



DATE: May 1, 2023

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

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SUBJECT: Resolution Accepting Completion of Contract for Phase One of the 1st & F Street Bridge Replacement Project, Adjusting the Project Budget, and Authorizing Release of the 10% Retention

RECOMMENDATION

It is recommended that the City Council approve the Resolution Accepting Completion of Contract for Phase One of the 1st & F Street Bridge Replacement Project, Adjusting the Budget, and Authorizing Release of the 10% Retention.

BACKGROUND

The original timber-framed bridge, located at the intersection of 1st and F Streets, was approximately 19.5 feet wide and 30 feet long, spanning a tidal portion of Thompson Creek, approximately 225 feet upstream from the confluence with the Petaluma River. On the upstream end, the original bridge was tied into an existing concrete oval storm drain culvert pipe that discharges streamflow below the original bridge. The structure was a former railroad bridge that was incorporated into the street. It carried pedestrian, bicycle, automobile, and truck traffic, and it also had two sets of rail tracks on it.

Since it was first evaluated in 2014, the original wood bridge continued to show signs of significant deterioration. Before the bridge replacement project, the City was notified of fall claims on 1st Street and made repairs to the decking multiple times, with the last maintenance repair being completed in 2020. The City also replaced the original decking to help provide a safe and reliable surface on which bicyclists can ride. However, due to the wood degradation over time, some of the original bridge's wood decking and beams were no longer in physical contact with their supporting structural elements, resulting in movement, deflection, and noise when vehicles passed over it. In addition, the piles were observed to have water and marine life damage, especially near the top.

Because of the extensive deterioration and damage of the previous wood structure, a Capital Improvements Program (CIP) project was created to perform a replacement of the existing wood bridge and make general site improvements. This project is broken down into two Phases with Phase One consisting primarily of the bridge replacement along with minor pedestrian improvements, while Phase Two of the project will involve increasing pedestrian and bicycle safety and access near the structure, as well as creating a safe and ADA-compliant path of travel to and from the bridge and neighboring residences. This phase will also include the installation of a community space for public use.

During this phase of the project, the City replaced the original deteriorated timber bridge structure with a new pre-cast reinforced concrete arch bridge, supported by a type of drilled displacement piles known as “torque-down piles.” This type of pile was selected because of its installation method, which helped to minimize the noise and vibration-related construction impacts on the neighborhood and river channel. The project also installed a new reinforced concrete wing wall and crash railing, repaved the roadway over the new concrete bridge deck using hot-mix asphalt, and restriped the street. In addition, a few pedestrian safety improvements were made, which included the installation of a new sidewalk along 1st Street, the installation of a new ADA-compliant curb ramp and crosswalk at the intersection of 1st and F Streets as well as installation of safety reflectors, railings, and signage around the site. All in-water work was performed under the observation of a biologist and in compliance with various permits, and the site was restored and planted with native plants to protect the riverbanks.



Figure 1: Original Wood Bridge



Figure 2: New Concrete Bridge

DISCUSSION

On January 24, 2022, by Resolution No. 2022-011 N.C.S., the City Council awarded the 1st and F Street Bridge Replacement Project to Ghilotti Bros., Inc. with a total construction budget of \$1,768,340. With the same Resolution, the City Council relieved the lowest bidder, Gordon N. Ball, Inc., who had requested the withdrawal of their bid due to a numerical error made in their bid schedule. A link to the staff report for the April 5, 2021, Council item is provided here: https://petaluma.granicus.com/MetaViewer.php?view_id=31&clip_id=3533&meta_id=516319

The final total construction cost for the project is \$1,819,328.46, which includes four change orders totaling a net increase of \$50,988.46. The Change Orders consisted of the following work: (1) a reduction in project cost due to some project redesign and value engineering efforts by City staff and consultants, (2) resolution of waterline conflicts (waterline relocation), (3) material cost increases for rebar and drain inlets, hot mix asphalt (HMA) paving and widening of conforms, placement of rip-rap and slope protection, a new ADA curb ramp, crane remobilization, and additional traffic management installation, (4) addition of pedestrian railing for safety and revegetation and restoration of the worksite to comply with mitigation requirements set forth by the San Francisco Bay Regional Water Quality Control Board and California Department of Fish and Wildlife.

There are no disputed claims, and the project was completed satisfactorily without any significant incidents.

PUBLIC OUTREACH

This agenda item appeared on the City's tentative agenda document on April 17, 2023, which was a publicly noticed meeting.

Before the start of construction, an emergency road closure was implemented, and a dedicated City web page was established to notify the public. This webpage was updated throughout the project to provide details regarding the status of the construction. In addition, public noticing was conducted before and during construction. Notifications included pre-construction letters to the neighboring community from the City as well as the contractor about road closures and general

construction impacts, a postcard notice regarding noise impacts, and notices to residents regarding upcoming utility work that would require a temporary water service shut-off.

COUNCIL GOAL ALIGNMENT

The City Council has identified “A City that Works” as one of its key strategic initiatives for 2021-2023. This recommended action supports the following Workplan items:

#15. Identify funds and develop a plan to improve Petaluma’s streets and roads.

#20. Better integration of multi-modal transportation with street designs.

CLIMATE ACTION/SUSTAINABILITY EFFORTS

The project removed hazardous materials from the river channel, improved public safety, and restored and increased the wetlands along the riverbank near the Thompson Creek outfall. In addition, it established a new City infrastructure that provides a safe path of travel and minimizes City forces from having to provide ongoing maintenance work. Additional sidewalks, an ADA ramp, bike access, and parking, will be installed during Phase Two in FY 23/24 to further improve the active transportation elements of the project.

ENVIRONMENTAL REVIEW

Extensive environmental permitting for the work was initiated with the design process starting in mid-2020. The permitting required addressed Section 404 of the 1972 Clean Water Act (CWA) and the California Environmental Quality Act of 1970 (CEQA). Included permits were from the US Army Corps of Engineers (Corps; Section 404), the Department of Fish and Wildlife, and the San Francisco Bay Regional Water Quality Control Board (Regional Board; Section 401 Water Quality Certification). In addition, a review was conducted to assess the eligibility of the Bridge for nomination to the National Register of Historic Places (NRHP) under 36 CFR Part 60.4, and its integrity as per National Register Bulletin (NRB) 15, (NPS 1990) as amended through 1995. Also, an evaluation was conducted for the presence of previously recorded archaeological sites near the project, and the potential for previously unidentified archaeological resources in the Area of Potential Effects (APE). The State Historic Preservation Office (SHPO) was contacted.

All permits were received with conditions. The most significant of these was the allowable construction window from June 15 to November 15, 2022. The removal of wood debris (with preservation chemical hazards) from the stream channel and the incorporation of a natural bottom (not concrete) was requested by the Water Board. These permit requirements were incorporated into the design of the project. The vegetative restoration was conditioned to be conducted on the bank shore area that will need to be monitored by the City.

The City determined that the project is categorically exempt from review under CEQA under CEQA Guidelines Section 15302, Replacement or Reconstruction and there are no cumulative impacts, unusual circumstances, or other factors that would make the exemption inapplicable pursuant to CEQA Guidelines Section 15300.2. The City of Petaluma filed a Notice of Exemption

with the State Clearinghouse on January 29, 2021. The Water Board concurred with this determination.

FINANCIAL IMPACTS

The total approved budget for the project is shown below as \$2,101,000 for FY 22/23. Funding for this project includes \$2,022,000 from Street Maintenance and \$168,000 from Traffic Impact Fees.

As part of the closure of Phase One of the project, a budget will be brought forward in conjunction with the next budget action. A budget adjustment is necessary to cover additional costs that the project incurred under change orders for additional public safety improvement work not originally anticipated, changes mandated by permit requirements, and the discovery of a utility conflict that required a water line to be relocated during construction. Design and construction management expenditures also exceeded what was originally adopted in the FY 22/23 budget.

The project budget breakdown is as follows:

1st & F St. Bridge Replacement (C16402141)	Total Adopted Project Budget	Final Budget Phase One
Uses		
Planning/Environmental	\$ 20,000	\$ 160
Design	\$ 128,000	\$ 273,131
Legal Services		
Administration		\$ 251
Construction Contracts	\$1,768,340	\$1,819,329
Construction Management	\$ 25,000	\$ 54,982
Land and Easements		
Contingency	\$ 156,660	\$ 0
CIP Overheads	\$ 3,000	\$ 10,184
Total Uses	\$2,101,000	\$2,158,037
Sources		
Street Maintenance	\$2,022,000	\$1,990,037
Traffic Mitigation Impact Fees	\$ 168,000	\$ 168,000
Total Sources	\$2,190,000	\$2,158,037

ALTERNATIVES

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

ATTACHMENTS

1. Resolution