TO: BOARD OF DIRECTORS

FROM: MICHAEL S. LEBRUN MSL
GENERAL MANAGER

DATE: JULY 19, 2013

AGENDA ITEM C
JULY 24, 2013

PRESENTATIONS AND REPORTS

The following presentations and reports are scheduled:

C-1) SHERIFF COMMANDER JAMES TAYLOR
Update Report re: South County Law Enforcement and Department News

C-2) CAL FIRE BATTALION CHIEF
Update Report re: South County Cal Fire Activity and Department News

C-3) DIRECTOR OF ENGINEERING AND OPERATIONS
RE: Summary of recent activities

C-4) 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-5) 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: JULY 18, 2013

AGENDA ITEM
C-3
JULY 24, 2013

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 V. Sevcik, will review the attached written update.

RECOMMENDATION

Staff recommends that your Honorable Board receive the update and ask questions.

ATTACHMENT

A. Engineering and Operations Update

JULY 24, 2013

ITEM C-3

ATTACHMENT A

NIPOMO COMMUNITY SERVICES DISTRICT

148 SOUTH WILSON STREET
POST OFFICE BOX 326
NIPOMO, CA 93444 - 0326
(805) 929-1133 FAX (805) 929-1932
Web site address www.ncsd.ca.gov

MEMORANDUM

TO: MICHAEL S. LEBRUN, P.E., GENERAL MANAGER

FROM: PETER V. SEVCIK, P.E., DIRECTOR OF ENGINEERING & OPERATIONS P.V.S.

DATE: JULY 18, 2013

RE: ENGINEERING AND OPERATIONS UPDATE FOR JUNE 2013

PROJECTS IN CONSTRUCTION

- **Southland WWTF Phase 1 Improvement Project**
  - SCOPE OF WORK - Phase 1 improvements to the treatment plant include an influent metering station, influent pump station, influent screening system, grit removal system, Biolac® extended-aeration system and two final clarifiers as well as gravity belt thickener and lined drying beds for biosolids handling.
  - STATUS
    - Construction in progress
    - Scheduled Contract Completion – May 6, 2014
    - Time Elapsed to Date – 51%
    - Work Completed to Date – 51% (Based on Approved Pay Requests)

Construction Contract Cost Summary	
Contract Amount – Cushman	$10,224,900.00
Change Orders	$36,226.00
Revised Contract Amount	$10,261,126.00
Completed to Date	**$5,227,118.61**
Project Cost Summary	
Description	Contract Amount
Design – AECOM	$1,631,038
Construction Management – MNS	$1,276,560
Authorized Construction Management Contingency Remaining	$65,000
Subtotal	**$2,972,598**
Revised Construction Contract – Cushman	$10,261,126
SCADA Integration – Tesco	$198,435
Authorized Construction Contingency Remaining	$265,339
Subtotal	**$10,724,900**
EIR and Permitting	$115,370
Estimated Total Project Cost	**$13,812,868**

- **Supplemental Water Project Phase 1 Bid Package 1 – Santa Maria River Crossing**

  - SCOPE OF WORK – 2,600 lineal feet 24-inch inside diameter HDD bore under Santa Maria River

  - STATUS

    - Notice to Proceed Issued July 10, 2013
    - Scheduled Contract Completion – November 28, 2013

Bid Package 1 Construction Contract Cost Summary	
Contract Amount – ARB, Inc.	$5,847,090.00
Change Orders	$0.00
Revised Contract Amount	$5,847,090.00
Completed to Date	**$0.00**
Authorized Contingency Remaining	$580,000.00

- **Supplemental Water Project Phase 1 Bid Package 3 – Blosser Road Waterline**

  - SCOPE OF WORK – 5700 lineal feet of 24-inch diameter waterline, 300 lineal feet levee crossing jack and bore, flow meter and flow control station with instrumentation

  - STATUS

    - Notice of Award Issued

Bid Package 3 Construction Contract Cost Summary	
Contract Amount – Specialty Construction Inc.	$3,007,897.00
Change Orders	$0.00
Revised Contract Amount	$3,007,897.00
Completed to Date	**$0.00**
Authorized Contingency Remaining	$300,000.00

- **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

  - STATUS

    - Notice of Award Issued

Bid Package 4 Construction Contract Cost Summary	
Contract Amount – Spiess Construction Co. Inc.	$4,364,030.00
Change Orders	$0.00
Revised Contract Amount	$4,364,030.00
Completed to Date	**$0.00**
Authorized Contingency Remaining	$430,000.00

- **Blacklake Well #4 Pump Replacement Project**

    - SCOPE OF WORK - Replacement of existing well pump, motor, column pipe and discharge piping assembly, downhole well video survey, installation of a new pump control valve, pressure relief and surge anticipating valve, gate valves, check valve, flow meter, air release valve, sounding tube, chlorination tube, transducer tube, service saddles, blowoff piping, and electrical system upgrade.

    - STATUS

        - Notice to Proceed pending pump delivery

Construction Contract Cost Summary	
Contract Amount – Sansone	$202,086.25
Change Orders	$0.00
Revised Contract Amount	$202,086.25
Completed to Date	**$0.00**
Authorized Construction Contingency Remaining	$10,000.00

OPERATIONS

- **Southland Wastewater Treatment Facility and Collection System – June 2013**

TOTAL EFFLUENT TREATED	AVERAGE DAILY FLOW TREATED
19.8 Million Gallons	0.661 Million Gallons Per Day
60.8 Acre Feet	2.03 Acre Feet Per Day

    - Daily maintenance and operation of treatment plant and 10 lift stations
    - Effluent suspended solids in compliance
    - Effluent biochemical oxygen demand (BOD) requirement for monthly average of 60mg/L exceeded (140 mg/l) and daily maximum 100mg/L requirement exceeded on 16 occasions
    - No sewer system overflows

- **Blacklake Wastewater Reclamation Facility and Collection System – June 2013**

TOTAL EFFLUENT TREATED	AVERAGE DAILY FLOW TREATED
1.24 Million Gallons	.041 Million Gallons Per Day
3.81 Acre Feet	.13 Acre Feet Per Day

    - Daily maintenance and operation of treatment plant and 3 lift stations
    - Effluent water quality in compliance
    - No sewer system overflows

- **Wells and Water Distribution System – June 2013**

TOTAL MONTHLY PRODUCTION	AVERAGE DAILY PRODUCTION
86.7 Million Gallons	2.8 Million Gallons
266 Acre Feet	8.6 Acre Feet

    - Daily maintenance and operation of 9 wells
    - Via Concha Well pump replacement in progress

- **Maintenance Program – June 2013**

Maintenance Measure	Goal	June Totals	Year to Date Totals
Water meter replacement	35 per month	55 meters	231/420=55%
Fire hydrant service	55 per month	35 hydrants	338/660=51%
Sewer line cleaning	8000 ft per month	29,409 ft	34,774/96,000= 36%

- **Compliance**
    - Monthly Distribution System Coliform Monitoring Summary to California Department of Public Health (CDPH)
    - Quarterly Disinfectant Residuals Compliance Summary to California Department of Public Health (CDPH)
    - Monthly Wastewater Monitoring Report for the Blacklake Wastewater Reclamation Facility to California Regional Water Quality Control Board (CRWQCB)
    - Monthly Wastewater Monitoring Report for the Southland Wastewater Treatment Facility to California Regional Water Quality Control Board (CRWQCB)
    - Completed Monthly 'No-Spill' Certification for California Integrated Water Quality System (CIWQS) for both Southland and Blacklake Sewer Collection Systems

- **Training**
    - Two staff that participated in Grade II Wastewater Treatment Certification Exam 4/6 received notification in May that they passed exam

- **Personnel**
    - Wastewater Supervisor recruitment initiated
    - Utility Operator recruitment pending
    - Customer service worker recruitment pending

PROJECTS IN DESIGN AND PLANNING STAGES

- **Water and Sewer Master Plan Implementation**
    - Standpipe Tank Inlet Modification and Interior Rehabilitation
        - Design in progress

- **Blacklake Wastewater Master Plan**
    - Technical evaluation in progress

OTHER PROJECTS AND PROGRAMS

- **Safety Program**
    - Operations Weekly Tailgate Safety training
    - Continued to coordinate on-line safety training for all District Employees

MEETINGS

- 6/3 – Supplemental Water Project Easement
- 6/5 – IRWM Regional Water Management Group
- 6/6 – SLO County and DWR, IRWM Implementation Grant
- 6/11 – Supplemental Water Project Property Easement
- 6/13 – Southland WWTF Phase 1 Improvement Project construction progress
- 6/13 – Cabinet Meeting
- 6/14 – MKN, Blacklake Sewer Master Plan Progress meeting
- 6/18 – GM Coordination
- 6/20 – Southland WWTF Phase 1 Improvement Project construction progress
- 6/21 – Southland WWTF SCADA Screen Workshop
- 6/24 – AECOM, MNS, Supplemental Water Project Coordination
- 6/25 – AECOM, Firma, Southland WWTF Phase 1 Improvement Project landscaping
- 6/25 – MKN, Blacklake WWTF Operations and Maintenance Workshop
- 6/27 – Cabinet Meeting
- 6/28 – Operations Staff, Southland WWTF Phase 1 Improvement Project

ATTACHMENT

- June 2013 Southland WWTF Improvements Phase 1 Project Monthly Construction Progress Report

Nipomo Community Services District

Southland WWTF Improvements
Phase 1 Project
Monthly Progress Report

Prepared By:
MNS Engineers, Inc.

June 2013

Schedule and Budget Summary

Schedule Summary

Notice to Proceed	July 30, 2012
Original Contract Days	645
Contract Days Added	0
Revised Contract Days	645
Elapsed Time (Days)	(332)
Remaining Time (Days)	313
Contract Completion Date	May 6, 2014
Time Elapsed to Date	51%
Work Completed to Date	51%
Approved Change Orders (Days)	0 days

Budget Summary

Original Contract Amount	$10,224,900.00
Approved Change Orders (Cost)	$36,226.00
Revised Contract Amount	$10,261,126.00
Previous Payments	$4,746,028.61
Current Month Pay Request	$481,090.00
Total Work Completed	$5,227,118.61
Work Remaining	$5,034,007.39

Progress Summary

General Site Work – Piping and Electrical

Summary of Work:

Cushman continued work installing the 24" SE2 piping and plug valves at Ponds 1 & 2, then performed video of the pipe installed to date. Cushman installed 8" DR piping between Manholes #5 & 6 and installed Manholes #6 & 7 and the 6" DR piping between them and to the Sludge Thickening Building. They also completed installation of all 16" SE1 piping from clarifiers to the Processed Water Pump Station. Bergelectric pulled control wire from the aeration system motorized valves to the PLC and from transformer 45 to the MCC. PG&E installed the transformer and pulled the primary feed from the new pole to the transformer and the secondary feed to the main panel in the Electrical/Blower Building.

Pictures:

Forms for pouring thrust block at a tee on the 24" SE2 pipe.

Cushman installing a tee on the 24" SE2 pipe.

Connecting the 24" SE2 piping to the Process Water Pump Station.

Manhole #6 installed with 6" DR piping to Manhole #7.

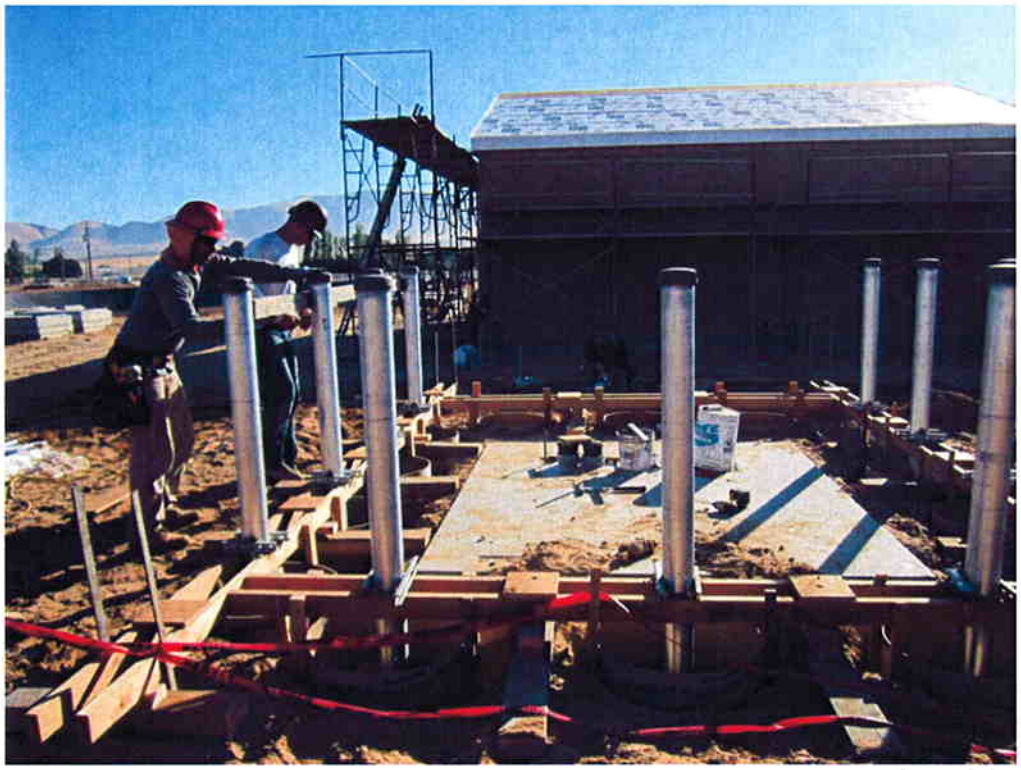
Cushman installing Manhole #7 and 6" DR piping.

Excavating for the 6" DR pipe.

Installation of 6" DR piping from Manhole #6 to the Sludge Thickening Building.

Cushman installing the 6" DR piping from Manhole #7 and connecting to the Sodium Hypochlorite Storage building drains.

Cushman installing the 16" SE1 piping between the Process Water Pump Station and Clarifier #1.



Cushman installing bollards around transformer pad in preparation for PG&E installing the transformer.

PG&E setting new transformer.

Process 10 Influent Pump Station

Summary of Work:

Cushman excavated and installed shoring for the Influent Pump Station. Next they formed and poured the slab and walls with 4,000 psi concrete.

Pictures:

Excavating for influent pump station. Cushman found unidentified 10" PVC C-900 pipe.

Completing excavation.

Assembling shoring.

Installing first level of shoring.

Installing second level of shoring.

Installing base material.

Forms and reinforcing for the slab.

Installing water stop at base of wall and slab.

Pouring concrete for the slab.

Installing interior wall forms.

Installing rebar for walls.

Process 40 Aeration Basin #1

Summary of Work:

Cushman completed installation of the weir gate at the Weir Boxes and the aeration system motorized valves and anchor posts. They also installed the metal grating on the top of the air meter and control valves and installed ladders inside both. The biofuser system inside the aeration basin was also assembled.

Pictures:

Cushman installing the weir gate at the Weir Box for Aeration Basin #1.

Cushman installing the access ladder inside the Air Meter Vault.

Installing anchor posts for the biofusers.

AR piping with valves and posts installed.

Cushman heat welding HDPE pipe for biofusers.

HDPE pipe welding complete and nipples installed on pipe.

Cushman assembling the biofusers for the Biolac System.

Cushman assembling the biofusers for the Biolac system.

Biofusers assembled and wrapped with plastic for protection.

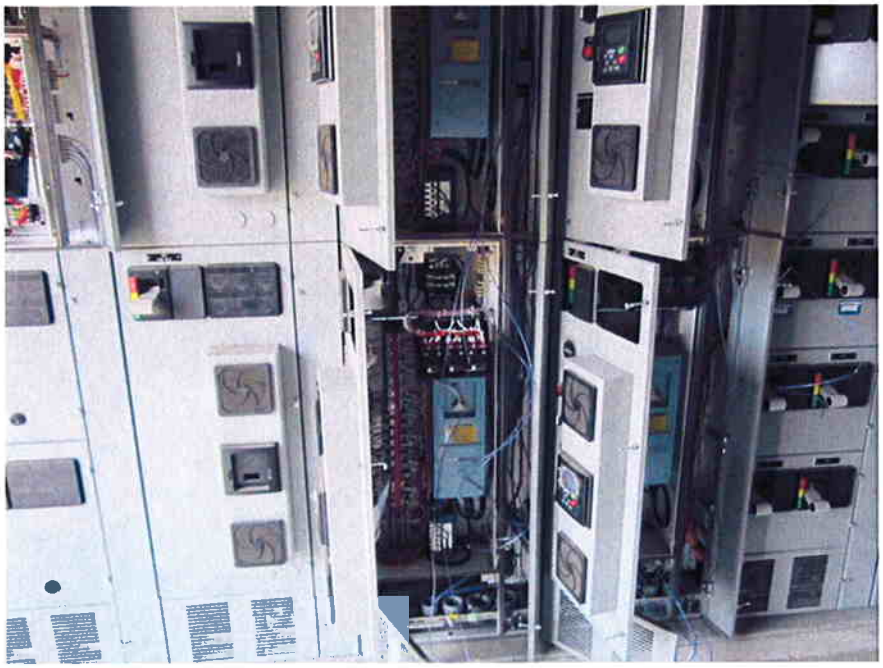
Process 45 Electrical/Blower Building

Summary of Work:

Bergelectric has almost completed the seismic restraint mounting for the electrical gear inside the Electrical/Blower Building. They continue to pull wires in the MCC panels and also installed conduit for the lighting. KNK Coating painted the fascia.

Pictures:

Bergelectric installing lighting conduit.



Bergelectric pulling wires inside MCC panels.

KNK Coating painting fascia.

Process 50 – Secondary Clarifier No. 1 and 2.

Summary of Work:

Cushman completed backfill and compaction on the west side of the clarifiers around the Scum Well after installing the 6" SC and 16" SE1 piping. They formed and poured the walls and the top deck of the Scum Well and both the RAS/WAS pump stations. KNK Coating completed the Xypex coating in the clarifiers, RAS/WAS Pump Stations and the Scum Well. Cushman assembled the clarifier mechanisms in preparation for installing inside the clarifiers, installed the scum troughs in the clarifiers, formed and poured the tops of the RAS/WAS Pump Stations and installed grating on the tops of Distribution Boxes #1 & 2.

Pictures:

Installing reinforcing for the walls at the Scum Well.

Tying reinforcing for the walls at the Scum Well.

Cushman pouring the Scum Well walls.

Scum Well wall forms removed.

KNK Coating applying Xypex to the inside of the Scum Well.

Backfilling around the Scum Well.


Cushman installing forms for pouring the top of the Scum Well.

Cushman installing the hatch on the top of the Scum Well.

Forming the top of RAS/WAS Pump Station #2.

Forming the top of RAS/WAS Pump Station #2.

KNK Coating applying Xypex to the inside of RAS/WAS Pump Station #2.

KNK Coating sandblasting the inside of Clarifier #1 in preparation for applying the Xypex coating.

KNK Coating applying Xypex to interior of Clarifier #1.

Cushman installing the scum trough inside Clarifier #1.

Cushman assembling clarifier mechanisms in preparation for installation inside clarifiers.

Installing beams for grating support at Distribution Box #2.

Process 70 – Process Water Pump Station and Sodium Hypochlorite Storage

Summary of Work:

Cushman removed wall forms then completed leak testing and backfill of the Process Water Pump Station. Bergelectric installed the electrical ductbank followed by Cushman forming and pouring the top deck and installing the vertical turbine pump shafts. The motors continue to be stored on site per the manufacturer's recommendations. Cushman also excavated for the foundation of the Sodium Hypochlorite Storage building and installed underground piping and electrical conduits before forming and pouring the footings.

Pictures:

Removing wall forms from the Process Water Pump Station.

Installing vertical turbine pump shafts inside the Process Water Pump Station.

Cushman dry packing the mounting plates for the vertical turbine pumps at the Process Water Pump Station.

Cushman installing the under slab plumbing for the Sodium Hypochlorite Storage building.

Cushman excavating for the footings of the Sodium Hypochlorite Storage building.

Compacting the base for the footings of the Sodium Hypochlorite Storage building.

Cushman preparing forms for the Sodium Hypochlorite Storage building foundation.

Bergelectric installing conduit through the footings of the Sodium Hypochlorite Storage building.

Change Orders

7. Native Sand/Weir Box Testing

This change order is for documentation of a credit to the District and a cost which were offset by each other in one change order. The Contract Documents required the Contractor to import sand material for the Bedding and Pipe Zones. Cushman tested the native material and submitted test results demonstrating the native material met the requirements of the import sand. AECOM and Fugro accepted the test results and Cushman was allowed to use the native material, resulting in a credit to the District of $11,475. The District also requested Cushman leak test the weir boxes for the Aeration Basin and Emergency Holding Basins, due to installation of a construction joint which was not shown in the Contract Documents. The cost to perform the leak tests was $11,779. The District and Cushman agreed to include both these items in this change order for a net cost of $0.

Final Cost: $0

8. Panic Hardware

This change order is for installing panic hardware on two sets of double doors, one at the Electrical/Blower Building and one at the Sodium Hypochlorite Storage building.

Final Credit: $7,440