PORT OF SEATTLE MEMORANDUM

Proceeds

COMMISSION AGENDA
ACTION ITEMItem No.6aDate of MeetingJanuary 6, 2015

DATE: December 29, 2014

TO: Ted Fick, Chief Executive Officer

FROM: Michael Ehl, Director Airport Operations

Wayne Grotheer, Director Aviation Project Management Group

SUBJECT: North Satellite Renovation and Expansion Project (CIP #C800556)

Seattle-Tacoma International Airport

Amount of This Request: \$5,000,000 Source of Airport Development

Funds: Fund and Future Bond

Est. Total North Satellite \$407,282,944

Renovation Project Cost:

Est. Total NorthSTAR Program \$515,000,000

Cost:

Est. State and Local Taxes: \$27,935,600

ACTION REQUESTED

Request Port Commission authorization for the Chief Executive Officer to (1) authorize \$5,000,000 for preconstruction services for a total authorized amount of \$55,464,800; (2) execute a General Contractor/Construction Manager (GC/CM) contract for preconstruction services in an amount not to exceed \$5,000,000 including Washington State Sales Tax; and (3) transfer design scope, budget, and authorization of \$1,750,000 from the North Satellite STS station roof replacement project (C800609) to the North Satellite Renovation and Expansion Project (C800556).

SYNOPSIS

The North Satellite (NSAT) Renovation and Expansion Project, (Project Budget: \$407,282,944) is the largest project of the North Sea-Tac Airport Renovation (NorthSTAR) Program (Program Budget: \$515,000,000). The program is a collaboration between the Port and Alaska Air Group (AAG) to create and promote a user-friendly "curb-to-seat" passenger experience through the integration of facility improvements, technology, and airline services on Concourses C, D, the North Main Terminal, North Satellite, and the North Satellite Transit System (STS) loop.

On August 5, 2014, the Commission approved expanding the NSAT to provide eight additional contact gates beyond the existing 12 contact gates, for a total of 20 gates. The Commission also authorized a corresponding increase to the project's budget to fund this expansion scope and approved use of the GC/CM contracting procurement procedure for construction contracting.

Ted Fick, Chief Executive Officer December 29, 2014 Page 2 of 9

Since then, the 30 percent NSAT renovation and expansion design has been completed, and the procurement to select a GC/CM in compliance with RCW Chapter 39.10 – Alternative Public Works Contracting Procedures – was conducted. This memo describes the solicitation process used, requests authorization to enter into the GC/CM contract and authorizes work associated with preconstruction services. The Port will return to the Commission in 2015 and 2016 to request budget authorization for early work subcontractor bid packages and the total construction cost after negotiation of the Maximum Allowable Construction Cost (MACC) respectively.

BACKGROUND

There are significant construction and operational risks posed by a project of this magnitude and complexity within an operating airfield. Therefore, in June 2014, the Port Aviation Project Management Group, Engineering Construction Management, and Central Procurement Office staff began acquisition planning to evaluate whether an alternative public works contracting procedure such as GC/CM would mitigate these risks when compared to a typical design-bidbuild (DBB) process for the NSAT expansion. As a result of this evaluation, staff concluded that although there are costs associated with preconstruction services, overall, the GC/CM would facilitate greater contractor collaboration with the design team. This would benefit design aspects of constructability, value engineering, construction phasing, and the identification and development of early work packages to advance key components of preparatory construction work - all in advance of design completion. This early participation by the GC/CM, as part of preconstruction services, would inform and result in a more cost efficient design prior to bidding of subcontract packages. This in turn would reduce the potential for change orders resulting from the operational complexity and construction constraints inherent with this expansion scope in an operating airfield environment. The GC/CM would, in effect, become part of the design process, providing important feedback in identifying conflicts between design disciplines for equipment, plumbing, heating and ventilation systems with the building structure and with each other, subcontract bid packaging, and construction sequencing.

With Commission approval on August 5 to proceed with construction procurement using the GC/CM methodology, Port staff began development of a solicitation for GC/CM services including mechanical and electrical subcontractor procurement. Unlike a DBB contract, which is awarded to the bidder submitting the lowest responsible and responsive bid, the award of a GC/CM contract is based on both qualifications and price. The process for this procurement included the following components:

- 1. A written proposal from each GC/CM team responding to the solicitation, identifying the team's experience, approach to the project, budget and schedule management techniques, and commitments to small business participation.
- 2. Interviews The proposing GC/CM teams were short-listed based on a scored evaluation of the written proposals and then invited as finalists to an interview. The interview was evaluated based on how well the team communicates, collaborates, problem solves, identifies achievable solutions to project-based scenarios.

Ted Fick, Chief Executive Officer December 29, 2014 Page 3 of 9

- 3. Preconstruction Services Proposal The GC/CM team finalists submitted a proposal outlining their approach and cost to provide preconstruction services.
- 4. Final Price Proposal The GC/CM team finalists submit a price proposal for the GC/CM fee percentage and a fixed amount for specified general conditions.

On September 10, the Port received four proposals in response to the GC/CM solicitation, of which three were shortlisted. Interviews were conducted the week of October 24, followed by Preconstruction Services proposal submittals on November 14, 2014. On December 10, the Port received the final price proposals. The Port is now intending to award the GC/CM contract for the North Satellite Renovation and Expansion Project at Seattle-Tacoma International Airport based on these final submittals.

PROJECT JUSTIFICATION AND DETAILS

Use of the GC/CM public works procedure for the North Satellite Renovation and North Satellite Station Lobbies Project is based on RCW 39.10.340 criteria in which the Port of Seattle, as a public body, is authorized to utilize GC/CM for public works projects where at least one of the following is met:

- 1. Implementation of the project involves complex scheduling, phasing, or coordination.
 - The North Satellite is a 24-hour, 7-day-per-week complex operating terminal located within and surrounded by a restricted and secured airport operating area. The renovation and expansion of this facility will require multiple construction phases, airline and tenant coordination.
- 2. The project involves construction at an occupied facility that must continue to operate during construction.
 - The North Satellite will remain occupied during construction, with construction activities occurring in and around terminal operations and occupied areas. As such, detailed construction planning will be required to assure safe and unobstructed airport operations as the facility is expanded and systems installed and upgraded.
- 3. The involvement of the general contractor/construction manager during the design stage is critical to the success of the project.
 - The GC/CM involvement during the design stage is critical to developing an appropriate design approach to construction and assisting in the development of early construction packages before the design is fully complete. Design stage engagement will allow for GC and subcontractor collaboration on constructability, value engineering identification, construction phasing and early work and to provide recommendations on scope decisions to keep costs in line with approved budgets. Early review of drawings and specifications

Ted Fick, Chief Executive Officer December 29, 2014 Page 4 of 9

will also identify more cost efficient design detailing prior to bidding and performing work, and reduce the potential for change orders.

- 4. The project encompasses a complex or technical work environment.
 - The North Satellite is a 40-year-old facility that requires substantial updating, installation, and coordination of sustainable, complex building systems. Construction activities will be undertaken within a highly congested and technically challenging operating environment. Advance involvement with the contractor in identifying and applying the appropriate means and methods of construction within this environment is critical to the success of this project.
- 5. Mechanical Contractor/Construction Manager (MC/CM) and Electrical Contractor/Construction Manager (EC/CM) selection:
 - The project encompasses a complex technical work environment. The Port has included MC/CM and EC/CM subcontractor procurements as part of this GC/CM alternative contracting procedure. These key subcontractors are selected based on qualifications and hired by the GC/CM early to participate in the preconstruction phase. The benefit of including MC/CM and EC/CM contractors lies in the same level of advance participation and involvement as afforded by the GC/CM, but focused on the mechanical and electrical design disciplines. By participating in the GC/CM, these trades will allow the Port to leverage this subcontractor expertise to streamline the utility and infrastructure coordination and reduce potential design conflicts and associated risks.

The project will add approximately 210,000 square feet to the existing NSAT terminal building, re-grade and replace significant areas of surrounding apron area to meet current National Fire Protection Association code requirements, and modify aircraft taxiway lighting. The extent of the work is significant and technically challenging. Early participation and input by the GC/CM into the design of this facility expansion will significantly reduce the risk of cost changes and schedule overruns when compared to the traditional DBB procurement approach.

Project Objectives

- Extend the length of NSAT by approximately two hundred forty feet to improve customer service and accommodate additional aircraft and passengers
- Seismically strengthen NSAT and expand the existing infrastructure
- Balance and integrate NSAT functional areas and requirements (concessions, holdrooms, amenities, airline operations and airline services) through a renovation and expansion of the NSAT's terminal area to achieve acceptable levels of service
- Align near term and forecasted airport-wide gate use and capacity by providing a total of 20 contact gates at NSAT
- Optimize gate door contact points, loading bridges and aircraft parking positions, including fuel hydrants and other support utilities
- Accommodate the future expansion of NSAT and minimize impacts to operations when constructed

Ted Fick, Chief Executive Officer December 29, 2014 Page 5 of 9

- Meet or exceed current sustainability goals with potential Leadership in Environmental and Energy Design (LEED) certification
- Create a "frictionless" and stress-free passenger experience within NSAT
- Create an exciting and attractive facility integrating holdrooms, diverse amenities and numerous concessions
- Maintain and promote a Northwest sense of place through the design of architectural finishes and connected technologies

Scope of Work

This request includes the following design elements at the NSAT and, as noted below, certain elements at Concourse C and the Main Terminal:

- Renovation of concourse level finishes, structure, and amenities
- Expansion of the NSAT STS, baggage and concourse levels
- Addition of 8 new NSAT aircraft gates with passenger loading bridges to be provided by AAG (for a total of 20)
- Seismic reinforcement
- Addition of an Alaska Airlines premium traveler lounge (Alaska Board Room)
- NSAT Train System lobby enhancements construction (including the NSAT, Concourse C and Main Terminal stations)
- Expansion, renewal and replacement of mechanical, electrical, plumbing, vertical transportation, and communication systems
- Aircraft taxilane changes around the NSAT
- Significant sustainability features and components
- Addition of vertical circulation (escalators/elevators) and ramp-level vestibules to facilitate passenger loading and unloading
- Reconfiguration and replacement of aircraft taxiway lighting and a significant amount of apron concrete panels in and around the NSAT aircraft movement areas

Schedule

GC/CM preconstruction services and construction of early work packages would occur before NSAT design completion. This is reflected in the following schedule:

GC/CM Selection	4 th Quarter 2014
Authorize Preconstruction Services	1st Quarter 2015
Authorize Advance Work Packages	3rd Quarter 2015
Design Completion	3rd Quarter 2016
Authorize Construction	3 rd Quarter 2016
Construction Complete	3rd Quarter 2020

Ted Fick, Chief Executive Officer December 29, 2014 Page 6 of 9

FINANCIAL IMPLICATIONS

Project Breakdown:

	Previous Budget	This Budget Request	Total Project Budget
Construction Phase	\$316,006,600	\$1,108,000	\$317,114,600
RMM/ERL	\$5,800,000	\$0	\$5,800,000
Design Phase	\$55,895,744	\$537,000	\$56,432,744
State & Local Taxes	\$27,830,600	\$105,000	\$27,935,600
Total	\$405,532,944	\$1,750,000	\$407,282,944

Authorizations:

	Capital	Expense	Total Project
Original Budget	\$194,300,000	\$5,000,000	\$199,300,000
Prior adjustments to Budget	\$205,432,944	\$800,000	\$206,232,944
Current Budget	\$399,732,944	\$5,800,000	\$405,532,944
Proposed Budget Transfer	\$1,750,000	\$0	\$1,750,000
Revised Project Budget	\$401,482,944	\$5,800,000	\$407,282,944
Previous Authorizations	\$50,464,800	\$200,000	\$50,664,800
Current Request for Authorizations	\$5,000,000	\$0	\$5,000,000
Total Authorizations - Incl. This Request	\$55,464,800	\$200,000	\$55,664,800
Remaining Budget to be Authorized	\$346,018,144	\$5,600,000	\$351,618,144

Budget Status and Source of Funds

This project was included in the 2015 - 2019 capital budget and plan of finance with a budget of \$399.7 million. The proposed transfer of \$1.75 million from the NSAT STS station roof replacement project (C800609) will bring the total capital cost to \$401.5 million. The Airport Development Fund (augmented as needed with the issuance of commercial paper) continues to be the initial source of funds for this project but funding for the entire project will include Passenger Facility Charge revenues (PFCs) and future bond issues. The Port anticipates issuing revenue bonds in 2015.

The terms under which AAG will participate in the Port's NorthSTAR Program costs have been established via an April 5, 2012, Letter of Agreement between the Port and AAG. The airlines

Ted Fick, Chief Executive Officer December 29, 2014 Page 7 of 9

were briefed on December 18, 2013, with regard to the decision to expand the NSAT and the resultant increase in budget. The formal Majority-In-Interest (MII) project approval process outlined in Signatory Lease and Operating Agreement (SLOA) was followed with the airlines voting in favor of this expansion and the project in July 2014.

Financial Analysis and Summary

CIP Category	Renewal and Replacement
Project Type	Terminal Infrastructure
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	\$407 million
Business Unit (BU)	Terminal
Effect on business performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	Estimated \$1.27 in 2020

The long-term funding plan will likely include the use of PFCs to pay a portion of the revenue bond debt service, thus reducing the costs to be recovered through terminal rents. This could significantly reduce the future CPE impacts of this project.

Annual operating and maintenance costs will be analyzed during the completion of the final project definition notebook.

STRATEGIC OBJECTIVES:

This project promotes the Port's business goals to "Ensure Airport and Seaport Vitality" and "Be a Catalyst for Regional Transportation Solutions." This is one of a number of projects that are directly tied to the One-Time Reallocation (Airline Realignment) program, that are in alignment with AAG's plan to consolidate its gate operations onto the NSAT and Concourses C and D. The NSAT expansion is also in alignment with Airport master plan development objectives that identify the NSAT as the most logical location for near-term expansion of airport capacity.

TRIPLE BOTTOM LINE

This project will increase the long-term ability of the Airport to serve a growing number of passengers and airlines. Long-term vitality of the Airport benefits the regional economy and nearby communities. The sustainable aspects of this project will benefit the local environment.

Small Business Participation

The project managers will collaborate with the Office of Social Responsibility to maximize small

Ted Fick, Chief Executive Officer December 29, 2014 Page 8 of 9

business participation opportunities including, but not limited to Small Contractors and Suppliers (SCS) participation in accordance with the Small Business Resolution 3618.

Environmental Responsibility

This project will incorporate environmental elements that are currently being analyzed. These elements, or environmental performance criteria, aim to reduce energy and water consumption and minimize lifecycle costs of the NSAT. As these elements are evaluated, they will be incorporated into the project definition and design of the project. The pursuit of the United States Green Building Council's Leadership in Energy and Environmental (LEED) certification is also being evaluated.

Community Benefits

This project improves operations, building safety, and customer service at what will be the primary location for the Airport's largest airline tenant.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Revert to Design-Bid-Build (DBB) Procurement (Not Recommended): As previously outlined, in instances where significant operational complexity and technical requirements exists, there is increased risk to schedule and construction changes/claims with DBB. There is no contractor involvement in the design development and no opportunities to include the contractor in any value engineering for design simplifications, constructability analysis or schedule improvements. With multiple stakeholders (airlines, concessions and other airport tenants) there is more risk, given the complexity of this project and overlapping priorities and an inability to engage the contractor in advance, for coordination issues resulting in contractor delay claims.

Execute a GCCM contract (Recommended): The GC/CM approach offers the most opportunity to address potential design issues or deficiencies prior to final agreement on MACC, provides cost benefits in performing early work, and allows for earlier knowledge of overall project costs to assure any required scope changes are designed within budget. As previously stated, although preconstruction services costs are part of GC/CM procurement, these costs are included and within the current budget and expected to be offset by savings resulting from GC/CM input as part of the design process.

ATTACHMENTS TO THIS REQUEST

• NorthSTAR Program Overview Slide

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- October 28, 2014 NorthSTAR Program Status Update
- August 5, 2014 Commission authorized an estimated \$191,323,143 to expand the NSAT by 8 additional gates, an additional \$15,717,800 for design completion, and use of the GC/CM alternative public works contracting procedure for NSAT expansion construction procurement.
- July 22, 2014 NSAT Expansion Briefing.

Ted Fick, Chief Executive Officer December 29, 2014 Page 9 of 9

- April 16, 2014 Seattle-Tacoma International Airport Capital Program Briefing.
- January 14, 2014 NorthSTAR Program status update and initial NSAT Expansion briefing.
- September 24, 2013 NorthSTAR Program status update.
- September 24, 2013 The Commission authorized staff to: (1) advertise, award, and execute a major public works contract for the construction of the NSAT Refurbish Baggage System Project; and (2) authorize the use of Port crews.
- June 25, 2013 –NorthSTAR Program status update.
- May 28, 2013, Commission authorized the execution of separate service agreements for Construction Management Services and Commissioning Services, of approximate values of \$10 million and \$1.5 million.
- April 9, 2013 The Commission authorized the Chief Executive Officer to enter into a project labor agreement covering the NorthSTAR program's five major construction projects.
- March 26, 2013 –NorthSTAR Program status update.
- December 11, 2012 The Commission was briefed on the Vertical Conveyance Modernization Project Aero Phases 1 and 2 and the possibility of adding the specified elevators and escalators to the NorthSTAR program.
- July 24, 2012 Commission authorized \$32,000,000 for the design of the NorthSTAR NSAT Renovation and NSTS Lobbies project.
- June 26, 2012 The Port Commission was briefed on the NorthSTAR program by Wayne Grotheer, Director Aviation Project Management Group.
- April 10, 2012 The Commission authorized the execution of consultant contracts for design and construction support services; program management services; and the completion of site surveys for regulated materials management, in the amount of \$1,200,000.