoice 12-Final was received, approved, and forwarded to Denver, Colorado, this report period. It was not for work done in this pay period, but for work done through January 18, 2012.

Field Engineering  
Construction Manager: Sean Frische, MPCO-317  
Construction Representative: Sergio Vivar, MPCO-311

Number of Contract Employees: 0

Work performed: No site work was performed this period.

Contract No. R10PC20019  
Specification No. 20-C0689  
Folsom Power plant, U1, U2, and U3 Rewind and Excitation System Replacement–  
American River Division–Folsom Unit–Central Valley Project, California  
Andritz Hydro Corp, Charlotte, NC

Work Performed:	March	0%
	Time Elapsed	46.1%
	Work Completed	34.4%
Contractor Earnings:	March	\$0
	Previous	\$6,271,961.77
	Total to Date	\$6,271,961.77
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$26,495.00
	2 <sup>nd</sup> Quarter Expenditures:	\$63,358.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$89,853.00
	FY 12 Budgeted:	\$206,325.00
	Amount Remaining:	\$116,472.00
	Percent Remaining:	56.45%

Note: Costs of Contract No. R10PC20 767, Folsom Power Plant U1, U2, and U3 Replacement Runners, are included in these costs.

Area Office Project Management  
Project Manager: Jesse Castro, CC-607

Office Engineering  
Contract Administrator: Madelyn Giles, MPCO-210

No invoices were received this period.

MPCO reviewed proposals for Modifications 6 and 7 which will definitize modifications 1 and 2. The review was not completed this period.

Field Engineering  
Construction Manager: Henry Garcia, MPCO-310  
Construction Representative: Sergio Vivar, MPCO-311, Sean Frische, MPCO-317

Number of Contract Employees: 0

Work performed: No worked was performed. The contractor demobilized on October 28, and per the schedule will remobilize in October 2012.

Contract No. R10PC20767  
Specification No. 20-C0703  
Folsom Power Plant U1, U2, and U3 Replacement Runners–American River Division–Folsom  
Unit–Central Valley Project, California  
Voith Siemens Hydro Power Generation, Inc., York, PA

Work Performed:	March	0.2%
	Time Elapsed	78.6%
	Work Completed	73.0%
Contractor Earnings:	March	\$13,629.44
	Previous	\$5,235,564.34
	Total to Date	\$5,249,193.78
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	
	2 <sup>nd</sup> Quarter Expenditures:	
	3 <sup>rd</sup> Quarter Expenditures:	
	4 <sup>th</sup> Quarter Expenditures:	
	FY 12 Cumulative Total:	
	FY 12 Budgeted:	
	Amount Remaining:	
	Percent Remaining:	

Note: Costs are included in costs of Contract No. R10PC20019, Folsom Power plant, U1, U2, and U3 Rewind and Excitation System Replacement.

Area Office Project Management  
Project Manager: Jesse Castro, CC-607

Office Engineering  
Contract Administrator: Madelyn Giles, MPCO-210

Invoice 22 was received this period, approved, and forwarded to Denver Finance for processing.

Modification 4 was executed on March 21, 2012.

Field Engineering  
Construction Manager: N/A Supply Contract  
Construction Representative: N/A Supply Contract

Number of Contract Employees: N/A Supply Contract

Work performed: N/A Supply Contract

Contract No. R10PC20128  
Specification No. 20-C0706  
New Melones Power Plant Excitation System Replacement–East Side Division–New Melones  
Unit–Central Valley Project, California  
Koontz Electric Company, Inc., Morrilton, AR

Work Performed:	March	31.9%
	Time Elapsed	74.0%
	Work Completed	68.8%
Contractor Earnings:	March	\$767,480.00
	Previous	\$889,133.00
	Total to Date	\$1,656,613.00
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$6,734.00
	2 <sup>nd</sup> Quarter Expenditures:	\$38,417.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$45,151.00
	FY 12 Budgeted:	\$144,750.00
	Amount Remaining:	\$99,599.00
	Percent Remaining:	68.81%

Area Office Project Management  
Project Manager: Terry Brown, CC-606a

Office Engineering  
Contract Administrator: Larry Bowman, MPCO-240

Invoice 6 was received, approved, and forwarded to Denver Finance for processing.

Field Engineering  
Construction Manager: Henry Garcia, MPCO-310  
Construction Representative: Dennis Schuenemann, MPCO-338

Number of Contract Employees: 11

Work performed:  
Prime contractor Koontz Electric Co. Inc. performed the following:  
Removed all the existing conductors, bus work, AC and DC breakers, three (3) fuses, power potential transformer (PPT) and existing General Electric exciter.  
Installed new 6000 lbs. power potential transformer (PPT).  
Installed new Emerson unit 1 exciter.  
Measured, cut and pulled a total of twenty-seven (27) conductors and cut 6 cables.  
Tested all conductors for Insulation Resistance (Meggar).  
Added braided sections between the PPT and each phase.

Inventoried and delivered all spare parts to the facility.  
Removed indicator lights and the accompanying switches in the control room panel.  
Terminated 800 + conductors to terminal points inside the new Emerson exciter, existing cabinets (SC2, SCR3 & DACS), CTs, PPT and U1 Governor.  
Installed the new switches and new indicator lights on control room panel.  
Installed testers and protection devices in the control room for unit 1 and unit 2.  
Installed new current transformers.  
Measured, field bent and attached conduit to the unit 1 air housing.  
Mounted and secured a discharge resistor to the top of the new exciter.  
Exchanged a 70 amp breaker for a 20 amp breaker.  
Pulled a new fiber optic line to protection device.  
Pulled and terminated 120VAC conductor from Uninterrupted Power Supply to the preferred AC panel.  
Completed wiring checkout and testing of the excitation system.  
Energized the new exciter cabinet with 125VDC.  
Energized the new exciter cabinet with 120VAC.  
Doble tested the Unit 1 Transformers.  
Contractor prepped cable for unit 2.  
Assisted TSC and the Emerson Process Management as needed (i.e. wires, relays etc. needed to be changed, removed or replaced) during commissioning.  
Logged data and events as they occurred during commissioning.

Contract No. R09PC20171  
Specification No. 20-C0720  
Nimbus Powerplant HVAC System Modification–American River Division–Folsom Unit,  
Central Valley Project, California  
Perryman Mechanical, Inc., West Sacramento, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	79.9%
Contractor Earnings:	March	\$0
	Previous	\$428,963.09
	Total to Date	\$428,963.09
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$2,401.00
	2 <sup>nd</sup> Quarter Expenditures:	\$809.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$3,210.00
	FY 12 Budgeted:	\$6,400.00
	Amount Remaining:	\$3,190.00
	Percent Remaining:	49.84%

Area Office Project Management  
 Brian Zewe, CC-607A

Office Engineering  
 Contract Administrator: Ryan Hennigan, MPCO-211

No invoices were received this period.

Although the substantially complete date is December 12, 2010, multiple submittals remain outstanding. Punch list items remain at the site. The contractor has not been timely in completing these items.

Field Engineering  
 Construction Manager: Henry Garcia, MPCO-310  
 Construction Representative: Todd Dooley, MPCO-314

Number of Contract Employees:

Work performed: No work was performed. As stated above there are punch list items to complete.

Contract No. R10PC20R49

Specification No. 20-C0733

Lake Berryessa ADA Accessibility Improvements-ARRA Project No. 49.000-Lake Berryessa  
Recreational Area, Solano Project, California CSRW (DBA)

CSRW, Inc. (DBA) Allied Construction Services, Livermore, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	96.3%
Contractor Earnings:	March	\$0
	Previous	\$1,009,249.48
	Total to Date	\$1,009,249.48
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$3,233.00
	2 <sup>nd</sup> Quarter Expenditures:	\$4,522.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$7,755.00
	FY 12 Budgeted:	\$7,500.00
	Amount Remaining:	-\$255.00
	Percent Remaining:	-3.40%

Area Office Project Management

Project Manager: Nicole Johnson, CC-605c

Office Engineering

Contract Administrator: Amber Pierce, MPCO-205

No invoices were received this period.

A final modification will be negotiated to incorporate differing quantities, some of which are over 15 percent.

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: John Lakovich, MPCO-344

Number of Contract Employees: 0

Work performed: Site work was completed in September 2011.

Contract No. R10PC20R37  
Specification No. 20-C0738  
New Melones ADA Accessibility–ARRA Project No. 50.000–New Melones Recreation Area,  
East Side Division–Central Valley Project, California  
J.I. Garcia Construction, Inc., Fresno, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	96.5%
Contractor Earnings:	March	\$0
	Previous	\$1,333,872.80
	Total to Date	\$1,333,872.80
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$13,703.00
	2 <sup>nd</sup> Quarter Expenditures:	\$14,164.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$27,867.00
	FY 12 Budgeted:	\$46,923.00
	Amount Remaining:	\$19,056.00
	Percent Remaining:	40.61%

Area Office Project Management  
Project Manager: Nicole Johnson, CC-605c

Office Engineering  
Contract Administrator: Amber Pierce, MPCO-205

No invoices were received this period.

The contractor has to complete the final submittals.

Field Engineering  
Construction Manager: Reynaldo Garcia, MPCO-310  
Construction Representative: John Lakovich, MPCO-344

Number of Contract Employees: 0

Work performed: The only remaining work is to resolve punch list items.

Contract No. R10PC20R24  
Specification No. 20-C0751  
Folsom Dam, Safety of Dams Modifications, Spillway Piers and Gates–American River  
Division–Folsom Unit, Central Valley Project, California  
Kiewit Infrastructure West Co., Folsom, CA

Work Performed:	March	1.5%
	Time Elapsed	65.0%
	Work Completed	97.8%
Contractor Earnings:	March	\$264,178.03
	Previous	\$16,847,786.58
	Total to Date	\$17,111,964.61
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$48,656.00
	2 <sup>nd</sup> Quarter Expenditures:	\$24,196.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$72,852.00
	FY 12 Budgeted:	\$63,230.00
	Amount Remaining:	-\$9,622.00
	Percent Remaining:	-15.22%

Area Office Project Management  
Project Manager: Larry Hobbs, CC-106

Office Engineering  
Contract Administrator: Erik Danger, MPCO-218

No invoices were received this period.

The substantially complete date is December 12, 2011.

The contractor has fulfilled all contract requirements and been paid the full amount due, which is less than 100% because some of the unit priced items are less than the bid scheduled amounts.

Field Engineering  
Construction Manager: Henry Garcia, MPCO-310  
Construction Representative: Howard Diedrich, MPCO-316

Number of Contract Employees: 0

Work performed: No site work was performed.

Contract No. R10PC20114  
Specification No. 20-C0754  
Folsom Dam–Safety of Dams Modification–MIAD Key-Block–American River Division,  
Folsom Unit, Central Valley Project, California.  
Shimmick Construction Co., Inc., Sacramento, CA

Work Performed:	March	5.4%
	Time Elapsed	35.1%
	Work Completed	66.3%
Contractor Earnings:	March	\$2,212,441.95
	Previous	\$24,934,526.15
	Total to Date	\$27,146,968.10
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$429,330.00
	2 <sup>nd</sup> Quarter Expenditures:	\$388,350.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$817,680.00
	FY 12 Budgeted:	\$1,290,400.00
	Amount Remaining:	\$472,720.00
	Percent Remaining:	36.63%

Area Office Project Management  
Project Manager: Larry Hobbs, CC-106

Office Engineering  
Contract Administrator: Larry Bowman, MPCO-240

Invoice 18 was received, approved, and forwarded to Denver, Colorado, this report period

Field Engineering  
Construction Manager: Henry Garcia, MPCO-310  
Construction Representative: Howard Diedrich, MPCO-316, Sean Frische, MPCO-317

Number of Contract Employees: 70

Work performed:

**BAY F WORK ACTIVITIES:**

Subcontractor, MDCI, continued drilling and installing secant piles on Bay F, which is approximately 74% complete for both primary and structural drill holes. 56 primary drill holes and 53 structural drill holes with W27x94 and 6-5/8" steel pipes were completed this month. A total of 3572 cubic yards of concrete was placed in the secant pile walls.

Bay A, Bay B, Bay D and Bay E are complete with secant pile walls.

Bay C work has not yet started.

**BAY D WORK ACTIVITIES:**

**Lean Concrete – Bay D:**

The contractor placed 4020 cubic yards of lean concrete from elevation 327.5' to finish elevation 342' in Bay D this month. A total of 8310 cubic yards has been placed in Bay D.

**Backfill – Bay D:**

The contractor started backfill operation at Bay D this month. Backfill was compacted from elevation 342' to 352.

**BAY B WORK ACTIVITIES:**

**Bay B Bracing Installation:**

All bracing installation in this bay was completed this period. Each completed section in Bay B is approximately 90.75' length by 41.25' width.

**Excavation – Bay B:**

The contractor completed excavation into sub-grade (finished elevation varies from 306' to 313') last month.

**Lean Concrete – Bay B:**

The contractor placed 5450 cubic yards of lean concrete from sub-grade to finish elevation 342.75' in Bay B this month.

**Backfill – Bay B:**

There was no backfill operation at Bay B this month. Lean concrete was completed on March 21<sup>st</sup>, 2012. Rain delays and insufficient manpower have moved the operation to April.

**BAY A WORK ACTIVITIES:**

Subcontractor, HSI, finished the draw-down and recovery tests at Bay A.

**BAY E WORK ACTIVITIES:**

MCI finished drilling the 6" dewatering wells at Bay E. Eighty-three wells were completed this month. HSI started and finished the draw-down and recovery tests at Bay E.

**BACKFILL PROCESSING:**

Subcontractor, Granite Construction, continued processing backfill material for the MIAD key-block. Approximately, 32,000 cubic yards of material has been processed to date.

**REMOVAL AND CONTROL OF WATER:**

The dewatering systems at Bay D and at Bay B are pumping out on average of 210 gallons per minute each.

Contract No. R10PC20R57  
Specification No. 20-C0760  
Folsom Dam Civil Maintenance Building–American River Division–Folsom Unit, Central Valley Project, California  
Building Solutions Inc., Reno, NV

Work Performed:	March	5.0%
	Time Elapsed	100%
	Work Completed	61.2%
Contractor Earnings:	March	\$330,325.13
	Previous	\$4,042,691.96
	Total to Date	\$4,373,017.09
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$155,201.00
	2 <sup>nd</sup> Quarter Expenditures:	\$90,027.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$245,228.00
	FY 12 Budgeted:	\$363,200.00
	Amount Remaining:	\$117,972.00
	Percent Remaining:	32.48%

Area Office Project Management  
Project Manager: Ed Roza, CC-608

Office Engineering  
Contract Administrator: Laurie Larson, MPCO-222

Invoice 17 was received this period and forwarded to Denver Finance for processing.

Field Engineering  
Construction Manager: Henry Garcia, MPCO-310  
Construction Representative: Michael E. Manlick, MPCO-313

Number of Contract Employees: 29

Work performed:  
Item #620 FRP Walks and Pads  
The contractor placed and finished the concrete heat pump compressor pads on the north and south side of Quad A.

Item #633 Irrigation System  
Takahara installed irrigation valves, control wiring, and valve boxes in the planting zones around the building. They also excavated and removed excess compacted embankment fill from planting zones and placed topsoil and compost.

Item #720 – Electrical Conduit

Rex Moore installed rigid conduit, unistrut, boxes, and flex conduit for circuits in quads A, B, C and D.

Item #730 – Erect Metal Building Quad D

Solo Steel reconfigured the ridge purlins across the Sand Blasting room of Quad D.

Item #735 – Install Roof Panels

Solo Steel installed insulated roof panels for Quads A, B, C and D.

Item #750 – Free Standing Mezzanine

American Mezzanine Fabrication and Installation removed and replaced the bent column on the northwest corner of the Carpenter's Office, replaced dented pan decking, and finished more of the handrails. They installed non-skid deck plates.

Item #760 – Install Exterior Wall Panels

Solo construction installed exterior wall panels over wall sections E, F, H, J, and G. They also installed insulated wall panels and door and window trim in Quads A, B, C and D.

Item #780 – Frame Interior Walls

Lancaster Burns completed wall framing interior walls in Quads B, C and D.

Item #795 – Rough Sprinkler System

Foothill Fire Protection installed main and lateral lines in Quads A, B, C and D.

Item #800 – Rough-in Electrical

Rex Moore's foreman unloaded, separated, and inventoried lighting fixtures.

Item #805 – Rough in Plumbing

Iron Mechanical installed copper main lines across the west side of the Car Wash area in Quad C, and into Quad B. They also installed the 4-inch copper truck filler water line.

Item #810 – Rough-in Fire Alarm

Rex Moore installed conduit for Fire Alarm System in Quads A and B.

Item #815 – Painting HM Frames and HM Doors & Other Metal

James Harris's foreman primed exterior door frames. They also primed and painted the entry columns, beams, and decorative truss; and painted the second coat on several of the exterior door frames.

Item 892: Pull wire to all equipment

Rex Moore pulled and labeled wire within Quad A.

Contract No. R10PC20197  
Specification No. 20-C0768  
Control Upgrade and Modernization of the Gantry and Bridge Cranes at the Folsom Dam and  
Powerplant–American River Division, Folsom Unit, Central Valley Project, California  
Crane America Services, Inc., Livermore, CA

Work Performed:	March	11.5%
	Time Elapsed	90.0%
	Work Completed	76.0%
Contractor Earnings:	March	\$195,250.00
	Previous	\$1,092,267.02
	Total to Date	\$1,287,517.02
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$19,742.00
	2 <sup>nd</sup> Quarter Expenditures:	\$65,536.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$85,278.00
	FY12 Budgeted:	\$54,073.00
	Amount Remaining:	-\$31,205.00
	Percent Remaining:	-57.71%

Note: Costs of Contract No. R10PC20196, Nimbus Power Plant Gantry Crane, are included in these costs.

Area Office Project Management  
Project Manager: Brian Zewe, CC-607A

Office Engineering  
Contract Administrator: Madelyn Giles, MPCO-210

Invoice 14 was received this period and forwarded to Denver Finance for processing.

Modification 6 was executed on March 8, 2012.

Field Engineering  
Construction Manager: Henry Garcia, MPCO-310  
Construction Representative: Todd Dooley, MPCO-314

Number of Contract Employees: 5

Work performed:

Install Resistors:

Crane America installed the new resistors (resistor bank) on the bridge crane.

**Install Cab Console:**

Crane America built and installed the crane control console mounting bracket; once the bracket was installed the control console was also installed inside of the cranes cab.

**Installation of VFD Controls:**

This month Crane America finished modifying the existing metal enclosure along the face of the bridge crane (bank side).

Crane America set the VFD (Variable Frequency Drive) cabinet on the cabinet rack. Once the cabinet was set and secured in its permanent location, the crew installed conduits connecting the existing metal enclosure, previously modified, to the VFD (variable frequency drive) cabinet.

**Install Hoist Motors:**

Crane America installed the sprocket and coupler and motor stands/pedestals on the hoist motors (main and auxiliary), then set the hoist motors (main hoist and auxiliary hoist motors) on the bridge crane. Then Crane America welded the motor stands to the existing motor pad and aligned the hoist motors.

**Install Bridge Motors:**

Crane America installed the sprocket and coupler on the bridge motors.

Crane America installed stands/pedestals and stands/pedestals on the bridge motors. Once the motors were set in place a crew member welded the bridge motors in their permanent location. Crane America aligned the bridge motors (bridge side and bank side) with the gear case shaft and secured them permanently in place.

**Install Trolley Motors:**

Crane America installed the sprockets and couplers on the new trolley motors and on the existing trolley gear cases. Then the crew set the new trolley motors and modified gear cases on the bridge crane. Once the motor stands were permanently secured, the crew aligned and permanently installed the trolley motors (upstream and downstream) with the trolley gear case shaft.

**Wire Up Electrical System:**

Crane America installed 2-inch diameter and 1/2-inch diameter liquid tight conduit from the bridge motors (bank side and river side of the crane).

A Crane America crew member installed two 3/4"-rigid metal conduits from the new Human Machine Interface panel to the existing sub panel inside of the cab.

**Miscellaneous work:**

Randy Owens, Crane America Superintendent, and Sergio Vivar visited the Gantry Crane (Folsom) to document the card error message and the Light Emitting Diode lights displayed on the different cards/modules in the VFD cabinet. Within 5 minutes of powering on the crane, the crane tripped off and displayed the card error message. Owens documented the LED lights on the modules before the transmitter was turned on, after the transmitter was turned on and frequency detected after the mainline was pulled in (main power turned to the on position and all is operational and working) and after the card error was received. This information will be forwarded to Magnetek for their interpretation and instruction on correcting the deficiency.

Crane America sealed the openings in the gutter box installed along the bank side of the bridge crane. Due to existing conduits being removed and no longer needed, a crew member covered the openings used to install the existing conduits to the gutter box.



View of Crane America removing the bridge motors rotor system to change the position

Contract No. R10PC20196

Specification No. 20-C0769

Control Upgrade and Modernization of the Gantry Crane at Nimbus Powerplant–American River

Division, Folsom Unit, Central Valley Project, California

Crane America Services, Inc., Livermore, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	88.8%
Contractor Earnings:	March	\$0
	Previous	\$456,650.16
	Total to Date	\$456,650.16

MPCO Noncontract Costs

1 <sup>st</sup> Quarter Expenditures:
2 <sup>nd</sup> Quarter Expenditures:
3 <sup>rd</sup> Quarter Expenditures:
4 <sup>th</sup> Quarter Expenditures:
FY 12 Cumulative Total:
FY 12 Budgeted:
Amount Remaining:
Percent Remaining:

Note: Costs are included in costs of Contract No. R10PC20197, Control Upgrade and Modernization of the Gantry and Bridge Cranes at the Folsom Dam and Powerplant.

Area Office Project Management

Project Manager: Brian Zewe, CC-607A

Office Engineering

Contract Administrator: Madelyn Giles, MPCO-210

No invoices were received this period. The next invoice will be the final invoice.

The substantial completion date was June 23, 2011.

The only contract work remaining is for the contractor to submit final data.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Todd Dooley, MPCO-314

Number of Contract Employees:

Work performed: Site work was completed in June 2011.

Contract No. R10PC20859

Specification No. None

Folsom Dam and Powerplant Site Security System—Central Valley Project, California

Troholz Technologies, Inc., Rocklin, CA

Work Performed:	March	0%
	Time Elapsed	83.3%
	Work Completed	82.3%
Contractor Earnings:	March	\$0
	Previous	\$5,038,463.08
	Total to Date	\$5,253,426.44
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$16,862.00
	2 <sup>nd</sup> Quarter Expenditures:	\$51,372.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$68,234.00
	FY 12 Budgeted:	\$178,100.00
	Amount Remaining:	\$109,866.00
	Percent Remaining:	61.69%

Area Office Project Management

Project Manager: Bill Vanderwaal, MPCO-122

Invoice 28 was received, approved, and forwarded to Denver, Colorado, this report period. It was not for work done in this pay period, but for work done through February 21, 2012.

Office Engineering

Contract Administrator: Kevin Jacobs, MPCO-214

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Juan Espinosa

Number of Contract Employees: 7

Work performed:

Administration Building and Back-up Control Center

The contractor's crew continued programming and testing the access control system. The crew continue with the troubleshooting the intrusion-detection system.

East Vehicle Barrier Civil, Electrical and Conduit Installation:

The contractor's crew continued installing the roadway sensor's conduits along both sides of the east vehicle barrier roadway.

The contractor's crew began installing the Stop and Go Red/Green light emitting diode traffic lights on both sides of the east vehicle barrier roadway.

Modification 3, Identification Number 11.4, Folsom entrance gate:

Subcontractor, Fence Corp, began installing the drop arm Gates at the Folsom Dam K12 roadway barriers entrance. Fence Corp installed the K-12 safety loops and conducted a test on the K-12 gate system

Subcontractor, Crusader Fence Company, began installation of the entrance gate to the Folsom Dam roadway. The crew installed the fence post with the fence fabric.

Note: at the entrance gate one of the posts had to be relocated 18 inches from the original location to avoid the existing utility duct bank running along the roadway.

Security Control Center:

The contractor's technician continued working on the Security Control Center building security system.

**LBAO**

Contract No. R10PC20211  
Specification No. 20-C0767

Prosser Creek Dam Road Improvements–Washoe Project–Stampede Division–California  
Spectrum Services Group, Inc., Sacramento, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	96.0%
Contractor Earnings:	March	\$0
	Previous	\$385,427.30
	Total to Date	\$385,427.30
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$6,517.00
	2 <sup>nd</sup> Quarter Expenditures:	\$12,469.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$18,986.00
	FY 12 Budgeted:	\$13,875.00
	Amount Remaining:	-\$5,111.00
	Percent Remaining:	-36.84%

Area Office Project Management

Project Manager: Locke Hahne, LO-400

Office Engineering

Contract Administrator: John Zimmerman, MPCO-230

No invoices were received this period. The contractor has fulfilled all contract obligations and is preparing the Release of Claims and final invoice.

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: Mike Rondoni, MPCO-319

Number of Contract Employees: 0

Work performed: The substantially complete date was September 13, 2011.

Contract No. R11PC20158  
Specification No. 20-C0777  
Stampede Powerplant and Switchyard Recoatings–Stampede Dam–Stampede Division–  
California  
Farr Construction Corporation, Sparks, NV

Work Performed:	March	0%
	Time Elapsed	61.3%
	Work Completed	0%
Contractor Earnings:	March	\$0
	Previous	\$0
	Total to Date	\$0
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$2,114.00
	2 <sup>nd</sup> Quarter Expenditures:	\$5,114.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$7,228.00
	FY 12 Budgeted:	\$25,195.00
	Amount Remaining:	\$17,967.00
	Percent Remaining:	71.31%

Area Office Project Management  
Project Manager: Locke Hahne, LO-400

Office Engineering  
Contract Administrator: Amber Pierce, MPCO-205

No invoices were received this period.

Field Engineering  
Construction Manager: Reynaldo Garcia, MPCO-310  
Construction Representative: Mike Rondoni, MPCO-319

Number of Contract Employees: 0

Work performed: No work was performed because it requires warmer weather (summertime).

**NCAO**

Contract No. R10PC20746  
Specification No. 20-C0700  
Coleman National Fish Hatchery Water Intakes Rehabilitation–Shasta Division–Central Valley  
Project, California  
Shimmick Construction, Inc., Sacramento, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	97.8%
Contractor Earnings:	March	\$0
	Previous	\$7,915,099.25
	Total to Date	\$7,915,099.25
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$99
	2 <sup>nd</sup> Quarter Expenditures:	\$7,454.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$7,553.00
	FY 12 Budgeted:	\$7,000.00
	Amount Remaining:	-\$553.00
	Percent Remaining:	-7.90%

Area Office Project Management  
Project Manager: Hank Herrington, NC-210

Office Engineering  
Contract Administrator: Kevin Jacobs, MPCO-214

No invoices were received this period.  
The contractor has only to complete final submittals.

Field Engineering  
Construction Manager: Randy Wyatt, MPCO-305  
Construction Representative: Daniel Pavone, MPCO-333

Number of Contract Employees: 0

Work performed: Site work is completed.

Contract No. R10PC20744  
Specification No. 20-C0712  
J.F. Carr Power Plant, Generator G1 and G2 Rewinds–NCAO–Shasta Power Plant–Sacramento  
River Division–Central Valley Project California  
National Electric Coil, Inc., Columbus, OH

Work Performed	March	17.3%
	Time Elapsed	100%
	Work Completed	96.5%
Contractor Earnings	March	\$2,631,607.21
	Previous	\$12,038,344.04
	Total to Date	\$14,669,951.25
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$69,757.00
	2 <sup>nd</sup> Quarter Expenditures:	\$118,436.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$188,193.00
	FY12 Budgeted:	\$212,050.00
	Amount Remaining:	\$23,857.00
	Percent Remaining:	11.25%

Area Office Project Management  
Program Manager: John Dotter, NC-261

Office Engineering  
Contract Administrator: Kevin Jacobs, MPCO-214

Invoice 17 was received, approved, and forwarded to Denver, Colorado, this report period

Field Engineering  
Construction Manager: Steve Holmes, MPCO-320  
Construction Representative: Frank Medberry, MPCO-341

Number of Contract Employees: 15

Worked Performed:

The contractor installed the equalizer bars and painted the stator and rotor.

The AC Hi-Post, DC Ramp and Megger testing were completed on the unit and the results sent to TSC for review.

The contractor completed the rewind work with the exception of the rotor balancing and commissioning.

The current transformer (CT) mod work was delayed until the fall of 2012.

This will be the last report for this contract until the rotor balancing and commissioning work resumes.

Contract No. R09PC20126

Specification No. 20-C0727

J.F. Carr Penstock Relining–NCAO, Shasta Power Plant–Sacramento River Division–Central Valley Project, California

Extreme Coatings, Inc., Pasco, WA

Work Performed	March	0%
	Time Elapsed	93.0%
	Work Completed	97.0%
Contractor Earnings	March	\$0
	Previous	\$2,871,774.61
	Total to Date	\$2,871,774.61
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$17,355.00
	2 <sup>nd</sup> Quarter Expenditures:	\$941.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$18,296.00
	FY 12 Budgeted:	\$81,740.00
	Amount Remaining:	\$63,444.00
	Percent Remaining:	77.62%

Area Office Project Management

Program Manager: Israel Patterson

Office Engineering

Contract Administrator: Kevin Jacobs

No invoices were received this period.

Field Engineering

Construction Manager: Steve Holmes

Construction Representative: Mike House

Number of Contract Employees: 0

Work performed:

No site work was performed this period.

Contract No. R10PC20R11  
Specification No. 20-C0730  
Red Bluff Pumping Plant and Fish Screen, Pumps and Motors–Sacramento River Division–  
Sacramento Canals Unit–Central Valley Project, California  
MWI Corporation, Deerfield Beach, FL

Work Performed	March	0%
	Time Elapsed	100%
	Work Completed	98.4%
Contractor Earnings	March	\$0
	Previous	\$6,851,884.00
	Total to Date	\$6,851,884.00
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	
	2 <sup>nd</sup> Quarter Expenditures:	
	3 <sup>rd</sup> Quarter Expenditures:	
	4 <sup>th</sup> Quarter Expenditures:	
	FY12 Cumulative Total:	
	FY12 Budgeted:	
	Amount Remaining:	
	Percent Remaining:	

Note: Costs are included in costs of Contract No. R10PC10R33, Red Bluff Pumping Plant and Fish Screen.

Area Office Project Management  
Project Manager: Bill Vanderwaal

Office Engineering  
Contract Administrator: Kevin Jacobs, MPCO-214

This is a supply contract.  
Liquidated damages are being assessed starting July 31, 2011.  
No invoices were received this period.

Field Engineering  
Construction Manager: Randy Wyatt  
Construction Representative: None

Number of Contract Employees: Not applicable as this is a supply contract.

Work Performed:  
All pumps and motors have been delivered to the site. Installation of pumps has not yet begun.

Contract No. R10PC20R09  
Specification No. 20-C0740  
Red Bluff Pumping Plant and Fish Screen, Landfill Excavation and Canal, Siphon and Access  
Bridge–Sacramento River Division–Sacramento Canals Unit–Central Valley Project, California  
West Bay Builders, Red Bluff, CA

Work Performed	March	0%
	Time Elapsed	100%
	Work Completed	95.7%
Contractor Earnings	March	\$0
	Previous	\$22,275,999.59
	Total to Date	\$22,275,999.59
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	
	2 <sup>nd</sup> Quarter Expenditures:	
	3 <sup>rd</sup> Quarter Expenditures:	
	4 <sup>th</sup> Quarter Expenditures:	
	FY12 Cumulative Total:	
	FY12 Budgeted:	
	Amount Remaining:	
	Percent Remaining:	

Note: Costs are included in costs of Contract No. R10PC20R33, Red Bluff Pumping Plant and Fish Screen.

Area Office Project Management

Project Manager: Bill Vanderwaal, MPCO-122

Office Engineering

Contract Administrator: Kevin Jacobs, MPCO-214

No invoices were received this period.

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: Daniel Pavone, MPCO-333

Number of Contract Employees: 0

Work Performed:

No work was performed as site work was completed in January 2012. Substantially complete date was December 2, 2011.

Contract No. R10PC20R33

Specification No. 20-C0752

Red Bluff Pumping Plant and Fish Screen–Sacramento River Division–Sacramento Canals Unit–  
Central Valley Project, California

Balfour Beatty Infrastructure, Inc., Red Bluff, CA

Work Performed	March	0%
	Time Elapsed	80.0%
	Work Completed	88.1%
Contractor Earnings	March	\$0
	Previous	\$62,237,608.64
	Total to Date	\$66,973,093.11
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$644,209.00
	2 <sup>nd</sup> Quarter Expenditures:	\$424,399.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$1,068,608.00
	FY12 Budgeted:	\$1,944,845.00
	Amount Remaining:	\$876,237.00
	Percent Remaining:	45.05%

Note: Costs of Contract No. R10PC20R09, Red Bluff Pumping Plant and Fish Screen, Landfill Excavation and Canal, Siphon and Access Bridge, and Contract No. R10PC20R11, Red Bluff Pumping Plant and Fish Screen, Pumps and Motors, are included in these costs.

Area Office Project Management

Project Manager: Bill Vanderwaal

Office Engineering

Contract Administrator: Kevin Jacobs, MPCO-214

Invoice 21 was received, approved, and forwarded to Denver, Colorado, this report period. It was not for work done this period but for work done through February 25, 2012.

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: Dave Derk, MPCO-334 and Luke Smith, MPCO-309

Number of Contract Employees: 107

Work Performed

The following work was performed:

All tie backs started last month were completed.

The dredge pipe was started around the pumping plant access road

Conco Pumping placed the controlled low-slump material along the outside of the canal transition wall using a pump truck.

Workers started the dredge floating dock stair access.

Fish Screen Structure: Crews continued installing the tuning baffles, sediment jetting piping, fish screen cleaner system, and cat walk and handrail. Concrete repairs and grouting where required under equipment. Crews test fit the fish screens and solid panels in the guides and started installing the screens and panels. The fish screen cleaners operational check was performed this month.

Pumping Plant: Workers completed concrete repairs in the sump areas. Workers installed all the trash racks on the upstream face of the pumping plant. All motors were installed on the pump pedestals under the supervision of an installation engineer from the pump manufacture. Installation of discharge pipes, butterfly valves, and flap gate was completed. Grouting and bracing was started for the butterfly valve bonnet tubes and flange supports under the pipes in the afterbay. 8 of the 9 valve actuators were installed. Grating over the butterfly valve openings was started and the grating for the stop logs was installed.

Switchyard: The contractor completed installation of the cable trench and started form work for the generator pad. Crews continued working on the oil containment system around the transformer pads.

Siphon: Crews completed installation of the trash racks in the siphon inlet.

Canal and Canal Transition: All walers and bracing was completed and crews completed the formwork for the individual structural concrete placements in the canal transition area. Crews placed all the concrete in the canal transition. Bureau of Reclamation personnel along with the contractor's testing laboratory, Mid Pacific Engineering, tested and took break cylinders.

Subcontractor Meyers Earthwork: Meyers Earthwork currently has 5 employees onsite.  
Forebay: Meyers earthwork workers continued the excavation while the weather allowed.

Site work: Meyers Earthwork workers installed some of the drains and rip rap pads along the forebay and canal.

Canal and Canal Transition: Meyers Earthwork workers started backfilling the canal and canal transition area.

Switchyard: Meyers Earthwork workers continued the gravel surfacing and backfill around the switchyard equipment.

Subcontractor Harris Salinas Rebar: Harris Salinas Rebar currently has 4 employees onsite. Harris Salinas workers installed the reinforcing steel for the canal and canal transition structural concrete.

Central Sierra Electric: Central Sierra Electric currently has 10 employees' onsite.  
Site Work: One Central Sierra electrician and an equipment operator continued the conduit duct bank run from the boat dock to the pumping plant. Central Sierra Electric workers

started the concrete-encased duct bank between the pumping plant and switchyard, and installed the pull boxes, conduits with ground and backfilled.

Fish Screen: Central Sierra Electric electricians continued pulling control and power conductors between the pumping plant equipment and the fish screen equipment. They started testing the conductors.

Pumping Plant: Central Sierra Electric electricians installed the Variable Frequency Drives for the pump motors, cathodic protection conduits, motor conduits, and lower voltage switchgear. They started installing the wire way and medium voltage switchgear. They continued conduit runs between the cable tray and electrical equipment and panels.

Switchyard: Central Sierra Electric workers continued installing the grounding grid in the switchyard along with making the terminations at the equipment.

Siphon: Central Sierra Electric workers installed the cathodic protection conduits on the siphon trash rack.

Subcontractor FD Thomas: FD Thomas has 10 painters onsite. The painters touched-up all metal work in the fish screen.

Subcontractor Harreld's Hi Voltage: Hareld's Hi Voltage has 3 workers onsite. Hareld's Hi Voltage workers finished installing the bus support structures, 2-inch diameter aluminum bussing, disconnect switches, combined current voltage transformers, and circuit breakers. They installed all jumpers and the ground mast.

Subcontractor Corrpro: Corrpro has two workers onsite. Two Corrpro technicians continued installation of the cathodic protection systems in the pumping plant and finished installation of the cathodic protection on the siphon structure.

Subcontractor Transformer Testing and Repair, Inc: Transformer Testing and Repair has 2 Workers onsite. These workers processed the oil in the two high voltage transformers in the switchyard and took samples.

Subcontractor Cross Electric: Cross Electric has 1 worker onsite. The worker installed the conduit runs between the thermostats and AC units inside the control building.

Subcontractor Fresno Valve and Castings: Fresno Valve and Castings has 1 worker onsite. The technician adjusted and tested the flap gates on the discharge pipes in the afterbay.

Subcontractor CON-VEY: CON-VEY has 1 worker onsite. The worker tested the fish screen cleaners.

Apparatus Testing and Engineering: Apparatus Testing and Engineering has 1 worker onsite. The technician high pot tested all 9 motors.



Balfour Beatty Infrastructure Workers installing an 84-inch butterfly valve actuator. The motors are in the background.  
Red Bluff Pumping Plant and Fish Screen

Contract No. R10PC20102  
Specification No. 20-C0755  
Spring Creek Powerplant Generators G1 and G2 Rewinds–NCAO–Central Valley Project,  
California  
Andritz Hydro Corp., Charlotte, NC

Work Performed:	March	0%
	Time Elapsed	94.4%
	Work Completed	63.5%

Contractor Earnings:	March	\$0
	Previous	\$3,801,117.15
	Total to Date	\$3,801,117.15

MPCO Noncontract Costs-Unit 1	1 <sup>st</sup> Quarter Expenditures:	\$34,398.00
	2 <sup>nd</sup> Quarter Expenditures:	\$48,523.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$82,921.00
	FY12 Budgeted:	\$85,300.00
	Amount Remaining:	\$2,379.00
	Percent Remaining:	2.79%

MPCO Noncontract Costs-Unit 2	1 <sup>st</sup> Quarter Expenditures:	\$5,409.00
	2 <sup>nd</sup> Quarter Expenditures:	\$3,561.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$8,970.00
	FY12 Budgeted:	\$15,000.00
	Amount Remaining:	\$6,030.00
	Percent Remaining:	40.20%

Area Office Project Management  
Project Manager: Joe Ascoli, NC-650

Office Engineering  
Contract Administrator: Kevin Jacobs, MPCO-214  
Construction Representative: Frank Medberry, MPCO-327

No invoices were received this period.

A modification is in the works to change the outage schedule and change the contract completion date from May 2, 2012, to June 28, 2013.

Field Engineering  
Construction Manager: Henry Garcia, MPCO-310  
Construction Representative: Sergio Vivar, MPCO-311, Sean Frische, MPCO-317

Number of Contract Employees: 4

Work performed:

Installation of the current transformers (CT's) and associated bus work was completed. The unit was DC Ramp tested per the contract requirement and to verify the recently installed work.

No work will be performed onsite until rotor balancing is done (tentatively scheduled in late April) and no further reports will be written until that work is started.

Contract No. R10PC20185

Specification No. 20-C0762

Whiskeytown Lake Temperature Control Curtain–Trinity River Division–Central Valley Project,  
California

Erick Ammon, Inc., Anderson, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	99.0%
Contractor Earnings:	March	\$0
	Previous	\$2,992,214.00
	Total to Date	\$2,992,214.00
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$4,814.00
	2 <sup>nd</sup> Quarter Expenditures:	\$8,182.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$12,996.00
	FY12 Budgeted:	\$13,000.00
	Amount Remaining:	\$4.00
	Percent Remaining:	0.03%

Area Office Project Management

Project Manager: Bob Gee, NC-230

Office Engineering

Contract Administrator: John Zimmerman, MPCO-230

No invoices were received this period.

During this period factors related to liquidated damages were being considered to determine if liquidated damages should be applied. Once a determination is made the final modification incorporating extra dive days will be executed.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: Steve Holmes, MPCO-320

Number of Contract Employees: 0

Work performed: The substantially complete date was June 17, 2011.

Contract No. R11PC20124  
Specification No. 20-C0780  
Coleman National Fish Hatchery Barrier Weir Site Modifications–Shasta Division–Central  
Valley Project, California  
Contractor Services Group, Inc., West Sacramento, CA

Work Performed:	March	1.4%
	Time Elapsed	48.4%
	Work Completed	1.4%
Contractor Earnings:	March	\$12,401.00
	Previous	\$0
	Total to Date	\$12,401.00
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$8,993.00
	2 <sup>nd</sup> Quarter Expenditures:	\$16,189.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$25,182.00
	FY 12 Budgeted:	\$122,955.00
	Amount Remaining:	\$97,773.00
	Percent Remaining:	79.52%

Area Office Project Manager  
Jim Goodwin, MP-200

Office Engineering  
Contract Administrator: Ryan Hennigan, MPCO-211

Invoice 1, bonds payment, was received, approved, and forwarded to Denver, Colorado, this report period.  
Notice to proceed was issued on October 13, 2011.

Field Engineering  
Construction Manager: Randy Wyatt, MPCO-305  
Construction Representative: Fernando Pavone, MPCO-333

Number of Contract Employees:

Work performed:  
Site work has not begun and will begin in June 2012.

Contract No. R10PC20025

Specification No. None

Coleman Fish Hatchery Water Intakes Vegetation Replacement and Monitoring–Shasta

Division–Central Valley Project, California

Tehama Environmental Solutions, Inc., Red Bluff, CA

Work Performed:	March	0%
	Time Elapsed	29.8%
	Work Completed	85.6%
Contractor Earnings:	March	\$0
	Previous	\$606,142.55
	Total to Date	\$606,142.55
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$2,445.00
	2 <sup>nd</sup> Quarter Expenditures:	\$1,241.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$3,686.00
	FY 12 Budgeted:	\$6,000.00
	Amount Remaining:	\$2,314.00
	Percent Remaining:	38.57%

Area Office Project Management

Project Manager: Hank Herrington, NC-210

No invoices were received this period.

Office Engineering

Contract Administrator: Jacquelyn Olds, MPCO-202

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: Daniel Pavone, MPCO-333

Number of Contract Employees: 0

Work performed: The contractor's current activity consists of maintaining vegetation it planted in 2010.

Contract No. R11PC20087

Specification No. None

Coleman National Fish Hatchery–Water Intake No. 3 Repairs to Fish Screen–Battle Creek

Division–Central Valley Project, California

Intralox, LLC, Harahan, LA

Work Performed:	March	100%
	Time Elapsed	100%
	Work Completed	100%
Contractor Earnings:	March	\$68,459.00
	Previous	\$0
	Total to Date	\$68,459.00
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$2,427.00
	2 <sup>nd</sup> Quarter Expenditures:	\$2,424.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY 12 Cumulative Total:	\$4,851.00
	FY 12 Budgeted:	\$3,088.00
	Amount Remaining:	-\$1,763.00
	Percent Remaining:	-57.09%

Area Office Project Management

Project Manager: Kevin Jacobs, MPCO-214

Office Engineering

Contract Administrator: Ryan Hennigan, MPCO-211

Invoice 1 (Final) was received, approved, and forwarded to Denver, Colorado, this report period. It was not for work done in this pay period, but for work done through July 13, 2011.

Although all work was completed and considered substantially complete on July 13, 2011, payment was delayed due to the contractor needing to complete one punch list item, to fix 3 broken bolts, remains.

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: Fernando Pavone, MPCO-333

Number of Contract Employees:

Work performed: No work was performed this period.

**SCCAO**

Contract No. R10PC20R32  
Specification No. 20-C0749  
Fish Screen Structure Phase 3, Contra Costa Canal–Central Valley Project, California  
Flatiron West, Inc., Oakley, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	99.0%
Contractor Earnings:	March	\$0
	Previous	\$13,755,052.81
	Total to Date	\$13,755,052.81
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$113,975.00
	2 <sup>nd</sup> Quarter Expenditures:	\$42,366.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$156,341.00
	FY12 Budgeted:	\$148,273.00
	Amount Remaining:	-\$8,068.00
	Percent Remaining:	-5.44%

Area Office Project Management

Project Manager: John Dealy, TO-406

Office Engineering

Contract Administrator: Larry Bowman, MPCO-240

An invoice received this period but it was returned because the contractor had not submitted an acceptable updated schedule.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: John Lakovich

Number of Contract Employees: 3

Work performed:

Modification 15 – 70-foot high Radio Antenna Tower

Communication was established with the Contra Costa Water District’s security control center last month and the 14 day test period concluded on the March 12, 2012.

On March 13, 2012 programming of the trash rakes was changed from running continuously to having 18 minutes of dwell time at the “home” position after a trash rack completed a full sweep.

Tesco replaced the central processing unit for the communication programmable logic circuit to stop the intermittent communication faults.

Tesco diagnosed that 3 beam detectors were giving off false environmental alarms. The 3 beams were removed from the system in order for them to be repaired or replaced.

The contractor reset Trash Rake 1 that had stopped functioning. Other than on March 23, 2012, the rakes seemed to function properly this month.

The 1/2"-diameter galvanized wire rope on Trash Rake 1, placed into operation on March 6, 2012, has significant damage, more than on any cable currently installed.

The 7/16"-diameter galvanized steel wire rope on Trash Rake 2, placed into operation on February 27, 2012, appears to have no damage.

The 7/16"-diameter stainless steel wire rope on Trash Rake 3, placed into operation on February 27, 2012, appears to have damage.

The 7/16"-diameter galvanized steel wire rope on Trash Rake 4, placed into operation on February 27, 2012, is starting to fray.

Below is a list of cycles completed and the hours of operations of all trash rakes since March 6, 2012, recorded on March 23:

Rake 1 - 383 hrs, 5821 cycles

Rake 2 - 406 hrs, 7326 cycles

Rake 3 - 385 hrs, 7059 cycles

Rake 4 - 380 hrs, 7309 cycles

Contract No. R10PC80R23

Specification No. 20-C0761

Delta-Mendota Canal–California Aqueduct Intertie–Central Valley Project–California

Shimmick Construction Company, Inc., Tracy, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	99.3%
Contractor Earnings:	March	\$0
	Previous	\$14,908,945.87
	Total to Date	\$14,908,945.87
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$351,595.00
	2 <sup>nd</sup> Quarter Expenditures:	\$269,288.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$620,883.00
	FY12 Budgeted:	\$606,680.00
	Amount Remaining:	-\$14,203.00
	Percent Remaining:	-2.34%

Office Engineering

Contract Administrator: Ryan Hennigan, MPCO-211

No invoices were received this period.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: Phil Vanderwal, MPCO-322

Number of Contract Employees: 11

Work performed:

- Reinstallation of Victaulic Dependo-O-Lok couplers on the 48" discharge manifold pipes
- Reinstallation of heating, air conditioning, and air conditioning dampers that had been removed for adjustment
- Application of floor hardener to the pumping plant floor
- Coating of the service water and compressed air system piping
- Removal of the jib crane hoist for a manufacturer's recall
- Tests and training on the fire detection, engine generator, and flowmeter systems
- Replacement of the roof access ladder
- Investigation of a leak in the 108" pipeline
- Preliminary work on punch list items

Electrical work including powering up the switchyard on March 14<sup>th</sup>, providing power to the pumping plant on March 15<sup>th</sup>, and motor bumping, pump testing, general electrical commissioning, and troubleshooting.



The pumping plant, right and switchyard left  
Delta-Mendota Canal–California Aqueduct Intertie

Purchase Order No. R11PC20155  
Specification No.20-C0776a  
Delta Cross Channel Gate Control and Lighting Improvements–Central Valley Project,  
California  
Sierra Range Construction, Visalia, CA

Work Performed:	March	67.4%
	Time Elapsed	76.6%
	Work Completed	71.2%
Contractor Earnings:	March	\$85,648.74
	Previous	\$2,534.00
	Total to Date	\$88,182.74
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$10,363.00
	2 <sup>nd</sup> Quarter Expenditures:	\$24,030.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$34,393.00
	FY12 Budgeted:	\$129,330.00
	Amount Remaining:	\$94,937.00
	Percent Remaining:	73.41%

Area Office Project Management  
Project Manager: Warren Feng, TO-438

Office Engineering  
Contract Administrator: Ryan Hennigan, MPCO-211

Invoice 2 was received, approved, and forwarded to Denver, Colorado, this report period.

Field Engineering  
Construction Manager: Henry Garcia, MPCO-310  
Construction Representative: Henry Garcia, MPCO-310

Number of Contract Employees: 4

- Work performed:
- Completing installation of the entire rigid conduit including the rigid conduit for the east and west sign lights.
  - Installation of the new control panels
  - Installation of the new disconnect switch.
  - Pulling all the new wire in the newly installed rigid conduit
  - Making connections after testing continuity on all the wire.
  - Installation of the primary limit switches on the gear drives.
  - Testing of the newly installed equipment and calibration of the primary limit switches.



This Photo shows the Gate #1 in the raised position. The photo is taken looking south west.

Contract No. R11PC20185  
Specification No. 20-C0778  
Tracy 13.8kV Switchgear/Breaker Replacement–Tracy Pumping Plant and Substation–Central Valley Project, California  
Contra Costa Electric Corp., Martinez, CA

Work Performed:	March	0%
	Time Elapsed	13.6%
	Work Completed	7.4%
Contractor Earnings:	March	\$0
	Previous	\$769,621.15
	Total to Date	\$769,621.15
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$26,018.00
	2 <sup>nd</sup> Quarter Expenditures:	\$8,349.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$34,367.00
	FY12 Budgeted:	\$475,432.00
	Amount Remaining:	\$441,065.00
	Percent Remaining:	92.77%

Area Office Project Management  
Project Manager: Warren Feng, TO-438

Office Engineering  
Contract Administrator: Amber Pierce, MPCO-205

This is a design-build contract.

No invoices were received this period.

Field Engineering  
Construction Manager: Steve Holmes, MPCO-320  
Construction Representative: Not yet determined

Number of Contract Employees: 0

Work performed: The contractor was scheduled to begin onsite work in February 2012, but this has been changed to February 2013.

# Regional

Contract No. R10PC20005  
Specification No. 20-C0717  
North Fork Screens and Ladders–Battle Creek Salmon and Steelhead Restoration Project,  
California  
Syblon Reid Contractors, Folsom, CA

Work Performed:	March	0%
	Time Elapsed	90.7%
	Work Completed	97.1%
Contractor Earnings:	March	\$0
	Previous	\$11,912,247.39
	Total to Date	\$11,912,247.39
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$119,955.00
	2 <sup>nd</sup> Quarter Expenditures:	\$31,593.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$151,548.00
	FY12 Budgeted:	\$187,610.00
	Amount Remaining:	\$36,062.00
	Percent Remaining:	19.22%

Area Office Project Management  
Project Manager: Mary Marshall, MP-203

Office Engineering  
Contract Administrator: Kent Perkes, MPCO-225

No invoices were received this period.

Field Engineering  
Construction Manager: Randy Wyatt, MPCO-305  
Construction Representative: John Pospishil, MPCO-321

Number of Contract Employees: 0

Work performed: The contractor completed all contract site work in December 2011, and demobilized its field office.

Contract No. R10PC20R48

Specification No. 20-C0741

Gray Lodge Wildlife Area and Pixley National Wildlife Refuge Wetlands–Groundwater Well  
Construction–ARRA Project No. 28.113–Central Valley Project–East Side Division, California  
Sansone Company, Inc., San Luis Obispo, CA

Work Performed:	March	11.7%
	Time Elapsed	100%
	Work Completed	97.0%
Contractor Earnings:	March	\$575,385.97
	Previous	\$4,215,884.62
	Total to Date	\$4,791,270.59
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$48,128.00
	2 <sup>nd</sup> Quarter Expenditures:	\$30,301.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$78,429.00
	FY12 Budgeted:	\$84,878.00
	Amount Remaining:	\$6,449.00
	Percent Remaining:	7.60%

Area Office Project Management

Project Manager: Sonya Nechanicky, MP-410

Office Engineering

Contract Administrator: Laurie Larson, MPCO-222

Invoice 10 was received, approved, and forwarded to Denver, Colorado, this report period.

We are dealing with issues with the contractor regarding coatings, Pacific Gas and Electric, and equipment.

Field Engineering

Construction Manager: John E. Nelson, MPCO-328

Construction Representative: Richard T. Nead, MPCO-342

Number of Contract Employees: 0

Work performed:

Pixley:

Hansen Painting & Decorating: Apply Tab. 3 Coating on above ground discharge head, pipe, and accessories wells 1 and 2

Telstar instruments Inc.: Complete motor heater circuitry and verify heater operation.

Terminate motor cutoff switch.

Field pump test:

Maggiora Bros. Drilling: Complete field pump testing on wells 1 and 2, recording all required monitoring points and preparing to submit data.

Gray Lodge:

Maggiora Bros. Drilling: Completed installation of pump, column, Shaft, discharge head and motors at all of the Gray Lodge well sites.

Future Work: Pixley: Complete punch list items.

Gray Lodge: Install VFD's, complete electrical, and perform field pump testing on wells recording all required monitoring points and preparing to submit data.

Contract No. R10PC20R39

Specification No. 20-C0744

Volta Wasteway Refuge Level 2 Diversification Phase I Project—ARRA Project No. 28.129—

Central Valley Project, California

Sansone Company Inc., San Luis Obispo, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	99.5%
Contractor Earnings:	March	\$0
	Previous	\$1,704,452.80
	Total to Date	\$1,704,452.80
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$4,347.00
	2 <sup>nd</sup> Quarter Expenditures:	\$1,283.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$5,630.00
	FY12 Budgeted:	\$26,638.00
	Amount Remaining:	\$21,008.00
	Percent Remaining:	78.86%

Area Office Project Management

Project Manager: Linda Colella, MP-410

Office Engineering

Contract Administrator: Laurie Larson, MPCO-222

No invoices were received this period.

All submittals complete, contractor is submitting final REA.

The substantially complete date was August 12, 2011.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: John Nelson, MPCO-328

Number of Contract Employees: 0

Work performed:

No onsite work was performed as all site work has been completed.

Contract No. R10PC20R42  
Specification No. 20-C0746  
Hydropower Facility Modifications-Stage 1–Battle Creek Salmon and Steelhead Restoration  
Project, California  
RTA Construction/Ray Toney JV, Redding, CA

Work Performed:	March	3.5%
	Time Elapsed	63.1%
	Work Completed	50.6%
Contractor Earnings:	March	\$278,243.41
	Previous	\$3,726,831.21
	Total to Date	\$4,005,074.62
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$190,690.00
	2 <sup>nd</sup> Quarter Expenditures:	\$181,739.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$372,429.00
	FY12 Budgeted:	\$697,837.00
	Amount Remaining:	\$325,408.00
	Percent Remaining:	46.63%

Project Management

Project Manager: Mary Marshall, MP-203

Office Engineering

Contract Administrator: Kent Perkes, MPCO-225

Invoice 13 was received, approved, and forwarded to Denver, Colorado, this report period.

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: John Pospishil, MPCO-321

Number of Contract Employees: 18

Work performed:

Penstock Bypass Pipeline: RTA continued installing reinforced concrete pipe for the 66-inch bypass pipeline. It started excavation and installation of pipe from station 21+31.72 to station 19+ 91.26 and placed controlled low strength material from station 21+31.72 to station 19+91.26.

The contractor finished placing rebar and concrete for manholes at bypass pipeline stations 37+33.00 and 28+33.00.

Penstock Bypass Chute: Subcontractor, Muse Concrete, placed concrete for Chute Slabs 14 and 25 and Walls 12 and 23.

Subcontractor, Camblin Steel, finished placing reinforcement for Walls 12 and 24, and Slabs 14 and 26.

During the last two weeks of the period the contractor did not perform construction work and performed Stormwater Pollution Prevention Plan monitoring due to rain.



RTA installing 66-inch RCP

Purchase Order No. R10PX20R45  
Specification No. 20-C0750  
Drought Relief, Well Enhancements–ARRA Project No. 28.000–Central Valley Project  
California  
Hydro Resources–West, Inc., Winnemucca, NV

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	43.9%
Contractor Earnings:	March	\$0
	Previous	\$555,369.60
	Total to Date	\$555,369.60
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	
	2 <sup>nd</sup> Quarter Expenditures:	
	3 <sup>rd</sup> Quarter Expenditures:	
	4 <sup>th</sup> Quarter Expenditures:	
	FY12 Cumulative Total:	
	FY12 Budgeted:	
	Amount Remaining:	
	Percent Remaining:	

Note: Costs are included in costs of Contract No. R10PX20R54, Drought Relief, Well Enhancements.

Area Office Project Management  
Project Manager: Kevin Clancy, MP-410

Office Engineering  
Contract Administrator: Ryan Hennigan, MPCO-211

No invoices were received this period.

Field Engineering  
Construction Manager: John Nelson, MPCO-328  
Construction Representative: Mike McCarty, MPCO-308

Number of Contract Employees: 2

Work performed:  
Well 1.16, Tulare irrigation district  
The contractor installed the test pump, column pipe, tube, shaft, discharge head, and motor into the well which had been rehabilitated at the owners expense, then set up the drive unit.

The contractor then performed pumping and surging for additional development, then completed a step tests and constant rate test for sizing of the permanent equipment.

Purchase Order No. R10PX20R54  
Specification No. 20-C0750  
Drought Relief, Well Enhancements–ARRA Project No. 28.000–Central Valley Project Don  
Pedro Pump, LLC–Turlock, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	86.5%
Contractor Earnings:	March	\$0
	Previous	\$1,084,249.60
	Total to Date	\$1,084,249.60
MPCO Noncontract Costs	1st Quarter Expenditures:	\$20,330.00
	2nd Quarter Expenditures:	\$5,396.00
	3rd Quarter Expenditures:	\$0.00
	4th Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$25,726.00
	FY12 Budgeted:	\$253,034.00
	Amount Remaining:	\$227,308.00
	Percent Remaining:	89.83%

Area Office Project Management  
Project Manager: Kevin Clancy, MP-410

Office Engineering  
Contract Administrator: Ryan Hennigan, MPCO-211

No invoices were received this period.

Field Engineering  
Construction Manager: John Nelson, MPCO-328  
Construction Representative: Mike McCarty, MPCO-308

Number of Contract Employees: 0

Work performed:  
No work was performed. Contractor is waiting for PG&E to provide power.

Contract No. R10PC20R80  
Specification No. 20-C0759  
Drought Relief–Construction of New Wells–ARRA Project No. 28.002–California  
Layne Christensen Company, Fontana, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	70.3%
Contractor Earnings:	March	\$0
	Previous	\$11,393,882.95
	Total to Date	\$11,393,882.95
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$78,267.00
	2 <sup>nd</sup> Quarter Expenditures:	\$74,373.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$152,640.00
	FY12 Budgeted:	\$457,070.00
	Amount Remaining:	\$304,430.00
	Percent Remaining:	66.60%

Area Office Project Management

Project Manager: Kevin Clancy, MP-410

Office Engineering

Contract Administrator: Laurie Larson, MPCO-222

No invoices were received this period.

Field Engineering

Construction Manager: John E. Nelson, MPCO-328

Construction Representative: Quint I. McCabe, MPCO-304

Number of Contract Employees: 8

Work performed:

Wells 14, 55, 80, & 91 Del Puerto Water District.

Wells 105a & 105b Tranquility Irrigation District

Well 107 Fresno Slough Water District.

Well 120 West Stanislaus Irrigation District.

At the above mentioned sites the following phases of production were performed; Electrical Top Out, Startup Four Hour pump tests, Rewiring due to vandalism, and Scrubbing.

Wells 105a & 105b TID, 112.1, 112.2, 112.3, & 112.4 and 107 FSWD

The Electrical Top Out and Head Shaft installation was completed for these wells.

Well 120 WSID

A 4-Hour start up test was attempted but was unsuccessful due to an improper head shaft.

Well 55 DWPD

A 4-Hour start up test was attempted but was unsuccessful due to a leaking stretch nut.

Wells 14, 80, & 91 DPWD

A 4-Hour start up test was successfully performed.

Well 33.1 WSID

Scrubbing of the wells screen began on the last day of this month

Upcoming work:

Startup Servicing and Field-Testing/Monitoring in the Northern zones (DWPD, WSID, BBID)

Startup Servicing and Field-Testing/Monitoring in the Southern zones (TID, JID)

Scrub, Develop, and Test WSID Well 33.1

Repair Leaking Stretch Nut and 4-Hour Test of DPWD Well 55



LCC's crew off loading Equipment from the service truck

Contract No. R11PC20196  
Specification No. 20-C0771  
Wildcat Canal Access Road Improvements–Battle Creek Salmon and Steelhead Restoration  
Project, California  
Contractor Services Group, Inc., West Sacramento, CA

Work Performed:	March	0%
	Time Elapsed	100%
	Work Completed	100%
Contractor Earnings:	March	\$0
	Previous	\$228,238.21
	Total to Date	\$233,678.21
MPCO Noncontract Costs	1 <sup>st</sup> Quarter Expenditures:	\$34,964.00
	2 <sup>nd</sup> Quarter Expenditures:	\$19,160.00
	3 <sup>rd</sup> Quarter Expenditures:	\$0.00
	4 <sup>th</sup> Quarter Expenditures:	\$0.00
	FY12 Cumulative Total:	\$54,124.00
	FY12 Budgeted:	\$103,830.00
	Amount Remaining:	\$49,706.00
	Percent Remaining:	47.87%

Area Office Project Management  
Project Manager: Mary Marshall, MP-203

Office Engineering  
Contract Administrator: Amber Pierce, MPCO-205

Invoice 4-Final was received, approved, and forwarded to Denver, Colorado, this report period. It was not for work done in this pay period, but for work done through January 19, 2012.

Field Engineering  
Construction Manager: Randy Wyatt, MPCO-305  
Construction Representative: Dennis Edwards, MPCO-339

Number of Contract Employees: 0

Work performed: No work was performed this period.

# Contracts in Warranty Status

Office Engineering

Contract Administrator: John Zimmerman MPCO-230

R09PC20017 20-C0708 Marble Bluff Fish Handling Building Reroofing

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (5-year roof guarantee extends to March 5, 2015).

R10PC20176 20-C0713 New Melones Resource Area Building Re-roofing

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (3-year roof guarantee extends to March 25, 2013).

R10PC20032 20-C0737 New Melones Powerplant Emergency Engine Generator

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (1-year warranty extends to May 26, 2012).

R09PC20147 20-C0758 New Melones Lake Restroom Building Reroofing

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (3-year roof guarantee extends to May 20, 2014).

Contract Administrator: Amber Pierce MPCO-205

R11PC20051 No Spec. No. Coleman Intakes - Leaky Concrete Pipe Joint Repair

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed. (1-year warranty extends to May 4, 2012).

# Lab Reports

03/27/2012

U.S. Bureau of Reclamation  
Aggregate Gradation Summary

Page 1

From 02/01/2012 to 03/31/2012

Specification : 20-C0746  
 Mix Number : ALL Combined for This Specification  
 Project : Battle Creek  
 Feature : Hydropower Facility Modifications Stage 1

Sand Gradations (ASTM)

Date	Percent Passing							% -200	FINE MOD	Moist %	Spec Grav	Absorp
	No. 3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100					
Spec Max %	100.0	100.0	100.0	85.0	60.0	30.0	10.0					
Spec Min %	100.0	95.0	80.0	50.0	25.0	10.0	2.0					
02/09/2012	100.0	99.6	84.8	61.1	34.7	12.9	3.4	2.10	3.03	4.50	2.58	3.10
02/17/2012	100.0	99.8	84.8	62.5	37.8	17.5	7.0	4.30	2.91	4.50	2.58	3.10
02/23/2012	100.0	100.0	84.5	61.7	36.2	14.6	4.4	2.70	2.99	4.50	2.58	3.10
03/05/2012	100.0	99.4	79.6	54.4	29.3	11.5	3.8	2.20	3.22	4.50	2.58	3.10
03/07/2012	100.0	99.9	81.5	55.8	29.6	11.1	3.5	2.20	3.19	5.50	2.58	3.10
03/09/2012	100.0	99.9	82.9	57.6	31.0	11.8	3.6	2.20	3.13	3.50	2.58	3.10
Average	100.0	99.8	83.0	58.9	33.1	13.2	4.3	2.62	3.08	4.50	2.58	3.10
S.D.	0.0	0.2	2.2	3.4	3.6	2.4	1.4	0.85	0.12	0.63	0.00	0.00
C.O.V.	0.0	0.2	2.6	5.7	10.9	18.3	31.6	32.56	3.96	14.05	0.00	0.00

03/27/2012

U.S. Bureau of Reclamation  
Aggregate Gradation Summary

Page 2

From 02/01/2012 to 03/31/2012

Specification : 20-C0746  
Mix Number : ALL Combined for This Specification  
Project : Battle Creek  
Feature : Hydropower Facility Modifications Stage 1

Nominal Size : #4 - 1" (ASTM)

Coarse Aggregate Gradations

Date	Percent Passing					% -200	Moist %	Spec Grav	Absorp
	Screen Sizes in Inches or Sieve Size Shown								
	1 1/2"	1"	1/2"	#4	#8				
Spec Max %	100.0	100.0	60.0	10.0	5.0				
Spec Min %	100.0	95.0	25.0	0.0	0.0				
02/09/2012	100.0	99.4	35.3	3.3	2.5	0.80	1.00	2.54	3.00
02/17/2012	100.0	87.7	34.6	2.5	1.2	1.10	1.00	2.54	3.00
02/23/2012	100.0	99.2	36.5	2.7	1.8	0.90	1.00	2.54	3.00
03/05/2012	100.0	99.7	40.6	3.2	2.5	1.80	1.00	2.54	3.00
03/07/2012	100.0	97.7	44.1	20.9	1.9	1.60	1.00	2.54	3.00
03/09/2012	100.0	98.6	36.5	3.2	2.7	1.50	1.00	2.54	3.00
Average	100.0	97.1	37.9	6.0	2.1	1.28	1.00	2.54	3.00
S.D.	0.0	4.6	3.7	7.3	0.6	0.41	0.00	0.00	0.00
C.O.V.	0.0	4.8	9.7	122.5	27.2	31.72	0.00	0.00	0.00

Concrete Class: Structural Concrete  
Report of Mixes Used From 02/01/2012 to 03/31/2012

Mix Design Number: F670AFPX7  
Specification Number: 20-C0746  
Project: Battle Creek  
Feature: Hydropower Facility Modifications Stage 1

Date Time	y^3 of Conc	Percent Of					Yield Quantities per Cubic Yard										Fresh Concrete Tests					Compressive Strength Of Individual Specimens (psi)					
		Coarse Aggregate in each size					Pounds					Oz					Cem Eff	M P	Slump (ins)	UW (pcf)	W/ C+P	Grav Meth	Press Meter	3 Day	7 Day	28 Day	90 Day
Sand	CA1	CA2	CA3	CA4	Water	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4	AD#5													
02/09/2012 07:47	28.75	47.3	100.0	0.0	0.0	0.0	263	538	98	1386	1522	0	2.5	24.9	19.3	0.0	7.9	64	4.50	141.0	0.41	4.1	4.1	3170	4240	3180	4300
02/17/2012 07:25	29.75	46.8	100.0	0.0	0.0	0.0	267	540	92	1383	1547	0	3.4	25.1	19.0	0.0	8.9	52	4.75	141.8	0.42	3.5	3.8	3400	4740	3380	4860
02/23/2012 07:44	20.00	47.1	100.0	0.0	0.0	0.0	240	534	98	1380	1527	0	3.0	24.9	18.9	0.0	7.4	61	5.00	140.0	0.38	5.6	4.2	2920	3940	2900	3960
03/05/2012 07:14	32.75	47.2	100.0	0.0	0.0	0.0	259	554	94	1417	1560	0	3.1	25.5	19.7	0.0	60	3.00	143.9	0.40	2.6	2.2	3400	#####	3360	#####	
03/07/2012 09:40	14.50	57.8	100.0	0.0	0.0	0.0	237	529	92	1704	1224	0	3.0	24.8	18.4	0.0	63	2.75	140.2	0.38	5.6	4.0	2940	#####	2920	#####	
Design		47.4	100.0	0.0	0.0	0.0	280	536	95	1357	1507	0	3.1	25.2	18.9	0.0			3.00	139.8	0.44	4.0	4.0				4000
AVG.		49.2	100.0	0.0	0.0	0.0	253	539	95	1454	1476	0	3.0	25.0	19.0	0.0	8.1	60	4.00	141.4	0.40	4.3	3.7	3157	4340		
S.D.		4.8	0.0	0.0	0.0	0.0	14	9	3	141	142	0	0.3	0.3	0.5	0.0	0.8	5	1.05	1.6	0.02	1.3	0.8	220	386		
C.O.V		9.7	0.0	0.0	0.0	0.0	5.4	1.7	3.2	9.7	9.6	0.0	11.1	1.0	2.6	0.0	9.4	7.9	26.1	1.1	4.7	31.0	22.7	7.0	8.9		

Bureau.....: Required average strength = -6792 psi at 28 days. Based on 90% exceeding the design strength of 4000 psi & C.O.V. (n=36) = \*\*.\*  
 ACI.....: Required average strength = 20719 psi at 28 days (n=36)  
 CURE METHOD...: Water Tank with an Average Cure Temperature of 60 - 80 (F)

##### = Specimen not broken as of report date.

Concrete Class: Structural Concrete  
Report of Mixes Used From 02/01/2012 to 03/31/2012

Mix Design Number: F670GFPW8  
Specification Number: 20-C0746  
Project: Battle Creek  
Feature: Hydropower Facility Modifications Stage 1

Date Time	y^3 of Conc	Percent Of				Water	Cem	Yield Quantities per Cubic Yard							Fresh Concrete Tests					Compressive Strength Of Individual Specimens (psi)							
		Sand	CA1	CA2	CA3			Pounds	Oz	Cem	M	Slump	UW	W/ C+P	Grav Meth	Press Meter	Air	3 Day	7 Day	28 Day	90 Day	180 Day	1 Year				
03/09/2012																											
09:07	20.00	47.7	100.0	0.0	0.0	0.0	272	514	90	1387	1495	0	2.0	48.7	24.6	0.0	63	7.00	139.2	0.45	4.8	5.6	2970	#####	2900	#####	
Design		44.4	100.0	0.0	0.0	0.0	285	536	95	1267	1585	0	2.1	50.4	50.4	0.0		6.00	139.6	0.45	4.0	4.0				4000	
AVG.		47.7	100.0	0.0	0.0	0.0	272	514	90	1387	1495	0	2.0	48.7	24.6	0.0	0.0 63	7.00	139.2	0.45	4.8	5.6	2935				

Bureau.....: Required average strength = 4950 psi at 28 days. Based on 90% exceeding the design strength of 4000 psi & C.O.V. (Est.) = 15.0  
 ACI.....: Required average strength = 4419 psi at 28 days (n=21)  
 CURE METHOD...: Water Tank with an Average Cure Temperature of 60 - 80 (F)

##### = Specimen not broken as of report date.



Concrete Class: Structural Cast-In-Place  
Report of Mixes Used From 02/01/2012 to 03/31/2012

Mix Design Number: F740QFPX9  
Specification Number: 20-C0649A  
Project: Central Valley  
Feature: Fixed Wheel Gate Rehabilitation

Date Time	y^3 of Conc	Percent Of					Yield Quantities per Cubic Yard										Fresh Concrete Tests					Compressive Strength Of Individual Specimens (psi)							
		Coarse Aggregate in each size					Pounds					Oz					Cem Eff	M P	Slump (ins)	UW (pcf)	W/ C+P	Air Meth	Press Meter	3 Day	7 Day	28 Day	90 Day	180 Day	1 Year
Sand	CA1	CA2	CA3	CA4	Water	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4	AD#5															
02/02/2012																													
11:27	10.00	48.8	100.0	0.0	0.0	0.0	295	596	105	1390	1494	0	0.0	0.0	0.0	0.0	7.8	67	3.75	143.7	0.42	4.2	5.5	3050	4670	4610			
02/17/2012																													
07:59	6.50	46.8	100.0	0.0	0.0	0.0	278	556	101	1344	1564	0	2.1	19.6	26.2	11.9	7.5	68	3.00	142.3	0.42	5.5	5.5	2550	4220	4120			
Design		41.5	100.0	0.0	0.0	0.0	278	592	104	1201	1695	0	2.3	20.8	27.8	128.0			3.00	143.3	0.40	5.0	5.0		4000				
AVG.		47.8	100.0	0.0	0.0	0.0	287	576	103	1367	1529	0	1.1	9.8	13.1	6.0	7.6	67	3.38	143.0	0.42	4.8	5.5	2773	4405				
S.D.		1.4	0.0	0.0	0.0	0.0	12	28	3	33	49	0	1.5	13.8	16.5	8.4	0.2	1	0.53	1.0	0.00	1.0	0.0	254	275				
C.O.V		2.9	0.0	0.0	0.0	0.0	4.2	4.9	2.7	2.4	3.2	0.0	**.*	**.*	**.*	**.*	2.6	1.1	15.8	0.7	0.4	19.7	0.0	9.2	6.3				

Bureau.....: Required average strength = 4950 psi at 28 days. Based on 90% exceeding the design strength of 4000 psi & C.O.V. (Est.) = 15.0  
 ACI.....: Required average strength = 5200 psi at 28 days (n=4)  
 CURE METHOD..: Water Tank with an Average Cure Temperature of 60 - 70 (F)



Concrete Class: Lean Concrete Fill  
Report of Mixes Used From 02/01/2012 to 03/31/2012

Mix Design Number: 1534982  
Specification Number: 20-C0754  
Project: MIAD Key-Block  
Feature: Lean Concrete

Date Time	y^3 of Conc	Percent Of Coarse Aggregate in each size				Yield Quantities per Cubic Yard										Fresh Concrete Tests					Compressive Strength Of Individual Specimens (psi)								
		Sand	CA1	CA2	CA3	CA4	Water	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4	AD#5	Cem Eff	M P	Slump (ins)	UW (pcf)	W/ C+P	Grav Meth	Press Meter	3 Day	7 Day	28 Day	90 Day	180 Day	1 Year
02/16/2012																													
06:17	460.00	70.5	100.0	0.0	0.0	0.0	475	465	105	1969	829	0	0.0	0.0	0.0	0.0	0.0	4.1	58	8.00	142.3	0.83	-1.0	0.6	1300	1930			
																								1240	1910				
08:04	460.00	70.1	100.0	0.0	0.0	0.0	473	460	111	1944	834	0	0.0	0.0	0.0	0.0	0.0	4.8	58	7.75	141.5	0.83	-0.5	0.6	1450	2210			
																								1420	2200				
10:50	460.00	70.3	100.0	0.0	0.0	0.0	470	465	105	1953	830	0	0.0	0.0	0.0	0.0	0.0	4.7	64	6.75	141.6	0.82	-0.4	0.5	1440	2240			
																								1480	2110				
13:06	460.00	70.3	100.0	0.0	0.0	0.0	474	460	104	1931	820	0	0.0	0.0	0.0	0.0	0.0	4.3	65	6.75	140.4	0.84	0.2	0.6	1380	2030			
																								1320	1950				
14:45	460.00	70.4	100.0	0.0	0.0	0.0	474	460	103	1937	817	0	0.0	0.0	0.0	0.0	0.0	4.3	65	6.25	140.4	0.84	0.1	0.6	1360	1980			
																								1310	2010				
02/23/2012																													
07:27	497.50	68.9	100.0	0.0	0.0	0.0	471	452	103	1913	867	0	0.0	0.0	0.0	0.0	0.0	4.2	61	6.50	141.0	0.85	-0.1	0.6	1370	1960			
																								1390	1830				
09:24	497.50	68.9	100.0	0.0	0.0	0.0	491	456	104	1917	867	0	0.0	0.0	0.0	0.0	0.0	4.3	67	6.50	142.0	0.88	-1.5	0.6	1380	1980			
																								1360	1920				
11:13	497.50	69.0	100.0	0.0	0.0	0.0	488	452	103	1907	859	0	0.0	0.0	0.0	0.0	0.0	4.2	68	6.75	141.1	0.88	-0.8	0.6	1380	1890			
																								1310	1890				
13:03	497.50	69.0	100.0	0.0	0.0	0.0	488	457	102	1902	859	0	0.0	0.0	0.0	0.0	0.0	4.6	70	6.00	141.0	0.87	-0.8	0.6	1420	2100			
																								1490	2110				
03/02/2012																													
07:34	600.00	68.8	100.0	0.0	0.0	0.0	480	449	101	1880	855	0	0.0	0.0	0.0	0.0	0.0	4.1	57	7.50	139.4	0.87	0.5	0.4	1050	1960			
																								920	1680				
10:45	600.00	68.7	100.0	0.0	0.0	0.0	483	448	102	1885	862	0	0.0	0.0	0.0	0.0	0.0	4.2	64	7.00	140.0	0.88	0.0	0.5	1230	1830			
																								1180	1910				
14:57	600.00	68.7	100.0	0.0	0.0	0.0	487	452	106	1893	867	0	0.0	0.0	0.0	0.0	0.0	4.3	67	6.00	140.9	0.87	-0.7	0.4	1230	1910			
																								1240	2010				
16:15	600.00	68.6	100.0	0.0	0.0	0.0	484	451	102	1884	866	0	0.0	0.0	0.0	0.0	0.0	4.9	68	6.00	140.2	0.88	-0.2	0.6	1420	2190	#####		
																								1390	2220				
03/05/2012																													
07:07	660.00	71.0	100.0	0.0	0.0	0.0	479	445	100	1932	792	0	0.0	0.0	0.0	0.0	0.0	58		6.50	138.8	0.88	0.9	0.5	1330	#####			
																								1330	#####				
09:36	660.00	71.0	100.0	0.0	0.0	0.0	488	454	102	1967	807	0	0.0	0.0	0.0	0.0	0.0	64		5.50	141.4	0.88	-1.0	0.5	1480	#####			
																								1540	#####				
12:18	660.00	71.0	100.0	0.0	0.0	0.0	488	452	106	1963	803	0	0.0	0.0	0.0	0.0	0.0	73		6.00	141.2	0.87	-1.0	0.6	1340	#####			
																								1340	#####				
14:44	660.00	71.0	100.0	0.0	0.0	0.0	487	452	102	1964	805	0	0.0	0.0	0.0	0.0	0.0	74		5.00	141.1	0.88	-0.9	0.8	1580	#####			
																								1480	#####				
03/09/2012																													
07:14	995.00	71.6	100.0	0.0	0.0	0.0	473	452	102	1977	785	0	0.0	0.0	0.0	0.0	0.0	63		7.00	140.3	0.85	0.4	0.4	1270	#####	#####	#####	#####
																								1290	#####	#####	#####	#####	
09:53	995.00	71.6	100.0	0.0	0.0	0.0	473	449	101	1989	788	0	0.0	0.0	0.0	0.0	0.0	66		6.75	140.8	0.86	0.1	0.6	1390	#####			
																								1350	#####				
13:51	138.00	71.6	100.0	0.0	0.0	0.0	487	452	104	1979	786	0	0.0	0.0	0.0	0.0	0.0	72		7.00	141.1	0.88	-0.7	0.8	1310	#####			



Concrete Class: Secant Pile Mix  
Report of Mixes Used From 02/01/2012 to 03/31/2012

Mix Design Number: 1514243  
 Specification Number: C0-C0754  
 Project: MIAD KEY-BLOCK  
 Feature: SECANT PILES

Date Time	y <sup>3</sup> of Conc	Percent Of				Water	Cem	Yield Quantities per Cubic Yard							Fresh Concrete Tests					Compressive Strength Of Individual Specimens (psi)										
		Sand	CA1	CA2	CA3			CA4	Pounds	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4	AD#5	Cem Eff	M	P	Slump (ins)	UW (pcf)	W/ C+P	Grav Meth	Press Meter	3 Day	7 Day	28 Day	90 Day
02/01/2012 09:20	207.50	58.8	100.0	0.0	0.0	0.0	286	403	172	1808	1293	0	0.0	18.1	22.3	28.7	9.8	63	8.25	146.7	0.50	2.1	2.2	4450	4050	2340	3830			
02/03/2012 10:47	154.50	46.2	100.0	0.0	0.0	0.0	285	398	172	1417	1689	0	0.0	17.6	22.5	28.5	10.6	58	8.25	146.7	0.50	2.3	2.2	2370	4160	2370	4280			
02/06/2012 09:57	204.00	44.0	100.0	0.0	0.0	0.0	289	411	182	1367	1774	0	0.0	18.7	22.3	29.5	10.6	58	7.25	149.0	0.49	0.9	1.5	2590	4320	2640	4430			
02/07/2012 09:54	221.50	43.8	100.0	0.0	0.0	0.0	287	407	172	1351	1763	0	0.0	18.5	22.4	29.2	10.6	63	7.00	147.4	0.50	1.9	2.2	2480	4380	2650	4220			
02/08/2012 09:32	234.00	43.8	100.0	0.0	0.0	0.0	286	404	174	1344	1756	0	0.0	18.4	22.6	29.1	9.7	63	7.25	146.8	0.49	2.3	1.7	2410	3920	2430	3930			
02/09/2012 07:51	242.50	43.8	100.0	0.0	0.0	0.0	286	405	178	1340	1749	0	0.0	18.1	22.3	29.1	10.3	59	7.00	146.6	0.49	2.4	2.0	2590	4140	2700	4220			
02/10/2012 08:44	113.00	44.7	100.0	0.0	0.0	0.0	291	412	176	1392	1756	0	0.0	18.4	22.4	29.6	10.4	60	7.25	149.1	0.49	0.7	1.6	2670	4120	2470	4410			
02/13/2012 09:28	120.00	44.9	100.0	0.0	0.0	0.0	287	405	174	1380	1729	0	0.0	18.1	21.7	29.2	10.0	55	8.00	147.2	0.50	2.1	2.3	2440	4000	2740	4120			
02/14/2012 10:12	199.50	44.8	100.0	0.0	0.0	0.0	304	406	172	1377	1729	0	0.0	17.8	22.7	29.5	9.6	59	8.50	147.7	0.53	1.1	1.9	1870	3760	1800	4050			
02/15/2012 07:21	144.00	44.9	100.0	0.0	0.0	0.0	302	410	175	1390	1737	0	0.0	26.3	18.3	22.4	9.5	56	8.25	148.6	0.52	0.6	2.3	2440	3760	2520	4050			
02/16/2012 08:27	158.50	45.0	100.0	0.0	0.0	0.0	301	409	175	1393	1736	0	0.0	18.3	22.2	24.5	8.3	54	8.00	148.7	0.52	0.7	1.0	2100	3520	2100	3250			
02/21/2012 11:09	162.00	45.0	100.0	0.0	0.0	0.0	306	406	172	1374	1711	0	0.0	18.4	21.9	28.9	10.0	62	7.00	147.0	0.53	1.4	2.2	2520	3940	2720	4140			



Concrete Class: Secant Pile Mix  
Report of Mixes Used From 02/01/2012 to 03/31/2012

Mix Design Number: 1514243  
Specification Number: C0-C0754  
Project: MIAD KEY-BLOCK  
Feature: SECANT PILES

Date Time	y^3 of Conc	Percent Of Coarse Aggregate in each size				Yield Quantities per Cubic Yard								Cem Eff	T E M P	Fresh Concrete Tests					Compressive Strength Of Individual Specimens (psi)								
		Sand	CA1	CA2	CA3	CA4	Water	Cem	Poz	Sand	C.A.	AD#3	AEA			WRA	AD#4	AD#5	Slump (ins)	UW (pcf)	W/ C+P	Air Grav Meth	Press Meter	3 Day	7 Day	28 Day	90 Day	180 Day	1 Year
03/01/2012 08:10	128.00	46.1	100.0	0.0	0.0	0.0	297	394	178	1397	1665	0	0.0	18.0	21.5	28.4	8.1	55	8.25	145.6	0.52	2.6	2.4	2050	3190	1950	3220		
03/07/2012 09:20	186.50	45.2	100.0	0.0	0.0	0.0	317	402	177	1374	1696	0	0.0	18.0	21.9	28.6	59	59	7.75	146.9	0.55	1.1	2.0	2620	#####	2740	#####		
03/08/2012 09:29	158.50	45.0	100.0	0.0	0.0	0.0	305	401	181	1374	1708	0	0.0	18.0	21.8	28.9	59	59	7.50	147.0	0.52	1.5	1.5	2700	#####	2790	#####		
03/12/2012 10:05	187.00	45.5	100.0	0.0	0.0	0.0	308	404	172	1395	1701	0	0.0	18.1	22.0	29.1	67	67	6.50	147.4	0.53	1.1	2.3	2550	#####	2460	#####		
03/13/2012 07:57	160.50	45.4	100.0	0.0	0.0	0.0	306	401	170	1384	1697	0	0.0	18.0	21.5	28.9	61	61	8.00	146.6	0.54	1.7	1.6	2110	#####	2060	#####		
03/15/2012 11:06	193.00	45.6	100.0	0.0	0.0	0.0	379	394	167	1361	1654	0	0.0	17.7	21.8	28.1	66	66	8.00	146.5	0.68	-1.0	1.6	2030	#####	2110	#####		
03/16/2012 07:18	135.50	45.7	100.0	0.0	0.0	0.0	307	403	178	1395	1692	0	0.0	18.1	22.0	29.1	57	57	7.50	147.2	0.53	1.3	1.7	2090	#####	2090	#####		
03/20/2012 07:14	218.00	44.2	100.0	0.0	0.0	0.0	309	405	174	1359	1747	0	0.0	18.2	22.1	29.5	56	56	7.75	147.9	0.53	0.8	1.7	2440	#####	2380	#####		
03/27/2012 08:21	99.00	42.5	100.0	0.0	0.0	0.0	306	402	171	1303	1793	0	0.0	18.7	22.2	29.0	58	58	7.00	147.2	0.53	1.4	1.0	#####	#####	#####	#####		
03/28/2012 07:14	177.00	42.8	100.0	0.0	0.0	0.0	286	410	174	1327	1805	0	0.0	18.4	22.3	29.2	57	57	8.00	148.2	0.49	1.5	1.5	#####	#####	#####	#####		
Design		42.0	100.0	0.0	0.0	0.0	309	395	169	1276	1750	0	0.0	18.0	22.0	24.0			8.00	144.4	0.55	3.0	3.0					3000	
AVG.		45.4	100.0	0.0	0.0	0.0	302	404	174	1393	1706	0	0.0	18.4	21.9	28.2	9.6	60	7.75	147.3	0.52	1.4	1.7	2397	3877				
S.D.		2.8	0.0	0.0	0.0	0.0	18	5	3	88	91	0	0.0	1.6	0.8	1.9	0.8	3	0.57	0.9	0.04	0.8	0.5	393	360				
C.O.V		6.3	0.0	0.0	0.0	0.0	6.0	1.1	1.9	6.3	5.3	0.0	0.0	8.7	3.6	6.8	8.7	5.8	7.4	0.6	6.8	54.7	31.5	16.4	9.3				
Bureau.....: Required average strength = 3500 psi at 28 days. Based on 90% exceeding the design strength of 3000 psi & C.O.V. (n=216) = 11.2																													
ACI.....: Required average strength = 3559 psi at 28 days (n=216)																													
CURE METHOD...: Water Tank with an Average Cure Temperature of 51 - 78 (F)																													

##### = Specimen not broken as of report date.

03/30/2012

U.S. Bureau of Reclamation  
Aggregate Gradation Summary

Page 1

From 02/01/2012 to 03/31/2012

Specification : 20-C0649A  
Mix Number : ALL Combined for This Specification  
Project : Central Valley  
Feature : Fixed Wheel Gate Rehabilitation

Sand Gradations (ASTM)

Date	Percent Passing							% -200	FINE MOD	Moist %	Spec Grav	Absorp
	No. 3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100					
Spec Max %	100.0	100.0	100.0	85.0	60.0	30.0	10.0					
Spec Min %	100.0	95.0	80.0	50.0	25.0	10.0	2.0					
02/02/2012	100.0	97.5	82.8	66.3	41.0	15.4	5.2	2.60	2.92	5.06	2.63	3.30
02/17/2012	100.0	97.5	82.8	66.3	41.0	15.4	5.2	2.60	2.92	5.13	2.63	3.30
Average	100.0	97.5	82.8	66.3	41.0	15.4	5.2	2.60	2.92	5.10	2.63	3.30
S.D.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.05	0.00	0.00
C.O.V.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.97	0.00	0.00

03/30/2012

U.S. Bureau of Reclamation  
Aggregate Gradation Summary

Page 2

From 02/01/2012 to 03/31/2012

Specification : 20-C0649A  
Mix Number : ALL Combined for This Specification  
Project : Central Valley  
Feature : Fixed Wheel Gate Rehabilitation

Nominal Size : #4 - 1 1/2" (ASTM)

Coarse Aggregate Gradations

Date	Percent Passing					% -200	Moist %	Spec Grav	Absorp
	2"	1 1/2"	3/4"	3/8"	#4				
Spec Max %	100.0	100.0	70.0	30.0	5.0				
Spec Min %	100.0	95.0	35.0	10.0	0.0				
02/02/2012	100.0	98.6	59.9	12.6	1.9	0.30	3.00	2.69	1.00
02/17/2012	100.0	97.3	46.1	13.6	1.4	0.30	3.00	2.69	1.00
Average	100.0	98.0	53.0	13.1	1.6	0.30	3.00	2.69	1.00
S.D.	0.0	0.9	9.7	0.7	0.4	0.00	0.00	0.00	0.00
C.O.V.	0.0	0.9	18.3	5.6	24.1	0.00	0.00	0.00	0.00

03/30/2012

U.S. Bureau of Reclamation  
Aggregate Gradation Summary

Page 3

From 02/01/2012 to 03/31/2012

Specification : 20-C0754  
Mix Number : 1534982  
Project : MIAD Key-Block  
Feature : MIAD Key-Block Lean Concrete  
Nominal Size : 1" (ASTM)

Combined Aggregate Gradations

Date	Percent Passing					% -200	Moist %	Spec Grav	Absorp
	1 1/2"	1"	1/2"	#4	#8				
Spec Max %		100.0		50.0		10			
Spec Min %		100.0		0.0		0			
02/16/2012		100.0		45.9		8.1	N/A	2.72	1.00
02/23/2012		100.0		43.5		7.7	3.15		
03/02/2012		100.0		42.9		6.6	5.5	2.72	1.00
03/05/2012		100.0		47.2		7.9	N/A	2.72	1.00
03/09/2012		100.0		48.3		7.8	5.5	2.72	1.00
03/21/2012		100.0		46.6		7.9	5.0	2.72	1.00
Average		100.0		45.7		7.7	3.80	2.72	1.00

03/30/2012

U.S. Bureau of Reclamation  
 Aggregate Gradation Summary  
 From 02/01/2012 to 03/31/2012

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Specification : C0-C0754  
 Mix Number : ALL Combined for This Specification  
 Project : MIAD KEY-BLOCK  
 Feature : SECANT PILES

Sand Gradations (ASTM)

Date	Percent Passing							% -200	FINE MOD	Moist %	Spec Grav	Absorp
	No. 3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100					
Spec Max %	100.0	100.0	100.0	85.0	60.0	30.0	10.0					
Spec Min %	100.0	95.0	80.0	50.0	25.0	10.0	2.0					
02/01/2012	100.0	98.0	84.7	71.7	50.9	22.1	6.9	2.90	2.66	4.05	2.65	2.00
02/03/2012	100.0	98.0	84.7	71.7	50.9	22.1	6.9	2.90	2.66	3.41	2.64	2.00
02/06/2012	100.0	97.8	85.8	73.5	51.5	21.5	5.7	1.70	2.64	3.04	2.65	2.00
02/07/2012	100.0	97.8	85.8	73.5	51.5	21.5	5.7	1.70	2.64	3.52	2.65	2.00
02/08/2012	100.0	97.8	85.8	73.5	51.5	21.5	5.7	1.70	2.64	3.71	2.65	2.00
02/09/2012	100.0	97.8	85.8	73.5	51.5	21.5	5.7	1.70	2.64	4.29	2.65	2.00
02/10/2012	100.0	99.8	85.8	73.5	51.5	21.5	5.7	1.70	2.62	4.18	2.65	2.00
02/13/2012	100.0	98.6	88.9	76.7	50.5	16.0	3.8	1.70	2.66	6.03	2.65	2.00
02/14/2012	100.0	98.6	88.9	76.7	50.5	16.0	3.8	1.70	2.66	7.40	2.65	2.00
02/15/2012	100.0	98.6	88.9	76.7	50.5	16.0	3.8	1.70	2.66	5.86	2.65	2.00
02/16/2012	100.0	98.6	88.9	76.7	50.5	16.0	3.8	1.70	2.66	5.39	2.65	2.00
02/21/2012	100.0	98.6	89.7	77.9	51.4	17.0	4.3	1.90	2.61	6.25	2.65	2.00
02/22/2012	100.0	98.6	89.7	77.9	51.4	17.0	4.3	1.90	2.61	6.00	2.65	2.00
02/24/2012	100.0	98.6	89.7	77.9	51.4	17.0	4.3	1.90	2.61	4.57	2.65	2.00
02/27/2012	100.0	98.6	88.3	76.9	51.2	16.8	4.2	1.80	2.64	6.75	2.65	2.00
02/28/2012	100.0	98.6	88.3	76.9	51.2	16.8	4.2	1.80	2.64	4.94	2.65	2.00
02/29/2012	100.0	98.6	88.3	76.9	51.2	16.8	4.2	1.80	2.64	5.54	2.65	2.00
03/01/2012	100.0	98.6	88.3	76.9	51.2	16.8	4.2	1.80	2.64	6.18	2.65	2.00
03/07/2012	100.0	98.3	89.2	77.8	53.3	20.2	5.6	2.20	2.56	5.04	2.65	2.00
03/08/2012	100.0	98.3	89.2	77.8	53.3	20.2	5.6	2.20	2.56	4.49	2.65	2.00
03/12/2012	100.0	98.2	88.4	76.8	49.8	16.2	4.2	1.70	2.67	4.51	2.65	2.00
03/13/2012	100.0	98.2	88.4	76.8	49.8	16.2	4.2	1.70	2.67	4.23	2.65	2.00
03/15/2012	100.0	98.2	88.4	76.8	49.8	16.2	4.2	1.70	2.67	10.00	2.65	2.00
03/16/2012	100.0	98.2	88.3	76.8	49.8	16.2	4.1	1.70	2.67	10.00	2.65	2.00
03/20/2012	100.0	98.4	88.7	77.1	51.7	18.0	4.6	1.90	2.61	10.02	2.65	2.00
03/27/2012	100.0	98.5	86.1	70.5	43.8	15.3	3.7	1.50	2.82	6.79	2.65	2.00
03/28/2012	100.0	98.5	86.1	70.5	43.8	36.5	3.7	1.50	2.61	4.31	2.65	2.00
Average	100.0	98.4	87.7	75.5	50.6	18.9	4.7	1.86	2.64	5.57	2.65	2.00
S.D.	0.0	0.4	1.6	2.4	2.1	4.3	1.0	0.34	0.05	1.95	0.00	0.00
C.O.V.	0.0	0.4	1.8	3.2	4.2	22.6	20.6	18.33	1.74	34.93	0.07	0.00

03/30/2012

U.S. Bureau of Reclamation  
 Aggregate Gradation Summary  
 From 02/01/2012 to 03/31/2012

Page 5

Specification : C0-C0754  
 Mix Number : ALL Combined for This Specification  
 Project : MIAD KEY-BLOCK  
 Feature : SECANT PILES  
 Nominal Size : #8 - 3/8" (ASTM)

Coarse Aggregate Gradations

Date	Percent Passing					% -200	Moist %	Spec Grav	Absorp
	1/2"	3/8"	#4	#8	#16				
Spec Max %	100.0	100.0	30.0	10.0	5.0				
Spec Min %	100.0	85.0	10.0	0.0	0.0				
02/01/2012	100.0	100.0	99.6	29.6	1.1	0.40	1.50	2.70	1.40
02/03/2012	100.0	99.6	29.6	6.6	1.1	0.40	1.50	2.70	1.40
02/06/2012	100.0	98.7	92.2	3.7	0.7	0.40	1.50	2.70	1.40
02/07/2012	100.0	98.7	92.2	3.7	0.7	0.40	1.50	2.70	1.40
02/08/2012	100.0	98.7	92.2	3.7	0.7	0.40	1.50	2.70	1.40
02/09/2012	100.0	98.7	92.2	3.7	0.7	0.40	1.50	2.70	1.40
02/10/2012	100.0	98.7	92.2	3.7	0.7	0.40	1.50	2.70	1.40
02/13/2012	100.0	99.5	25.1	5.0	1.6	0.60	1.50	2.70	1.40
02/14/2012	100.0	99.5	25.1	5.0	1.6	0.60	0.75	2.70	1.40
02/15/2012	100.0	99.5	25.1	5.0	1.6	0.60	0.25	2.70	1.40
02/16/2012	100.0	99.5	25.1	5.0	1.6	0.60	0.25	2.70	1.40
02/21/2012	100.0	99.0	23.5	5.2	1.0	0.70	0.50	2.70	1.40
02/24/2012	100.0	99.0	23.5	5.2	1.0	0.70	0.25	2.70	1.40
02/27/2012	100.0	99.5	28.8	7.7	1.9	0.80	0.50	2.70	1.40
02/28/2012	100.0	99.5	28.8	7.7	1.9	0.80	0.50	2.70	1.40
02/29/2012	100.0	99.5	28.8	7.7	1.9	0.80	0.50	2.70	1.40
03/01/2012	100.0	99.5	28.8	7.7	1.9	0.80	1.50	2.70	1.40
03/07/2012	100.0	100.0	29.7	5.7	1.8	0.90	0.75	2.70	1.40
03/08/2012	100.0	100.0	29.7	5.7	1.8	0.90	0.75	2.70	1.40
03/12/2012	100.0	99.4	27.8	6.3	2.1	1.50	1.00	2.70	1.40
03/13/2012	100.0	99.4	27.8	6.3	2.1	1.50	1.00	2.70	1.40
03/15/2012	100.0	99.4	27.8	6.3	2.1	1.50	1.00	2.70	1.40
03/16/2012	100.0	99.4	27.8	6.3	2.1	1.50	1.00	2.70	1.40
03/20/2012	100.0	99.0	24.7	4.1	1.4	0.60	1.00	2.70	1.40
03/27/2012	100.0	99.2	13.5	1.4	0.3	0.80	1.00	2.70	1.40
03/28/2012	100.0	99.2	13.5	1.4	0.3	0.80	1.50	2.70	1.40
Average	96.3	95.6	39.8	5.9	1.3	0.76	0.98	2.70	1.40
S.D.	19.2	19.1	29.9	5.1	0.6	0.36	0.46	0.00	0.00
C.O.V.	20.0	20.0	75.2	86.6	48.6	46.82	47.35	0.00	0.00



04/02/2012

U.S. Bureau of Reclamation  
STATISTICAL SUMMARY OF FIELD AND LABORATORY TESTS OF COMPACTED FILL  
CONTROLLED BY THE LABORATORY COMPACTION METHOD

Page 2

PROJECT: Central Valley  
FEATURE: MIAD Key-Block  
SPECIFICATION NO: 20-C0754  
FILL NAME: 1 - Key Block

SPECIFICATION REQUIREMENTS:

PERIOD OF REPORT: 03/01/2012 - 03/30/2012  
TOTAL MATERIAL PLACED: 0 Cubic Yards  
UNITS PER ACCEPTED TEST: 0 Cubic Yards

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	<u>This Period</u>	<u>To Date</u>
No. of Tests Taken	10	10
No. of Tests Accepted	10	10
No. of Tests Rejected	0	0
No. of Rejected Tests not Re-Checked	0	0
Average Water Content Total Material	7.0	7.0
Average Control Fraction Water Content	8.8	8.8
Average Optimum Water Content	10.2	10.2
Average Wo-Wf	1.4	1.4
Average Wet Density Total Material (PCF)	146.4	146.4
Average Control Fraction Dry Density (PCF)	129.6	129.6
Average Proctor Max Dry Density (PCF)	128.3	128.3
Average Compaction Cylinder Wet Density (PCF)	137.7	137.7
Average Percent #4 Material (%)	22.5	22.5
Average C-Value (%)	102.4	102.4
Average D-Value (%)	101.0	101.0
Percent Accepted with D-Value < 0.0	0.0	0.0

From 03/01/2012 to 03/31/2012

Specification : 20-C0752  
 Mix Number : ALL Combined for This Specification  
 Project : Central Valley  
 Feature : Red Bluff Pumping Plant and Fish Screen

## Sand Gradations (ASTM)

Date	Percent Passing							% -200	FINE MOD	Moist %	Spec Grav	Absorp
	No. 3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100					
Spec Max %	100.0	100.0	100.0	85.0	60.0	30.0	10.0					
Spec Min %	100.0	95.0	80.0	50.0	25.0	10.0	2.0					
03/06/2012	100.0	99.1	85.7	68.4	48.1	27.1	10.3	5.10	2.61	6.00	2.59	2.90
03/07/2012	100.0	99.1	85.9	68.3	46.6	24.3	8.9	4.00	2.67	5.50	2.59	2.87
03/08/2012	100.0	99.3	85.8	68.9	46.1	23.8	8.3	3.50	2.68	5.00	2.59	2.90
03/12/2012	100.0	99.8	82.4	58.4	32.4	13.0	4.5	2.90	3.09	5.00	2.60	2.20
Average	100.0	99.3	84.9	66.0	43.3	22.0	8.0	3.88	2.76	5.38	2.59	2.72
S.D.	0.0	0.3	1.7	5.1	7.3	6.2	2.5	0.93	0.22	0.48	0.01	0.35
C.O.V.	0.0	0.3	2.0	7.7	16.9	28.2	31.1	24.06	8.05	8.91	0.19	12.71

From 03/01/2012 to 03/31/2012

Specification : 20-C0752  
 Mix Number : ALL Combined for This Specification  
 Project : Central Valley  
 Feature : Red Bluff Pumping Plant and Fish Screen

Nominal Size : #8 - 3/8" (ASTM)

## Coarse Aggregate Gradations

Date	Percent Passing Screen Sizes in Inches or Sieve Size Shown					% -200	Moist %	Spec Grav	Absorp
	1/2"	3/8"	#4	#8	#16				
Spec Max %	100.0	100.0	30.0	10.0	5.0				
Spec Min %	100.0	85.0	10.0	0.0	0.0				
03/06/2012	100.0	87.3	21.9	1.2	0.7	1.20	2.00	2.65	2.30
03/07/2012	99.8	84.4	15.6	1.5	1.1	1.20	1.00	2.65	2.30
03/08/2012	100.0	85.8	17.2	1.4	1.0	1.00	1.00	2.65	2.30
Average	99.9	85.8	18.2	1.4	0.9	1.13	1.33	2.65	2.30
S.D.	0.1	1.4	3.3	0.2	0.2	0.12	0.58	0.00	0.00
C.O.V.	0.1	1.7	17.8	11.5	20.7	10.19	43.30	0.00	0.00

From 03/01/2012 to 03/31/2012

Specification : 20-C0752  
 Mix Number : ALL Combined for This Specification  
 Project : Central Valley  
 Feature : Red Bluff Pumping Plant and Fish Screen

Nominal Size : #4 - 1 1/2" (ASTM)

## Coarse Aggregate Gradations

Date	Percent Passing Screen Sizes in Inches or Sieve Size Shown					% -200	Moist %	Spec Grav	Absorp
	2"	1 1/2"	3/4"	3/8"	#4				
Spec Max %	100.0	100.0	70.0	30.0	5.0				
Spec Min %	100.0	95.0	35.0	10.0	0.0				
03/12/2012	100.0	99.1	58.0	22.5	3.9	1.90	1.50	2.58	2.10
Average	100.0	99.1	58.0	22.5	3.9	1.90	1.50	2.58	2.10
S.D.	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
C.O.V.	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00

Concrete Class: Controlled Low-Strength Material (CLSM)  
Report of Mixes Used From 03/01/2012 to 03/31/2012

Mix Design Number: F200BMS01  
Specification Number: 20-C0752  
Project: Central Valley  
Feature: Red Bluff Pumping Plant and Fish Screen

Date Time	y <sup>3</sup> of Conc	Percent Of Coarse Aggregate in each size				Yield Quantities per Cubic Yard										Fresh Concrete Tests						Compressive Strength Of Individual Specimens (psi)								
		Sand	CA1	CA2	CA3	CA4	Water	Cem	Pounds			Oz			Cem Eff	M P	Slump (ins)	UW (pcf)	Air		3 Day	7 Day	28 Day	90 Day	180 Day	1 Year				
									Poz	Sand	C.A.	AD#3	AEA	WRA					AD#4	AD#5							W/	Grav Press C+P Meth Meter		
03/03/2012																														
06:44	166.50	74.9	100.0	0.0	0.0	0.0	281	98	99	2379	791	0	0.0	0.0	18.2	0.0	47	8.00	135.1	1.43	6.2	2.0								60
																													60	
09:00	166.50	76.3	100.0	0.0	0.0	0.0	266	86	87	2491	766	0	0.0	0.0	15.2	0.0	54	9.50	136.9	1.54	5.6	1.0								40
																													40	
11:49	166.50	76.3	100.0	0.0	0.0	0.0	197	87	88	2489	766	0	0.0	0.0	15.2	0.0	58	8.50	134.3	1.13	9.7	2.7								50
																													40	
03/05/2012																														
06:22	203.65	76.4	100.0	0.0	0.0	0.0	192	87	87	2521	773	0	0.0	0.0	15.4	0.0	51	4.50	135.6	1.10	9.1	1.7								50
																														40
09:45	203.65	74.7	100.0	0.0	0.0	0.0	235	93	93	2443	820	0	0.0	0.0	17.2	0.0	55	4.50	136.4	1.26	7.0	1.5								40
																														40
11:40	207.00	75.1	100.0	0.0	0.0	0.0	421	93	93	2287	751	0	0.0	0.0	16.4	0.0	57	8.50	135.0	2.26	1.1	0.4								30
																														30
03/06/2012																														
06:30	411.63	75.9	100.0	0.0	0.0	0.0	394	92	92	2335	759	0	0.0	0.0	17.1	0.0	50	5.75	136.0	2.14	1.7	0.9								30
																														40
10:23	411.62	76.0	100.0	0.0	0.0	0.0	386	91	92	2346	757	0	0.0	0.0	16.2	0.0	51	7.00	136.0	2.11	2.0	0.6								40
																														40
03/07/2012																														
08:21	365.37	73.5	100.0	0.0	0.0	0.0	298	92	92	2338	863	0	0.0	0.0	16.2	0.0	52	6.00	136.4	1.62	5.0	1.0								50
																														40
10:24	365.38	73.5	100.0	0.0	0.0	0.0	345	90	90	2291	846	0	0.0	0.0	16.7	0.0	51	6.00	135.6	1.92	3.8	0.8								40
																														40
03/08/2012																														
10:49	249.75	73.6	100.0	0.0	0.0	0.0	346	90	91	2300	845	0	0.0	0.0	16.7	0.0	57	7.75	136.0	1.91	3.5	0.5								40
																														40
12:25	249.75	73.6	100.0	0.0	0.0	0.0	331	91	91	2310	848	0	0.0	0.0	15.9	0.0	60	6.00	136.0	1.82	4.0	1.3								40
																														40
03/26/2012																														
14:06	17.00	73.9	100.0	0.0	0.0	0.0	318	98	91	2345	844	0	0.0	0.0	16.6	0.0	50	9.00	136.9	1.68	4.2	0.9								#####
																														#####
Design		75.0	100.0	0.0	0.0	0.0	434	94	94	2253	771	0	0.0	0.0	16.9	0.0		9.00	135.0	2.31	1.0	1.0								50
AVG.		74.9	100.0	0.0	0.0	0.0	308	91	91	2375	802	0	0.0	0.0	16.4	0.0	0.0	53	7.00	135.9	1.69	4.8	1.2							42
S.D.		1.2	0.0	0.0	0.0	0.0	73	4	3	83	43	0	0.0	0.0	0.8	0.0	0.0	4	1.67	0.7	0.38	2.7	0.7							8
C.O.V		1.6	0.0	0.0	0.0	0.0	23.6	4.1	3.4	3.5	5.3	0.0	0.0	0.0	5.1	0.0	0.0	7.2	23.8	0.6	22.8	54.7	55.6							18.3

Bureau.....: Required average strength = 62 psi at 7 days. Based on 90% exceeding the design strength of 50 psi & C.O.V. (Est.) = 15.0  
 ACT.....: Required average strength = 61 psi at 7 days (n=24)  
 CURE METHOD...: Water Tank with an Average Cure Temperature of 70 - 76 (F)

##### = Specimen not broken as of report date.

