PORT OF SEATTLE MEMORANDUM

COMMISSION AGENDA	Item No.	8b
	Date of Meeting	March 5, 2009

DATE: February 18, 2009

TO: Tay Yoshitani, Chief Executive Officer

FROM: Dave Soike, Deputy Director, Aviation Division

Mike Ehl, Director, Aviation Operations

SUBJECT: Replacement of Perimeter Fence around south end of runway 34R.

ACTION REQUESTED:

Request Port Commission authorization to procure and execute service agreements with consultants to perform design; to prepare contract documents; and perform construction contract administration for the replacement of perimeter fence around south end of runway 34R at Seattle-Tacoma International Airport (Airport) in the amount of \$375,000.

SYNOPSIS

This memorandum requests authorization for all costs for replacing fencing around south end of runway 34R. This project will improve airport safety by both providing taller fencing to meet airport standards and by providing an underground barrier below the fence to prevent the ability to tunnel under the fence. The height of the new fence will be 12 feet high with barbed wire along the top. The underground barrier is designed as a deterrent to prevent wildlife, in particular coyotes, from entering the airfield and endangering operations. The new fence will encompass the portion of the runway south of 188th that lies in undeveloped areas with dense vegetation where wildlife has often been found to enter the airfield. The approximate length of the fence is 4,800 lineal feet and will partially utilize materials that the airport has in stock to minimize costs.

BACKGROUND

Coyote numbers continue to increase in the urban areas of Washington State for a number of reasons, including residential encroachment on coyote habitat, a lack of competition for food, trapping restrictions, and a lack of predators. As their numbers have increased, so has their ability to coexist with humans in highly urbanized areas.

The existing airfield fence line is older and does not meet current Airport standards. Coyotes have dug under the existing fence, particularly in areas with nearby vegetation, and gained access to the airfield because the fence does not have a buried barrier. Once on the airfield, the coyotes

COMMISSION AGENDA

T. Yoshitani, Chief Executive Officer February 18, 2009 Page 2 of 4

become a safety concern for operating aircraft, since strikes can cause significant aircraft damage and result in unsafe foreign object debris. The new fence will be located closer to roads and farther from vegetation to enable easier visual checks from periodic patrols.

To minimize costs, the fence fabric will come from available airport stock that originated from recycled temporary operational security fences that were necessary while the third runway was being constructed. Reusing this fence material results in a substantial savings to the project.

PROJECT DESCRIPTION/SCOPE OF WORK

Project Statement:

Provide new security fencing around the south end of runway 34R that lies south of 188th street.

Project Objectives:

- Meet current standards for airfield security fence.
- Gain more positive control over daily airport operations functions.
- Reduce the number of coyotes on the airfield to enhance aviation safety.
- Reduce the need to use wildlife deterrent measures by staff in the aircraft operations areas which are necessary when coyotes are discovered on the airfield.

Scope of Work:

Design, provide, and install fencing to meet current airport standards.

STRATEGIC OBJECTIVES

This project supports the Aeronautical goal to provide a safe environment to do business.

This project will also support the CEO's goal of having the "cleanest and greenest port in America" by reusing existing fencing materials.

ALTERNATIVES

- Alternative 1: Do Nothing: Leaving the fence as it currently exists today continues to compromise airport safety and is not in compliance with current Airport security fence standards. Airfield personnel require large shot pellets to remove coyotes. Such shot can travel greater distances than the smaller shot normally used for typical bird control.
- Alternative 2: Install Only the Underground Barrier: The barrier could be installed without updating the fence to current security standards. While this alternative increases airport safety by deterring wildlife, it would disrupt the existing fence and require repair

COMMISSION AGENDA

T. Yoshitani, Chief Executive Officer February 18, 2009 Page 3 of 4

- without either bringing the fence up to current standards or moving portions of the fenceline to better locations. This alternative is estimated to cost nearly the same amount as a new taller fence.
- Alternative 3: Electrification of the Fence: This is not a feasible possibility. Excessive
 vegetation at ground level and the wet conditions normally experienced in the Pacific
 Northwest would quickly cause this fence to become inoperable. Dry summer conditions
 may also cause any electrified wire near ground level to start fires. In addition
 electrification would require ongoing maintenance costs that are unnecessary with the
 new taller fence standard.
- Alternative 4: Replace the Fence while using Recycled Materials: This option meets current security standards while also providing both a taller fence and an underground barrier. Recycling via using previously purchased materials provides a substantial savings to the project. This is the recommended alternative.

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

Duuget/Authorization Summary	
Original Budget	\$375,000
Budget Increase	\$0
Revised Budget	\$375,000
Previous Authorizations this CIP	\$0
Current request for authorization	\$375,000
Total Authorizations, including this request	\$375,000
Remaining budget to be authorized	\$0

Project Cost Breakdown

Construction costs	\$266,000
Sales tax	\$24,000
Outside professional services	\$35,000
Aviation PMG and other soft costs	\$50,000
Total	\$375,000

Source of Funds

This project was included in the 2009 – 2013 capital budget and plan of finance as a business plan prospective project (CIP C800286). The funding source will be the Airport Development Fund.

COMMISSION AGENDA

T. Yoshitani, Chief Executive Officer February 18, 2009 Page 4 of 4

Financial Analysis Summary

CIP Category	Renewal/enhancement	
Project Type	Renewal and replacement	
Risk adjusted Discount rate	N/A	
Key risk factors	N/A	
Project cost for analysis	375,000	
Business Unit (BU)	Airfield – capital costs will be fully recovered in landing	
	fees over the life of the asset	
Effect on business performance	NOI after depreciation will increase as amortized capital	
	cost incorporated into airfield rate base will exceed	
	depreciation.	
IRR/NPV	N/A	
CPE Impact	Less than \$.01 in 2010, but no impact on business plan	
	forecast as this project was included.	

ECONOMIC IMPACTS

Airfield safety will be enhanced which assures continuation of the economic generation aspects associated with the Airport.

ENVIRONMENTAL SUSTAINABILITY/COMMUNITY BENEFITS

This project will use vinyl-coated, rather than galvanized fence material, over impervious surfaces to prevent zinc leaching from potentially contaminated surface water. The project will re-use fencing materials recycled from other temporary fencing. Fuel consumption will decrease due to the reduced need to patrol the area for coyote presence.

TRIPLE BOTTOM LINE

Airfield safety will promote the economic vitality of the air carriers, while the community will benefit from steadfast air carrier performance. And, the environment will benefit from utilization of the recycled fencing material.

PROJECT SCHEDULE

The project will be completed in 2009.

PREVIOUS COMMISSION ACTIONS

There have been no previous Commission actions related to this item.