

# Nipomo Community Services District



## Southland WWTF Improvements Phase 1 Project Monthly Progress Report



Prepared By:  
MNS Engineers, Inc.

## September 2013

# Schedule and Budget Summary

## Schedule Summary

|                               |               |
|-------------------------------|---------------|
| Notice to Proceed             | July 30, 2012 |
| Original Contract Days        | 645           |
| Contract Days Added           | 60            |
| Revised Contract Days         | 705           |
| Elapsed Time (Days)           | (425)         |
| Remaining Time (Days)         | 280           |
| Contract Completion Date      | July 5, 2014  |
| Time Elapsed to Date          | 60%           |
| Work Completed to Date        | 72%           |
| Approved Change Orders (Days) | 60 days       |

## Budget Summary

|                               |                 |
|-------------------------------|-----------------|
| Original Contract Amount      | \$10,224,900.00 |
| Approved Change Orders (Cost) | \$967,159.28    |
| Revised Contract Amount       | \$11,192,059.28 |
| Previous Payments             | \$7,510,382.09  |
| Current Month Pay Request     | \$557,110.51    |
| Total Work Completed          | \$8,067,492.60  |
| Work Remaining                | \$3,124,566.68  |

# Progress Summary

## General Site Work – Piping and Electrical

### Summary of Work:

Cushman completed installation of the 1-inch, 2-inch and 6-inch non potable water piping and the worked on the 6-inch TWAS piping and 4-inch DR piping. They also installed the new fire hydrant on the 6-inch potable water line. Bergelectric installed Pull Boxes 11 and 20 with conduit and ground wire between pull boxes, then placed red slurry over the conduit. They also completed installation and terminated wires for the Clarifiers and installed conduit to the motorized valves at the Aeration Basin.

### Pictures:



Cushman installing 4-inch DR piping along the Grit Classifier.

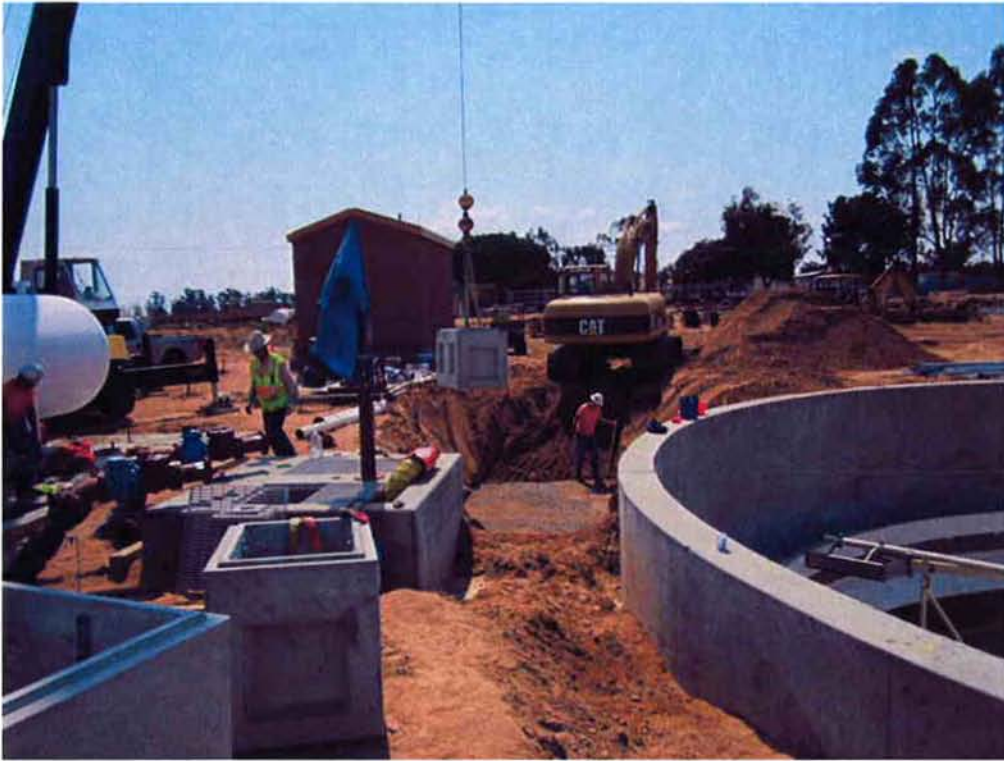




Cushman installing the fire hydrant near the Electrical/Blower Building.



Bergelectric installing Duct Bank 12 (DB 12).



Bergelectric and Cushman installing Pull Box 20.



## **Process 10 Influent Pump Station**

### **Summary of Work:**

Cushman installed 10-inch raw wastewater (RW) piping at the pre-rotation basins and poured concrete fill in the Influent Pump Station. They also installed the stainless steel access ladder.

### **Pictures:**



Cushman pouring concrete fill at the Influent Pump Station.



Cushman installing 10-inch RW piping at the Influent Pump Station.

## **Process 20 & 30 Headworks Screening System & Grit Removal System**

### **Summary of Work:**

Cushman completed concrete for the Headworks channels, upper stair landings, and installed the slide gates and hand wheels. They also completed concrete for the Grit Chamber.

### **Pictures:**



Cushman pouring channel walls to the Vortex Grit Tank.



Cushman forming Grit Chamber walls.





Completing forms for the Grit Chamber.



Cushman pouring the Grit Chamber structure.





Cushman finishing the surface of the Grit Chamber.



Concrete fill poured at the overflow channel of the Headworks.



Cushman pouring stair landings at Headworks.



Cushman installing slide gate hand operators at the Headworks channels.





Cushman installing slide gates at the Headworks.

## **Process 40 Aeration Basin**

### **Summary of Work:**

Bergelectric terminated power and control wires at the motorized valves along with disconnect switches mounted on aluminum stands at the Aeration Basin. Cushman has also poured the pipe support concrete pads and installed pipe supports along the AR piping at the motorized valves and grouted the slide gates at Distribution Box #1. KNK Coating coated the AR piping inside the vaults.

### **Pictures:**



Conduit and wire installed to motorized valves at Aeration Basin.





Cushman forming pads for pipe supports and disconnect switches at the AR piping for the Aeration Basin.



Cushman grouting the slide gates at Distribution Box #1.



KNK Coating painting AR piping inside the Air Meter and Flow Control Valve Vault.



## **Process 45 Electrical/Blower Building**

### **Summary of Work:**

Dueck Roofing was on site to complete the roof. AIT installed the drywall in the ceiling with a smooth coat and painted it. Cushman poured the AC concrete pad. Bergelectric has terminated the control wire from the motorized valves in the variable frequency drive (VFD) panel and instrumentation control panel (ICP) along with terminating power and control wire from Clarifiers to the motor control center (MCC).

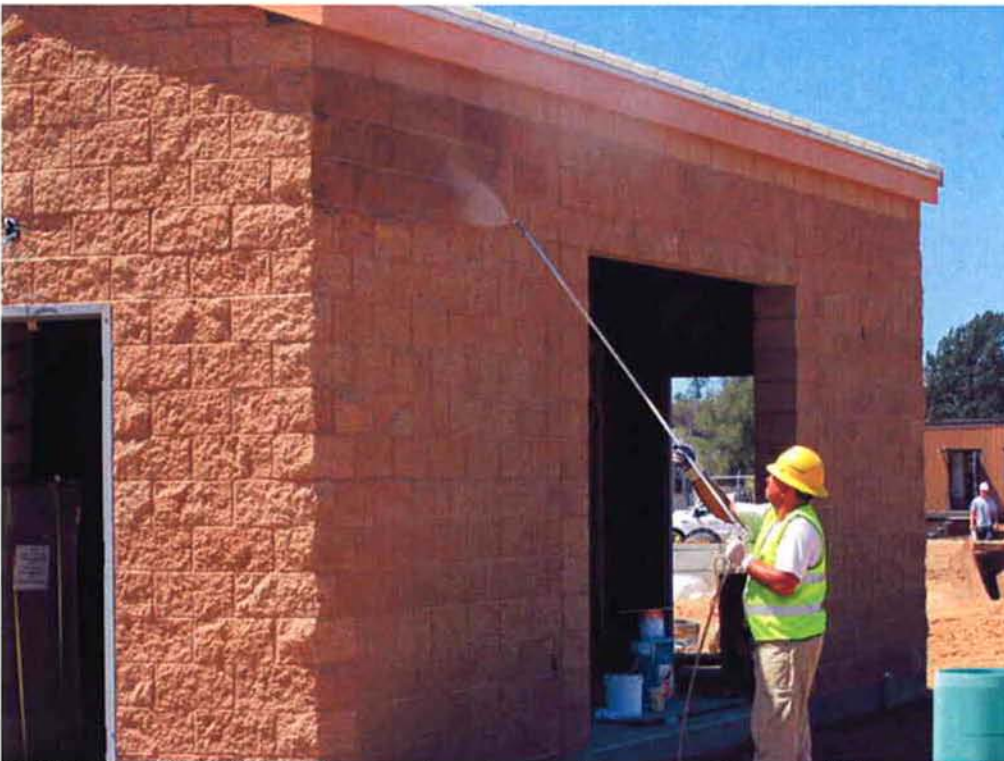
### **Pictures:**



Dueck Roofing completing mechanical seam roof at Electrical/Blower Building.



Dueck Roofing installing the ridge on the Electrical/Blower Building.



KNK Coating applying Bloc Seal to the outside of the Electrical/Blower Building for waterproofing.





KNK Coating priming AR piping in Blower Room of Electrical/Blower Building.



KNK Coating putting finish coat on AR piping in Blower Room of Electrical/Blower Building.



AIT installing sheet rock on the ceiling of the MCC Room in the Electrical/Blower Building.



AIT taping drywall in the Blower Room at Electrical/Blower Building.





AIT sanding the smooth coating on the ceiling inside the Blower Room of the Electrical/Blower Building.



KNK Coating prime coating the ceiling inside the MCC Room of the Electrical/Blower Building.

## **Process 50 – Secondary Clarifier No. 1 and 2.**

### **Summary of Work:**

Bergelectric pulled control and power conductor wiring from the MCC to the clarifier mechanism control panel and terminated the wire at the motor disconnect switch and panel. RAS/WAS PS # 1 discharge piping, knife gate, pump bases and pumps have been installed with exterior pipe installed to the metering vault. Portions of the Scum Pump Station and RAS/WAS PS # 2 discharge piping has been installed along with pump bases.

### **Pictures:**



Bergelectric installing PVC rigid coated conduit at Clarifier #1.





Bergelectric pulling wire to the local control panel at the clarifiers.



Bergelectric terminating clarifier wires at MCC room in Electrical/Blower Building.



Cushman installing RAS/WAS piping inside RAS/WAS Pump Station #1.



Cushman installing RAS/WAS Piping inside RAS/WAS Pump Station #2.





Cushman installing RAS/WAS Pump #1.



Cushman installing RAS/WAS piping from the RAS/WAS Pump Station #1.

## **Process 60 – Sludge Thickening System**

### **Summary of Work:**

Cushman completed the Sludge Thickening Building and set the sludge thickening equipment into position. They also worked on WAS and SC piping connecting to the sludge thickening equipment. KNK Coatings completed coating for the steel part of the building and Dueck Roofing completed installation of the canopy on the Sludge Thickening Building.

### **Pictures:**



Sludge thickening equipment delivered to site.





KNK Coating sanding the Sludge Thickening Building in preparation for applying the prime coat.



KNK Coating applying primer to the Sludge Thickening Building.



KNK Coating applying finish coat to the Sludge Thickening Building.



Dueck Roofing installing the shade canopy on the Sludge Thickening Building.





Dueck Roofing installing the shade canopy at the Sludge Thickening Building.



Cushman moving sludge thickening equipment into place at Sludge Thickening Building.



Cushman installing 6-inch WAS and SC piping at Sludge Thickening Building.



Cushman installing 6-inch WAS and SC piping at Sludge Thickening Building.



## **Process 70 – Process Water Pump Station and Sodium Hypochlorite Storage**

### **Summary of Work:**

Dueck Roofing completed the standing seam roof of the Sodium Hypochlorite Storage Building. Cushman installed the hypochlorite storage tank with vent piping. AIT installed and taped drywall on the ceiling. KNK Coated the hydropneumatic tank, Cushman constructed the foundation and supports for the tank and mounted it onto the supports.

### **Pictures:**



KNK Coating applying primer to the hydropneumatic tank.



Cushman compacting base material under hydropneumatic tank foundation.



Sandblasting foundation for hydropneumatic tank supports.





Cushman forming hydropneumatic tank supports.



Cushman pouring the hydropneumatic tank supports.





Cushman forming the hydropneumatic tank slab, and CMC installing reinforcing.

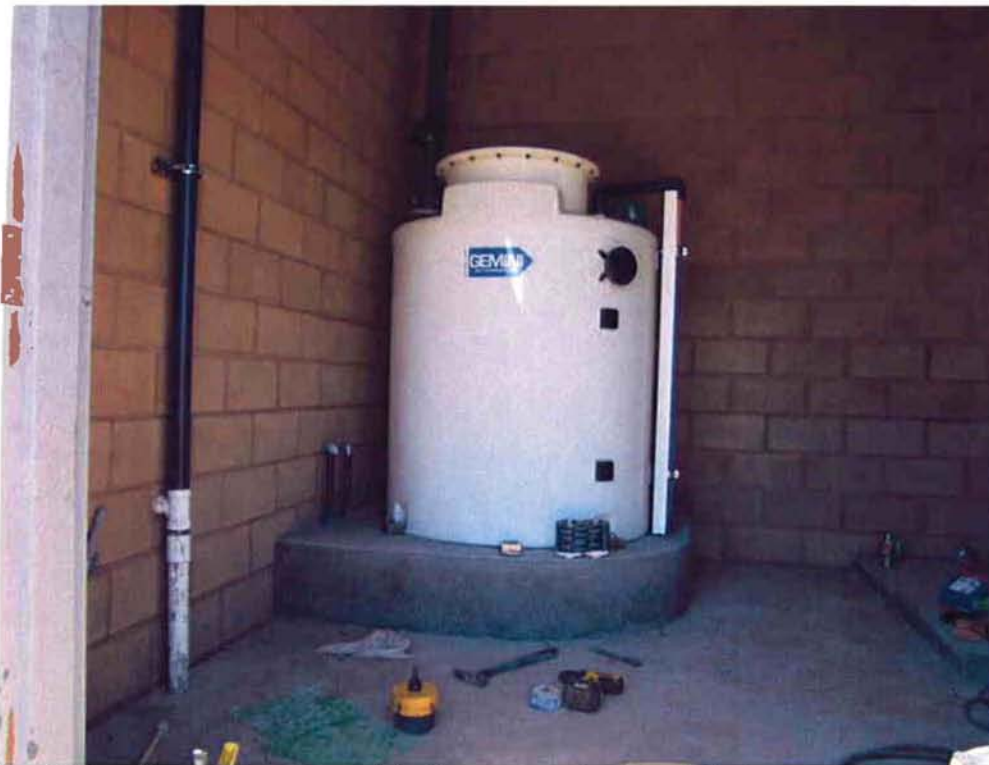


Hydropneumatic tank slab finished.





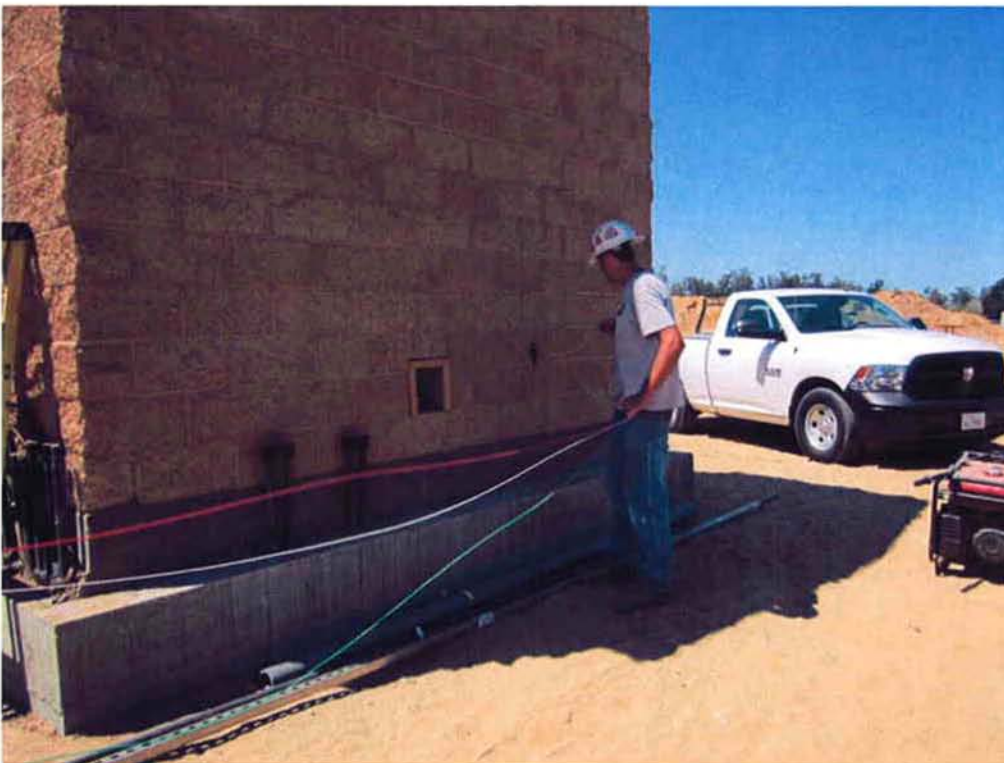
Cushman mounting hydropneumatic tank on supports.



The 300 gallon sodium hypochlorite storage tank installed.



KNK Coating applying Bloc Seal to the outside of the Sodium Hypochlorite Storage Building for waterproofing.



Bergelectric pulling wires at the Sodium Hypochlorite Storage Building.



## **Process 90 – Sludge Drying Beds**

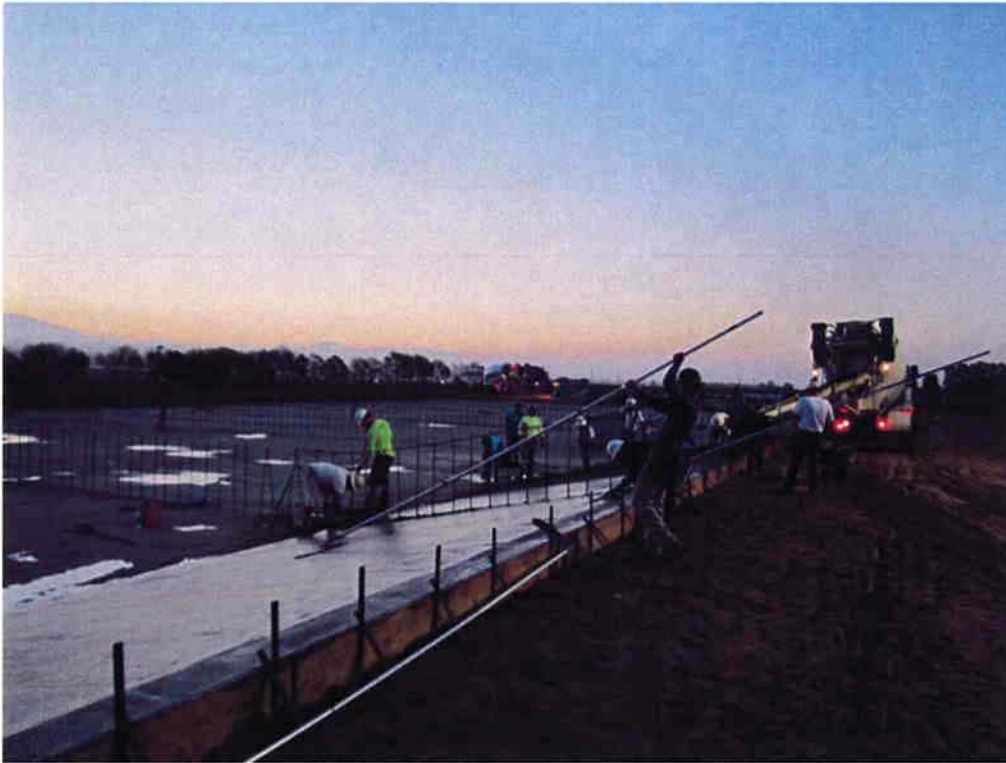
### **Summary of Work:**

Cushman completed pouring of the Sludge Drying Bed slabs and formed and poured 600 yards of 4,000 psi concrete for the divider walls with a reusable form system.

### **Pictures:**



Cushman completing concrete pours of the ramps to the Sludge Drying Beds.



Cushman completing concrete pours of the ramps to the Sludge Drying Beds.



Cushman making final pour of the ramps for the Sludge Drying Beds.





Sludge Drying Bed ramp pours complete and concrete cure applied.



Cushman installing wall construction joints with water stop at Sludge Drying Bed #1.





Cushman setting forms for intersections of divider walls at the Sludge Drying Beds.



Divider wall intersection forms installed at Sludge Drying Beds.





Cushman pouring divider wall intersections at Sludge Drying Beds.



Cushman removing forms for divider wall intersections from the first pour and relocating and installing them for the next pour at the Sludge Drying Beds.



Cushman pouring west wall along the Sludge Drying Beds.



Cushman relocating reusable forms from the west wall concrete pours to the divider walls at the Sludge Drying Beds.





Cushman setting reusable forms for divider walls at the Sludge Drying Beds.



Cushman pouring divider walls at Sludge Drying Beds.



Cushman vibrating concrete during pour of divider walls at the Sludge Drying Beds.



Cushman sandblasting rebar and concrete before next divider wall pour at Sludge Drying Beds.