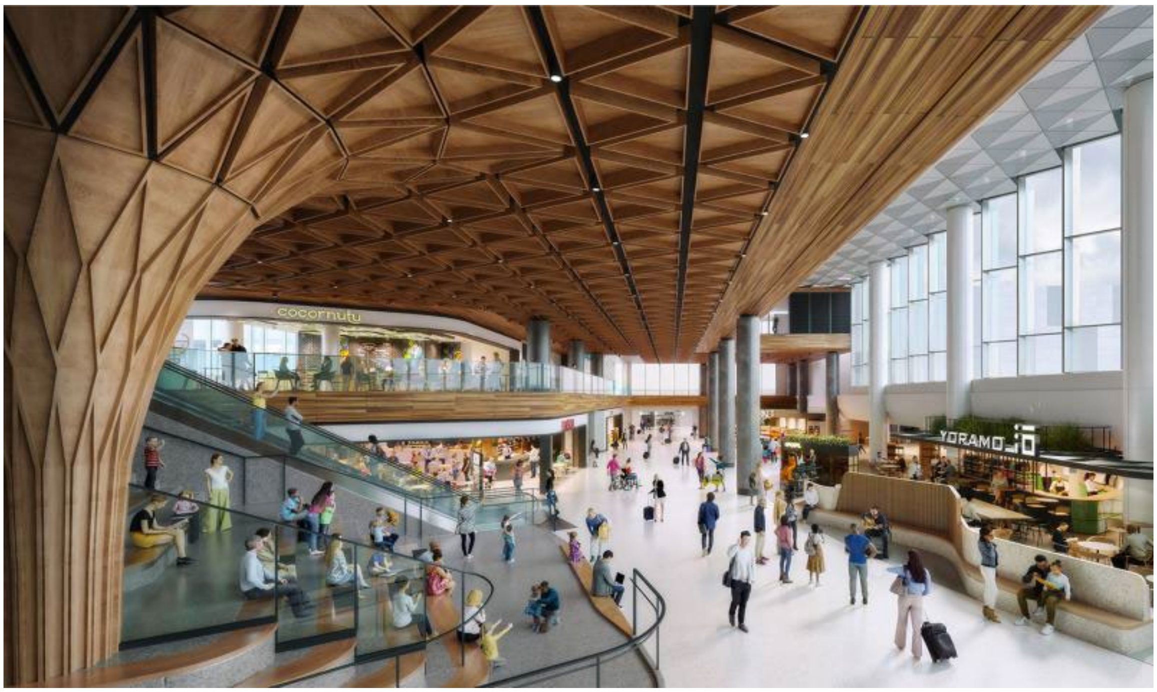
INTERNAL AUDIT REPORT

Operational Audit – Capital
C Concourse Expansion Project (Pre-Construction)



Source: Port of Seattle

January 2021 – May 2023

Issue Date: August 30, 2023
Report No. 2023-09

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INTERNAL AUDIT

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Executive Summary

Internal Audit (IA) completed an audit of the C Concourse Expansion Project Pre-Construction phase for the period January 2021 through May 2023. The audit was performed to assure the quality of the Port of Seattle's (Port) monitoring of the Project, to assess if it was meeting project management standards, and to determine if pay applications were properly approved, supported, and reasonable.

The Port utilized the General Contractor/Construction Manager (GC/CM) delivery method for the Project. In addition to this audit, Washington State Law (RCW 30.10.385) requires an independent audit be conducted to confirm the proper accrual of costs for any alternatively selected subcontractors. R.L. Townsend and Associates, a nationally recognized, construction audit firm was awarded this contract.

The Port contracted Turner Construction Company (Turner) to be the GC/CM in December 2020. The initial GC/CM Pre-construction Services Agreement (Agreement) was awarded for a not-to-exceed amount of $2.5 million for services provided by Turner, including an allowance of $194,000 for services to be provided directly by an Electrical Contractor/Construction Manager, and an allowance of $194,000 for services to be provided directly by a Mechanical Contractor/Construction Manager. Additionally, in 2022, a change order was initiated for approximately $300,000 to incorporate the services of an exterior wall Subcontractor/Construction Manager. Including change orders and open trends, the projected Agreement amount was approximately $4.44M at the time of this report. In the preliminary work plan, Turner estimated the pre-construction work would be completed by December 2022. However, pre-construction work is still ongoing, overlapping with construction work that started in July 2022, and is expected to be completed in the fall of 2023.

Our audit focused on a review of pay applications, compliance with Agreement language, industry best practices, and compliance with Washington State Law (RCW 39.10.385). Our audit identified opportunities where internal controls could be enhanced or developed. These opportunities are listed below and discussed in more detail beginning on page six of this report.

1. **(Medium)** The model that was used to determine billable rates for contractor's staff, utilized inputs that could result in paying higher than market rates for labor.
2. **(Medium)** The Port's oversight process and documentation could be improved to support justifications for approving rates above the Market Maximum, and collaboration with other departments or teams.
3. **(Medium)** We identified opportunities for Port Management to strengthen controls during the pay application review process. Additionally, we identified several instances where there has been a lack of adherence to the stipulated Agreement. These observations highlight opportunities to enhance oversight and assure compliance with contractual requirements.

Glenn C Fernandes

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Director, Internal Audit

Responsible Management Team
Karen Goon, Deputy Executive Director
Nora Huey, Director, Central Procurement Office
Janice Zahn, Director of Engineering

Background

Seattle-Tacoma International Airport (SEA) is a fast-growing airport. Passenger activity has shown phenomenal growth in the past few years and is straining existing facilities. Passenger facilities and amenities needed to be expanded and improved to meet passengers' needs and provide them with a higher level of service. Tenants such as TSA, concession operators, and airlines have a need for more space to meet traveler demand. Major projects are being planned and built. These include, the International Arrivals Facility, the North Satellite Renovation, as well as other space and system improvements throughout the terminal facilities. SEA is land constrained; there is limited land available to expand horizontally, however there are a few opportunities to expand vertically, one of which is the C1 building. The following are the Port's objectives for the expansion of the C1 Building (now known as the C Concourse Expansion Project) mostly within the existing footprint:

- Maximize and optimize concessions space on the concourse and Mezzanine Level of the expansion.
- Expand the C1 building around a light-filled public area.
- Develop strong visual and physical connections between the new C1 concessions area and Concourses C and D such that passengers are comfortably drawn into the C1 space.
- Maximize natural light in the C1 public areas.
- Meet the requirements of the primary tenants.
- Build facilities that are adaptable to change in use, and which have the flexibility to meet short and long-term demands.
- Develop design that endeavors to minimize the Total Cost of Ownership, rather than exclusively first costs.
- Comply with the Port's environmental and sustainability goals and standards.
- Create an aesthetically unique, pleasing, and inviting space that satisfies passengers' different needs and senses, and conveys and reflects a strong Northwest sense of place.
- Comply with the Port's design and performance standards.

The Agreement total as of July 19, 2023, was $4.38 million, which includes approximately $1.88 million in executed change orders (COs). Additionally, there is $63,417 in Open Trends, which projects the total Agreement to be $4.44 million. In the preliminary work plan, Turner estimated the pre-construction work would be completed by December 2022. However, pre-construction work is still ongoing, overlapping with construction work that started in July 2022, and is expected to be completed in the fall of 2023.

Schedule (Per July 19, 2023, Trend Log)	
Original Contract Completion Date	12/10/2022
Approved Time Extension (Calendar Days)	0
Current Contract Completion	12/10/2022
Anticipated Completion Date	Fall 2023
Budget (Per July 19, 2023, Trend Log)	
Original Contract Sum	$2,500,000
Executed COs	$1,880,302
Potential Risk (Open Trends)	$63,417
Projected Contract Amount	$4,443,719

Original Contingency	$2,000,000
Less: Executed COs and Potential Risk	$(1,943,719)
Remaining Contingency	$56,281

Audit Scope and Methodology

We conducted the 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.

The period audited was January 2021 through May 2023 and included the following procedures:

Pay Applications

- Obtained an understanding of the construction management team's review and approval of pay applications.
- Reviewed pay applications 1-27 and verified hours billed, labor rates and expenses charged to determine their reasonableness.
- Verified if costs and payments followed the terms of the Services Agreement (SA).
- Obtained an understanding of the construction management team's review of forecasted payments. Verified if forecasted payments were correctly reversed in the next pay applications.

Labor Rate Analysis

- Gained an understanding of allowable mark-ups by reviewing the SA, regulations, and industry standards.
- Obtained copies of the rate schedules and relevant documents that provided information on the approved labor rates.
- Compared approved rates through market research, industry standards, and consulting with other construction audit firms who specialize in labor rate analysis.
- Re-calculated benefits, contributions, insurance, and other build-up costs to determine if they were accurately calculated in accordance with the SA and industry standards.

Key Personnel Change

- Verified any key personnel changes that happened during the pre-construction phase.
- Obtained and reviewed supporting documentation for such changes.

Compliance with RCW 39.10.385

- Obtained and reviewed supporting documentation as per RCW 39.10.385 for alternatively selected subcontractors.
- Verified if all the requirements were met as stated in the RCW.

Schedule of Findings and Recommendations

1) Rating: Medium

The model that was used to determine billable rates for contractor's staff, utilized inputs that could result in paying higher than market rates for labor.

Turner submitted a table of people, and proposed rates, to CPO for approval. CPO uses a Rate Tool that integrates Market Survey Data, Port Historical Data, and Firm Data, to negotiate rates for each position title.

There are generally two industry standard approaches an owner can take when approving contractor rates: 1) using a Rate Tool or "market rate" analysis, which uses an in-house model to price each position title, or 2) using a Cost-Plus approach, which includes negotiating a profit margin and vetting the build-up of proposed rates.

Compensation to Turner for pre-construction services was based primarily on approved hourly billing rates per person. The Port's Central Procurement Office (CPO) was tasked with reviewing and approving the proposed billing rates, which were updated every April. As of Pay Application (PA) 27, the Port paid $2,436,781 in billable rates. This was done compliance with the contract as negotiated.

Although not required, Turner submitted a rate buildup for each position, which was then attached to the contract and included the *"agreed to rate"* for each position (see example in Appendix B). This rate per position was what was paid. We used the table attached to the contract, and data received directly from Turner, to assess the Cost-Plus buildup that was attached in the contract. We then performed a test to compare what would have happened if the Port reviewed the rate buildup and came up with an actual rate (actual allowable costs plus fee).

Our review of Turner's table identified several items that would be questioned if a Cost-Plus method was employed. Examples include the lack of detail on the build-up of "Base Cost" which appeared to be a fully burdened rate, large variances in the Virtual Design and Construction "VDC Universal Rates", insurance percentages higher than industry standard, and a "B&O tax" percentage, which was more than the actual rate. Upon a recalculation of adjusted rates with the information provided by Turner, we determined that if a Cost-Plus methodology had been employed, the billed cost to the Port could have been between approximately $160,316 and $257,974 less than the rates generated from the Port's rate tool. The range is dependent on the fee negotiated with the contractor.

Furthermore, we noted that the Agreement language on allowable billable rate build-up (*Section III Compensation*) was vague, which increased the risk of rate components being included that normally would not be or included in multiple areas. For example, the Agreement stated in part, "The hourly labor rates included in Attachment B (Pre-construction Work Plan), cover the items listed below of the GC/CM's direct and indirect costs or expenses arising out of or related to the performance, of the Pre-construction Services authorized in this Agreement, ***including but not limited to…"***. Another example states, "home office overhead and profit" as an allowable inclusion. Without more specific verbiage this leaves a broad interpretation of what is allowable.

See **Appendix B** for detailed information on the rate components that were adjusted.

Recommendations

1. CPO should either modify the inputs to the current rate tool or employ a Cost-Plus approach.
2. CPO should work with Legal to strengthen pre-construction services agreement language to help decrease the possibility of misinterpretation.

Management Action Plan

Thank you for sharing your audit report. After a thorough review, we wanted to provide the following information and management response to better inform the audit findings.

GCCM contracts are considered an alternative to the traditional design-bid-build contracting method under Chapter 39.10 RCW and are useful in situations where “(1) implementation of the project involves complex scheduling, phasing, or coordination; (2) The project involves construction at an occupied facility which must continue to operate during construction; (3) The involvement of the general contractor/construction manager during the design stage is critical to the success of the project” RCW 39.10.340.

The Port, through CPO and with our internal partner, is responsible for: determining how to deliver a project; determining the type of contract that will be utilized; conducting negotiations; assessing and balancing different risks; and determining fair and reasonable prices.

The following is provided to highlight two concerns we have regarding the audit findings.

1. <u>Port Negotiated Fair & Reasonable Billing Rates and the Review of Cost Information Did Not Account for Risk and Contract Administration</u>.

The Port chose to utilize a billing rate type contract and negotiated fair and reasonable rates. The contract that is the subject of the audit established specific fixed rates for the pre-construction services, which has lasted over 2 years. The contract included a price adjustment clause that limited price increases to the 5-year annual average CPI-U for the local area. This simplified administering price increases.

The contract did not mandate accounting for all rates but rather adherence to a negotiated rate fixed for a specific period, which mitigated the Port's risk of unexpected increases. This approach also saved the Port considerable time and effort compared to reviewing the agreement as a cost reimbursement contract. We shared this information but note that information was not included in the audit report. The Port’s negotiation process was successful, resulting in a 7% reduction of proposed rates for the Port, along with significant time savings.

Utilization of a cost reimbursement analysis to review one phase of a negotiated fix rates type contract is not appropriate and can lead to confusion. Utilization of a reimbursement method fails to take into account risk factors associated with the different type of contracts and administrative costs and complicates the ability to deal with the complex design and construction setting that benefits from utilizing the GCCM method. The Port is focused on paying fair and reasonable prices accounting for business risks, time impacts, materiality, our desire to be the “Owner of Choice” and creating a win-win philosophy.

In a cost reimbursement type contract, the Port would pay actual, allowable, allocable, and reasonable costs incurred by the Contractor. Cost reimbursement contracts require additional oversight in contract management, carry higher risk for the owner, and can be administratively complex. Some examples include higher level of detail in invoices and invoice review; annual review and adjustments related to overhead changes for the prime contracts and any subcontractors; and regular review throughout the year of labor rate changes for all individuals working on the contract to address cost increases. In the cost reimbursement scenario, the Port is obligated to pay increased costs when the contractors’ cost increases.

The C Concourse contract was based on negotiated rate fixed for a specific period, which mitigated the Port's risk of cost increases. This approach also saved the Port and Contractors considerable time and effort associated with managing a cost reimbursement type contract. For example, invoice submission and review are simplified along with minimizing the need for regular detailed accounting review of overhead and labor rates. This work and risk are not accounted for in the audit and the rates were not adjusted to address the added time and effort expended by the Contractor and Port managing a cost reimbursement contract. The Port would pay for the additional hours spent by the contractor to comply with the added contract management associated with a cost reimbursement contract. This analysis also doesn't address risks mitigated via a fixed rate contract.

2. Potential Savings from Cost Reimbursement Contracts Miscalculated.

In reviewing the "cost analysis" that was performed, CPO noted that the analysis reduced actual costs the Port would have been required to pay in a cost reimbursement scenario. First, the fee percentage (profit) allowed in the audit was 5% and 10%. Industry standards for professional cost-plus fixed fee (CPFF) contracts, typically range from 8% to 15%. Second, the audit reduced the indirect cost pool (benefits base) percentage from 34% to 21% for unallowable costs that are generally allowable[1]. Third, the analysis reduced General Liability insurance from 1.2% to .5% based on "industry averages". CPFF contracts pay the actual rates experienced by the contractor. Finally, the baseline cost information provided by the contractor was checked, but not validated as complete and accurate. In a typical cost reimbursement contract, the analysis would include reviewing the complete audited indirect overhead cost rate, reviewing actual salary data, and negotiating and applying an appropriate fee based on risk. By combining different risk measures and contract terms, the cost reimbursement analysis purported to yield a savings.

CPO took the data used by Internal Audit and recalculated the costs assuming a reasonable fee of 11%, 30% benefits bases and 1.2% for general liability. In doing so, there is no purported savings of $257,974. Our negotiation process was successful, resulting in 7% savings for the Port, along with significant time savings. The Port will assess the recommendations and determine whether to implement them.

[1] 2016 AASHTO Uniform Audit & Accounting Guide; See also FAR Part 31.

Auditor's Remarks

We carefully considered management's response. During the audit, we consulted with multiple construction audit firms who specialize in labor rate build-up audits. We recognize that this specific contract was written to approve rates based on a fixed amount. We reaffirm our finding and recommendations.

Due Date: 12/31/2023

2) Rating: Medium

The Port's oversight process and documentation could be improved to support justifications for approving rates above the Market Maximum, and collaboration with other departments or teams.

We reviewed CPO's "market rate" analysis process. We discovered that some of Turner's staff members were not subject to negotiation, nor was any documented evidence of the negotiation found (refer to Appendix C). Additionally, we observed instances where certain Turner employees were approved rates that exceeded the Market Maximum allowed rate for their respective titles. CPO explained that such approvals over the maximum were permissible, in certain cases, if the contractor provided documentation justifying the higher rate, and the rate was within "Port Historical Maximum". We requested the documentation supporting the justification for approving higher rates from management; however, no records were maintained.

One of the reasons cited for the absence of documentation was that the rate analyst, responsible for approving these rates, is no longer employed by the Port. In situations where the rate analyst could not find equivalent titles in their job roster, or the contractor's requested rates were deemed excessive, they would collaborate with Construction Management (CM) and Project Management group (PMG) to seek guidance on establishing fair and reasonable rates. It is important to note that the market rate analysis tool serves as a starting point for these negotiations, but historical rates paid by the Port on previous projects, and the expertise of CM and PMG, are also taken into consideration throughout the process.

Based on our review, we were unable to ascertain whether rates for all Turner staff members were subject to negotiation or if the approval of higher rates (above the Market Maximum) was adequately supported.

Recommendations

1. CPO should establish a comprehensive documentation process, and clear guidelines for negotiations and approvals of rates for contractor staff. This includes maintaining records of negotiations, justifications for rates above the Market Maximum, and collaboration with other departments or teams.

Management Action Plan

The Port did conduct negotiation of all the contract rates and, we believe, documented the negotiations appropriately. We will take the opportunity to review our process, guidance documents, and record retention.

Due Date: 12/31/2023

3) Rating: Medium

We identified opportunities for Port Management to strengthen controls during the pay application review process. Additionally, we identified several instances where there has been a lack of adherence to the stipulated Agreement. These observations highlight opportunities to enhance oversight and assure compliance with contractual requirements.

We selected pay applications (PA) 1 – 27 for review and noted Agreement requirements were not properly followed. The following table details our observations:

Agreement section	Agreement language	Issue
III.B.6	The GC/CM and any other subcontractors working on Pre-construction services shall provide detailed timesheets for each day worked that show (a) the names of individuals that worked on the Project, (b) the hours each individual worked, and (c) the tasks each individual performed. For every day that an individual bills time to the Project, time sheets for that individual must show his/her billable and non-billable time for that day.	After PA 11, no timesheets were submitted along with the PA. Upon inquiry with Turner and Port Management, it was confirmed that Port had given direction to discontinue the practice due to the excessive workload for both parties involved. Without timesheets, there is a risk of the contractor charging the Port higher billable hours compared to actual hours worked. Additionally, we noted the review process involved spot checking for labor hours and rates and not a full comprehensive review of hours and rates which is required by the Agreement and is a standard operating procedure at the Port. **<u>Our test of billed hours determined that the Port was overbilled $997.05. Discussions with Turner's Accounting Manager indicated that she would make the adjustment on the May 2023 PA. IA verified that there was an adjustment on PA 29.</u>**
III.B.6	The GC/CM shall submit monthly invoices for actual labor hours incurred and will be paid monthly for satisfactorily completed Pre-construction services….	We observed that there was a total of $924,039 in forecasted payments spread across 27 pay applications, resulting in an average monthly payment of $34,224. There was no dedicated review process in place to ensure the completion of services and subsequent reimbursement to the Port for these forecasted/prepayments. We noted that while Washington State Law does not explicitly prohibit prepayments, the Agreement only allowed reimbursement of actual incurred costs. Payment for actual work performed is the standard operating procedure at the Port.
X.B	GC/CM agrees not to replace or remove any individual who is satisfactory to the PORT without the PORT'S prior written consent, unless due to serious illness, death or leaves employment. GC/CM may request that a particular individual be replaced with a person of like skill and experience and, if agreed by the PORT, the period of time required to orient and familiarize the replacement with the services being performed will be provided at no charge to the PORT. In the event any of the key personnel become unavailable, the	During the review of the PA, we noted several personnel changes involving both key and supplementary staff members. To assure comprehensive documentation and transparency, we requested support from Port Management, specifically seeking support for approval for these changes, agreed upon rates, and list of key and supplementary staff. In some instances, management was unable to provide the requested support demonstrating approval or negotiated rates for certain personnel modifications. Consequently, the hours worked by these individuals accounted for approximately $190,000 (refer to **Appendix D**).

	GC/CM shall propose a substitute and demonstrate that (a) the proposed substitute meets the qualifications indicated in the RFP for the respective role and has the experience required to successfully perform such duties, and (b) has a combination of qualifications and experience that are equal to or better than those of the individual being replaced.	To verify the reasonableness of these expenses, we reached out to Turner and obtained agreed upon rate sheets for the personnel changes. The failure of management to adhere to the contractual requirement of requesting and providing the necessary support puts the overall success of the project at risk. Furthermore, this oversight exposes the Port to potential additional costs and damages, particularly if replacement personnel are selected without adequate experience or qualifications.

Recommendations

1. Maintain timesheets for everyone, to track the days worked, with careful verification of hours and rates during the PA review process.
2. Follow existing Standard Operating Procedures to pay for services rendered.
3. Maintain supporting documentation, of Port management approval, for all key personnel changes. For any staff change including key or supplemental staff, there should be support provided for a negotiated agreed upon rate.

Management Action Plan

Engineering Construction Management agrees with these recommendations and will continue to train staff to improve compliance with existing requirements. Additionally, Engineering Construction Management will ensure SOPs thoroughly capture GC/CM specific procedures.

Due Date: 12/23/2023

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.

Rating	Financial Stewardship	Internal Controls	Compliance	Public	Commission/ Management
High	Significant	Missing or not followed	Non-compliance with Laws, Port Policies, Contracts	High probability for external audit issues and / or negative public perception	Requires immediate attention
Medium	Moderate	Partial controls Not functioning effectively	Partial compliance with Laws, Port Policies Contracts	Moderate probability for external audit issues and / or negative public perception	Requires attention
Low	Minimal	Functioning as intended but could be enhanced	Mostly complies with Laws, Port Policies, Contracts	Low probability for external audit issues and/or negative public perception	Does not require immediate attention

Appendix B: Billable Rate Component Adjustments

Table 1 represents an example of what was submitted to Port management and included in the Agreement. Table 2 represents an example of what was provided to Internal Audit for Base Cost component review. On average, we adjusted billing rates by approximately $16 per hour.

Table 1: Example Proposed Rates in the Agreement

Person	Title	Base Cost	Home Office Overhead	Trade Employee Sick Leave	VDC Universal Rate	Leased Auto (Hourly)	IT Systems	Mobile Phones	Computers	Training	EDP Payroll processing	Insurance	B&O Tax	Fee	Escalation (TBD)	Billing Rate
Rates Effective 4/3/22		In Rate	5%	4%	Y	Y	Y	Y	Y	Y	Y	1.2%	2.5%	3.3%		
-	Project Manager for Construction	$174.48	$8.72	-	-	-	$2.81	$0.79	$0.68	$0.72	$0.60	$2.19	$4.85	$6.39	-	$ 202.23
-	BIM Manager	$126.27	$6.31	-	$4.39	-	$2.81	$0.79	$0.68	$0.72	$0.60	$1.65	$3.66	$4.82	-	$ 152.71
-	Chief of Party	$102.81	$5.14	-	-	$8.08	$2.81	$0.79	$0.68	$0.72	$0.60	$1.41	$3.12	$4.11	-	$ 130.27
-	Carpenter	$74.35	$3.72	$1.96	-	-	$2.81	$0.79	$0.68	$0.72	$0.60	$0.99	$2.20	$2.90	-	$ 91.71
-	VDC Project Manager	$95.86	$4.79	-	$35.46	-	$2.81	$0.79	$0.68	$0.72	$0.60	$1.64	$3.64	$4.79	-	$ 151.79
-	Carpenter Journeyman	$92.69	$4.63	$2.55	-	$8.08	$2.81	$0.79	$0.68	$0.72	$0.60	$1.32	$2.92	$3.84	-	$ 121.63
-	VDC Coordinator	$55.77	$2.79	-	$74.84	-	$2.81	$0.79	$0.68	$0.72	$0.60	$1.61	$3.57	$4.70	-	$ 148.88

Table 2: Example Rate table re-calculated by Internal Audit

Person	Title	Base Wage	Auto Allowance	Taxes	Benefits	Base Cost	Home Office Overhead	Trade Employee Sick Leave	VDC Universal Rate	Leased Auto (Hourly)	IT Systems	Mobile Phones	Computers	Training	EDP Payroll processing	Insurance	B&O Tax	Fee	Re-Calculated Billing Rate
Rates Effective 4/4/22						In Rate	5%	4%	Y	Y	Y	Y	Y	Y	Y	0.75%	0.471%	5.00%	
			(1)		(2)			(3)	(4)	(5)						(6)	(7)	(8)	
-	Project Manager for Construction	$113.75	$6.35	$15.71	$ 23.20	$ 159.01	$ 7.95	$ -	-	$ -	$ 2.81	$ 0.79	$ 0.68	$ 0.72	$ 0.60	$ 1.29	$ 0.82	$8.73	$ 183.41
-	BIM Manager	$82.31	$4.62	$11.37	$ 16.79	$ 115.08	$ 5.75	$ -	$6.14	$ -	$ 2.81	$ 0.79	$ 0.68	$ 0.72	$ 0.60	$ 0.99	$ 0.63	$6.71	$ 140.91
-	Carpenter	$57.69	-	$8.08	$ 11.77	$ 77.54	$ 3.88	$ -	-	$ -	$ 2.81	$ 0.79	$ 0.68	$ 0.72	$ 0.60	$ 0.65	$ 0.41	$4.40	$ 92.48
-	Chief of Party	$65.69	$1.92	$9.20	$ 13.40	$ 90.21	$ 4.51	$ -	-	$ -	$ 2.81	$ 0.79	$ 0.68	$ 0.72	$ 0.60	$ 0.75	$ 0.48	$5.08	$ 106.62
-	Carpenter	$48.92	-	$7.35	$ 9.98	$ 66.25	$ 3.31	$ -	-	$ -	$ 2.81	$ 0.79	$ 0.68	$ 0.72	$ 0.60	$ 0.56	$ 0.36	$3.80	$ 79.89
-	VDC Coordinator	$37.73	-	$5.21	$ 7.70	$ 50.64	$ 2.53	$ -	$6.14	$ -	$ 2.81	$ 0.79	$ 0.68	$ 0.72	$ 0.60	$ 0.49	$ 0.31	$3.29	$ 68.99

Adjustments

(1)	Auto Allowance	The Project Manager for Design contract stipulated an $1100/month auto allowance. However, she flew to Seattle and used taxi service, which the Port reimbursed through Pay Applications. We removed the $6.35/hr. from the billing rate.
(2)	Benefits[1]	The following adjustments were made to the Benefits column: • End of Year Premium Pay/Company Staff Awards/Employee Referral Bonuses/Staff Retention Program should not be included in the build-up. • Training was included as an individual component in the "Training" column. • Tuition Reimbursement/Employee Assistance Programs, Employee retention/bonuses, and Employee Assistance Programs are overhead costs not related to the Project.
(3)	Trade Employee Sick Leave	Already included in the "Benefits" component of the Base Cost.
(4)	VDC Universal Rate	VDC rates ranged from $5 to $75 per hour. After discussions with Turner Construction, they determined that $6.14 per hour was closer to what the rate should have been.
(5)	Leased Auto (Hourly)	Already included as "Auto Allowance" in Base Cost.
(6)	Insurance	This component was for General Liability Insurance. The proposed percent was 1.2% while industry standard normally ranges between 0.50 - 0.75%.
(7)	B&O Tax	Proposed B&O tax percent was 2.5%. Construction work for the State B&O tax falls under the "retail" category, which is 0.471%.
(8)	Fee	Port management stated if components of the build-up were questioned, then Turner would have increased their fee. Although the original 3.3% fee falls within industry standard range of 2%-5% for a project this size[2], we performed a test using 5% and 10%.

[1] Consultation with construction audit firms
Risner, Ron. *The Practitioner's Blueprint to Construction Auditing, Labor and Labor Burden Costs (pg. 132-133)*.
The Institute of Internal Auditors Research Foundation, 2012
Effective Auditing of Construction Activity, Construction Audit and Cost Control Institute, Inc.

[2] Profitability Margins By Industry (financialrhythm.com)

Appendix C: Market Rate Analysis Test Results

We noted instanced where some Turner staff members were not subject to negotiation, nor was any documented evidence of the negotiation was found. See table below for details:

Consultant	Billing Rate	Billed Amount
Steve Rule	$ 252.88	$ 166,158.00
McAdow, Belinda A.	$ 172.57	$ 34,908.00
Jack Adams	$ 188.40	$ 161,189.00
Tran, Cynthia H.	$ 117.92	$ -
Caldwell, Brett B.	$ 101.27	$ -
Todd Johnson	$ 162.44	$ 104,603.00
Anthony Bell	$ 134.31	$ 21,722.00
Ross Jorgensen	$ 107.22	$ -
McCauley, Antonio	$ 94.43	$ -
Jones, Jason M.	$ 140.08	$ 62,315.00
Watkins, Zachariah	$ 135.14	$ 429,551.00
Ken Hoglan	$ 105.67	$ 163,585.00
Nguyen, Andy	$ 68.18	$ 6,952.00
Beatty, Sean P.	$ 134.18	$ 19,731.00
Badera, Gaurav	$ 132.31	$ -
Stefanie Young	$ 124.89	$ -
Beyer, Jennifer	$ 87.01	$ -
Tuffs, Jonelle M.	$ 135.30	$ -
Boyd, Janelle U.	$ 72.86	$ 1,092.00
Smith, Marc J.	$ 79.48	$ 1,197.00
White, Anthony J.	$ 88.96	$ 1,957.00
Schwisow, Mekenna L.	$ 58.45	$ -
Sparks Kelsey	$ 62.96	$ 73,845.00
Tang Bodiford Zach	$ 70.33	$ -
Welch Denise	$ 76.90	$ -
Kendall Khloe	$ 39.25	$ 3,022.00
Sreng Moryka	$ 61.94	$ 650.00
Habibnezhad MahMoud	$ 149.90	$ 4,197.00
Pulalasi Rosanne	$ 77.93	$ 2,104.00
Shah Dhawani	$ 81.92	$ 20,727.00
Thornton Tamaka	$ 120.61	$ 3,588.00
Hilt Sean	$ 246.85	$ 32,337.00
Garrett Aiden	$ 77.13	$ 7,867.00
Rasheed Hammad	$ 101.90	$ 10,598.00
Skinner Brian	$ 131.08	$ 3,801.00
Total		**$ 1,337,696.00**

Appendix D: Testing Methodology

The table presented below outlines the personnel additions to the project that occurred after the finalization of the Agreement. To validate and obtain support for these changes, we requested documentation from Port Management, including an acceptance letter from the Port acknowledging the modifications and evidence of agreed-upon rate negotiations for the newly added personnel. Port Management was unable to provide documentation regarding these matters. To gather further information, we directly requested the relevant documents from Turner, resulting in Turner providing an agreed-upon rate list as support for most of the changes. However, it is important to mention that certain changes were agreed upon verbally, hence no supporting documentation could be found in relation to those specific instances.

Name	**PA**	**Date**	**Rate**	**Amount**
Renzo Difuria	1 - 4	Rate effective (till 4/17/21)	159.26	$ 2,707.42
Silas Burke	4	Rate effective (till 4/17/21)	131.83	$ 5,932.35
Danny Carlson	4	Rate effective (till 4/17/21)	133.83	$ 267.66
Jason M Jones	4	Rate effective (till 4/17/21)	135.14	$ 8,054.60
Billy Schaeffer	12 - 16	Rate effective (till 4/16/22)	92.09	$ 33,935.17
Todd Johnson	13 - 16	Rate effective (till 4/16/22)	162.44	$ 38,010.96
Nathan Ware	14 - 16	Rate effective (till 4/16/22)	54.02	$ 108.40
Kelsey Sparks	15 - 16	Rate effective (till 4/16/22)	62.96	$ 7,287.62
Mahmoud Habibnezhad	19 - 27	Rate effective (till 4/03/23)	149.90	$ 4,197.28
Rosanne J Pulalasi	19 - 27	Rate effective (till 4/03/23)	77.93	$ 2,104.04
Dhawani Shah	19 - 27	Rate effective (till 4/03/23)	81.92	$ 20,726.66
Tamaka Thornton	20 - 27	Rate effective (till 4/03/23)	120.61	$ 3,588.15
Andrew Kang	20 - 27	Rate effective (till 4/03/23)	147.93	$ 7,867.26
Sean Hilt	21 - 27	Rate effective (till 4/03/23)	246.85	$ 32,337.35
Aiden Garrett	22 -27	Rate effective (till 4/03/23)	77.13	$ 7,867.26
Hammad Rasheed	22 -27	Rate effective (till 4/03/23)	101.90	$ 10,597.60
Brian Skinner	27	Rate effective (till 4/03/23)	131.08	$ 3,801.32
TOTAL				**$ 189,391.10**