

Owner: CITY OF GLENWOOD SPRINGS
Contractor: MOLTZ CONSTRUCTION, INC.
Engineer Team: SCHMUESER GORDON MEYER, INC.
TETRA TECH, INC.

JULY 2011 PROGRESS REPORT

This report will summarize work performed during July 2011. With the embankment and backfill materials placed during July, the concrete walls of the various tanks seemed to have grown shorter and the roominess of the facility area as a whole seems to have grown larger. Earthen materials were placed around the perimeter of the Oxidation Ditches and between the O Ditches and Clarifiers. Along with the masonry work nearing completion at the Operations and Administrations building, it is becoming easier to visualize the final profile of this new Glenwood Springs Facility.

Work completed or performed in July included the pre-mentioned embankment construction, masonry work on the Administration building, structural steel erection including steel columns, beams, joists, and roof panels, installation of yard pipe, interior electrical, HVAC, and plumbing work, installation of doors and window frames, installation of FRP grating over the channels in the Headworks building, and start of the installation of the main electrical feed ductbank into the plant.

Work at the Lift Station included concrete slabs and walls in the north and south pump rooms and the electrical and plumbing work necessary in those areas.



Total Driven Piles Installed	2,707 vertical feet
Total Cement Treated Soils	18,403 cubic yards
Total Concrete To Date	6,996 cubic yards
Concrete Reinforcing Steel	1,103,500 pounds
Total Masonry Walls Erected	29,274 square feet
Total Masonry Veneer In Place	6,884 square feet
Total Pre-cast concrete roof panels	18 each
Total Structural Steel Columns/Beams	43 each
Total Metal Roofing Panels	13,185 square feet
Total Handrail	1370 linear feet
Total Process/Yard Pipe Installed	6980 linear feet

STATUS BY STRUCTURE

HEADWORKS BUILDING

*Overall dimensions of building: 90L x 40W
Concrete Placed To Date: 627.5 cubic yards
Masonry Walls Constructed: 3804 square feet
Process Pipe Installed 99 linear feet*

With the exception of the installation of doors and window frames, the more important function of the Headworks building during July was to act as protection for some large equipment pieces that needed to be stored indoors. Installation of FRP grating began than was put off as other more pressing work took priority. Still, the Headworks building is the first building you see entering the project.



Window Frame Installed



BIOSOLIDS/DIGESTERS BUILDING

*Overall dimensions (in feet): 171L x 54W
Concrete Placed To Date: 1479 cubic yards
Masonry Walls Constructed: 10,457 square feet
Process Pipe Installed: 1001 linear feet*

Work on the BioSolids/Digester building included HVAC work with the installation of the air handling units intake louvers, ductwork fabrication from the louvers to the make-up air units themselves, and other connection ductwork to the system. Plumbing work included water entry piping, overflow drain installation, and pipe hanging and insulation. Window frames were installed throughout the building and all doors, with the exception of the overhead coiling doors, were installed. This includes the large two doors opening from the centrifuge room out to the loading dock on the west side. Stainless steel air pipe was installed to the building and connected to the interior air distribution piping.



OXIDATION DITCHES

Overall dimensions of tanks(in feet): 173L x 145W x 21H

Concrete Placed To Date: 2698 cubic yards

Process Pipe Installed to date: 473 linear feet



Stainless Steel Air Distribution Piping - O Ditches

With the placement of fill around the perimeter of the tanks, it is hard to judge their size until you walk up to a wall and look inside. Of course once they are filled with water that vantage point will also disappear. Moltz Construction has installed the vertical drum mixer on the west side of the north tank. There are four mixers in total to be installed. They continue to install the stainless steel air distribution piping which will provide the air to the diffusers in the bottom of the tank. Once complete, this piping and the diffuser system will inject air/oxygen into the wastewater circulating in the Oxidation Ditches thus beginning the biological process.



Oxidation Ditch - Vertical Drum Mixer

Also placed in July was the concrete in the anaerobic selector box deck and the splitter box slab.

CLARIFIERS

Dimensions (2 tanks) each 55 foot diameters by 18.75 feet tall

Concrete Placed To Date: 829 Cubic yards

Process Pipe Installed: 184 linear feet

Both clarifier mechanisms are installed along with the FRP scum baffles and effluent weirs. Moltz also placed the grout in the effluent trough that performs as the invert, channeling water to the effluent piping. Water flowing over the weir, along the trough invert and into the effluent pipe heads for the UV Disinfection system and discharged to the river.

A representative from WesTech Engineering Inc, the manufacturer of the clarifier mechanisms will complete adjustments of the equipment during the first week of August.



Placing Grout Invert in Clarifier Effluent Trough

OPERATIONS AND ADMINISTRATIONS BUILDING



Admin Building Upper Level Deck

*Concrete Placed to date: 799 CY
Pipe Installed: 488 LF
Masonry Walls Constructed: 15,013 SF
Masonry Veneer Walls: 6884 SF*

The masons were the most visual component on the Operations and Administration building. They first completed the exterior structural block and elevator shaft up to the elevation of the upper level slab. Next they constructed the veneer to just under the same elevation then moved inside constructing interior walls on the main level. Structural steel erection included numerous steel joist placed for support of the upper level slab with several beams set to support the joists and to span certain open areas.

For the upper level slab, steel floor panels were installed over the joists and a concrete topping slab placed over the steel panels. Now the masons could continue work up to the roof and completed the perimeter walls and elevator shaft to the bearing elevation of the roof joists.

Other work performed in July was the installation of electrical conduit, placement of steel roof panels over the Operations side of the building, and installation of door frames concurrent with the masonry construction.



Administration Building - Masonry

YARD PIPE

Pipe Installed (to date): 4660 linear feet

Yard pipe installed this month included the two eight inch RAS lines returning wastewater from the lower zone of the Clarifiers to the Oxidation Ditch Splitter Box (influent side), the four inch sanitary line carrying waste water collected from the Operations/Administration building to the influent channels of the Headworks building, and numerous sizes of stainless steel air pipe for distribution of air to the Digesters and the Oxidation Ditches.



Installing Stainless Steel Pipe North of Digesters

SITE WORK

Work performed in July included the installation of the Rockfall Protection Fence and the beginning of the main electrical feed ductbank into the facilities.

The Rockfall Protection Fence is a thirteen foot tall metal fence anchored into the soil by twenty and thirty foot deep drilled micropiles. The fence posts are connected to the micropiles through a series of steel plates and cables creating a braking system to absorb the energy of rock falling down the mountain in the future.



Micropile Verification Testing - Rockfall Fence



Rockfall Protection Fence at South Side of Facilities



Main Electrical Feed to Plant - Ductbank Installation

The main electrical feed ductbank starts at an existing vault as you enter the site from the east. It will run to the project transformer and high voltage switching gear located east of the Admin and south of the Clarifiers. The facilities emergency generator will also be located in this area. Distribution of electrical service will fan out from here to all structures with power needs. Distribution conduit back to some structures, such as the Headworks building, is contained within this concrete encased ductbank.

THE LIFT STATION *Overall dimensions of building: 112L x 91W; Concrete Placed: 525 cubic yards*

Concrete work performed includes the slabs and walls of the pump rooms adjacent to the wet well with one of these rooms on each side. Related electric and plumbing work was completed



Installing Casing thru Bore Under RFTA Tracks

for under and in-slab items. The bore/casing installation to carry the force main pipe under the RFTA train tracks was completed with grout placement to fill voids around the outside of the casing and placement of the force main pipe through the casing remaining.



Lift Station - Concrete Wall Placement

The contractor, though showing a few items still slightly behind schedule, is planning start-up of the new plant in spring of 2012.

