**DATE:** June 20, 2023

**TO:** Honorable Mayor and Council Members

FROM: Brendan Byrd, Public Works Director/City Engineer

SUBJECT: Public Works/Engineering Department Monthly Report

### **STAFF RECOMMENDATION:**

Receive report as an informational item.

### **EXECUTIVE SUMMARY:**

### Public Works Director/City Engineer

#### Police Facility Remodel Project

Over the past month, the contractor has spent the majority of the time framing the interior of the building, and completing the southern 'half' of the new building addition area. See the photo of

the first concrete pour of the addition inset right. To date, the majority of the rough framing has been completed, in addition to the plumbing. In the coming month, staff anticipate the contractor will work on completing the 'north' portion of the building addition, and complete new exterior wall framing.

As stated in last month's report, the construction contingency fund has been required due to a number of unforeseen issues, and over this past month that



trend has remained the same. To date approximately 25% of the initial contingency amount remains, or about \$100,000. Staff do believe that the majority of the unknown issues have been addressed, however, there remain a number of items that will require use of contingency, including contractor work for the new PG&E and AT&T services, and the installation of solar panels. It is likely that some additional contingency funding may be necessary depending on the true costs of these items, or if other unforeseen circumstances arise.

### Rohner Park Basketball Court Project

The contractor completed the grading and paving in mid-May. On June 13<sup>th</sup>, the subcontractor that will be completing the acrylic surfacing will be onsite to inspect the finished paving surface to

determine if it is suitable for finished striping and coating. The same subcontractor plans to mobilize to complete the coating work the week of the 4<sup>th</sup> of July. There will likely be some overlap between project work and Rodeo week, however, staff are working closely with the contractor to ensure that the site will be secure and disturbances/conflicts will be minimized to the extent possible. Prior to the coating contractor, Humboldt Fence will be onsite to install most of the site fencing, and City crews will work to fill the planters with soil. The project is anticipated to be fully completed by July 14<sup>th</sup>.

# Corp Yard Roofing Project

The roof at the corp. yard is near completion, and all aspects of the project are anticipated to be complete before the end of the fiscal year. During the project, only minimal unforeseen building damage was found, all of which was fixed by the contractor onsite. Overall, the project is anticipated to be completed under-budget.

# Water Tank Coating Project

The City's contractor began work on May  $22^{nd}$  at the Hillside tank site. So far, the work at that site is ahead of schedule, and staff anticipate the contractor will be moving to the Campton tank site in the last week of June. To date no construction contingency has been required.

# **Utilities Division- Utility Lead**

### Service Call Summary

- In the month of May the utilities division completed 111 service calls by operators. Figure 1 below shows the distribution of service calls by type.
- Underground Service Alert (USA) has changed their format and the utilities crew can no longer track how many mark and locates have been completed. There were zero miss-marked line, resulting in zero broken utilities.



# Figure 1. Utility division service calls by type in May.

Water Distribution System

- Read water meters and completed meter worksheet.
- The utilities team installed two new services to the system in the month of May.

- In the month of May, the utilities team changed out 18 dead water meters.
- Continued to check service lines for lead.
- In May, there was three water leaks. As result of this, there was an estimated water loss of 42,120 gallons. The three leak locations were 221 Newell Drive, 379 Garland, and 824 P Street.
- Replaced one broken angle valve on Boon Street.
- Completed replacing a 6" pressure reducing valve near the intersection of David Way and Rohnerville Road.
- Began rebuilding and testing water meters again until new meters are delivered. New water meter continue to be in short supply
- Respirator fit testing for cutting asbestos cement pipe.

Date	Location	Pipe Information	Estimated Leak Rate (Gallons per Minute)	Leak Duration	Total Estimate Leak Volume (Gallons)
5/8/2023	824 P Street	<sup>3</sup> / <sub>4</sub> '' Plastic	0.25	1 Day	360
5/30/2023	375 Garland	<sup>3</sup> / <sub>4</sub> '' Copper	3	3 Days	12,960
5/31/2023	221 Newell Drive	1" Saddle	5	4 Days	28,800

**Table 1.** Water leak rate and water loss estimates for 2023.

Wastewater Collections System

- Utilities cleaned 16,000 feet of sewer main.
- Utilities had two sewer plugs in May with no spills.
- Sewer line inspection with a push camera, found break in line to be repaired.

# Miscellaneous Tasks

• The utilities division performed monthly maintenance on the division's heavy equipment, including greasing and checking all fluids.

# Water Treatment/Wastewater Division- Chief Plant Operator

### Wastewater Treatment

**Table 2.** May wastewater plant effluent flows for the past five years in Million Gallons (MG) and Million Gallons per Day (MGD).

Year	2019	2020	2021	2022	2023
<b>Total Monthly Flow, MG</b>	38.329	34.517	28.730	34.410	29.980
Maximum Daily Flow, MGD	2.279	1.774	1.100	1.990	1.260
Average Monthly Flow, MGD	1.236	1.113	0.927	1.110	0.967



**Figure 2.** May wastewater plant effluent flows for the past five years in Million Gallons (MG) and Million Gallons per Day (MGD).

Wastewater Events & Maintenance Tasks Completed:

- Contractors completed annual rehabilitation work on the percolation ponds. Staff switched effluent discharge from Strongs Creek to the ponds well before the May 15 deadline, as regulated by the State Water Resources Control Board.
- A Fortuna High School class toured the plant. About 30 students and their instructor learned how the City treats its wastewater and how it is recycled for crucial resources. (See photo inset right).



• Staff began work on re-installing new shafts, sprockets, and other equipment in the grit channel. Staff removed this equipment a year ago due to a failure. Supply chain issues, long lead times, parts-preparation, and waiting for flows to subside prolonged this project until now.

# Water Treatment

Table 3. May potable water production for the past five years in Million Gallons (MG).

Year	2019	2020	2021	2022	2023
Total Production, MG	37.19	37.642	39.004	30.259	29.234
Maximum Daily, MG	1.978	1.515	1.652	1.767	1.465



Figure 3. May potable water production for the past five years in Million Gallons (MG).

**Table 4.** Average May depth-to-groundwater static levels in the City's active wells for the past five years in feet.

Year	2019	2020	2021	2022	2023
Well #1	24.3	28.2	28.3	27.3	25.2
Well #2	21.5	25.2	26.4	22.9	22.3
Well #4	27.0	30.7	31.2	29.2	27.8
Well #5	28.6	32.6	33.4	31.5	29.2

Water Events & Maintenance Tasks Completed:

- PG&E granted the Tesla battery-pack installation permission-to-operate at the water wells site. This unit will save electricity during times of peak energy demand, and thus save the City utility costs.
- Colburn Electric completed construction and installation on the emergency generator at the Drake Hill booster pump station. The last step before automatic activation of the generator is for Tesco Controls to re-program the radio telemetry unit. This should occur sometime in the next month or so.
- Sub One Diving completed tank cleaning and inspection of the City's 2 million gallon, concrete Stewart Tank. The American Water Works Association recommends this task every 5-7 years. The tank was in excellent working condition and staff do not anticipate cleaning and inspection of this facility for another 5-7 years.

- Wendt Construction assisted staff in reinstalling the rehabilitated, 125 HP motor for booster pump #2 at the water wells site. Industrial Electric repaired this motor after its fault a few months ago. Bringing this pump online adds crucial redundancy for water production. (See photo inset right).
- Logging contractors completed log removal and chip grinding at the City's Vancil Reservoir. City staff will utilize the piled wood chips for future compost operations at the wastewater treatment plant.
- City staff completed work at Hillside tank: site-grading; connecting, disinfecting and activating three 10,000-



gallon temporary storage tanks. Staff drained the 250,000-gallon steel tank just in time for the arrival of the coating contractors' mid-month. The contractors started sandblasting the interior of the tank towards the end of the month. Plans are to have both the interior and exterior sandblasted and re-coated by mid-to-late June.

• City staff began preparation-work at Campton Heights tank. Staff will need to plumb in eight, 10,000-gallon temporary storage tanks to use while contractors sandblast and re-coat the interior and exterior of the one million gallon, steel tank. This work will occur in July.

# **General Services and Streets - General Services Superintendent**

The following is a list of scheduled assignments completed by the General Services staff in May:

- Staff potholed for utilities on 12<sup>th</sup> Street for the storm drain culvert project.
- Staff replaced rotten deck, seat, and seat back boards at the grandstands for the coming event season. Staff repaired fences and installed the chutes in the arena. Staff worked up the arena for equine and rider use in Rohner Park. The Tom McWhorter Arena memorial sign was relocated to the new gate at the arena.
- Staff planted additional vegetation in the first phase of the Rohner Creek project. Staff removed unwanted vegetation along Rohner Creek.
- Staff installed new conduit and wiring for the parking lot lights in Rohner Park.



- Staff repaired a water leak in the main Police station.
- Staff removed rubble and hauled off to make space for the annual pond maintenance task.
- Staff placed traffic control lane closures on the North and South bound of Fortuna Boulevard for the concrete curb replacement on the medians for GRS Inc.
- Staff replaced the rapid flash beacon pedestrian sign that was hit by a vehicle. Staff repaired the pedestrian button at Main and Twelfth Street that was hit by a large vehicle.



- Staff handed out paving notices and placed no parking signage cones on Smith Lane. Mercer Fraser milled the failing asphalt concrete and resurfaced Smith Lane and Fortuna Boulevard at Hillside Creek crossing (See photo inset top right).
- Staff regraded the alley in between Seventh and Eighth Street.
- Staff painted red curbs downtown and on Kenwood/Kenmar area.
- Staff continues to mow and weed eat in various locations.
- Staff moved city vehicles, personal vehicles, and equipment to accommodate the contractor that is replacing the roof at the Corp Yard building (See photo inset bottom right).

In addition to the special tasks noted above, staff also engaged in the following regular routine maintenance activities including USA's, street sweeping, recycling and trash management, collect batteries at City Hall, road maintenance, Dog Park maintenance, vegetation management including sniping of curbs, and safety training and inspections. Staff is available for questions, requests, and emergency responses to the community.

# **RECOMMENDED COUNCIL ACTION:**

Receive Public Works Department Monthly Report. Consent agenda vote.