

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE: Motion to Authorize the City Manager to: 1) execute a contract supplement for professional services for Phase II design of the Richmond Beach Overcrossing Bridge Replacement Project in the amount not exceed \$225,000; and 2) execute a Local Agency Agreement Supplement to obligate federal grant monies for Phase II design.

DEPARTMENT: Public Works

PRESENTED BY: Jill Marilley, P.E., City Engineer
Jon Jordan, P.E., Capital Projects Manager

BACKGROUND: The Richmond Beach Overcrossing Bridge (bridge) was originally built in 1923 and rebuilt in 1956. The normal life span of a timber bridge is 45 to 50 years. This bridge provides sole access to 35 homes on 27th Avenue NW and the City is responsible for the maintenance of the roadway over and approaches to the bridge. The railroad is responsible for maintenance of the bridge superstructure.

The bridge is inspected annually by the King County Bridge Unit. Structural analysis conducted by King County and verified by staff determined that the bridge was at risk for accelerated weakening due to aging deterioration and extensive use by vehicles carrying heavy loads. To minimize the risk, the City adopted an ordinance in November 1999, for the purpose of specifying a weight limit on the bridge that the structure can safely carry on a routine basis. This time last year, further measures were taken to preserve the bridge and improve safety when a median was installed to keep wheel loads off the weaker structural members.

The goal of this project, as identified in the 2005 –2010 Capital Improvement Program, is to design and construct a new concrete bridge to replace the existing, deteriorating timber bridge. With the federal grant monies, the City has an opportunity to construct a new concrete bridge for less than the cost of rehabilitating the existing timber bridge.

Benefits of the new bridge include:

- 50 to 80 year life expectancy;
- Seismic upgrades;
- Improves bridge geometry (improves sight safety and vehicle access);
- Reduces maintenance cost and frequency of inspections and repairs;
- Increases load limit (provides safe access for emergency vehicles, garbage trucks, dump trucks, fuel trucks, cement trucks, etc);
- Meets BNSF minimum horizontal and vertical clearance requirements; and
- Able to accommodate a potential third track for BNSF/Sound Transit

PROBLEM/ISSUE STATEMENT: Staff is requesting that Council authorize the City Manager to execute a contract supplement (Supplement No. 1) not to exceed \$225,000 to complete design work for Phase II of the Richmond Beach Overcrossing Project. In addition, staff is also requesting that Council authorize the City Manager to execute a Local Agency Agreement Supplement to obligate additional federal grant funds to complete required design work.

At their April 28, 2003 meeting, Council authorized staff to execute a professional services contract with ABKJ to complete pre-design to determine the type, size, and location of the bridge and development of the Type, Size, and Location Report. Design Supplement No. 1, includes additional effort needed to develop the final design and to prepare Plans Specifications and Estimate (PS&E) for the project.

The PS&E will be based on a reinforced concrete through-girder bridge on approximately the same alignment as the existing bridge. This is the alternative recommended in the Type Size and Location (TS&L) Report prepared during pre-design and has been accepted by the Burlington Northern Railway Company for meeting their clearance requirements and accommodating a future third track. This alternative can be built without right-of-way acquisitions or changes to the profiles of 27th Ave NW and Richmond Beach Drive.

Supplement No. 1 also revises the completion date for the professional services contract from December 31, 2004 to December 31, 2005 and adds or revises tasks to Exhibit B, Scope of Work.

In addition to supplementing the design contract, a Local Agency Supplement from the Washington State Department of Transportation (WSDOT) is required to obligate additional federal grant monies for Preliminary Engineering (Design) phase. These monies will be reimbursed at 80% per the funding levels explained below.

FINANCIAL IMPACT: This project is estimated to cost \$2,482,847, which includes maintenance and operations expenses to inspect and repair the existing bridge, and design, construction, construction administration, and staff time related to the new bridge. Additional funding is expected from Burlington Northern Santa Fe Railway Company.

When the City applied for a federal grant for replacement or rehabilitation of the bridge, the Bridge Replacement Advisory Committee (BRAC) selected the bridge to receive grant monies for replacement with a concrete structure. The Preliminary Engineering (Design) phase of this project is funded 80% through the Highway Bridge Replacement and Rehabilitation Program (HBRRP) and 20% through the Roads Capital Fund. The Washington State Department of Highways and Local Programs (H&LP) is estimating that approximately \$85 million of toll credits will be dedicated to the Bridge Program over the next 10 years. As a result, all TEA-21 bridge projects up to \$10 million will be federally funded at 100% for phases not currently obligated (i.e., the right-of-way acquisition and construction phases of this project will be funded at 100%). ISTEA selected bridges are not eligible to utilize toll credits.

The costs and revenue allocations are as follows: We anticipate BNSF contribution between \$100,000 and \$200,000 in 2005, upon execution of a construction agreement. Once this revenue is received, it will go back into the Roads Capital Fund.

The maintenance and operation cost includes expenditures to replace the bridge deck and repair abutment walls in 1999, installation of the median in 2003, other minor repairs, analyses, evaluations, and annual inspections by King County Bridge Unit.

The design cost includes expenditures beyond those required for a typical bridge and roadway design. These unique costs result from applying new bridge design standards and railroad clearance requirements to replace an outdated existing bridge located within a restricted geographic area (e.g., a bridge that provides sole access; limited available right-of-way and limited distance between existing roadways; two existing and highly active railroad tracks and requirements to accommodate one future track; and a design with little or no grade changes to existing roadways to minimize public inconvenience and reduce ineligible grant related costs).

These tasks include data collection and evaluation of the existing bridge, extensive alternative analysis and coordination with BNSF, a life cycle cost comparison, design standard deviations, and design of an alternative temporary access.

Project Cost	Amount
Maintenance & Operation	\$105,272
Design	\$447,263
Construction	\$1,930,312
Total	\$2,482,847

Revenue Sources	Amount
Roads Capital Fund	\$206,155
HBRRP	\$2,276,692
Total	\$2,482,847

COMMUNICATION PLAN: Upon City Council approval of the recommended alternative, staff will schedule a meeting with the neighbors immediately surrounding the bridge including all of those living on Apple Tree Lane to update them on the project and answer questions.

RECOMMENDATION

Staff recommends that Council authorize the City Manager to execute a contract supplement (Supplement No. 1) not to exceed \$225,000 to complete design work for Phase II of the Richmond Beach Overcrossing Project. In addition, staff is also requesting that Council authorize the City Manager to execute a Local Agency Agreement Supplement to obligate additional federal grant funds to complete required design work.

Approved By: City Manager  City Attorney 

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