Agenda Item10

DATE: June 5, 2023

TO: Honorable Mayor and Members of the City Council through City Manager

FROM: Josh Minshall, PE – Senior Civil Engineer, Public Works & Utilities (PW&U)
Gina Benedetti-Petnic, PE – Assistant Director, PW&U
Christopher J. Bolt, MPA, PE, CPM, ICMA-CM – Director, PW&U

SUBJECT: Resolution Ratifying Award of Contract, Accepting Completion of the Emergency Bypass Pumping of the Ellis Creek Water Recycling Facility Outfall as Performed by Team Ghilotti, Inc., and Authorizing Release of the 10% Retention

RECOMMENDATION

It is recommended that the City Council adopt the attached Resolution ratifying award of contract, accepting completion of the emergency bypass pumping of the Ellis Creek Water Recycling Facility Outfall as performed by Team Ghilotti, Inc., and authorizing release of the 10% retention.

BACKGROUND

The City's Ellis Creek Water Recycling Facility (ECWRF) has been in operation since early 2009 and currently processes an average dry weather daily flow of 4.8 MGD (million gallons per day). The ECWRF site currently has an outfall that extends from a junction box immediately south of the developed ponds and extends southerly to a structure located within the Petaluma River. This existing outfall was constructed of a fiberglass-based composite material in the 1970s, which has become known for becoming brittle and prone to failure over time. During a September 2016 inspection, signs of severe stress and imminent failure were observed, including longitudinal cracks along the top and bottom of the pipe, separating pipe joints and sections of pipe. The existing outfall is currently unable to maintain the original design flow rate and is at risk of complete failure.

To bring the project into compliance with the conditions of the permits as quickly and safely as possible, the City issued an emergency Purchase Order to Coastside Concrete & Construction, Inc. (Coastside). The initial purchase order included the restoration activities to properly backfill excavations, correct erosion controls, clean the site, hydroseed the slopes, reinstall the temporary discharge pipeline, and install a temporary apron to stabilize the modified discharge location in preparation for activation of the temporary discharge pipeline. The work by Coastside was completed on January 12, 2023, and the work was accepted by Resolution No 2023-028 N.C.S.

The rain events of December 2022 and January 2023, resulted in a condition at ECWRF, where storage capacity for peak flows was limited, and high-flow treatment procedures were implemented. The high-flow treatment process does not allow for the existing bypass pumping to be used, based on the pump location within the treatment process. Additionally, the pumps were part of a legacy system and would require maintenance before activation. In order to comply with the discharge requirements for ECWRF, it was determined that the fully treated and measured discharge water could be extracted from the outfall junction box and pumped to the temporary discharge apron.

Team Ghilotti, Inc. was simultaneously performing work at ECWRF for a separate project, which used a large pumping system, and this pump was scheduled for demobilization in mid-January. Based on the availability of large pumps for rent during the rain events of January 2023, and that Team Ghilotti was already at ECWRF with the necessary equipment, an emergency purchase order was issued for Team Ghilotti to relocate the pump to the outfall location.

DISCUSSION

Team Ghilotti's work began with placing a self-contained pumping unit at the outfall location. A temporary extraction pipe was installed into the junction box downstream of all operations, including treatment and flow measurement. An emergency discharge pipe was added to the temporary outfall location, which was previously authorized by the Regional Water Quality Control Board for the ECWRF Outfall Relocation Project. The discharge point was enhanced with additional stabilization measures to accommodate the modified flow conditions. The use of the pump was performed by ECWRF staff and closely monitored.

On Friday, January 20, 2023, observations of the existing outfall indicated a potential change in condition. A response team of consultants and staff met at the site that same day to the site to assess the potential risk of failure of the existing outfall pipe. The bypass pump previously set up by Team Ghilotti is capable of pumping roughly half of the peak discharge from ECWRF. Therefore, it was determined that a second pump would be appropriate to add, which would provide redundancy and the ability to accommodate the full discharge rate in case of a complete failure of the existing outfall. At the request of City staff, the initial quote from Team Ghilotti was expanded for the addition of a second pump unit and the setup of associated temporary piping. An estimated monthly cost for pump rental was included which would allow for the use of the pumps through the end of the permitted discharge period, ending April 2023.

On Friday, April 14, 2023, Team Ghilotti removed one of the two pumps. The second pump was removed on May 1, 2023. The site was inspected by staff and the work performed by Team Ghilotti was satisfactory.

PUBLIC OUTREACH

Due to the emergency nature of the work and its location, public outreach was not performed prior to the work.

This staff report was included on the tentative City Council agenda posted on May 15, 2023.

COUNCIL GOAL ALIGNMENT

The project was not anticipated as part of a specific goal, however, a safe and environmentally responsible discharge from the Ellis Creek Water Recycling Facility promotes a healthy river and is part of maintaining the City's critical infrastructure.

CLIMATE ACTION/SUSTAINABILITY EFFORTS

The emergency work completed by Team Ghilotti was performed in compliance with the requirements of the various environmental permits for the project noted within the environmental review section, as well as the National Pollutant Discharge Elimination System Permit for discharge from ECWRF, and the Bay Area Air Quality Management District requirements. In addition, metal sheets from old traffic signs were used as part of the setup for directing the discharge within the stabilized discharge apron. At the end of the project, reusable materials will be salvaged. The temporary piping system was rented, and the material was removed carefully to reuse pipe sections. The pumps were only operated, when necessary, which limited the energy impacts and emissions from the pumps.

ENVIRONMENTAL REVIEW

Environmental Impact Report

The Environmental Impact Report (EIR) for the facility (*Water Recycling Facility and River Access Improvements EIR* – State Clearinghouse #2001052089) included maintenance of the existing outfall. The EIR was certified by the City of Petaluma in 2002 and subsequently amended by certified addenda in 2004, 2005, 2006, 2007, and twice in 2016. An addendum that was certified in August 2022 and included the relocation of the outfall. The work was performed in part of the implementation of the outfall relocation and therefore no separate, subsequent, or supplemental review is warranted.

Additionally, pursuant to CEQA guidelines Article 19, section 15301, the project would otherwise be categorically exempt as part of an existing facility. And Section 15269 which exempts emergency repairs to maintain services or are necessary to mitigate an emergency.

Permitting

The work was located near areas that require great care in protecting the environment and habitat. As part of the outfall relocation project, a Mitigation Monitoring Plan (MMP) was developed to ensure that the project is constructed in compliance with best practices and the restrictions required by various permitting agencies. This MMP was followed as closely as possible given the constraints of the emergency nature of the work. The agency permits and approvals active on the outfall relocation project include:

- **San Francisco Regional Water Quality Control Board** (RWQCB)
    - Section 401 Water Quality Certification
- **California Department of Fish and Wildlife** (CDFW)

    - Streambed Alteration Agreement
- **Army Corps of Engineers** (ACOE)
    - Section 404 Nationwide Permit
- **Bay Conservation and Development Commission** (BCDC).
    - Regionwide Permit 2

Of note, work within the riverine habitat area was restricted to September 1 through October 15. Limited extensions were granted to stabilize the site and perform erosion control. The work did not extend beyond the limits imposed by the regulating agencies.

FINANCIAL IMPACTS

The total amount invoiced by Team Ghilotti is $112,533.57 inclusive of the time and materials purchase order and pump rental. The invoiced amount is less than the amount authorized by the emergency purchase orders, which set a not-to-exceed amount of $126,579.00. The Ellis Creek Outfall Replacement Project C66501838 is funded by Wastewater Enterprise funds. The new outfall is currently in the 22/23 CIP budget. It is the intent to seek reimbursement through the appropriate methods to minimize the fiscal impact.

Itemized Budget Breakdown	**FY 22/23 CIP Budget**
Uses	
Planning/Environmental	$ -
Land & Easements	$ -
Design	$ 75,000
Legal Services	$ -
Administration	$ -
Construction Contracts	$ 1,466,000
Construction Management	$ 70,000
Contingency	$ 200,000
CIP Overheads	$ 15,000
TOTAL	**$ 1,826,000**

ALTERNATIVES

The contractor satisfactorily completed the project. Not accepting completion would likely lead to a contractual dispute with the contractor.

If the City Council does not approve the resolution, a revised resolution would be necessary to release the retention of payment due to the contractor for completing the emergency work.

ATTACHMENTS

1. Resolution
2. Emergency Purchase Order

3. Site Plan
4. Site Photos