October 28, 2025 Agenda Item No. 7

TO: HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL

FROM: David A. Webb, Public Works Director - 949-644-3311,

dawebb@newportbeachca.gov

PREPARED BY: Bob Stein, Assistant City Engineer - 949-644-3322,

rstein@newportbeachca.gov

TITLE: San Diego Creek Trash Interceptor - Notice of Completion for

Contract No. 7127-5 (17X12)

ABSTRACT:

On July 11, 2023, the City Council awarded Contract No. 7127-5 for the San Diego Creek Trash Interceptor to Jilk Heavy Construction, Inc. (Jilk). The project installed a one-of-a-kind floating trash wheel with a rail system and landside improvements for the removal of trash and debris from San Diego Creek prior to it entering the Newport Bay. The work is now complete and staff requests City Council acceptance of the project and close out of the contract.

RECOMMENDATIONS:

- a) Determine that on July 11, 2023, City Council found the requirement for environmental review under the California Environmental Quality Act (CEQA) is satisfied by Adopting Mitigated Negative Declaration No. ND2018-002(SCH No. 2018081013) for the Newport Bay Water Wheel Project; and
- b) Accept the completed work and authorize the City Clerk to file a Notice of Completion for the project.

DISCUSSION:

Overall Contract Cost/Time Summary

| Awarded Contract Amount | Final Total Contract Amount | Total Contract Change Amount | | | Percent Contract Cost Change | |
|--|--------------------------------|---------------------------------|-------------------------|--------|---------------------------------|--|
| \$ 3,981,074.00 | \$4,644,826.56 | \$663,752.56 | | +16.7% | | |
| Allowed Contract Time + Approved Extensions (Days) = | | 541 | Actual Time Used (Days) | | 513 | |

The completed San Diego Creek Trash Interceptor (Trash Interceptor) project consists of a floating trash wheel, rail system and landside improvements that provide truck access to the dumpsters located on the rail sled (Attachment A). The trash wheel is a moored vessel that uses booms to move trash toward the trash wheel where rotating trash rakes convey floating trash and debris onto a conveyor belt that then moves the trash up and into two dumpsters that sit within a sled mounted to a short rail system. Once the dumpsters are full, the dumpster sled is winched landward and the dumpsters emptied by a standard front-loading trash truck.

Power for the floating trash wheel is provided by solar panels on top of the trash wheel. The solar panels charge batteries, that in turn, power submerged pumps to pump creek water into the vanes of the water wheel causing the water wheel to turn. The turning water wheel powers the trash rakes and the conveyor belt. Landside power for the lights, cameras, rail sled winch, and sliding entrance gate, is provided by a separate array of solar panels located at the top of the creek bank.

While still under construction, the Trash Interceptor was able to be operated and captured approximately 50 to 60 cubic yards of trash and debris during the last half of the rain season from February through April 2025. It is anticipated that during the upcoming full rain season, the Trash Interceptor will remove over 200 cubic yards of material from San Diego Creek.

The contracted work has now been completed to the satisfaction of the Public Works Department. A summary of the construction cost is as follows:

| Final Contract Cost: | \$ 4,644,826.56 |
|---------------------------------------|--------------------|
| Total Change Orders: | \$ 663,752.56 |
| Actual Cost of Bid Items Constructed: | \$ 3,981,074.00 |
| Original Bid Amount: | \$ 3,981,074.00 |

The final total contract amount was \$4,644,826.56, approximately 16.7% higher than the original bid amount. Given the project's complexity and the pilot-project nature of the Trash Interceptor installation, City of Newport Beach (City) staff, the designer, and the contractor refined the design during construction to improve reliability and resilience, which increased costs. Upgrades and design modifications were implemented on the trash wheel's power transmission system, custom-built conveyor, electrical system, pump system, skeletal structure and canopy, solar panel system, site lighting, cameras and SCADA (Supervisory Control and Data Acquisition) system. To accommodate City-requested design changes, 276 additional working days were granted to the contractor.

Project schedule milestones include:

| Estimated Start of Construction per Annual Baseline Schedule | September 4, 2023 |
|--|-------------------|
| Actual Start of Construction Per Notice to Proceed | October 2, 2023 |
| Estimated Completion per Annual Baseline Schedule | April 11, 2025 |
| Substantial Completion Date Inclusive of Extra Work | October 3, 2025 |

FISCAL IMPACT:

The San Diego Creek Trash Interceptor was included within the Capital Improvement Program Budget. Funds for the construction contract were expended from the following accounts:

| Account Description | Account Number | <u>Amount</u> |
|-----------------------------------|----------------------|-----------------|
| Contributions | 13801-980000-17X12 | \$ 2,962,500.00 |
| OCTA Measure M2 | 1230052-980000-17X12 | 500,000.00 |
| Environmental Liability Fund Fees | 16001-980000-17X12 | \$ 1,182,326.56 |

Total: \$ 4,644,826.56

Contributions were received from the Ocean Protection Council and the State of California.

Measure M2 funds are provided by OCTA through their Project X "Environmental Clean Up" program. OCTA established and is administering an environmental cleanup grant funding program to address water quality degradation associated with transportation-generated pollution.

The Environmental Liability Fund Fees (ELFF) are authorized for use by the City for any expense associated with a City-hired commercial hauler recycling, diverting, recovering or disposing of trash collected in the city to fulfill State, federal or local law requirements. In this case, State regulations, promulgated in 2015, require heightened trash capture and removal. Construction of the trash interceptor facility allows access for one of the City's commercial trash haulers to collect and dispose of the trash captured in San Diego Creek and is therefore eligible for funding from the ELFF program, which currently has approximately \$10 million in reserves.

ENVIRONMENTAL REVIEW:

On July 11, 2023, City Council found the requirement for environmental review under the California Environmental Quality Act (CEQA) is satisfied by the September 25, 2018 Council adoption of Resolution No. 2018-67, A Resolution of the City Council of the City of Newport Beach, California, Adopting Mitigated Negative Declaration No. ND2018-002 (SCH No. 2018081013) for the Newport Bay Water Wheel Project (PA2018-153), pursuant to the California Environmental Quality Act, State CEQA Guidelines and City Council Policy K-3.

NOTICING:

The agenda item has been noticed according to the Brown Act (72 hours in advance of the meeting at which the City Council considers the item).

ATTACHMENT:

Attachment – Location Map