

CITY OF SANTA ROSA  
BOARD OF PUBLIC UTILITIES

TO: BOARD OF PUBLIC UTILITIES  
FROM: TRACY DUENAS, SUPERVISING ENGINEER, CAPITAL PROJECTS  
ENGINEERING  
SUBJECT: APPROVAL OF CHANGE IN SCOPE CHANGE ORDER TO DELTA  
POND DIFFUSER MAINTENANCE, CONTRACT NO. C02200

AGENDA ACTION: MOTION

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RECOMMENDATION

It is recommended by the Transportation and Public Works Department and the Water Department that the Board of Public Utilities, by motion, pursuant to Council Policy No. 100-07, approve a change in scope change order with Dixon Marine Services of Inverness, CA to Construction Contract No.C02200 to modify the diffuser manifold installed in Santa Rosa Creek with a not-to-exceed amount of \$73,000.00, which does not exceed the current total authorized contract amount and 15% contingency of \$591,937.00.

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EXECUTIVE SUMMARY

This motion will approve, pursuant to Council Policy No. 100-07, Policies, Section E a change in scope change order with Dixon Marine Services of Inverness, CA to Construction Contract No. C02200 in an amount not-to-exceed \$73,000.00 to modify the diffuser manifold installed in Santa Rosa Creek. The proposed change in scope change order does not exceed the current total authorized contract amount, plus the 15% contingency of \$591,937.00.

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 the 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. These inspections revealed accumulated sediment completely covering most of the duckbill check valves and thus impeding the discharge capacity of the facility.

*Original Scope:* Delta Pond Diffuser Maintenance (Project), Contract No. C02200, provided an immediate solution for removing the accumulated sediment and reinstating the diffuser's discharge capacity back to the original design intent. The project consisted of removing accumulated sediment surrounding the Diffuser via both mechanical and hydraulic dredging techniques. Mechanical dredging involved a long-reach excavator near, but not immediately adjacent to, the Diffuser to remove large quantities of sediment and posed no risk of damaging the duckbill check valves. Hydraulic dredging involved efforts within the immediate vicinity of the Diffuser by deployed divers performing hydro jetting operations to displace sediment material to a location where mechanical dredging could occur. A 'U'-shaped turbidity containment curtain was also installed to prevent disturbed sediment from being transported downstream. Dredged material was decanted, dried, and removed from the site. The Project is subject to regulatory permitting requiring work within the creek to be completed by October 15<sup>th</sup>, 2022.

Dredging activities were completed in the week beginning October 2<sup>nd</sup>, 2022.

*Change In Scope (Additional Work):* In 2019, Kennedy Jenks prepared the Evaluation of Potential Modifications for Delta Discharge Study, which assessed different alternatives to address the long-term mitigation of sediment issues around the existing Diffuser facility. One of the alternative recommendations was rotating the diffuser valves 90 degrees to minimize flow obstruction and, thus, sediment accumulation.

Given time constraints related to permitting (all creek work to be completed by October 15, 2022), subcontractor availability, cooperating weather, and available authorized contingency, staff determined there was a significant cost and efficiency benefit in performing the additional work of rotating the diffuser valves and directed the contractor via a field change order on October 5, 2022. Regulatory approval for change of scope work has been acquired. A field change order was issued with a not-to-exceed amount of \$73,000.00. Work was completed on October 7, 2022.

#### 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.

CONTRACT CHANGE ORDER – DELTA POND DIFFUSER MAINTENANCE,  
CONTRACT NO. C02200  
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On July 21, 2022, the Board of Public Utilities, by motion, awarded Construction Contract No. C02200 in the amount of \$514,728.00 to Dixon Marine Services of Inverness, CA for Delta Pond Diffuser Maintenance, approved a 15% contingency, and authorized a total contract amount of \$591,937.00.

### ANALYSIS

Under City Council Policy No. 100-07, the rotation of the diffuser valves (the “Additional Work”) in the creek in advance of the October 15, 2022 deadline meets the definition of both a “change in scope change order” (see Definitions, section H) and a “field change order” (see Definitions, section F).

A “field change order” is made in the field while work is in progress to eliminate a hazard to the health, safety, and welfare of the public, or to protect public property or other resources, or to continue work in progress thereby saving significant additional cost which would be incurred by delay or lost time. As noted above, staff determined that the Additional Work involved work in progress and saved significant additional costs that staff would have incurred by delay or lost time. Where the authorized contract amount is not exceeded, staff has the authority to issue and sign field change orders under Council Policy No. 100-07, section C. The original contract amount here was not exceeded, and appropriately authorized staff executed the change order.

At the same time, under Council Policy No. 100-07, a change order to a Public Works Contract that materially changes the character of work prescribed in the contract plans and specifications is considered a change in scope change order (see Definitions, Section H). Separate from the issuance and execution process, Council Policy No. 100-07 requires that change in scope change orders be returned to the original award authority for approval. As the Board was the original award authority for Construction Contract No. C02200, staff requests that the Board, by motion, approve the change in scope change order as well, to complete the City’s compliance with City Council Policy No. 100-07.

As noted above, the cost associated with this change in scope of work is estimated at a not-to-exceed amount of \$73,000.00.

### FISCAL IMPACT

No fiscal impact, sufficient funds are available and authorized in Contract C02200.

### ENVIRONMENTAL IMPACT

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