

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

**COMMISSION AGENDA**  
**ACTION ITEM**

**Item No.** 5d  
**Date of Meeting** January 7, 2014

**DATE:** December 12, 2013

**TO:** Tay Yoshitani, Chief Executive Officer

**FROM:** David Soike, Director, Aviation Facilities and Capital Programs  
Robert York, Senior Engineer, Aviation Facilities and Infrastructure

**SUBJECT:** Stormwater Pipe Replacement on Town and Country site south of the Airport  
(C800651)

|                                    |           |                         |                          |
|------------------------------------|-----------|-------------------------|--------------------------|
| <b>Amount of This Request:</b>     | \$350,000 | <b>Source of Funds:</b> | Airport Development Fund |
| <b>Est. Total Project Cost:</b>    | \$350,000 |                         |                          |
| <b>Est. State and Local Taxes:</b> | \$10,100  |                         |                          |

**ACTION REQUESTED**

Request Commission authorization for the Chief Executive Officer to authorize (1) purchase of necessary materials and supplies, and (2) utilization of Port crews to install a storm water pipe in the former Town and Country site south of the Seattle-Tacoma International Airport in an amount not to exceed \$350,000.

**SYNOPSIS**

The Port agreed with local agencies to replace the most severely deteriorated section(s) of a large storm drainage pipe located on Port-owned property south of Seattle-Tacoma International Airport. The property was formerly the Town and Country mobile home park site. An initial project budget was developed that indicated that the work could be completed as a small works project; however, continued cave-ins have expanded the scope of the project to include additional length of pipe, including a small section across the property line into the adjacent Washington State Department of Transportation (WSDOT) owned property. In addition, as the project began, permit approvals both from the City of SeaTac and from WSDOT, as well as coordination with Midway Sewer District became necessary. Construction will need to occur during the most difficult construction season, requiring detaining and possibly bypassing storm water during construction. These issues caused the project scope and budget to expand to a level requiring Commission approval.

The Commission was notified of the Critical Work determination and budget increase during the December 10, 2013, Commission meeting.

## **COMMISSION AGENDA**

Tay Yoshitani, Chief Executive Officer

December 12, 2013

Page 2 of 4

### **BACKGROUND**

Over the years, as part of noise mitigation projects, the Port has purchased numerous parcels, including the former Town and Country Trailer Court located south of Seattle-Tacoma International Airport. A decades-old 36- to 48-inch diameter storm drain pipe, which conveyed off-site drainage throughout this property, had been previously constructed on the property before the Port assumed ownership. This corrugated metal pipe is now severely deteriorated and is failing in places, causing cave-ins and allowing sediment to be carried downstream to storm water infrastructure owned by the City of SeaTac.

After discussions with the City, the Port assumed responsibility for replacing the most deteriorated section of existing pipe with new 36-inch diameter, smooth inner wall, corrugated high density polyethylene pipe. Approximately 550 feet of new pipe and manhole(s) are proposed to be installed.

### **PROJECT JUSTIFICATION AND DETAILS**

The project is deemed necessary to be completed as soon as possible because the situation has worsened to the point where delaying this work until drier months would cause further sedimentation. Further delay may eventually compromise the ability of the existing infrastructure to convey the storm water through Port property.

#### ***Project Objectives***

- Replace failed and failing infrastructure
- Maintain good community relations

#### ***Scope of Work***

- Install new pipe and related infrastructure
- Restore areas where existing cave-ins have occurred

#### ***Schedule***

Work is expected to be substantially complete by February 28, 2014

### **FINANCIAL IMPLICATIONS**

#### ***Budget/Authorization Summary***

|  | Capital   | Expense | Total Project |
|--|-----------|---------|---------------|
| Original Budget                              | \$250,000 | \$0     | \$250,000     |
| Budget increase                              | \$100,000 |         | \$100,000     |
| Revised budget                               | \$350,000 |         | \$350,000     |
| Previous Authorizations                      | \$0       | \$0     | \$0           |
| Current request for authorization            | \$350,000 | \$0     | \$350,000     |
| Total Authorizations, including this request | \$350,000 | \$0     | \$350,000     |

## **COMMISSION AGENDA**

Tay Yoshitani, Chief Executive Officer

December 12, 2013

Page 3 of 4

|                                   |           |     |           |
|-----------------------------------|-----------|-----|-----------|
| Remaining budget to be authorized | \$0       | \$0 | \$0       |
| Total Estimated Project Cost      | \$350,000 | \$0 | \$350,000 |

### ***Project Cost Breakdown***

|                                 | This Request | Total Project |
|---------------------------------|--------------|---------------|
| Construction                    | \$292,000    | \$292,000     |
| Construction Management         | \$5,900      | \$5,900       |
| Design                          | \$15,000     | \$15,000      |
| Project Management              | \$10,000     | \$10,000      |
| Permitting                      | \$7,000      | \$7,000       |
| State & Local Taxes (estimated) | \$10,100     | \$10,100      |
| Total                           | \$350,000    | \$350,000     |

### ***Budget Status and Source of Funds***

This project was budgeted for 2014 within the Small Jobs project budget (CIP C800017) that serves to fund smaller sized and fast paced projects similar to this one. Due to the budget increase, this project will now be performed within a new CIP, C800651. The budget for this new CIP will be transferred from the Aeronautical Allowance CIP (C800404), resulting in no net change to the total Aviation capital budget. The project is funded by the Airport Development Fund.

### ***Financial Analysis and Summary***

|                                       |   |
|---------------------------------------|---|
| <b>CIP Category</b>                   | Renewal and Enhancement                 |
| <b>Project Type</b>                   | Renewal and Replacement                 |
| <b>Risk adjusted discount rate</b>    | N/A                                     |
| <b>Key risk factors</b>               | N/A                                     |
| <b>Project cost for analysis</b>      | \$350,000                               |
| <b>Business Unit (BU)</b>             | Airfield Movement Area (Noise property) |
| <b>Effect on business performance</b> | NOI after depreciation will increase    |
| <b>IRR/NPV</b>                        | N/A                                     |
| <b>CPE Impact</b>                     | Less than \$.01 in 2015                 |

### ***Lifecycle Cost and Savings***

Only the most deteriorated section of pipe would be replaced at this time. Discussions with the City of SeaTac and WSDOT will continue regarding responsibility, timing, and need for replacing other portions the storm drainage conveyance system. A State of Washington funded transportation package would likely negate the need for the Airport to replace other portions of the pipe, since it would be replaced as part of either state funded City roadways or as part of SR-509 construction.

The new piping system that would be used is one of the most cost-effective selections for this application. The new pipe would have less friction loss and therefore can be a smaller diameter

## **COMMISSION AGENDA**

Tay Yoshitani, Chief Executive Officer

December 12, 2013

Page 4 of 4

than the existing pipe. The new piping system is being designed for a minimum 50-year life expectancy and would have a partially diagonal alignment, slightly reducing the required length of pipe.

## **STRATEGIES AND OBJECTIVES**

This project supports the Port's Century Agenda objective to "Be the greenest, and most energy efficient port in North America" by meeting or exceeding agency requirements for storm water leaving Port-owned or operated facilities.

## **ALTERNATIVES AND IMPLICATIONS CONSIDERED**

**Alternative 1)** – Do nothing. This would result in continued failure of the existing pipe, creating additional risk of flooding, sedimentation, or erosion and possible enforcement action by the City of SeaTac. This is not the recommended alternative.

**Alternative 2)** – Replace the entire piping system within Port property. This alternative would be 2 to 3 times more expensive than a limited replacement of the existing piping. Portions of the piping system have deteriorated but have not yet caved in. These sections of pipe were judged to not need immediate replacement. In addition, the property is being considered for future redevelopment for both the extension of SR-509 and the City's South 28<sup>th</sup> Street extension. Ongoing coordination with these agencies may later result in portions of the existing stormwater conveyance system being modified by future City or State redevelopment. This is not the recommended alternative.

**Alternative 3)** – Replacement of only the most deteriorated sections of pipe. **This is the recommended alternative.**

## **ATTACHMENTS TO THIS REQUEST**

- None

## **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

- None