

CITY OF SANTA ROSA  
BOARD OF PUBLIC UTILITIES

TO: BOARD OF PUBLIC UTILITIES  
FROM: RICHEL MAEDA, ASSOCIATE CIVIL ENGINEER  
CAPITAL PROJECTS ENGINEERING  
SUBJECT: CONTRACT AWARD – DELTA POND DIFFUSER MAINTENANCE,  
CONTRACT NO. C02200

AGENDA ACTION: MOTION

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RECOMMENDATION

It is recommended by the Transportation and Public Works and Water Departments that the Board of Public Utilities, by motion, award Construction Contract No. C02200 in the amount of \$514,728 to Dixon Marine Services of Inverness, CA for Delta Pond Diffuser Maintenance, approve a 15% contingency, and authorize a total contract amount of \$591,937.

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EXECUTIVE SUMMARY

This motion will award a construction contract in the amount of \$514,728 to Dixon Marine Services of Inverness, CA for Delta Pond Diffuser Maintenance, approve a 15% contingency, and authorize a total contract amount of \$591,937 to Delta Pond Diffuser Maintenance, Contract No. C02200.

BACKGROUND

Tertiary disinfected recycled water produced at the City of Santa Rosa's (City) Laguna Treatment Plant (LTP) is stored in a series of ponds with a total storage capacity of 1.45 billion gallons. Delta Pond is both supplied by, and supplies water to, the recycled water distribution network. When necessary, discharge of recycled water is conveyed from Delta Pond into Santa Rosa Creek near its confluence with the Laguna de Santa Rosa via a diffuser manifold (Diffuser) installed in the creek bottom. The Diffuser is the primary recycled water discharge facility for the City.

Originally constructed in 2010, the Diffuser extends beyond the centerline of Santa Rosa Creek and is comprised of a 48-inch pipe with an array of eleven 24-inch rubber duckbill check valves installed slightly above the channel bottom to maximize mixing, reduce channel scouring, and minimize creek flow turbulence and overall impacts to navigation. Since original installation, the City has completed various inspections to monitor changes in the channel bottom near the Diffuser. As is common in fluvial environments, gravel and sediment bars tend to move based on hydrologic and hydraulic conditions each year.

Recent inspections have revealed accumulated sediment completely covering most of the duckbill check valves. Based on these observations, the diffuser's discharge capacity is impeded and not able to be operated at the design discharge capacity.

In 2019, an alternative analysis was completed to identify the best approach for mitigating sediment accumulation affecting the Diffuser operation. The analysis evaluated five different alternatives that considered constructability, regulatory implications, cost, operations and maintenance, and anticipated effectiveness. To the extent each of the alternatives posed regulatory and/or efficacy issues, staff determined that the accumulated sediment should be removed via routine dredging operations. As such, no improvements to the facility are proposed and the Project is considered maintenance.

The project will consist of removing accumulated sediment surrounding the Diffuser via both mechanical and hydraulic dredging techniques. Mechanical dredging will be completed with a long-reach excavator near, but not immediately adjacent, to the Diffuser to remove large quantities of sediment. Hydraulic dredging will be completed within the immediate vicinity of the Diffuser by deployed divers performing vacuum pumping operations of sediment material to significantly reduce the risk of damaging the duckbill check valves. A "U"-shaped turbidity containment curtain will be installed to prevent disturbed sediment from being transported downstream. Material removed will undergo a decanting and drying process and ultimately be removed from the site. The project will require a permit or approval from the following agencies: Federated Indians of Graton Rancheria, Permit and Resource Management District, Sonoma Water, U.S Army Corps of Engineers, North Coast Regional Water Quality Control Board, California Department of Fish and Wildlife, and the Federal Emergency Management Agency.

#### PRIOR BOARD OF PUBLIC UTILITIES REVIEW

On January 20<sup>th</sup>, 2022, the Board of Public Utilities approved Resolution No. 1281, adoption of a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Geysers-Delta Pond Connection/Diffuser Improvements, and approval of the Geysers-Delta Pond Connection Improvements Project and the Delta Pond Diffuser Maintenance Project.

#### ANALYSIS

The project was advertised on May 26<sup>th</sup>, 2022, and no bids were received at the bid opening on June 14<sup>th</sup>, 2022.

Where no bids are received, the City has authority pursuant to California Public Contract Code (PCC) Section 20166 to "have the project done without further complying" with PCC bidding requirements. In essence, the City can negotiate a contract directly with a contractor where no bids are received.

On June 23<sup>rd</sup>, 2022, the City utilized its direct negotiation authority under PCC Section 20166 to solicit a proposal from, and initiate negotiations directly with, Dixon Marine Services, the sole prime contractor that attended the pre-bid meeting and displayed interest in and understanding of the project.

On July 6<sup>th</sup>, 2022, Dixon Marine Services submitted a bid in the amount of \$514,728, approximately 11% below the Engineer's Estimate of \$580,000. Construction is anticipated to begin in late August 2022 and be completed in late October 2022.

#### FISCAL IMPACT

Approval of this contract has no additional impact on the budget. Funds for this project were previously appropriated in Santa Rosa Water's Capital Improvement Program Budget.

#### ENVIRONMENTAL IMPACT

Pursuant to the California Environmental Quality Act, the Board of Public Utilities adopted a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Project on January 20<sup>th</sup>, 2022 in which a determination was made that the Project will not have a significant effect on the environment due to the mitigation measures included as a part of the Mitigation Monitoring and Reporting Program.

#### BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

Not applicable.

#### ATTACHMENTS

- Attachment 1 – Location Map

#### CONTACT

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