City Administrators Report

May 6, 2013

Water Treatment Plant

On Monday April 22, Bob Thompson and Karl Henriksson from Purification Technology Inc. out of Rangely, Co arrived to start running tests at the water treatment plant. Both Bob and Karl have been here before, they were involved during the “pilot study” for the plant when it was first designed. Bob mentioned to me there were similar problems that came up when the plant first came on line in the mid 90’s. It too was related to work being performed on Flower Creek dam.

Samples were drawn from the raw water coming into the plant and “jar testing” was performed using different types and amounts of chemicals. Ideally when the raw water comes into the plant the chemicals are injected and the treatment takes place within minutes. The problem we are having is it can take much longer to treat and there are times the chemicals don’t work at all.

Samples were also taken from the upper reservoir, the lower reservoir and at the bridge near the gauging station. After running tests at all three locations they were able to isolate the problem as coming from the upper reservoir and it is likely related to the work in and around the dam.

The final results of the entire tests should be back to the city within a couple of weeks. The operators were given instructions on what measure to take to treat the water. More chemicals had to be ordered and in the future a more permanent injection system into the raw water line may have to be installed further up from the plant. They are using a vault near the old chlorinating station to inject a chemical called Potassium Permanganate. This destroys the organic acids that are in the water and allows the metal salts that are in the chemicals to work.

This chemical is very dangerous to work with and the operators don’t like having to use it. The Potassium Permanganate has to have a contact time in the raw water to dilute it before coming into the plant. This helps the other chemicals that are added, to react to the turbidity in the water to “flock” and to be collected in the filters. There will be more recommendations once all the data gathered is analyzed and put into the report.

Waste Water Treatment Plant

On Monday, April 29, 2013, Thompson Construction started work on the contact basin at the waste water plant. As you may recall there is an issue of algae building up on the walls and bottom of the basin. During the warmer months, the algae forms and has to be cleaned from the walls quite often. If left alone the algae will build up and then come loose and travel through the UV System and prevents the water from being treated. This can result in the plant not being in compliance with DEQ.

The plan to prevent this problem is to gate off the contact basin and run the water from the clarifiers straight to the UV System. The gates will be made of cement and once in place a section from the contact basin wall will be cut out and the water will travel through the opening and into the UV System. The entire project should take about a week to complete.

Park Lights

The lights for City Service Road through Riverfront Park have been ordered and should arrive soon. The location of the lights has been staked out along with the crossing areas. A meeting with the EPA was set up regarding the drilling of the holes, along with the trench alongside the street and crossing areas.

EPA will have someone on site during the work to assist with any material that may be contaminated. Once the holes are drilled, city crews will install forms with #4 rebar and filled with cement. The “J” bolts will be put into the cement and left to cure. Once the cement has cured, the poles and fixtures will be assembled and mounted.

The trench will follow alongside the street where the 1-1/4 inch conduit will be placed. There will be three locations where the conduit will have to be bored under the street. When the conduit is in place and the trench covered, wire will then be pulled into the conduit and connected at each light.

Departments

Water distribution had a large leak on Highway #2 west near Les Schwab. We knew there was a problem there for a while but until it surfaced crews were not able to locate where to begin digging to repair the leak. After filing the required permitting to the MDOT and getting the ok to move forward, crews started work on Monday the 29 of April. They replace a 13 foot section of 10 inch main. They wrapped up around 10:30 that evening.

Wastewater had an issue two weeks ago with the “grit chamber”. The bucket elevator, which scoops the grit up from the bottom of the chamber quit working. The operator pumped out the water in the chamber and cleaned out the auger feed system that carries the grit to the bucket elevator. They found a chain that runs the system had came off the drive sprocket. Over time the chain has worn and stretched. Crew spent 4 days getting the chain working again. Removing grit from the treatment process has been an ongoing issue at the plant for some time.

Jim Hammons