December 13, 2018

TO: HART Board of Directors

THROUGH: Andrew S. Robbins
Executive Director and CEO

THROUGH: Charles S. Carnaggio
Project Director

FROM: Francis X. Kosich
Director for Design & Construction

SUBJECT: West Oahu Station Group Construction
Time Delay - Differing Site Condition 46 kV and Fiber Optic Undergrounding of Overhead Lines at UH West O‘ahu Station (TIA No. 5)
Contract CT-HRT-1500503

Overview

HART staff requests approval of the subject contract change order which will be presented to the HART Board for execution. If approved by the HART Board of Directors, there will be a cost increase of $4,700,000 to this contract.

Justification

- Contract Change Order No. 00025 is to increase the period of performance 244 calendar days and extend the completion date to March 5, 2019. It will also compensate the Contractor for 235 of the delay days as they are compensable, at the as-bid compensable daily rate of $20,000 per day.
- The time delay incurred to the project critical path work is due to the redesign to accommodate differing site conditions found during the undergrounding of the overhead 46 kV and fiber optic lines at University of Hawaii West Oahu Station.
- This contract change order will increase the contract sum by $4,700,000.
- This change order will be funded with allocated contingency allowable per the GCCC, Section 3.8.

Recommendation

HART staff recommends that the Board approve this contract change order.
1. Purpose:
- To seek Board approval to award Contract Change Order No. 00025 for the time delay incurred to project critical path work due to the redesign to accommodate differing site conditions found during the undergrounding of the overhead 46 kV and fiber optic lines at UHWO.
- This contract change order will increase the contract period of performance 244 calendar days and extends the completion date to March 5, 2019, and compensates the Contractor for 235 of the delay days at the as-bid compensable daily rate of $20,000 per day.
- This contract change order will be funded with allocated contingency allowable per the GCCC, Section 3.8.

2. Background/Justification
- HART's staff analyses of the time impact (TIA) No. 5 schedule determined 244 delay days affected the project's critical path. HART's staff analyses further determined 235 of those days were caused by HART and are therefore compensable per GCCC Section 3.8. The other nine delay days are shared between HART and the Contractor and are not compensable (concurrent delay).
- Redesign efforts for differing site conditions found in late February 2017 during the undergrounding of the schedule critical overhead 46kV and fiber optic lines at UHWO were completed by the Engineer of Record between March and April 2017 and incorporated into the Contractor's scope of work by contract change order in June 2017. Fieldwork impacted by the change, coordinated and performed with HECO, was completed mid-October 2017 ending the impact to the project's critical path.

3. Board Authority
HART Board is required to approve all Change Order/Contract Amendment over $1M. The total value of the proposed contract change order is $4,700,000.

4. Procurement Background
This contract change order has been processed in accordance with Contract terms and Change Management Procedures.

5. Financial/Budget Impact
This contract change order will increase the contract sum. Its value is within the project contingency.

6. Policy Impact
Not Applicable

7. Public Involvement
Not Applicable

8. Alternatives
None. Mitigation efforts of the delay was taken into account in the impact schedule (TIA No. 5).

9. Exhibits
PowerPoint Presentation
West Oahu Station Group Construction

Time Delay
Differing Site Condition 46kV and Fiber Optic Undergrounding of Overhead Lines
UH West O‘ahu Station (TIA-5)
Contract CT-HRT-1500503

Board of Directors Meeting
December 15, 2018 • Honolulu, Hawai‘i
Purpose

- To seek Board approval to award a contract change order for the time delay incurred to project critical path work due to the redesign to accommodate differing site conditions found during the undergrounding of the overhead 46 kV and fiber optic lines at UHWO.

- This contract change order will increase the period of performance 244 calendar days and extends the completion date to March 5, 2019.

- 235 of the delay days are compensable at the as-bid compensable daily rate of $20,000 per day.

- If approved, this contract change order will increase the contract sum by $4,700,000. Its value is within the allocated project contingency.

- This change order will be funded with allocated contingency allowable per the GCCC, Section 3.8.
Background

- Re-design efforts for differing site conditions found in late February 2017 during the undergrounding of the schedule critical overhead 46kV and fiber optic lines at UHWO were completed by the Engineer of Record between March and April 2017, and incorporated into the Contractor’s scope of work by contract change order in June 2017.

- Field work impacted by the change, coordinated and performed with HECO, was completed in mid-October 2017, ending the impact to the project’s critical path.

- HART conducted three (3) separate staff analyses of the time impact (TIA) No. 5 schedule.

- HART’s staff analyses determined that 244 delay days affected the project’s critical path.

- 235 of those days were outside the contractor’s control.

- These days are compensable per GCCC, Section 3.8. The other nine delay days are shared between HART and the Contractor, and are not compensable (concurrent delay).
## Cost Overview

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Awarded Value of Contract</td>
<td>$56,088,470</td>
</tr>
<tr>
<td>Previously Authorized Changes</td>
<td>$9,186,076</td>
</tr>
<tr>
<td>Proposed Contract Change Order</td>
<td>$4,700,000</td>
</tr>
<tr>
<td>New Contract Total</td>
<td>$69,974,546</td>
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</tbody>
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Recommendation

Approve the Contract Change Order to increase the contract period of performance by 244 calendar days and compensate the Contractor for 235 compensable delay days, at the as-bid daily rate of $20,000 per day, for a total of $4,700,000.
Questions?
Mahalo!