



**CITY OF**

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# **NEWPORT BEACH**

## **City Council Staff Report**

August 14, 2018  
Agenda Item No. 10

**TO:** HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL

**FROM:** David A. Webb, Public Works Director - 949-644-3311,  
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**TITLE:** Park Avenue Bridge Replacement Project – Notice of Completion for  
Contract No. 6155 (15R20)

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**ABSTRACT:**

The City Council on February 23, 2016 awarded Contract No. 6155, Park Avenue Bridge Replacement Project, to John S. Meek Company, Inc. The required work is now complete and staff requests City Council acceptance and close out of the contract.

**RECOMMENDATION:**

- a) Approve an additional construction contract change amendment for John S. Meek Company, Inc. in the amount of \$231,788.98 (3.7% of the original contract) to cover the additional construction costs beyond the original 10 percent contingency;
- b) Accept the completed work and authorize the City Clerk to file a Notice of Completion for the project. A Mitigated Negative Declaration (MND) was adopted by the City Council on November 24, 2014;
- c) Authorize the City Clerk to release the Labor and Materials Bond 65 days after the Notice of Completion has been recorded in accordance with applicable portions of the Civil Code; and
- d) Release Faithful Performance Bond one (1) year after acceptance by the City Council.

**FUNDING REQUIREMENTS:**

Funds were expensed as follows:

<b><u>Account Description</u></b>	<b><u>Account Number</u></b>	<b><u>Amount</u></b>
Federal Grant	13501-980000-15R20	\$6,958,633.00
General Funds	01201927-980000-15R20	\$ 181,185.98
Water Capital NMP	70201932-980000-15R20	\$ 50,000.00
	Total	\$7,189,818.98

**DISCUSSION:**

Public Works staff secured a \$9,109,939 grant from the Federal Highway Administration (FHWA) through the State of California Department of Transportation (Caltrans) to reconstruct the Park Avenue Bridge. This bridge connects Balboa Island and Little Balboa Island and was originally built in 1928 and was rated as functionally deficient and obsolete. Through an extensive community involvement process including a number of town hall and focus group meetings, the design of the new bridge, closely resembles the look of the original bridge. Special design features were added including slightly wider pedestrian sidewalks and traffic lanes, new staircases, and a reduction of support piles within the Grand Canal. Another important feature of the project was the construction of a (rented) temporary steel bridge over the Grand Canal on Balboa Avenue to maintain public access during the construction.

The congested work site, the restricted and limited job site access, the lack of available space to perform production work, the environmental restrictions, the high volume of curious pedestrians in the area, and the close proximity to residences all added to the project complexities. In anticipation of these operational constraints, staff assembled a project team that included a resident stakeholder group, consultant construction managers, inspectors and an outreach professional to resolve issues as they arose so that the contractor could focus on the construction.

Throughout the construction duration, the team hosted project specific community meetings and implemented a comprehensive public awareness plan that included project fact sheets and contact cards, weekly updates to the community through email and social media, a project website, weekly “office hours”, weekly and monthly community information meetings, and a 24/7 project hotline. This focused effort to keep the community abreast of the project progress as well as implementing the ideas and suggestions from the community led to a successful project.

The temporary bridge on Balboa Avenue remained in service during the 11-month closure of Park Avenue (closed on June 13, 2016). City Council opened the new bridge to the public on July 25, 2017. This opening allowed public access while the ancillary and final work bridge items were being completed.

As noted above, the project was extremely complex and when coupled with unforeseen underground conditions, community requests, environmental issues and utility delays, the contractor’s planned efficiencies decreased and delays compounded. Over the course of the project, the City issued 27 construction contract change orders and hundreds of directives and submittal approvals. (This quantity is common for these types of projects.) The most significant change orders were in four key areas: dry utilities delays, community requests, underground obstructions, and hand-railing & barrier modifications.

Dry utilities delays – The project design team conducted extensive project coordination with the dry utility companies (Edison, Gas Company, AT&T, and Cable TV) which have facilities within the limits of the construction. In addition, these companies were invited and participated in preconstruction and construction meetings with staff and the contractor and were made fully aware of the project parameters and the timelines that they were to achieve as specified in the contract documents. Dry utilities were relocated twice; once to a temporary utility bridge and then onto the final bridge.

Per State and City franchises, dry utilities are obligated to relocate their facilities at their own cost. However, timeliness, the most critical issue for the project owner (the City), is not specifically addressed (guaranteed) in these franchises and becomes the most difficult challenge on all bridge projects. The City and contractor must rely on a complex blend of communication, coordination, consensus, relationships and pressure. Ultimately, all of the dry utilities took longer than expected and delayed the schedule. Although, many of the delays were mitigated by work-arounds and schedule adjustments, the utility delays contributed to a significant portion of the change orders and the contingency use.

**Community Requests** - This project was complex technically and in execution. While the engineering issues were expected, the requests made by the community required frequent project adjustments and added costs. They included project construction features such as additional concrete roadway repairs, construction fencing, barricading, and signing of the construction site. They also included daily inefficiencies and extra work by the contractor for community directives regarding the portable toilet, use of tools, substitutions on construction equipment, methods, and materials such as backfilling with cement slurry, changes to right of way access, and restrictions to arrival times, work times and working days. These items also contributed to a significant portion of the change orders and the contingency use.

**Underground Obstructions** – While the Public Works Department maintains an inventory of record drawings, it is inevitable to encounter below grade interferences from time to time and this project was no exception. This occurred for portions of the bridge foundations and during the utility relocations. Since Little Balboa Island is undergrounded, the network of utilities and the multiple utility paths in close quarters create a challenge for the installation of utilities. Also, the contractor encountered some of the original wooden foundation piles for the bridge that existed before the 1928 bridge. These obstructions contributed a significant portion of the changed conditions and costs.

**Hand-railing and Barrier Modifications** – The permanent railings, which were a highly specialized anodized aluminum, require fabrication after the wall and barrier are constructed to obtain precise measurements. The community and the City desired to open the new bridge to public use at the earliest opportunity. With this in mind, the City directed the contractor to install temporary railings to provide protection on the bridge and in order to open the bridge. The temporary railings were liked by the community, and after the permanent railings were installed, there were a few community complaints regarding the permanent “picket railing”. However, as discussed with the community, the “picket railing” style was the originally approved community design, it matches the Marine Avenue bridge and is period-correct for the design of the bridge. Also, City staff made modifications during the construction to the heights and levels of bridge barrier and roadway barriers to enhance aesthetics. These items were the final category of change orders and costs on the project.

Per the Contract, the contractor had 225 consecutive plus (136) approved additional working days to complete the work. The first day of contract work was March 21, 2016. The old Park Avenue Bridge was closed and the temporary Balboa Avenue steel bridge was opened to traffic on June 13, 2016. The new bridge was substantially complete and opened to the public on July 25, 2017. The remaining items were completed by March 19, 2018.

**Overall Contract Cost/Time Summary**

Awarded Contract Amount	Final Cost at Completion	Contingency Allowance	Actual Contract Change	% Due to Directed Change	% Due to Unforeseen Change
\$6,326,030.00	\$7,189,818.98	10% or less	13.7%	2.4%	11.3%
Allowed Contract Time + Approved Extensions Days) =		361	Actual Time Under (-) or Over (+)		-8

Contract No. 6155, Park Avenue Bridge Replacement Project, has been completed to the satisfaction of the Public Works Department. The final negotiated contract amount is \$7,189,818.98. (\$6,326,030.00 original contract amount plus \$632,000.00 for contract changes contingency plus \$231,788.98 for the final contract amendment.) A summary of this contract's construction cost is as follows:

Original Bid Amount:	\$6,326,030.00
Actual Cost of Bid Items Constructed:	\$5,862,607.31
Total Change Orders:	\$1,327,211.67
<b>Final Contract Cost:</b>	<b>\$7,189,818.98</b>

A summary of the project schedule milestones is as follows:

Estimated Start of Construction per Annual Baseline Schedule	3/1/2016
Actual Start of Construction Per Notice To Proceed	3/21/2016
Completion Date Per Notice to Proceed + Rain Days	2/28/2017
Completion Date Per Contract +Approved Extension Days	8/6/2017
Actual Substantial Construction Completion Date	7/25/2017

**ENVIRONMENTAL REVIEW:**

A Mitigated Negative Declaration (MND) was adopted by the City Council on November 24, 2014. The MND did not identify any component of the project that would result in a "potentially significant impact" on the environment per CEQA guidelines. Specific mitigation measures were incorporated in the contract to reduce the potentially significant adverse effects to a less than significant level.

**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 A – Location Map