

**PORT OF SEATTLE**  
**MEMORANDUM**

**COMMISSION AGENDA**  
**STAFF BRIEFING**

**Item No.** 7a

**Date of Meeting** August 9, 2016

**DATE:** August 1, 2016  
**TO:** Ted Fick, Chief Executive Officer  
**FROM:** George England, Program Leader, Aviation Project Management Group  
Michael Ehl, Director, Aviation Operations  
Jeffrey Brown, Director, Aviation Facilities and Capital Programs  
**SUBJECT:** 2016 Q2 NorthSTAR Program and North Satellite Project Briefing

**SYNOPSIS**

The North Sea-Tac Airport Renovation (NorthSTAR) Program is being planned and delivered in collaboration with Alaska Airlines to better serve passengers and improve operational efficiency. The NorthSTAR program includes four renovation projects. The program, which is a collaborative effort of the Port and AAG, was defined in a conceptual study prepared by AAG and its consultant in 2011. Working with this conceptual study, the Port and AAG refined the scope to meet the long-term goals of both the Port and AAG. In some cases, scope and budget from other parallel capital projects have been incorporated into the NorthSTAR program to ensure compatibility of design and efficiencies of construction. The revised scope meets the Airport and AAG goals for improved traveler experience and customer service.

The North Satellite (NSAT) Renovations and Expansion project will be constructed in four steps as follows:

1. Preliminary work package 1, previously authorized by the Commission, was advertised for bid on February 22, 2016 on the North Satellite (NSAT) Renovations and Expansion project and began construction June 23, 2016. This package reconfigures Alaska Airlines NSAT gates to accommodate the start of expanding the building.
2. Preliminary Work Package 2 relocates major underground utilities and constructs the foundations for the expanded building. Preliminary work package 2 is at 90% design.
3. Phase 1 of the NSAT base building project will complete the building expansion.
4. Phase 2 of the NSAT base building project begins at the completion of Phase 1 and renovates the existing building.

The Phase 1 and Phase 2 base building design (expansion and renovation) is approximately 75% designed and continuing toward 90%. The team (Port, Designer, Contractor and AAG) are continually evaluating and managing the schedule to minimize further delays.

Port staff working with AAG and the entire project team recently completed a complex and challenging analysis of how to accommodate increasing the Alaska Boardroom by an additional 3,000 square feet and increase future leasable space by relocating a mechanical room to the roof. The analysis does recommend a redesign of the third floor, currently at 85% design, and an increase in the overall project

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

August 1, 2016

Page 2 of 7

budget of \$7 million. The team worked diligently to eliminate any delay impacts to the overall project schedule. The team is also refining the transition of operations and construction from Phase I to Phase II to ensure 12 to 14 gates can be provided during construction of Phase 2 and to detail out systematic work sequencing and phasing to meet this requirement. Workshops have been conducted and the team is finalizing the final plan. To expedite the redesign staff will proceed with amending AECOM's, contract within current Commission authorizations. Authorization and approval of this recommended redesign effort and the final project budget will be requested either with the next required authorization for the NSAT project or in Q1 2017 when staff will seek final authorization of the MACC and to execute the contract with Hensel Phelps to construct the project.

## **BACKGROUND**

The following is a summary of accomplishments, progress, issues, metrics and risks specific to the NorthSTAR programmatic capital project and each of the four capital construction projects:

### **1. CIP C800544 NorthSTAR Program Management & Controls**

This umbrella project is comprised of cost estimating, cost controls, scheduling and overall management support for the four capital renovation projects within the NorthSTAR program.

#### **Accomplishments**

- Received additional Program Management authorization on 5/24/16.

#### **Progress**

- Continued update of overall program master schedule with changes to each project schedule in design/construction

#### **Issues**

- Resolving remaining design decisions and AAG concurrence have budget and schedule implications.
- Final Sustainable Airport Master Plan (SAMP) recommendations could have implications with the Main Terminal Improvements (MTI) project.

#### **Metrics**

- Financial performance is reflected in the program budget summary (Supplement A PowerPoint) and includes:
  - Cumulative Spent against Budget – Actual \$3.8M; Budget \$19.5M
  - Overall Schedule Progress – Actual 43%; Planned 43%
  - Cash flow for this reporting period – Actual \$193k; Planned \$140k
  - Contingency remaining - Forecast \$6.8M; Budget \$0.94M (inclusive of Management Reserve)
  - Small Contractor Supplier (SCS) Participation (Program Mgmt.) Actual 23.1%; Planned 27.0%

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

August 1, 2016

Page 3 of 7

### **Risks**

- Communication and coordination between multiple teams, stakeholders and people
- Maintain baseline schedule agreed to by all stakeholders
- Further budget implications and schedule delays due to Port and AAG decisions

**Current Capital Budget:** \$19,514,150 \*  
(\*Includes program management reserve)

**Scheduled Project Completion:** April 2021

## **2. CIP C800556 NorthSTAR NSAT Renovation & North Satellite Transit System Lobbies**

This project is the largest within the overall program and includes the renovation of NSAT and the satellite transit system (STS) north loop stations at the Main Terminal, Concourse C, and the North Satellite. While the renovation of the STS station lobbies is relatively minor in scope, the NSAT renovation is significant and includes expansion of the NSAT to improve customer service and provide a balance of holdrooms, concessions, and circulation space to meet the overall program vision. The NSAT scope includes the removal of all regulated materials, seismic reinforcement of the NSAT, replacement of all infrastructure systems within the NSAT, expansion of the NSAT by nine structural bays to accommodate five additional gates, the addition of a rooftop structure for Alaska Airlines' Boardroom and a destination restaurant, the rebuilding of the NSAT concourse level interior, and the renovation of non-public support spaces on the ramp and STS levels. The NSAT scope will also incorporate sustainable building elements and the data and communications infrastructure to accommodate the anticipated needs of the Port, AAG and the travelling public.

### **Accomplishments**

- Received Commission approval for \$121.2M increased scope and additional authorization for \$6M design and overall project support services.
- Executed Amendment on May 11, 2016 for PWP-1 to commence with construction.
- Construction began on Preliminary Work Package (PWP) 1.
- Received and began review of Preliminary Work Package (PWP) 2 – 90% submittal.
- Conducted critical Decision Analysis for NSAT 3<sup>rd</sup> floor plan to accommodate the Signature Restaurant, Alaska Boardroom and future growth that meets original program requirements that increases the budget by \$7 million to a revised project capital budget of \$538.2 million.
- Interior design concepts and materials approved by AAG and Port. Sr. Management.
- Completed Passenger Facility Charge strategy analysis for NSAT with AV/Finance.

### **In Progress**

- Working to finalize resolution of AAG 60% design comments and resolve existing holdroom Level of Service concerns by AAG during construction.
- Awaiting Port and AAG's final approval of refined space layout for Boardroom based upon Decision Analysis process held June 2016.

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

August 1, 2016

Page 4 of 7

- Port, Designer & GC/CM coordinating critical path schedule, discussing contract requirements, refining bid package scopes of work and finalizing construction phasing in preparation to begin work for Preliminary Work Package (PWP) 2 and subsequent Base Building packages.
- The transition of operations and construction from Phase I to Phase II is being finalized and a plan is being developed for acceptance by AAG, the Contractor and Operations.
- Finalizing early procurement of copper wire based on commodity price to achieve cost savings

### **Metrics**

- Financial performance is reflected in the program budget summary (attachment A) and includes:
  - Cumulative Spent against Budget – Actual \$31.4M; Budget \$531.1M
  - Overall Schedule Progress – Actual 5%; Planned 9%
  - Cash flow for this reporting period – Actual \$6.0M; Planned \$3.7M
  - Contingency remaining Forecast \$28.3M; Budget \$38.5M
  - Number of delayed outbound bags – Actual 0; Planned 0
  - Number of delayed outbound flights – Actual 0; Planned 0
  - Number of safety hazard report incidences – Actual 0; Planned 0
  - Number of customer complaints received – Actual 0/mo.; Planned <5/mo.
  - Construction Change Orders Processed – Actual 0; Planned 0
  - SCS Participation (Design) Actual 2.1%; Planned 3.3%
  - SCS Participation (Const) Actual 0%; Planned 6.79%<sup>1</sup>
  - SBS Participation (Const) Actual 0%; Planned 38.19%<sup>1</sup>
  - WMBE Participation (Const) Actual 0%; Planned 4.65%<sup>1</sup>
  - Apprenticeship Utilization – Actual 0% \* ; Goal 15%

<sup>1</sup> Represents SCS participation for PWP#1 effort only

\* No information available yet – too early to report

### **Issues**

- AAG submitted letter identifying issues requiring resolution for concurrence.
  - Stated requirement for 17 gates during NSAT construction, approval of revised Boardroom and LOS concerns.
- Final definition and agreement required of AAG “betterments” (cost sharing items), including budget quantification.

### **Risks**

- The current capital budget of \$531.1 million approved by the Commission May 24, 2016 will increase by an estimated \$7 million to a revised total of \$538.1 million resulting from the redesign of the 3<sup>rd</sup> floor to increase the Alaska boardroom by an additional 3,000 square feet and future leasable space by relocating the mechanical room to the roof.
- Budget growth due to aggressive construction market and resource availability.
- Ability to implement construction phasing plan and terminal/airside modifications that minimizes impacts to AAG’s level of service, operations, schedule and construction costs.
- Ability to support AAG’s continued requests for more detailed analysis while minimizing impacts to design completion and project schedule.

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

August 1, 2016

Page 5 of 7

- Continued analysis of Phase 2 to increase number of operating gates impacts design and construction.
- Resolution of AAG & Port 60% design comments further increases scope.
- Dropping copper commodity pricing after early purchase reduces potential cost savings

<b>Current Capital Budget:</b>	\$531,102,042
<b>Estimated Capital Cost at Completion:</b>	\$531,102,042
<b>Estimated Expense Budget:</b>	\$11,800,000
<b>Scheduled Project Completion:</b>	April 2021

### **3. CIP C800547 NorthSTAR Concourse C Vertical Circulation - Complete**

### **4. CIP C800545 NorthSTAR Main Terminal Improvements – On Hold**

<b>Current Capital Budget:</b>	\$29,200,000
<b>Scheduled Project Completion:</b>	TBD

### **5. CIP C800555 NorthSTAR Refurbish Baggage System - Complete**

### **6. CIP C800554 NorthSTAR Concourse C & D Exterior Stairs - Deleted**

## **ATTACHMENTS TO THIS BRIEFING**

- Attachment A - Quarterly Commission Update PowerPoint

## **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

### **North Sea-Tac Airport Renovations (NorthSTAR) (CIP #C800544)**

- May 24, 2016 – Commission authorized Chief Executive Officer to 1) increase the North Satellite project scope and budget by \$121,219,098 for a revised total budget of \$542,902,042; 2) increase authorization by \$6,000,000 for NSAT design and overall project support; 3) amend service agreements with Jacobs Project Management Company and AECOM; and 4) authorize the use of port crews and small works contactors to perform work for the project.
- February 23, 2016 – NorthSTAR Program status update
- November 24, 2015 – NorthSTAR Program status update
- July 14, 2015 – NorthSTAR Program status update
- April 28, 2015 – NorthSTAR Program status update
- January 27, 2015 – NorthSTAR Program status update
- October 28, 2014 - NorthSTAR Program status update.
- August 19, 2014 - NorthSTAR Program status update.
- May 27, 2014 – NorthSTAR Program status update.
- January 14, 2014 – NorthSTAR Program status update.
- September 24, 2013 – NorthSTAR Program status update.
- June 25, 2013 –NorthSTAR Program status update.

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

August 1, 2016

Page 6 of 7

- 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.
- June 26, 2012 – The Commission received a briefing on the status of the Airline Realignment Program and budget restructuring in association with the NorthSTAR Program.
- April 10 2012 – Authorizations for the North Sea-Tac Airport Renovations program for: 1) preliminary project funding; 2) execution of consulting contracts for design/construction support services and project management services; and 3) use of Port crews and consultants to conduct regulated materials management surveys and field support services for preliminary project planning tasks.

### **North Satellite Renovation & North Satellite Transit Station Lobbies (CIP #C800556)**

- December 8, 2015 – The Commission authorized \$98,100,000 for the following:
  - Additional Pre-Construction services (\$1,200,000)
  - Construction auditing services
  - Preliminary Construction work
- March 24, 2015 – The Commission authorized three NSAT related items:
  - Expand the baggage handling system increasing the project scope for \$14,400,000 and \$1,954,000 to complete the design.
  - Entering into a developer agreement with Puget Sound Energy and \$200,000 in reimbursement for the design and construction of underground gas infrastructure.
  - \$5,300,000 to
    - Prepare four locations to accommodate temporary passenger loading bridges, to construct temporary construction offices.
    - To complete construction of a Satellite Transit System (STS) North loop Dynamic Display system.
    - \$600,000 in expense funds for regulated materials management for AAG’s tenant improvement project.
    - Approval to use Port crew labor and small works contractors to complete early project work.
- August 5, 2014 – The Commission authorized expansion of the NSAT, \$191,323,143 budget increase, \$15,717,800 to complete the design, execute amendments to existing consulting contracts; execute future consulting contracts and use of and to advertise for General Contractor/Construction Manager (GC/CM) alternative public works contractor.
- July 22, 2014 - NSAT Expansion Briefing
- April 22 2014 – Seattle-Tacoma International Airport Capital Program - Briefing
- January 14, 2014 –NSAT expansion briefing.
- 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.
- 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.

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

August 1, 2016

Page 7 of 7

- July 24, 2012 - Commission authorized \$32,000,000 for the design of the NorthSTAR NSAT Renovation and NSTS Lobbies project.
- 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, for \$1,200,000.

### **NorthSTAR Concourse C Vertical Circulation Project (CIP #C800547)**

- October 22, 2013 – Commission authorized \$16,145,000 for advertising for bids, executing a major construction contract, executing a tenant reimbursement agreement with Alaska Air Group, using Port crews to provide construction services for the Concourse C Vertical Circulation.
- November 6, 2012 – Commission authorized the design for the 1:20 sloped walkways and elevator(s) at Gates C2, C10-12, and C14 on Concourse C.

### **NorthSTAR North Main Terminal Improvements Project (CIP #C800545)**

- December 3, 2013 – Commission authorized \$1,500,000 for preliminary engineering up to 30% design.

### **North Satellite Refurbish Baggage System Project (CIP#C800555)**

- September 24, 2013 – The Commission authorized staff to: (1) advertise, award, and execute a major public works contract for the construction of the North Satellite Refurbish Baggage System Project; and (2) authorize the use of Port crews.
- July 12, 2013 – The Commission was notified of 1 added scope item and 2 scope items moved into the scope previously identified as suggested scope.
- November 6, 2012 – The Commission authorized staff to prepare design documents and use Port crews to support site investigation needed to develop the contract documents, for \$3,760,000.