



TOWN OF ELIZABETH

MICHAEL DEVOL/PUBLIC WORKS DIRECTOR

TO: Honorable Mayor, Mayor Pro-Tem and Town Board of Trustees
FROM: Mike DeVol, Public Works Director
DATE: Sept 10, 2024
SUBJECT: Public Works Monitoring Report

***Town Street Paving Improvements Project:**

1. Temporary Pot hole work has been completed in Hillside Subdivision. Additional work will be ongoing as the deeper repairs settle and more asphalt will need to be added.
2. Public Works used 110 tons of asphalt patching material on potholes within Hillside subdivision.
3. Repairs/Warranty work has been concluded on Pearl St., Mobile St., and Chestnut.

***Town Main St. Decorations:**

1. Main St. solar street lights are being removed and placed at the two new mail kiosk locations. Any lights that are left over will be placed at strategic locations within RC Park for events.

***Town Wells, Tanks and Effluent:**

1. All three tanks are in operation and typically store between 1.1 million gallons and 1.5 million gallons depending on daily operational needs.
2. Public Works is at 85 percent completion of Operating/Exercising all main line water valves per the state regulations for 2024.

***Town Water Line (NON) Emergency Repair:**

1. N/A

***Town Hall/ Repairs/ Landscaping Plan:**

***Town Walkway Repairs:**

1. PW has completed several repairs to sidewalks at storm drain inlets and removed tripping hazards.
2. Public Works will be installing "Chase Drains" at two locations on Blackhaw street where several lots drain across sidewalks at curb and gutter, these will alleviate icing and unsafe walking conditions.
2. Public Works continues to repair areas around town.

***Town Street Maintenance/Striping Projects:**



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1. Public Works continues mowing for the season in Parks, Right of Ways, and Drainages.
2. Street Striping will begin in the month of September.

*Town Snow Plowing and Street Sweeping: SNOW ROUTE SEASON IS COMPLETED until Nov.

1. The Town Newsletter included Town Plowing Code and Snow Route "NO PARKING" information.
2. PW has been installing new snow route signs in Gold Creek Valley and Legacy Village as time allows.

*Town New Wells at Ritoro/Gold Creek Valley:

1. The new Wells building is complete, and PW is planning an Open House Grand Opening once the land issue has been completed.
2. Landscaping will take place in 2024-2025 depending on item #1. PW will work with the 4 adjacent property owners for their approval of the landscape sketch to ensure that we conceal as much of the building as possible from their views.
3. The Back-up Generator (Diesel) that is installed and tested allows Public Works to operate Arapahoe 2 and Denver 2 Wells during any event that electrical service is not available.

*Town Trail Project:

1. PW has completed a walk-through inspection with our reporting Agency Stantec Engineering for guidance after the flooding and the loss of previously planted vegetation, bushes and trees.
2. 2023 Reporting has been sent to CDOT and other agencies. PW is awaiting a decision on course of action(s) that will be required to fulfill our Trail obligations. (#9 below on upcoming projects).

*Gold Creek Lift Station Improvements:

1. Completion of project has begun warranty period and filing completion with CDPHE Permitting.

*Eligibility Surveys for Water and Wastewater Capitol projects have been completed for 2024 and accepted by Colorado Department of Public Health and Environment (CDPHE). The eligibility surveys allow for the town to be in line for any funding that may be available for future projects.

*Gold Creek Wastewater Treatment Plant (GCWWTP)



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The state sampling of the plant after maintenance all came back at 98% removal of all constituents that are required. It was an excellent slow start up of Train 2 and the plant is back at 100% capacity.

Maintenance has been concluded on Train 2 of the plant. PW did a slow 2-week plant start up on Train 2 of the plant to allow bugs/bacteria to acclimate and begin their life cycle. The combination of Bug population, Dissolved Oxygen and liquid temperature are the biggest contributors to a happy healthy working bug population as they work chemical free to complete the process of naturally treating the water.

1. NO CHANGES AS OF THIS REPORT-On going Project/ The new fine screen replacement unit has been installed. The new screen has been in automated operations for three months with no issues.
2. Just a quick review of the Wastewater Plant: It is designed to treat 500,000 gallons of Raw Sewage per day. Train 1 and Train 2 share that equally. Train 1 currently is treating 190,000-200,000 gallons per day while maintaining our minimal 85% reduction constituent removals (currently 93%-99% removal) that are set by CDPHE in our Permit (excellent test for me as an operator and all equipment). Currently we are operating one Train at basically 80% capacity and operating very well. This is a test never completed before as our available capacity is 500,000 gallons. When the time comes that the wastewater Plant is treating at 80% (400,000 gallon) of the Total Capacity the Town must start to show Plant Expansion Plans to CDPHE. The current WTP upgrade Budget is currently in good shape for funding. Reference of constituent removal: Please see attached Laboratory Sampling Analysis for actual numbers while completing maintenance of one train. Note all numbers/results are shown as milligrams per liter (mg/L) this equates from metric to Standard as parts per million (ppm). Plant is 100% Biological/Bacteria (Bugs) NO CHEMICALS

Bio-chemical Oxygen Demand (BOD) minimum 85% removal (current average 99% removal)

Total Suspended Solids (TSS) minimum 85% removal (current 93%-99% removal)

Nitrogen/Ammonia (NH₃) minimum 85% removal (current 99% removal)

E. Coli maximum 115 parts per million (ppm) (current <1 ppm) U.V. Light neuters bacterial for no reproduction and does not kill the bacterial which in turn means no chemicals and cost savings to the Town residents.

*Town Clean Up Day/ Paint Round-Up/Arbor Day

1. Town Clean Up Day Results are as follows:
2. Electronics:
 - a. Batteries – 58 lbs.



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- b. Computer Materials – 374 lbs.
 - c. Display Materials – 2,144 lbs.
 - d. Mixed Electronics – 1,400 lbs. Total Cost - \$2,708.45
 3. 7 – Roll-Off Dumpsters (2 Metals) (5 Garbage). Total Cost - \$2,331.75
 4. Flat Fee for 4 hours shredding of documents or paper. Total Cost - \$1,222.95
- Grand Total - \$6,263.15

*Town Public Works News

1. Public Works has all empty positions filled and we are excited to welcome Jared Burris and Ryan Ehlert, who are local residents to the Public Works Water and Wastewater team.
2. Public Works has hired one new employee for the Streets and Parks position. His name is Caden Rocha.

*Town Farmers Market:

1. Event Park Name is Running Creek Park, and the events have ended for the year.
2. Public Works will keep one Porta Potty at RC Park year around until the Depot Parking Lot is completed and bathrooms added at that site.

*Town Parks and Right of Way (ROW):

1. Porta-Potty will remain at Bandt Park parking area for the Winter season.
2. Bandt Park restrooms are now Open for the summer season.
3. Town Parks staff have painted new lines at the Bandt Park Tennis and Basketball courts to allow Pickle Ball enthusiasts to continue to use the park.
4. The concrete trail has been poured and stripped of forms, and the backfilling, seeding, and clean-up will begin. This connects Playground equipment, restrooms, pavilion all to the parking lot at Chestnut St.

Upcoming Projects:

1. PW has begun for 2024 the following Annual Reporting:
2. Annual Biosolids has been completed for 2023 and sent to CDPHE.
3. Regulation 85 Nutrient Monitoring/Accepted by CDPHE
4. PW has completed a round of PFAF's (radiation/radiological). Results have been reported to CDPHE.
5. Water Augmentation and Recording
6. Water Lead and Copper sampling
7. Water Constituents Metals Sampling
8. Annual DMR (Daily Monitoring Report) Gold Creek Wastewater Plant



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9. Tree City USA Application/ Accepted and approved by Tree City USA
10. Trail DOLA findings and Inspections/ Addition of Willow Cuttings Planted
11. PW has begun 2024 Highway User Tax Fund (HUTF) reporting and data processing.
12. PW is completing Lead and Copper testing per CDPHE guidelines for 2023/2024
13. Flushing of the entire town's water supply system is completed every 6 months.

Mail Kiosk:

1. Public Works will be installing Solar Street Lights at Mail Kiosk in various locations to aid in nighttime safety and mail collections by residents. The solar lights will be removed the second week of September from Main St and relocated to Kiosk area to save money on purchases.
2. Public Works has enhanced the recycled asphalt parking area at the Washington St Mail Kiosk.

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