INTERNAL AUDIT REPORT

Operational Audit- Capital

Central Terminal Infrastructure Upgrade Project
(Construction and Closeout Phases)

December 2017 – March 2021

Issue Date: March 24, 2021
Report No. 2021- 03
TABLE OF CONTENTS

Executive Summary ...................................................................................................................................................3
Background................................................................................................................................................................4
Audit Scope and Methodology ...................................................................................................................................5
Summary Schedule of Findings and Recommendations .........................................................................................6
Appendix A: Risk Ratings ........................................................................................................................................ 10
Appendix B: Force Account Change Order Exceptions for Osborne Employees .................................................. 11
Central Terminal Infrastructure Upgrade Project

Executive Summary
Internal Audit (IA) completed an audit of the Central Terminal Infrastructure Upgrade Project (Project) for the period December 2017 through March 2021. The audit was performed to assess the quality of the Port’s monitoring of the Project to assure it was meeting project management standards in an efficient and effective manner.

We selected this project to audit based on the number of change orders (COs) and the delays in schedule completion. We selected the largest dollar value COs, ones that changed the scope of the project, those that approved the extension of the contract, and those that were the result of errors and omissions. We noted that in all of the Force Account COs that we reviewed, the Port was overbilled by the contractor. While the Port should have preventative controls to identify many of these, the primary responsibility lies with the contractor to assure billings are accurate and reconcile to their internal records. This assures that they are both accurately, billing the Port and paying their staff.

The Project was audited in two parts. The first audit; report no. 2020-18 issued on November 24, 2020, focused on the bidding and design phases while this audit focused on the construction and closeout phases.

The project delivery method was a design-bid-build with a lump sum contract. The construction contract total was $12.2 million, which included approximately $2.77 million in COs. Through discussions with the Port’s project staff, significant reasons that the Project did not meet critical milestones included: errors in design, scope changes, and varying site conditions. The contract required that Osborne Construction Company (Osborne) substantially complete the work no later than 730 days following the contract execution date, which would have been December 26, 2019. During the course of the project, the Port approved 278 additional days that extended substantial completion to September 29, 2020. Even with the additional approved days, Osborne did not meet the revised substantial completion date and actual substantial completion was achieved on December 31, 2020. As of March 8, 2021, the Port accepted two additional Time Impact Analyses (TIAs) for a total of 93 additional days which extended the Contract’s completion date to December 31, 2020.

We identified the following opportunities where internal controls can be enhanced or developed. These opportunities are discussed in more detail beginning on page six of this report. Additionally, we communicated matters to management, related to the Small Business Utilization compliance through a separate letter.

1. **(High)** The audit identified that the Port was overbilled approximately $18,181 through force account change orders. These were primarily due to incorrect labor hours and billing rates submitted by Osborne and an inadequate review of documentation by the Port.

2. **(Medium)** Osborne did not meet critical milestones which resulted in the overall Project not being completed on time and the Port incurring additional costs to oversee the Project.

Glenn Fernandes, CPA
Director, Internal Audit

Responsible Management Team
Wayne Grotheer, Director, Aviation PMG
Tina Soike, Chief Engineer and Director of Engineering Services
Janice Zahn, Asst. Engineering Director- Construction
Background

The purpose of the Project was to provide the shell space and associated vertical circulation for expansion of, and improvements to, the airport dining and retail (ADR) space in the Central Terminal. The outcome was anticipated to improve customer service and increase non-aeronautical revenues. A space demand analysis showed there was a need in the Central Terminal for an additional 12,000 square feet of ADR space to meet the anticipated 2025 passenger projections. This project added approximately 10,000 square feet of new ADR space to the Central Terminal.

In 2016, the Port advertised two separate projects for bid. The first project was the ADR Modifications Central Terminal Project, with an engineer’s estimate of $3.4 million. The ADR Modifications Project received one bid of $7.5 million, which was 120% above the engineer’s estimate. The second project was the Central Terminal HVAC Upgrade Project with an engineer’s estimate of $2.9 million. This project also received one bid of $8.7 million, which was 200% above the engineer’s estimate. As a result of these irregular bids, the Port management team combined the two construction projects into one larger project, the Central Terminal Infrastructure Upgrade Project, with an estimated project cost of $10.2 million. Osborne was awarded the contract for $9.3 million.

The Project experienced multiple construction COs. Some of these were driven by business and customer service-related decisions, but nonetheless, resulted in schedule delays and increased the Project’s budget. The final construction contract total, as of the audit report date, was $12.2 million which includes approximately $2.9 million in COs.

The following table details the Project’s schedule and budget.

<table>
<thead>
<tr>
<th>Schedule (Per February 16, 2021 Trend Log)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract Completion Date</td>
</tr>
<tr>
<td>Approved Time Extension (Calendar Days)</td>
</tr>
<tr>
<td>Revised Substantial Completion Date</td>
</tr>
<tr>
<td>Actual Substantial Completion Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Budget (Per February 16, 2021 Trend Log)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract Sum</td>
</tr>
<tr>
<td>Executed COs and Potential Cost Risks</td>
</tr>
<tr>
<td>Projected Contract Sum to Date*</td>
</tr>
<tr>
<td>Original Contingency *</td>
</tr>
<tr>
<td>Revised Contingency Total*</td>
</tr>
<tr>
<td>Remaining Contingency</td>
</tr>
</tbody>
</table>

* Contingencies used are included in Project Contract Sum to Date.
Audit Scope and Methodology

We conducted this engagement in accordance with Generally Accepted Government Auditing Standards and the International Standards for the Professional Practice of Internal Auditing. Those standards require that we plan and conduct an engagement to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our engagement objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our engagement objectives.

We used a judgmental method to determine the samples selected for our audit test work. The results of this work cannot be projected to the entire population as we did not select a random sample.

The period audited was December 2017 through March 2021 and included the following procedures:

**Change Orders**
- Obtained an understanding of the Port's change order review process.
- Verified approvals by required personnel (e.g. Port, Osborne, etc.).
- Confirmed approved change order amounts tied to the Change Order Log.
- Reviewed for reasonableness and allowability (i.e. not base contract scope).
- Calculated proper markups (for force account COs).
- Tested subcontractor back-up including direct costs and inclusion of accurate markups.
- Reviewed supporting documentation for change order/claim submission, specifically errors/omissions and scope COs.
- Verified the inclusion of reasonable unit pricing.

**Small Business Utilization**
- Obtained an understanding of the Port’s monitoring of compliance with small business utilization requirements.
- Verified compliance with requirements through document review, submitted reports, and Osborne’s Job Cost Ledger.
- Obtained an understanding of the Port’s monitoring of Monthly Amounts Paid to Subcontractors (MAPS) reports.
- Compared the most recent MAPS report to Osborne’s Subcontractor Job Cost Subledger.

**Critical Milestones**
- Obtained an understanding of the Port’s monitoring process.
- Obtained substantial and physical completion date and letters of forbearance.
- Tied out the dates of actual substantial completion to the expected dates.
- Assessed the reasonableness of excused/extended days approved through COs.
- Calculated potential liquidated damages.

**Closeout Process**
- Obtained an understanding of the Port's closeout review process. Reviewed documented procedures for formally closing out construction contracts.
- Confirmed if Osborne completed the required deliverables, and the Port inspected and accepted the goods and materials.
- Verified that the final payment and the release of retention will not occur until all documentation is received (including warranty documents, as-built drawings, inspection and acceptance records, operating and maintenance manuals,...etc.)
Central Terminal Infrastructure Upgrade Project

Summary Schedule of Findings and Recommendations

1) Rating: High

The audit identified that the Port was overbilled approximately $18,181 through force account change orders. These were primarily due to incorrect labor hours and billing rates submitted by Osborne and an inadequate review of documentation by the Port.

We selected six Change Orders (COs) for review, based on those we considered high risk. Four of the six COs were Force Account COs, which accounted for approximately $732,584 of the $1 million in Force Account COs. A Force Account CO is issued on a Not-To-Exceed (NTE) basis in order to compensate the Contractor for costs and expenses including labor, material, and equipment expended. These expenses are tracked by the Contractor on a daily basis and Daily Force Account Field Documents are submitted and then signed off by the Port Field Inspector. Upon completion of the CO work, the Port issues a separate CO to reconcile the difference between the original amount of the NTE CO and the Contractor’s approved costs plus applicable markup.

We requested job cost ledger and timesheets directly from Osborne, these were additional documents that are not usually provided to the CM. We noted instances in our sample of Force Account COs in which documentation that we received from Osborne did not accurately support the amount submitted to the Port for payment of labor hours and rate. It appeared that Osborne systematically overbilled the Port for hours worked and rates for several of their employees and the Port’s Construction Manager did not catch these errors and approved them for payment. Below are some examples which are described in more detail in Appendix B.

- The Port was billed overtime hours for salaried employees of Osborne. Additionally, there were incorrect Field Documents submitted by Osborne and approved by the Port.
- Duplicate Field Documents were submitted / billed for the same day by Osborne. The Port approved and paid these duplicate documents without noticing they were duplicates.
- The Port was billed for a full day when Osborne employees were not onsite for the entire day. Additionally, there were multiple instances when the Port was billed for an entire week and the employee’s timesheet showed that the Osborne employee did not work for a large portion of that week.

Contractors have the primary responsibility to submit accurate documents and billings to the Port; however, the Port also has a responsibility to review these documents to assure that they are accurate.

Recommendations:

- In the future, the Port should require contractors to submit all supporting documentation together, including a list of hourly and salaried employees as part of the CO supporting documentation.
- In the future, the Port should require the contractor to submit daily force account sheets for all employees working on force account COs.
- CM should seek and recover any amount due to the Port from the overbilling.

Management Response/Action Plan:

The team is in agreement with your recommendations. While we exercised due diligence in our oversight of the contractor’s change order documentation, our current procedures are based on reviewing contractor’s submitted records. The examples provided in Appendix B, including additional contractor records obtained by internal audit, has identified what appears to be contractor submitting
incorrect information for cost reimbursement, resulting in the Port overpaying for work not performed as well as potential underpayment for several construction workers performing overtime work.

The team will review our overall management of Force Account change orders and make revision regarding salaried versus hourly workers.

The team will investigate any overpayments made to the contractor and issue a deductive change order to correct this issue. In addition, the team will investigate and ensure that the contractor pays the hourly workers any backpay that is required by law.

The team will reinforce, with our contractors and at the next Port of Seattle/Association of General Contractor’s Best Practices committee meeting, the importance of submitting factually correct records and proper payment of wages for hourly construction workers.

DUE DATE: June 30, 2021
Osborne did not meet critical milestones which resulted in the overall Project not being completed on time and the Port incurring additional costs to oversee the Project.

There were four critical milestones included in the Contract that needed to be substantially completed by specific dates for the Project to remain on schedule. If Osborne failed to meet those milestones, the Contract included a calculation of the additional costs that the Port would incur, and the Port could assess liquidated damages (LDs) against Osborne as detailed in the following table:

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Liquidated Damages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milestone No. 1</td>
<td>$2,274/day</td>
</tr>
<tr>
<td>Milestone No. 2</td>
<td>$1,074/day</td>
</tr>
<tr>
<td>Milestone No. 3</td>
<td>$1,399/day</td>
</tr>
<tr>
<td>Milestone No. 4</td>
<td>$ 855/day</td>
</tr>
</tbody>
</table>

During the Project, there were 278 excused days added to the schedule, which extended the contract completion date to September 29, 2020. Even with these additional days, Osborne did not meet the revised completion dates for any of the four milestones. However, instead of seeking LDs the Port issued multiple forbearance letters. These letters provided Osborne additional days to complete the milestones and provide the Port with documentation justifying why the milestones were not met, without seeking LDs. Even with the additional days provided in the forbearance letters, Osborne did not meet the stated requirements. In two cases milestones were not completed by the forbearance letter requirement, and in all cases, Osborne did not submit the required documentation for justification. When Osborne did not comply with the requirements of the forbearance letters, the Port was entitled to assess LDs from the original date that a milestone should have been completed.

<table>
<thead>
<tr>
<th>MS</th>
<th>Original Date of Completion</th>
<th>Excused Extension (Days)</th>
<th>Revised/Approved Date of Completion</th>
<th>Actual Substantial Completion</th>
<th>Diff (Days)</th>
<th>Letter of Forbearance Date for Completion</th>
<th>Liquidated Damages</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>6/19/2019</td>
<td>274</td>
<td>3/19/2020</td>
<td>12/31/2020</td>
<td>287</td>
<td>10/6/2020</td>
<td>401,513</td>
</tr>
</tbody>
</table>

\[908,609\]

Note: The LDs represent current amounts. Discussions with CM group indicate that it is likely that days will be approved for each critical milestone. Therefore, when a CO is approved, LDs will potentially be decreased or eliminated.

The Project’s overall substantial completion occurred on December 31, 2020. As of March 8, 2021, the CM team had recently received and approved two TIAs which extended the Contract’s completion date to December 31, 2020. Given that a considerable amount of time has passed since the completion of the critical milestones, reliance will be placed primarily on the information provided by Osborne. There is the potential that some of the days that could be excused, might not have been approved during the Project. Additionally, if the Port enforced critical milestone dates, or the requirements of the forbearance letters during the Project, Osborne may have been more diligent in completing the milestones and ultimately the Project sooner, which would have resulted in a lower cost to the Port.

Recommendation:
- We recommend that management reconcile the actual milestone completion dates to the contract requirements and assess whether the Port is due any LDs.
- In the future, management should enforce critical milestone dates, and the requirements of forbearance letters, during the course of a project, rather than after a project is complete.
Management Response/Action Plan:

The team is in agreement that reconciliation of actual milestone completion dates to the contract milestone completion dates is required and the contractor will be assessed liquidated damages for all unexcused delays to interim milestones, substantial completion and physical completion dates.

The team agrees that management of milestones should be addressed in a timely manner during construction as required by our standard operating procedures. Management will reinforce with staff and provide a higher level of oversight to ensure staff understands the importance of timely actions related to schedule management and milestones. The team will also reinforce with the contractors the importance of timely submissions of documentation for schedule delays.

DUE DATE: June 30, 2021
Appendix A: Risk Ratings

Findings identified during the audit are assigned a risk rating, as outlined in the table below. Only one of the criteria needs to be met for a finding to be rated High, Medium, or Low. Findings rated Low will be evaluated and may or may not be reflected in the final report.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Financial Stewardship</th>
<th>Internal Controls</th>
<th>Compliance</th>
<th>Public</th>
<th>Commission/Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Significant</td>
<td>Missing or not followed</td>
<td>Non-compliance with Laws, Port Policies, Contracts</td>
<td>High probability for external audit issues and/or negative public perception</td>
<td>Requires immediate attention</td>
</tr>
<tr>
<td>Medium</td>
<td>Moderate</td>
<td>Partial controls Not functioning effectively</td>
<td>Partial compliance with Laws, Port Policies Contracts</td>
<td>Potential for external audit issues and/or negative public perception</td>
<td>Requires attention</td>
</tr>
<tr>
<td>Low</td>
<td>Minimal</td>
<td>Functioning as intended but could be enhanced to improve efficiency</td>
<td>Mostly complies with Laws, Port Policies, Contracts</td>
<td>Low probability for external audit issues and/or negative public perception</td>
<td>Does not require immediate attention</td>
</tr>
</tbody>
</table>
# Appendix B: Force Account Change Order Exceptions for Osborne Employees

<table>
<thead>
<tr>
<th>CO</th>
<th>CO Purpose</th>
<th>Title</th>
<th>Issue Description</th>
<th>Total Billed</th>
<th>Expected Amount&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Difference: Over/(Under) Billed</th>
</tr>
</thead>
<tbody>
<tr>
<td>174</td>
<td>North Ceiling Superintendent</td>
<td>12/9/2019-12/18/2019 Timesheet shows 64 hours worked at the regular rate. Daily Field Records show 94 hours worked (104 hours billed) at overtime rate. 12/18/19 FA field records double counted.</td>
<td>$9,832.84</td>
<td>$4,458.95</td>
<td>$5,373.89</td>
<td></td>
</tr>
<tr>
<td>174</td>
<td>North Ceiling Carpenter</td>
<td>12/9/2019-12/18/2019 Timesheet shows 21 hours worked. 26 hours billed 12/9/2019 counted twice (Original signed Daily FA Sheet shows 5 hours while copy has 4 hours).</td>
<td>1,733.78</td>
<td>1,400.36</td>
<td>333.42</td>
<td></td>
</tr>
<tr>
<td>174</td>
<td>North Ceiling Night Supervision</td>
<td>OCC original request- $7,497.67. POS approved $6,700.94, but OCC still billed $7,497.67</td>
<td>7,497.67</td>
<td>6,700.94</td>
<td>796.73</td>
<td></td>
</tr>
<tr>
<td>176</td>
<td>COVID Reimb. COVID Sup. weekly salary</td>
<td>Worked 4/27 and 5/1 for week ending 5/2/20. Port charged entire week. Onsite four hours on 4/27 (per parking receipt). Billed for 8 hours.</td>
<td>$11,479.20</td>
<td>$8,953.78</td>
<td>$2,525.42</td>
<td></td>
</tr>
<tr>
<td>176</td>
<td>COVID Reimb. COVID Sup. weekly salary</td>
<td>Week ending 6/6/20- Worked three days (6/1, 6/2 &amp; 6/3). Port billed for entire week.</td>
<td>9,183.36</td>
<td>8,265.02</td>
<td>918.34</td>
<td></td>
</tr>
<tr>
<td>176</td>
<td>COVID Reimb. COVID Sup. weekly salary</td>
<td>Did not work on July 3- Independence Day holiday. Port billed for this day.</td>
<td>9,183.36</td>
<td>8,724.19</td>
<td>459.17</td>
<td></td>
</tr>
<tr>
<td>176</td>
<td>COVID Reimb. COVID Sup. weekly salary</td>
<td>Only worked on 7/31 for week ending 8/1/20. Timesheet does not indicate that days were worked on the Project between 7/25 to 7/30.</td>
<td>11,479.20</td>
<td>9,183.36</td>
<td>2,295.84</td>
<td></td>
</tr>
<tr>
<td>176</td>
<td>COVID Reimb. COVID Sup. weekly salary</td>
<td>Did not work on CTIUP 9/1 - 9/3 for week ending 9/5/20. Port charged for entire week. Did not work on 9/7, Labor Day. Port billed.</td>
<td>10,560.86</td>
<td>8,724.19</td>
<td>1,836.67</td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>HSS Beam Install in North CT Superintendent</td>
<td>9/20/2019 &amp; 9/30/2019 - 10/3/2019 timesheet shows 40 hours worked at the regular rate. Daily Field Records shows 60 hours worked at overtime rate.</td>
<td>$4,686.00</td>
<td>$2,386.60</td>
<td>$2,299.40</td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>HSS Beam Install in North CT Carpenter</td>
<td>9/16/2019-9/20/2019 Daily Field Records shows 25.5 hours worked at regular rate. 9/20/2019 Daily field records shows 12 hours worked, possible overpayment of 4 hours as timesheet shows only 8 hours</td>
<td>1,417.04</td>
<td>1,194.76</td>
<td>222.28</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>Scaffolding Carpenter</td>
<td>4 hours billed at overtime rate for 10/26/19. Per timesheet did not work on that day.</td>
<td>$306.08</td>
<td>0</td>
<td>$306.08</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>Scaffolding Superintendent</td>
<td>8 hours billed at overtime rate for 10/26/19. Timesheet does not indicate time worked.</td>
<td>814.00</td>
<td>0</td>
<td>814.00</td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> These amounts are calculated based the documents IA received directly from Osborne (Timesheets) and are not provided to Port as part of their CO review process.
Example 1:
There were multiple Daily Force Account Field Documents (12/9/2019 through 12/13/2019) that appear to be copies with only the Port’s Field Inspector’s original signature. In all instances, the Port was billed 12 hours per day for the Superintendent, however, the Contractor only paid the Superintendent eight hours per day.
Example 2:
Original signed Daily Force Account Field Documentation shows five hours worked on 12/9/2019 while the copy lists four hours worked. The Contractor included both documents in their hourly calculation and billed the Port nine hours for the Carpenter on this day.
Example 3:
The Port agreed to reimburse Osborne 100% of expenses for a COVID-19 Safety Supervisor to be onsite eight hours per day. On April 27, 2020, the parking garage receipt shows that the Safety Supervisor was onsite for four hours, however, the Port was billed for eight.