

TO: BOARD OF DIRECTORS

FROM: MICHAEL S. LEBRUN
GENERAL MANAGER



DATE: APRIL 17, 2015

AGENDA ITEM

C

APRIL 22, 2015

PRESENTATIONS AND REPORTS

The following presentations and reports are scheduled:

- C-1) DISTRICT DIRECTOR OF ENGINEERING AND OPERATIONS SUMMARY OF ACTIVITIES
- C-2) REPORT ON APRIL 8, 2015 REGULAR MEETING CLOSED SESSION
Announcement of actions, if any, taken during most recent Closed Session
- C-3) DIRECTORS' ANNOUNCEMENTS OF DISTRICT & COMMUNITY INTEREST AND REPORTS ON ATTENDANCE AT PUBLIC MEETINGS, TRAINING PROGRAMS, CONFERENCES, AND SEMINARS.
Receive Announcements and Reports from Directors
- C-4) RECEIVE PUBLIC COMMENT ON PRESENTATIONS AND REPORTS PRESENTED UNDER ITEM C AND BY MOTION RECEIVE AND FILE PRESENTATIONS AND REPORTS

TO: BOARD OF DIRECTORS

FROM: MICHAEL S. LEBRUN *msl*
GENERAL MANAGER

DATE: APRIL 17, 2015

AGENDA ITEM

C-1

APRIL 22, 2015

**DISTRICT DIRECTOR OF ENGINEERING AND OPERATIONS
SUMMARY OF ACTIVITIES**

ITEM

Report on recent engineering and operations activities [NO ACTION REQUESTED].

BACKGROUND

Director of Engineering and Operations, Peter Sevcik will summarize recent engineering and operations activities.

RECOMMENDATION

Staff recommends that your Honorable Board receive the update.

ATTACHMENTS

- A. Engineering and Operations Update for January 2015

April 22, 2015

C-1

ATTACHMENT A



NIPOMO COMMUNITY SERVICES DISTRICT

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MEMORANDUM

TO: MICHAEL S. LEBRUN, P.E., GENERAL MANAGER
FROM: PETER V. SEVCIK, P.E., DIRECTOR OF ENGINEERING & OPERATIONS *PVS*
DATE: APRIL 16, 2015
RE: ENGINEERING AND OPERATIONS UPDATE FOR MARCH 2015

PROJECTS IN CONSTRUCTION

- **Supplemental Water Project Phase 1 Bid Package 4 – Joshua Road Pump Station**
 - SCOPE OF WORK – 1930 lineal feet of 24-inch diameter waterline, 400 gpm pump station with back-up power, controls, and instrumentation systems, a pressure reducing station and chloramination systems at 4 existing District wells. Work also includes Blosser Road flow control and metering station.
 - STATUS
 - Scheduled Contract Completion – June 2015

SWP Bid Package 4 Construction Contract Cost Summary	
Contract Amount – Spiess Construction Co. Inc.	\$4,364,030
Change Orders	\$620,530
Revised Contract Amount	\$4,984,560
Completed to Date	\$3,524,794

- **Supplemental Water Project Phase 1 – Blosser Road Water Main**
 - SCOPE OF WORK – 5970 lineal feet of 24-inch diameter waterline including 300 lineal feet levee crossing jack and bore
 - STATUS
 - Contract Completed – March 2015

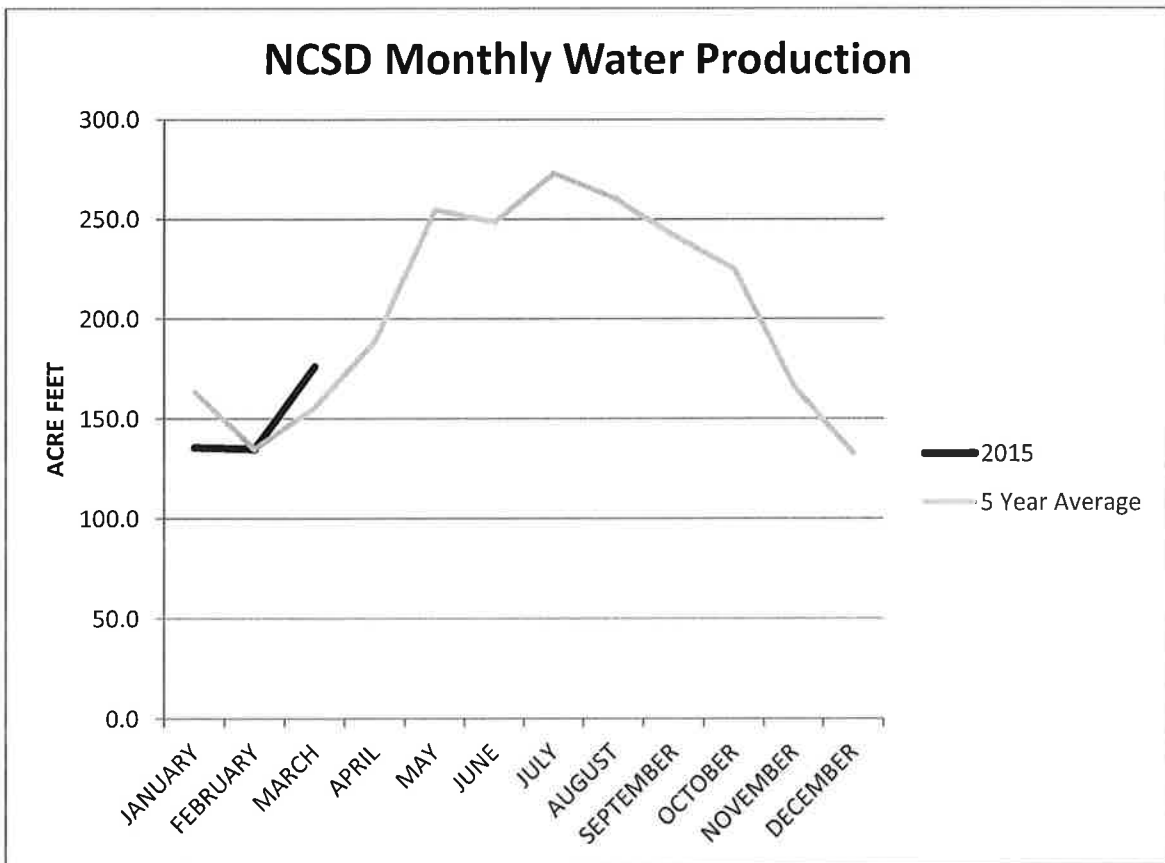
SWP Blosser Road Water Main Construction Contract Cost Summary	
Contract Amount – D-Kal Engineering Inc.	\$1,599,999
Change Orders	\$86,830
Revised Contract Amount	\$1,686,829
Completed to Date	\$1,686,829

OPERATIONS

• **Wells and Water Distribution System – March 2015**

<u>YEAR</u>	<u>TOTAL MONTHLY PRODUCTION</u>	<u>AVERAGE DAILY PRODUCTION</u>
2015	176.1 Acre Feet	5.7 Acre Feet Per Day
5 Year Average	155.6 Acre Feet	5.0 Acre Feet Per Day

- Daily operation and maintenance of 5 operational wells
- 16+ distribution system routine coliform monitoring samples
- 30+ distribution system disinfectant residual monitoring samples
- Via Concha Well – apparent pump failure – investigation in progress
- Olympic and Church Wells – out of service and scheduled to be idled when Supplemental Water Project comes on line
- Draft Water System Operations and Nitrification Control Plan submitted to State Water Resources Control Board Division of Drinking Water
- Water System Operations permit amendment submitted to State Water Resources Control Board Division of Drinking Water
- Identified need to install mixers in the District's water storage tanks to prevent water quality problems once supplemental water delivery begins



• **Southland Wastewater Treatment Facility and Collection System – March 2015**

<u>TOTAL EFFLUENT TREATED</u>	<u>AVERAGE DAILY FLOW TREATED</u>	<u>BOD₅</u>	<u>TSS</u>
18.0 Million Gallons	.582 Million Gallons Per Day	3 mg/l Monthly Average	3 mg/l Monthly Average
55.2 Acre Feet	1.8 Acre Feet Per Day	3 mg/l Daily Maximum	3 mg/l Daily Maximum

- Daily maintenance and operation of .9 MGD treatment plant and 10 lift stations
- No reportable sewer system overflow
- Effluent biochemical oxygen demand (BOD) requirement for monthly average of 60 mg/L met and daily maximum of 100 mg/L requirement met
- Effluent total suspended solids (TSS) requirement for monthly average of 60 mg/L met and daily maximum of 100 mg/L requirement met
- 4 Each influent BOD, TSS regulatory compliance samples
- 4 Each effluent BOD, TSS regulatory compliance samples
- 31 Effluent settleable solids regulatory compliance samples
- 31 Each effluent pH, dissolved oxygen regulatory compliance samples
- Numerous daily process control samples

• **Blacklake Wastewater Reclamation Facility and Collection System – March 2015**

<u>TOTAL EFFLUENT TREATED</u>	<u>AVERAGE DAILY FLOW TREATED</u>	<u>BOD₅</u>	<u>TSS</u>
1.6 Million Gallons	.054 Million Gallons Per Day	25 mg/l Monthly Average	12 mg/l Monthly Average
5.0 Acre Feet	.16 Acre Feet Per Day	29 mg/l Daily Maximum	15 mg/l Daily Maximum

- Daily maintenance and operation of .2 MGD treatment plant and 3 lift stations
- Effluent biochemical oxygen demand (BOD) requirement for monthly average of 40 mg/L met and daily maximum 100 mg/L requirement met
- Effluent total suspended solids (TSS) requirement for monthly average of 30 mg/L met and daily maximum of 100 mg/L requirement met
- No sewer system overflows
- 4 Each effluent BOD, TSS, dissolved oxygen regulatory compliance samples
- 21 Each effluent total coliform, settleable solids, chlorine residual, pH regulatory compliance samples

• **Compliance Reporting**

- March Monthly Distribution System Coliform Monitoring Summary to California Department of Public Health
- March Wastewater Monitoring Report for the Blacklake Wastewater Reclamation Facility to Central Coast Regional Water Quality Control Board
- March Monthly Wastewater Monitoring Report for the Southland Wastewater Treatment Facility to Central Coast Regional Water Quality Control Board
- March Monthly 'No-Spill' Certification for California Integrated Water Quality System (CIWQS) for Southland Collection System
- March Monthly 'No-Spill' Certification for California Integrated Water Quality System (CIWQS) for Blacklake Sewer Collection System

PROJECTS IN DESIGN AND PLANNING STAGES

- **Blacklake Wastewater Master Plan**
 - Treatment plant head works project in design
 - Technical evaluation of existing wastewater plant and sewer collection system on hold

OTHER PROJECTS AND PROGRAMS

- **Safety Program**
 - Weekly operations tailgate safety meetings for Operations staff
 - On-line safety training for all District employees

ATTACHMENTS

- A. March 2015 Supplemental Water Project Phase 1 Bid Package 4 Monthly Construction Progress Report
- B. March 2015 Supplemental Water Project Blosser Road Water Main Monthly Construction Progress Report

Nipomo Community Services District



Supplemental Water Project Bid Package 4

Monthly Progress Report



Prepared By:
MNS Engineers, Inc.

March 2015

Schedule and Budget Summary

Schedule Summary

Notice to Proceed	December 19, 2013
Original Contract Days	519
Contract Days Added	14
Revised Contract Days	533
Elapsed Time (Days)	(460)
Remaining Time (Days)	73
Contract Completion Date	June 5, 2015
Time Elapsed to Date	86%
Work Completed to Date	61%
Approved Change Orders (Days)	14 days

Budget Summary

Original Contract Amount	\$4,364,030.00
Approved Change Orders (Cost)	\$620,529.29
Revised Contract Amount	\$4,984,559.29
Previous Payments	\$3,017,029.21
Current Month Pay Request	\$507,764.62
Total Work Completed	\$3,524,793.83
Work Remaining	\$1,459,765.46

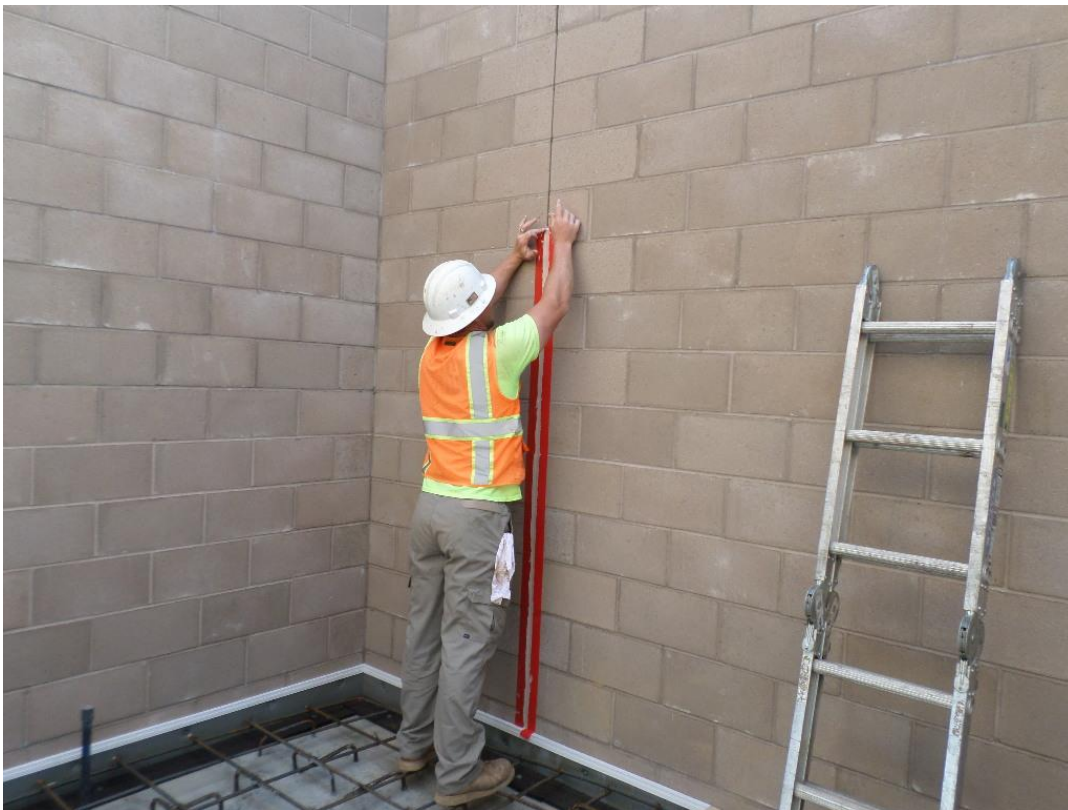
Progress Summary

Joshua Pump Station Site

Summary of Work:

Rocky Boydston Masonry poured the final wall grout at the pump station, while Spiess installed the steel roof plates. After the plates were installed Spiess continued work on the pump station roof, installing the trusses, decking, hatches and fascia. Ely Dodson Construction worked on interior framing at the pump station, Spiess poured the chemical tank pads and installed the chemical tanks, poured the PG&E electrical panel pad, St. Denis Electric set the pad, Spiess installed forms and reinforcement for light pole bases. Spiess also completed the permanent access road and relocated the site entrance from the start of the access road to the pump station site. They installed tire tracking control at both ends of the access road to prevent sand and mud from tracking on the new road. At the PRV vault they removed the test plate and completed final tie-ins to the piping, allowing removal of the temporary bypass piping.

Pictures:



Spiess applying joint sealant at pump station building after masonry was completed.



Spiess attaching bolts to roof steel plates.



Spiess verifying hold down bolt locations prior to final grouting.



Spieß fabricating steel framing for roof at pump station.



Boydston Masonry pouring final grout while Spieß set steel plates for roof.



Spieß setting steel roof plates in grout.



Spieß setting steel roof plates during final wall grout.



Spieß installing steel roof plates during final wall grout.



Spieß setting trusses at pump station.



Welding steel plate connections at pump station.



Spieß installing truss framing.



Spiess installing truss framing.



Spiess installing truss framing.



Spies dry packing grout under steel roof frame plate.



Spies installing the steel deck for the roof.



Spieß installing the steel deck for the roof.



Spieß installing the roof deck at the pump station.



Steel roof deck installed.



Puddle welding at steel roof plates.



Spiess installing fascia backing.



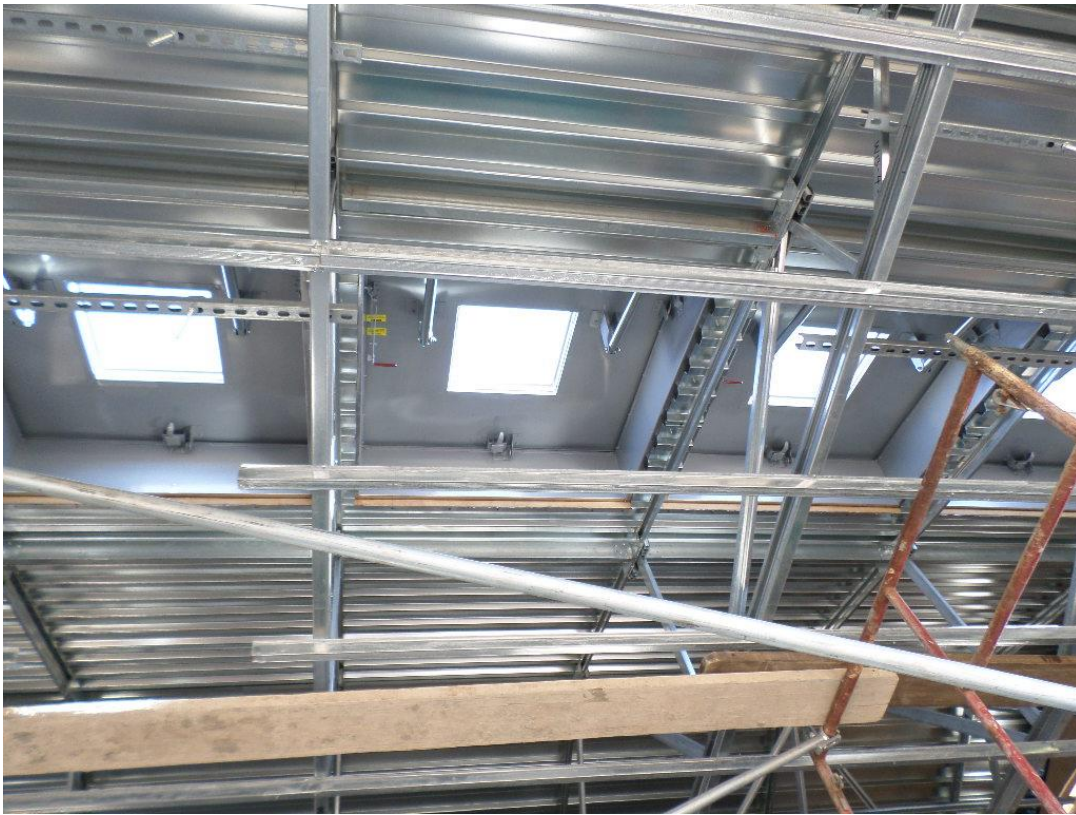
Spiess installing fascia.



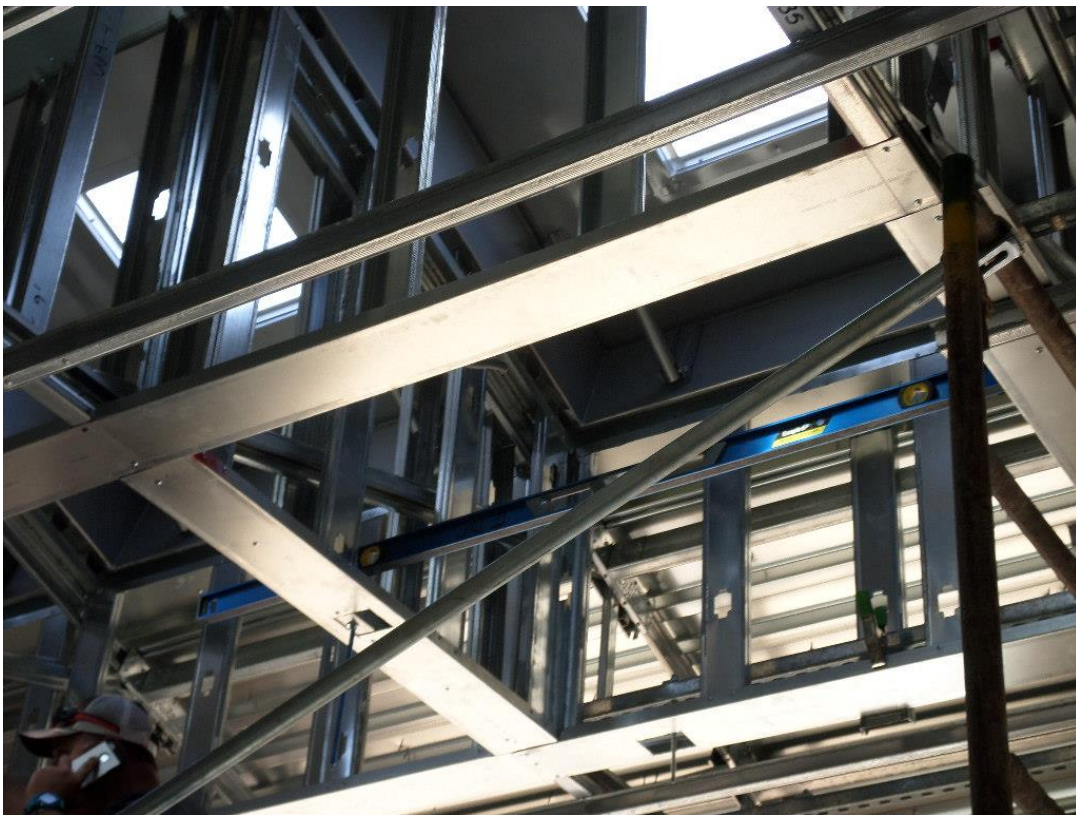
Spies cutting openings for roof hatches.



Roof hatches installed.



Roof hatches from inside pump station building.



Framing walls below the roof hatches inside the pump station building.



Ely Dodson Construction installing interior steel stud wall at pump station.



Spiess installing plywood sheeting on pump station roof.



Spiess installing plywood sheeting on pump station roof around hatches.



Spiess installing plywood sheeting on pump station roof.



Coast Painting applying coating to fascia at pump station building.



Spieß assembling surge tank piping.



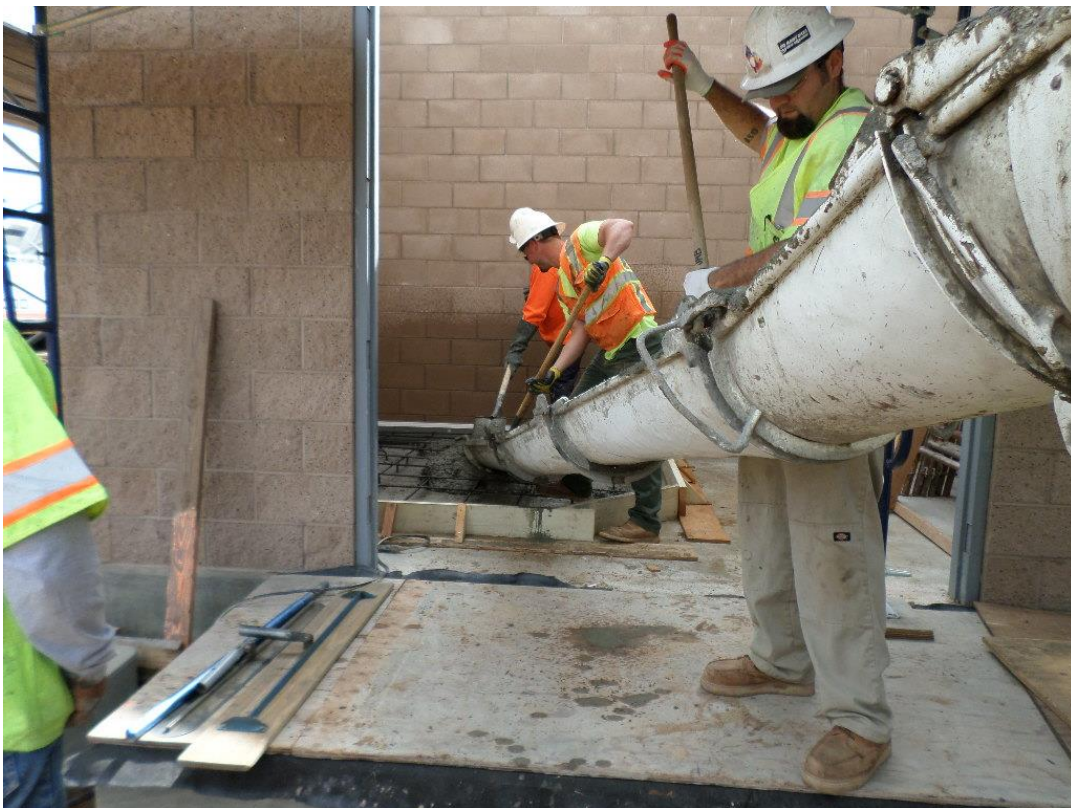
Spiess pouring for PG&E metering station.



St. Denis Electric installing PG&E metering station.



Spieß installing forms and reinforcement for light pole base.



Spieß pouring chemical tank pad in Sodium Hypochlorite Room at pump station.



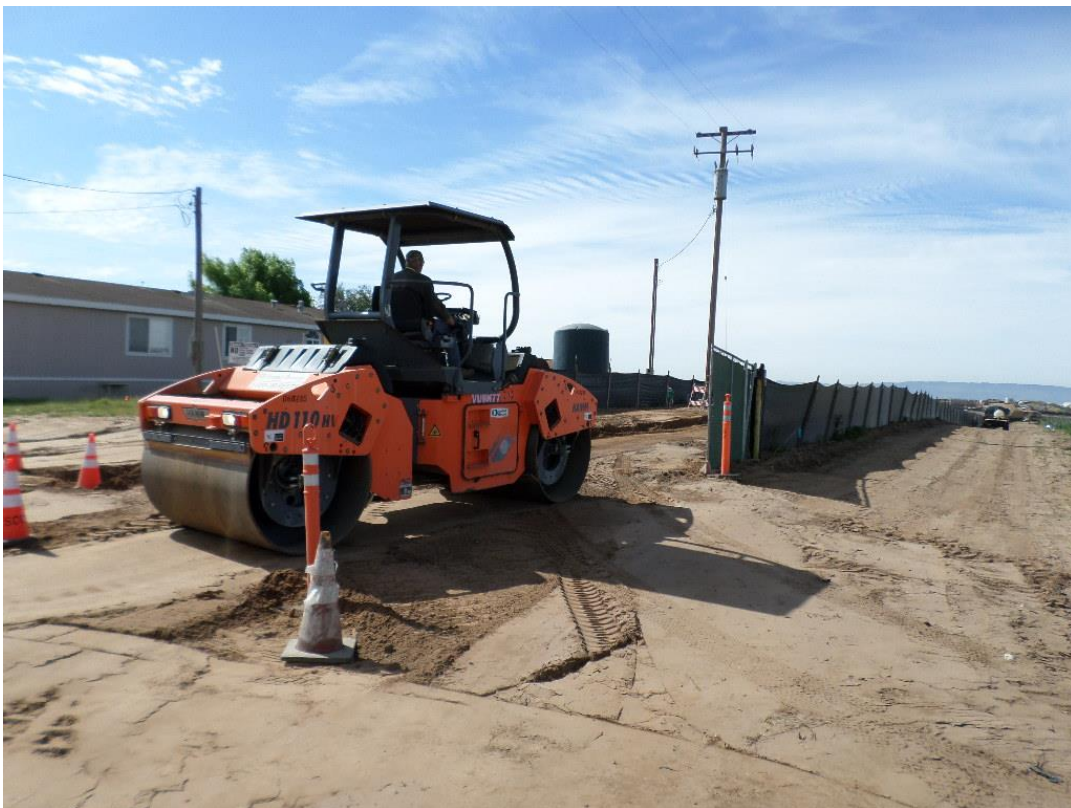
Chemical tank pad in Sodium Hypochlorite Room poured.



Chemical tank installed at pump station.



Spieß cutting the access road to subgrade to build permanent access road.



Spieß compacting subgrade to construct permanent access road.



Base delivered for construction of permanent access road.



Spies placing base to construct permanent access road.



Spiess grading the permanent access road.



Spiess installing tracking control at relocated site entrance.



Spieß installing tracking control at the beginning of the permanent access road.



Spieß removing the test plate from piping at the PRV vault.



Backfilling and compacting over piping at the PRV vault.



Spies making the final tie-in to the 12-inch water line at the PRV vault.



Removing temporary bypass piping after the final tie-in was completed at the PRV vaults.



Spieß excavating to remove temporary bypass piping at PRV vault.



Spiess performing night work to drain the District's existing 12-inch water line and remove tee used for temporary bypass.



Spiess completing final tie-in on District's existing water main at PRV vault.

Blosser Road Flow Metering Station Vaults

Summary of Work:

Spiess completed installation of the sump pump piping and air vents, then backfilled and placed base around the metering vaults. They also completed forms for the electrical pad, the SCADA tower base and the light pole base. Central Coast Fence installed posts for new fencing around the metering vaults.

Pictures:



Spiess installing vent piping at metering vaults.



Placing base material around metering vaults.



Spiess installing forms for electrical pad, light pole and SCADA antenna.



Post for new perimeter fence installed around metering vaults.

Sundale Well Site

Summary of Work:

Quaglino Roofing installed roof membrane while St. Denis Electric worked on installation of chemical building lights, electrical panel, transformer and chlorine analyzers. Spiess worked on installation of chemical tanks. The door manufacturer was also on site to trim the doors on the chemical building to fit inside the door framing.

Pictures:



Quaglino Roofing installing the roof membrane.



Chlorine analyzers installed by St. Denis Electric.



Electrical panel and transformer installed by St. Denis Electric.



Chemical tank installed with tie-downs.

Via Concha Well Site

Summary of Work:

Quaglino Roofing installed roof membrane while St. Denis Electric worked on installation of chemical building lights, electrical panel, transformer and chlorine analyzers. Spiess worked on installation of chemical tanks. The door manufacturer was also on site to trim the doors on the chemical building to fit inside the door framing.

Pictures:



Doors being trimmed by manufacturer to make final fit with door frame.



Transformer installed by St. Denis Electric.

Blacklake Well Site

Summary of Work:

Quaglino Roofing installed roof membrane while St. Denis Electric worked on installation of chemical building lights, electrical panel, transformer and chlorine analyzers. Spiess worked on installation of chemical tanks. The door manufacturer was also on site to trim the doors on the chemical building to fit inside the door framing.

Pictures:



Quaglino Roofing installing roof membrane.

Eureka Well Site

Summary of Work:

Quaglino Roofing installed roof membrane while St. Denis Electric worked on installation of chemical building lights, electrical panel, transformer and chlorine analyzers. Spiess worked on installation of chemical tanks. The door manufacturer was also on site to trim the doors on the chemical building to fit inside the door framing.

Pictures:



Lights installed by St. Denis Electric inside chemical building, chemical tank installed by Spiess.



Electrical panel and transformer installed by St. Denis Electric.

Nipomo Community Services District



Supplemental Water Project Blosser Road Watermain Project

Monthly Progress Report



Prepared By:
MNS Engineers, Inc.

March 2015

Schedule and Budget Summary

Schedule Summary

Notice to Proceed	September 24, 2014
Original Contract Days	120
Contract Days Added	82
Revised Contract Days	202
Elapsed Time (Days)	(202)
Remaining Time (Days)	0
Contract Completion Date	March 31, 2015
Time Elapsed to Date	100%
Work Completed to Date	100%
Approved Change Orders (Days)	82 days

Budget Summary

Original Contract Amount	\$1,599,999.00
Approved Change Orders (Cost)	\$86,829.67
Revised Contract Amount	\$1,686,828.67
Previous Payments	\$1,645,260.14
Current Month Pay Request	\$41,568.53
Total Work Completed	\$1,686,828.67
Work Remaining	\$0.00

Progress Summary

Blosser Road Pipeline

Summary of Work:

D-KAL completed the project on March 31, 2015. They backfilled at Blosser Road and Atlantic Place, successfully passed the bacteria test on the pipeline from Station 1+07 to Bid Package #4, and rechlorinated the entire pipe to 6 ppm to maintain chlorination until the line is put into service. D-KAL replaced curb and gutter which was removed at the access to the levee from Blosser, demobilized and cleaned up their staging area, removed silt fence and SWPPP measures, completed punch list items, performed final paving at Blosser and Atlantic, and Blosser at Taylor, raised valve cans and installed CAV cans. The City also requested additional work to grind the trench pavement from approximately Hidden Pines to the metering vaults in Blosser Road. D-KAL and Ramsey Asphalt worked to get the trench ground down and oiled before Toste was on site to re-stripe the road and install new delineators.

Pictures:



Fugro on site at Blosser and Atlantic where D-KAL has removed the test plate and is backfilling in preparation for paving.



Combination air release valve installed and pad poured prior to cover being installed.



Enclosure installed over CAV.



D-KAL using Baker tank to dechlorinate water from chlorinating prior to bacteria test and flushing from tank into SBCFC channel at Blosser and Atlantic with their permission.



Dechlorination process at Baker tank.



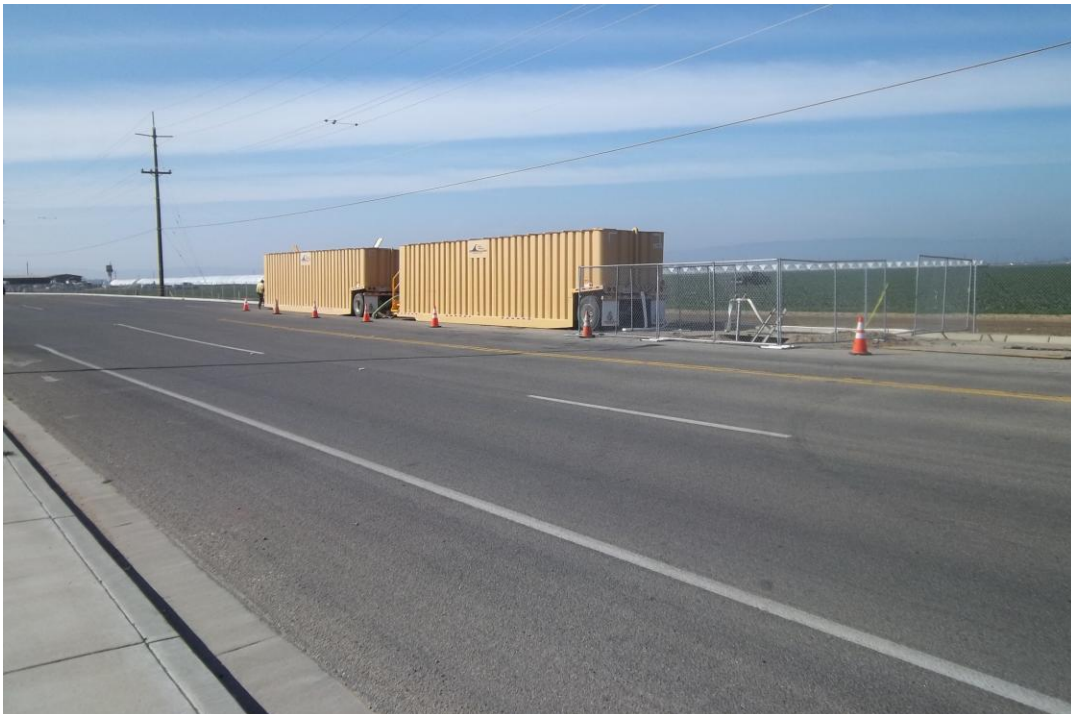
D-KAL forming curb and gutter replacement at Blosser Road and Atlantic Place.



D-KAL pouring curb and gutter.



Curb and gutter replacement poured at Blosser Road and Atlantic Place.



Baker tanks staged in Blosser Road at Station 1+07 to dechlorinate water and release into SBCFC channel while D-KAL rechlorinates the entire pipe from BP #4 to Station 1+07 to 6 ppm.



D-KAL using a “water buffalo” to inject chlorine into the pipeline at BP #4 and flush to the end at Taylor and Blosser to achieve 6 ppm throughout the line.



D-KAL preparing to sawcut trench for final paving section at Blosser and Atlantic.



D-KAL removing sawcut pavement along trench edges in preparation for final paving at Blosser and Atlantic.



D-KAL spreading aggregate base in preparation for final paving.



D-KAL compacting aggregate base at Blosser and Atlantic in preparation for final paving.



Ramsey Asphalt performing final paving of Blosser and Atlantic.



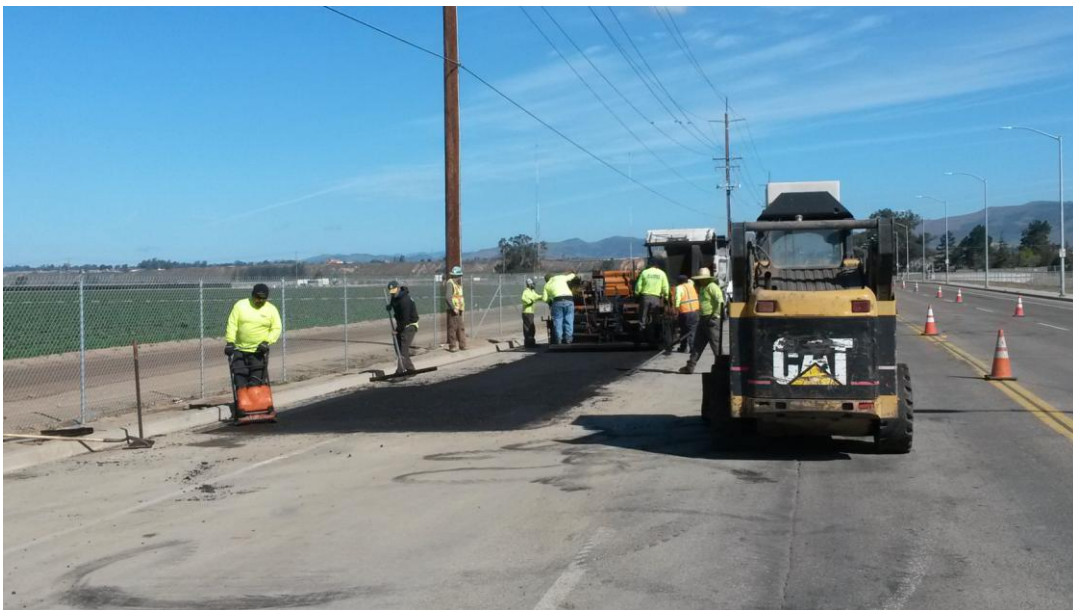
Ramsey Asphalt performing final paving at Blosser and Atlantic.



Ramsey Asphalt completing final paving at Blosser and Atlantic.



Ramsey Asphalt completing final paving at Blosser and Atlantic.



Ramsey Asphalt completing final paving at the south end of the pipe at Blosser and Taylor.



Ramsey Asphalt completing final paving at end of the pipe in Blosser at Taylor.



Final paving completed at Blosser and Taylor, and trench edges oiled.



Ramsey Asphalt re-oiling trench edges of previously paved areas and oiling rock pockets in pavement.



D-KAL removing paving to install valve cans and concrete collars.



Valve cans installed and ready for pouring concrete collars.



D-KAL pouring concrete collars around valve cans.



Street monument at Blosser and Atlantic replaced.



D-KAL finishing concrete collar at pig launcher.



Staging area being cleaned up and regraded.



Ramsey Asphalt placing slurry seal at Blosser and Atlantic per the request of the City of Santa Maria.



Ramsey Asphalt placing slurry at Blosser and Atlantic per the request of the City of Santa Maria.



Grinding of the trench being performed under Ramsey Asphalt per the request of the City of Santa Maria.



Traffic control during restriping.



Toste restriping Blosser Road and replacing delineators.



All work completed in Blosser and Atlantic and looking south down Blosser Road.



Blosser Road with project completed.



Blosser Road with project completed.



Entire length of Blosser Road Water Main completed. Ramsey Asphalt grinding and oiling trench paving near Blosser Flow Meter Vaults.

