



THE CITY OF KEY WEST

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EXECUTIVE SUMMARY

TO: Jim Scholl, City Manager

FROM: Kreed Howell, Senior Construction Manager

DATE: 15 May 2019

SUBJECT: Unforeseen Conditions Change Order Request – Glynn Archer Gymnasium

ACTION STATEMENT

Authorizing the City Manager to approve Change Order No. 2 in the amount of \$135,057.83 using available unencumbered project funds for unforeseen conditions encountered during construction of the Glynn Archer Gym.

BACKGROUND

Resolution 18-251 of the City Commission of the City of Key West awarded the bid of Pedro Falcon Contractors, Inc. (Pedro) for the renovation of the Glynn Archer Gymnasium (Gym). Consistent with reconstruction of an existing 90 year old structure, encountering unforeseen conditions is to be expected.

Construction activities commenced in September 2018. Relative to the age of the building, multiple requests for Change Orders was expected. For the sake of administrative record keeping, these Change Order requests have been condensed into Change Order No. 2. Change Order No. 1, for additional electrical work to achieve generator connectivity, was approved and executed 1 October 2018. The Change Order Requests (COR), provided by the Contractor and the required backup documentation are attached with this document.

Change Order Request 1: Additional Electrical Work – Generator Connection

- COR 1 was approved and executed as Change Order No. 1 for \$17,826.37 on 1 October 2018. No further action by the City Commission is required for this item.

Change Order Request 2: Grout Hollow CMU Walls

- In Request for Information (RFI) #18, the Contractor requested guidance for the anchoring of 2” x 12” floor joists to an existing hollow concrete masonry unit (CMU) wall. This

member is a critical structural component to support the flooring mezzanine framing system and requires solid concrete to anchor. The structural engineer of record (EOR), Mark Keister, P.E., responded; *The hollow CMU cells at the anchors can be filled with grout or if there is a solid concrete beam or solid CMU below the joists that can be anchored into, the ledger can be lowered with the floor joists bearing on top with a Simpson H2.5A at each joist.* The cost for this COR is \$4,378.76.

Change Order Request 3: Chain-link Fence Removal

- During a progress meeting, the proprietor of Star of the Sea (SOS) Kitchen, Tom Callahan requested the removal of a chain link fence between SOS and the Gym. SOS sited the existing fence hindered their ability to maneuver pallets in and out of the kitchen. Subsequently, Pedro removed the fence. No further action is required by the Contractor resulting in a no cost Change Order.

Change Order Request 4: Additional Footing to support new CMU Walls

- Note 2 from the Construction Drawings Page S-1.1 calls for an 8" CMU wall with #5 rebar at 48" on center, the Contractor is to drill and epoxy into existing footing with 6" of embedment. In preparation for this task, the Contractor discovered that in some areas there was no existing footing to install the CMU walls onto. RFI #14 from the Contractor requested direction on how to proceed or have the EOR provide a footing detail to support these walls. The Engineer's response was; *These walls will require a new, 2' x 1'-4" concrete footing with (4) #4 rebars continuous and #3 ties at 2' on center.* The cost for this COR is \$2,646.76

Change Order Request 5: Custom Divided Muntins on Window Exterior

- During plan review, the HARC Assistant Planner noted that the horizontal muntin that attaches to the exterior portion of the windows did not match the original historic windows. The AOR subsequently provided HARC and the Contractor a revision to Page A-6.1 detailing the muntin type and schedule. Change Order Request 5, furnish and installation of the revised muntins, \$4,956.80.

Change Order Request 6: Removal and Replacement Exterior Storage Room Door

- Procurement and installation of the storage room door will be performed at a later date by CKW Community Services. No action required by the Contractor resulting in a no cost Change Order.

Change Order Request 7: Additional Concrete Cracking and Spalling Repairs

- In the Contract Documents, bidders were provided with a structural assessment report detailing areas that were identified by the EOR as spalling. Those areas as well as remediation details were incorporated in the Construction Drawings on Pages S-1.1 and S-1.2. During the selective demolition phase of construction, particularly of a 90 year old structure, one expects to find additional areas of spalling that require attention above those previously identified by the EOR.

Due to inability to accurately assess the exact number of repairs needed, Staff requested the Contractor provide a quote on a cost per cubic feet basis. The cost breakdown of these repairs are as follows:

	Unit Cost	Qty	Total
Vertical	\$1,056.65	48.1	\$50,824.87
Horizont:	\$1,478.37	12.95	\$19,162.47
Total all Repairs			\$69,987.34

Change Order Request 8: Vertical Steel Column Repairs

- As part of the demolition phase of the Gym project, the Contractor was tasked to remove all existing basketball goals. During removal, the Contractor discovered vertical steel I-beams that were previously encased in concrete on the west wall of the Gym. Because of the concrete encasement, the original assessment of the vertical cracking was standard spalling to be covered under COR 7. Further investigation revealed the concrete previously encasing the I-beams was never properly reinforced. As such, the delamination (corrosion) of the steel beam was causing major vertical spalling at the face of the beam. The EOR provided a remediation detail and basic scope for the Contractor. **Change Order Requests 7 and 8 are the same ones Senior Construction Manager showed to each Commissioner individually. These requests are NOT in addition to what was previously shown.** The financial details for the additional work are as follows:

Description	Unit Price	Qty	Total
Materials	\$2,053.25	4	\$8,213.00
Labor	\$7,667.88	4	\$30,671.52
Miscellaneous	\$1,600.00	4	\$6,400.00
Bond & Overhead	\$7,803.65	1	\$7,803.65
TOTAL ADDITIONAL COST FOR COR 8			\$53,088.18

The above analysis is summarized as follows:

COR #	CO #	Description	Requested	CKW approved
<i>1</i>	<i>1</i>	<i>Additional Electrical Work (previously approved 10/01/2018)</i>	<i>\$17,826.37</i>	<i>\$17,826.37</i>
2	2	Block Fill for CMU walls	\$4,378.76	\$4,378.76
3	N/A	Re-Locate Chain-link Fence	\$2,112.58	\$0.00
4	2	New Footer for CMU Walls	\$2,646.76	\$2,646.76
5	2	New Exterior Window Muntins	\$4,956.80	\$4,956.80
6	N/A	New storage room door	\$7,221.60	\$0.00
7	2	PPCF for additional spall rep	\$69,987.34	\$69,987.34
8	2	Steel Column Repair	\$53,088.17	\$53,088.17
9	TBD	Vapor Barrier	\$3,627.77	\$0.00
Total Change Order 2				\$135,057.83

PURPOSE AND JUSTIFICATION

Addressing the identified unforeseen conditions in a timely manner and in accordance with good engineering and construction practice is critical to providing a structurally stable gymnasium, office and community resource facility.

The improvement of infrastructure is critical to meeting the current and future needs of the City. This project supports Goal #4 of the Key West Strategic Plan, specifically: Long term sustainability of the City's hard assets.

FINANCIAL ISSUES

Unforeseen conditions Change Order No. 2 in the amount of \$135,057.83 available and funded under Account #1011900 5196300 (Project IS19001701). Currently there is \$181,630 unencumbered in the project account of this \$1.9M project.

RECOMMENDATION

Engineering Staff recommends authorizing the City Manager to approve Change Order No. 2 to Pedro Falcon Contractors, Inc. in the amount of \$135,057.83 to address unforeseen conditions to the Glynn Archer Gym.