



**CITY OF KIRKLAND**  
Department of Public Works  
123 Fifth Avenue, Kirkland, WA 98033 425.587.3800  
www.kirklandwa.gov

---

## MEMORANDUM

**To:** Kurt Triplett, City Manager

**From:** Dave Snider, Interim Capital Projects Manager  
Ray Steiger, P.E., Public Works Director

**Date:** September 8, 2011

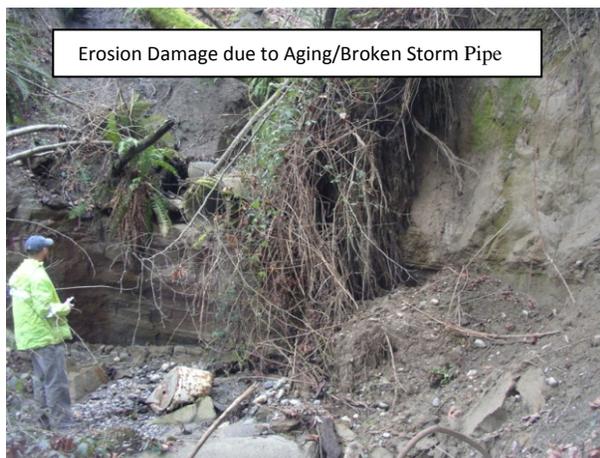
**Subject:** BILLY CREEK RAVINE STABILIZATION PROJECT

### **RECOMMENDATION:**

It is recommended that City Council authorize the use of \$150,000 from the Surface Water Construction Reserve as the City's contribution towards completing the Billy Creek Ravine Stabilization Project. It is further recommended that City Council authorize the City Manager to sign a Professional Services Agreement (PSA) with King County to allow County crews to perform the construction work associated with the Project.

### **BACKGROUND DISCUSSION:**

The Billy Creek Ravine is located near 93<sup>rd</sup> Place NE and NE 131<sup>st</sup> Way, at the boundary of the Finn Hill and the North Juanita neighborhoods (Attachment A). In the past, the Ravine has experienced severe erosion due to the failure of an aging stormwater pipe. During large storm events this erosion is a major source of sediment that washes downstream and clogs the City's stormwater system along 94<sup>th</sup> Avenue NE to NE 124<sup>th</sup> Street. Additionally, severe rain events have resulted in large quantities of mud and debris being deposited on several private properties and on City streets below the Ravine; the cleanup cost for removing sediment from the public streets and the City's stormwater system following a December 10, 2010 storm event was approximately \$16,000. The impact to private property has also been significant based on claims for damage submitted to the City; similar damages occurred during a large storm event in December, 2006.

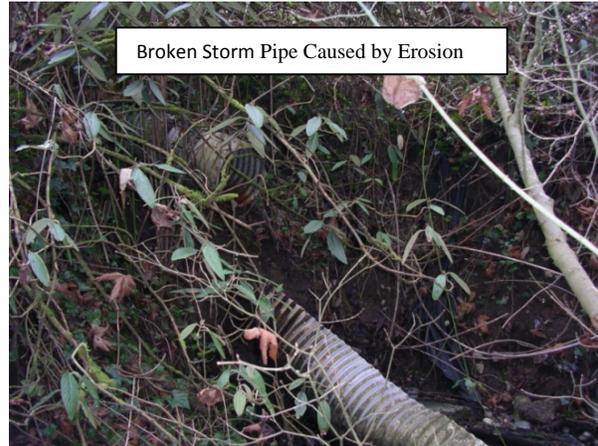


The Billy Creek Ravine was, until June 1, 2011, in unincorporated King County. King County staff has been aware of the Ravine's condition and has been working toward a solution since 2009. Since that time, City staff has been given assurance by County personnel that this Project would be completed by June 1<sup>st</sup>; however, check-ins with County staff starting in fall of 2010 revealed that the Project had been delayed due to changes in King County's funding

priorities. As recently as February, 2011, City staff was assured that it was still the intention of County staff to have the improvements completed by the June 1<sup>st</sup> annexation date.

In April of this year, Kirkland staff was updated by the County on their design, permitting and easement work. At that time, County staff informed City staff that, due to an increased scope of work, the County no longer had sufficient funds to construct the Project. In mid-July, Kirkland staff received an updated cost estimate from the County.

The currently estimated cost to complete the Billy Creek Ravine Stabilization Project is \$180,600 (Column A, Table 1). To date, King County has spent approximately \$40,000 for on-site remediation in an effort to stabilize the area – this amount is in addition to the \$180,600 estimated to complete the Project. At this time, King County has an additional \$60,000 (Column B, Table 1) for construction of the improvements. As a result, Kirkland is being asked to fund the remaining \$120,600 needed to complete the physical construction (Column C, Table 1).



The following factors led to the current King County funding gap:

- The size of the eroded area grew significantly during the 2010-2011 storm season, resulting in the need for a larger project, and
- King County engineering staff determined that a second storm pipe connection would significantly increase the stability of the affected area while decreasing the amount of erosion. The damage that occurred during the 2010-2011 storm season showed that this pipe connection is vital to the success of the overall Project.
- The second storm pipe was originally considered to be a “Neighborhood Drainage Assistance Project” (NDAP) by King County. The NDAP program is separate from the County’s Capital Improvement Program; however, the NDAP program received no funding in the 2011 King County budget.

King County has completed the design for the Project using their in-house engineering, permitting and property acquisition staff. In addition, the County Road Division crews are available to perform the work. Although project costs are significant, the cost of doing this project in partnership with King County is approximately 40% lower than what would be expected for a standard design/bid/build process using a consultant for design and then advertising for contractor bids for construction.

**Table 1: Funding Detail**

Task	A King County Estimate 7/11	B King County Funding	C = (A – B) Funding Gap	D Kirkland Contribution	E = (B + D) Total Project
Property Acquisition	\$5,000	\$5,000	\$0	\$0	\$5,000
Design	\$27,200	\$27,200	\$0	\$0	\$27,200
Construction	\$107,000	\$7,800	\$99,200	\$99,200	\$107,000
Construction Admin.	\$11,500	\$11,500	\$0	\$20,800	\$32,300
Out-year Monitoring	\$1,200	\$1,200	\$0	\$0	\$1,200
Contingency	\$28,700	\$7,300	\$21,400	\$30,000	\$37,300
<b>TOTAL</b>	<b>\$180,600</b>	<b>\$ 60,000</b>	<b>\$120,600</b>	<b>\$150,000</b>	<b>\$210,000</b>

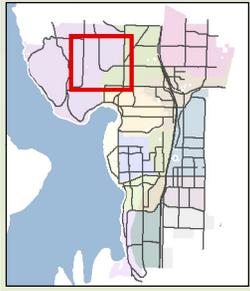
In addition to \$120,600 in City funds needed to make up the King County funding gap for completing the Project, City staff requires additional funding for in-house construction administration and public outreach efforts (\$20,800) and is requesting an increased project contingency (\$30,000). Therefore, it is staff's recommendation that City Council authorize the use of \$150,000 from the Storm Water Construction Reserve (Attachment B) for use as the City's contribution towards the costs associated with King County's efforts on restoring the Ravine. As specified in the PSA, King County crews will perform the work and the County will invoice the City on a time and materials basis after the work is completed (Attachment C). The PSA specifies the criteria by which the work will be accepted by the City, and City staff will participate in quality control inspections and site evaluations with King County engineering staff throughout the construction process – any unspent funds will be returned to the Reserve.

As the rainy season is only a couple months away, it is vital for the work to begin as soon as possible; the utilization of County forces to perform the construction work is the most expedient and cost effective means for completing the Project before the middle of October. The County has secured the necessary Hydraulic Project Approval permit from the State Department of Fish and Wildlife, and the physical work is expected to take approximately three weeks.

To date, King County has not performed any public outreach or project notification on this Project, other than with the three directly affected property owners along the Ravine's boundary. As a result, and with City Council's approval of the use of the Surface Water Construction Reserve money, Public Works staff will begin a public notification campaign to inform all neighboring residents of the proposed activities. These notification activities will fall under the Construction Administration element of the funding and will include posting information on the Public Works webpage, notification of the North Juanita and Finn Hill Neighborhood Association Chair Persons, and mailed notices to immediately adjacent homes.

Attachments: (3)

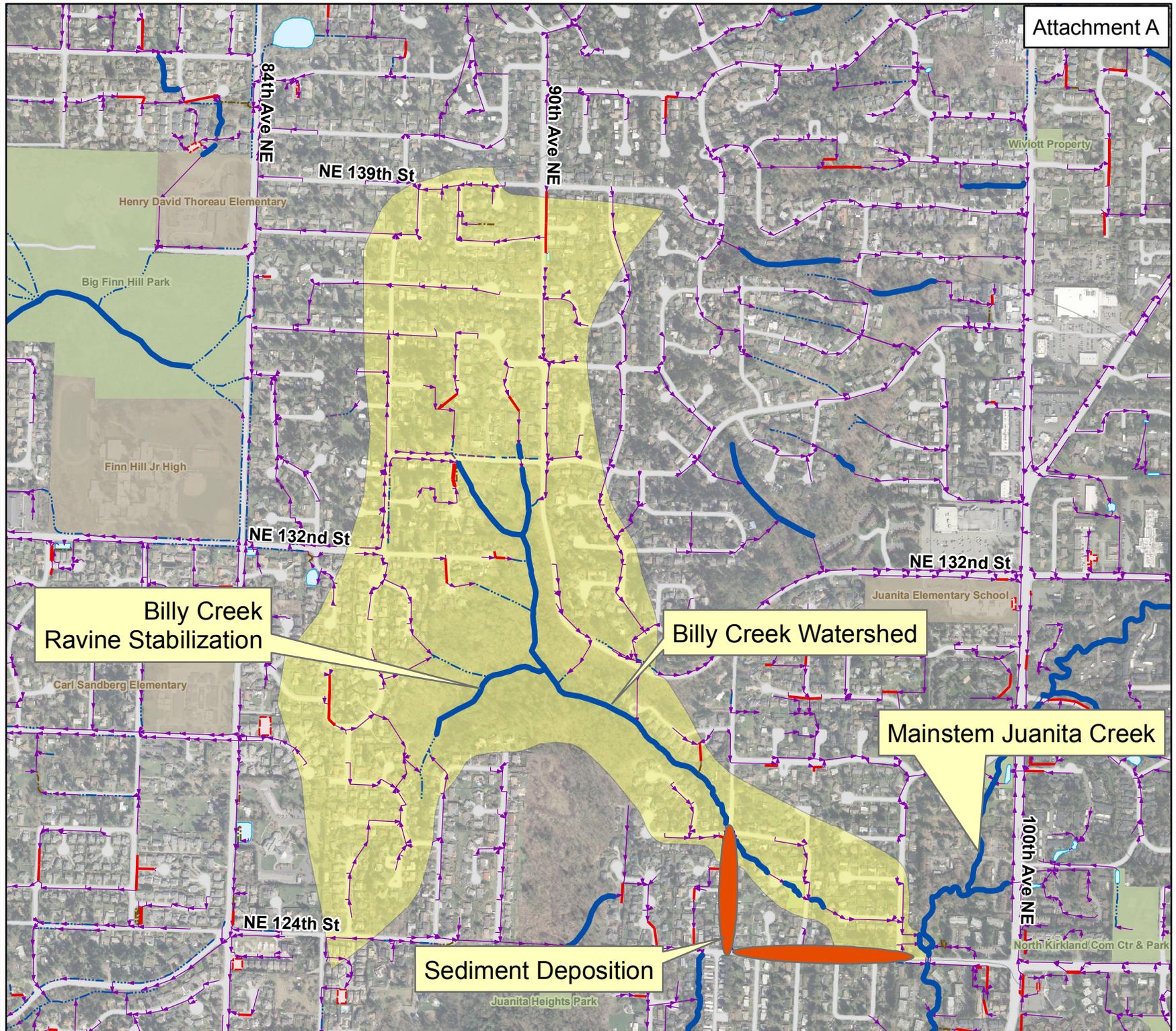
# Billy Creek Ravine Stabilization



Produced by the City of Kirkland.  
© 2011, the City of Kirkland, all rights reserved. No warranties of any sort, including but not limited to accuracy, fitness or merchantability, accompany this product.

Author:

Date Saved: 8/26/2011 8:31:07 AM



Billy Creek Ravine Stabilization

Billy Creek Watershed

Mainstem Juanita Creek

Sediment Deposition

# FISCAL NOTE

Source of Request							
Ray Steiger, Public Work Director							
Description of Request							
Request for \$150,000 from the Surface Water Construction Reserve to provide funding for the Billy Creek Ravine Stabilization Project. The project will be completed by entering into a Technical Services Agreement (TSA) with King County for having County crews perform the construction work associated with the project (\$120,600) and \$29,400 for internal staffing for public outreach and project contingency.							
Legality/City Policy Basis							
Fiscal Impact							
One-time use of \$150,000 of the Surface Water Construction Reserve. The reserve is able to fully fund this request.							
Recommended Funding Source(s)							
<i>Reserve</i>	Description	2012 Est End Balance	Prior Auth. 2011-12 Uses	Prior Auth. 2011-12 Additions	Amount This Request	Revised 2012 End Balance	2012 Target
	Surface Water Construction	3,376,431	218,000	0	150,000	3,008,431	N/A
	2011-12 Prior Authorized Use of this reserve: \$218,000 for Totem Lake Boulevard Flood Control Measures.						
<i>Revenue/Exp Savings</i>							
<i>Other Source</i>							
Other Information							

Prepared By	Neil Kruse, Senior Financial Analyst	Date	August 24, 2011
-------------	--------------------------------------	------	-----------------

**Professional Services Agreement  
Regional Facility D90183 Outfall  
and Panorama Estate Outfall Remediation Project  
City of Kirkland and King County**

This AGREEMENT is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2011 by and between King County, Washington, hereinafter referred to as "King County" and the City of Kirkland, hereinafter referred to as the "City," collectively referred to as the "Parties."

WHEREAS, the City desires to procure professional services and materials from King County to assist it with implementing certain drainage-related improvements within City limits in the area known as "Billy Creek"; and

WHEREAS, King County has indicated it desires to do the work set forth in the Agreement upon the terms and conditions set forth below; and

NOW THEREFORE, in consideration of the terms, conditions, covenants and performances contained herein below, the Parties agree as follows:

**I. Purpose**

The purpose of this Agreement is to set forth the terms under which King County, through its Department of Natural Resources and Parks, Water and Land Resources Division (WLRD), and the City will work cooperatively to implement the Regional Facility D90183 Outfall and Panorama Estate Outfall Remediation Project ("Project"). To fully implement the Project, King County agrees to provide the City with services as described in Exhibit A, attached to this Agreement and incorporated herein and made a part hereof.

**II. Management of Technical Services Provision**

- A. The provision of services under this Agreement will be managed for King County by the Managing Engineer of WLRD Capital Services Unit or other staff as designated by King County, and for the City by Dave Snider, Capital Projects Manager or other staff as may be designated by the City, and shall be known as the "Project Administrators."
- B. In the event that a dispute arises under this Agreement, it shall be resolved by the Project Administrators. If the dispute cannot be resolved by the Project Administrators, it shall be

referred for final resolution to the Division Director of King County WLRD and the City Manager. This dispute resolution provision shall not be construed as prohibiting either Party from seeking enforcement of the terms of this Agreement, or relief or remedy from a breach of the terms of this Agreement, in law or in equity.

### **III. Responsibilities**

#### **A. King County**

King County shall provide services as set forth in Exhibit A.

#### **B. City**

1. The City will coordinate with King County on services to be provided under this Agreement.
2. The City will pay for service costs as outlined in Exhibit A.

### **IV. Costs and Billing**

Total project costs are estimated at \$180,600, as set forth in Exhibit A. Under no circumstances shall the cost of services provided under this agreement exceed \$180,600. King County shall pay the first \$60,000 of Project costs incurred. Remaining costs, up to \$120,600, shall be paid by the City to the County on a reimbursable basis.

After the \$60,000 threshold has been reached, King County will invoice the City for services provided on a quarterly basis. The invoice shall clearly set forth the item, task and cost per the budget schedule in Exhibit A.

Payment to King County for submitted invoices will be made by the City within forty-five (45) days of receipt of invoices.

### **V. Effectiveness, Duration, Termination, and Amendment**

- A. This Agreement will be effective upon its signature and will remain in effect until December 31, 2012.
- B. This Agreement may be terminated by either Party upon 30 days written notice. In the event of termination, payment will be made by the City for work performed by King County to the date of termination.
- C. This Agreement may be amended only by written agreement of the Parties.

- D. This Agreement is not assignable by either Party, either in whole or in part.
- E. This Agreement is a complete expression of the intent of the Parties and any oral or written representations or understandings not incorporated herein are excluded. The parties recognize that time is of the essence in the performance of the provisions of this Agreement. Waiver of any default shall not be deemed to be waiver of any subsequent default. Waiver of breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the terms of the Agreement unless stated to be such through written approval by the parties which shall be attached to the original Agreement.
- F. Funding or obligation under this Agreement beyond the current appropriation year is conditional upon appropriation by the County Council of sufficient funds to support the activities described in this Agreement. Should such appropriation not be approved, this Agreement will terminate at the close of the current appropriation year.

**VI. Indemnification and Hold Harmless**

- A. King County shall protect, defend, indemnify, and save harmless the City, its officers, officials, and employees, while acting within the scope of their employment, from any and all costs, claims, judgments, and/or awards of damages, arising out of or in any way resulting from King County's own negligent acts or omissions, or the negligent acts or omissions of King County's officials, officers, or employees.
- B. The City shall protect, defend, indemnify, and save harmless King County, its officers, officials, and employees, while acting within the scope of their employment, from any and all costs, claims, judgments, and/or awards of damages, arising out of or in any way resulting from the City's own negligent acts or omissions, or the negligent acts or omissions of City officials, officers or employees.
- C. Each Party agrees that its obligations under this Article VI extend to any claim, demand, and/or cause of action brought by, or on behalf of, any of its employees or agents. For this purpose, each Party, by mutual negotiation, hereby waives, with respect to the other Party only, any immunity that would otherwise be available against such claims under the Industrial Insurance provisions of Title 51 RCW.

- D. In the event that either Party incurs any judgment, award, and/or cost arising there from, including attorney's fees, to enforce the provisions of this Article, all such fees,
- E. expenses, and costs shall be recoverable from the responsible Party to the extent of that Party's culpability.
- F. The indemnification provided for in this Article VI shall survive the termination of this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

Approved as to Form

**King County:**

By: \_\_\_\_\_  
Title: Deputy Prosecuting Attorney

By: \_\_\_\_\_  
Title: Director, King County Department  
of Natural Resources

Approved as to Form

**City of Kirkland:**

By:  \_\_\_\_\_

By: \_\_\_\_\_

Title: Attorney

Title: \_\_\_\_\_

## **Scope of Work Regional Facility D90183 Outfall and Panorama Estate Outfall Remediation**

---

The King County Water and Land Resources Division (WLRD) will provide the City of Kirkland with services as described below for the Regional Facility D90183 Outfall Remediation and the Panorama Estate Outfall Remediation Capital Improvement Project.

### **Project Background/Objective**

The ravine area known locally as “Billy Creek,” formerly within King County and annexed into Kirkland in June 2011, is the site of a progressively deteriorating stormwater outfall and stormwater conveyance system. Prior to annexation King County had identified and developed plans for a two-phase capital improvement project (“Project”) to address the associated slope instability, erosion and sedimentation problems. Phase One is improvements to stormwater facility D90183 (under King County’s facility numbering system) discharge pipe in the ravine. Phase Two is designed to replace a lateral drainage system that conveys drainage from 88<sup>th</sup> Place NE across a private single family residence at 8800 NE 127<sup>th</sup> Place and connects to the stormwater facility outfall. Slope stability concerns at the site will be mitigated by using a tightline to convey stormwater flow to an energy dissipating outfall within the ravine at the headwaters of Billy Creek.

As of September 2011, King County will have completed design for Project phases 1 and 2 and allocated \$60,000 toward construction. Under this Scope of Work and attached Agreement, King County will complete construction on both Project phases 1 and 2, if possible, with costs over and above the \$60,000 previously allocated by King County to be paid by the City, subject to Agreement terms.

### **Tasks**

King County will perform the following tasks:

#### **Property Interests**

- Negotiate with three private property owners to secure permanent easements for Kirkland for perpetual ownership and maintenance of the Project
- Transfer existing easement (for the lateral line traversing Parcel 661990-0160) to Kirkland (Kirkland will not be charged for staff time to complete this task)
- The City will provide a project manager for property interest negotiations

#### **Design and Engineer of Record Services**

- Prepare 100% engineering plans and reports (90% engineering plans were previously prepared) and engineer’s cost estimate for City’s review
- Prepare and provide final plans

#### **Permitting**

- Acquire Hydraulic Project Application approval from Washington Dept. of Fish and Wildlife Upon receiving a complete application, Kirkland will issue a PUB permit to King County

### **Project Management**

- Perform Project cost accounting and provide invoices to City
- Supervise Project schedule
- Act as liaison for City
- Coordinate the following meetings and check-in points with Kirkland: client authorization to issue Notice to Proceed, preconstruction field conference, construction completion (punch-list) field meeting.
- Manage Project design team
- Manage Project construction management team
- Ensure permit compliance

### **Construction Management and Inspection (CM&I)**

- Take preconstruction photographs of the project area and all associated areas likely to be disturbed by the work
- Issue a Noticed to Proceed (NTP). The Managing Engineer of Capital Services Unit issues NTP's to the Construction Supervisor
- Perform construction inspection, which shall include photographs of key work such as pipe connections, anchoring of pipes and structures, and any underground work that will be challenging to inspect once the work is complete.
- Provide a resident engineer and site inspector during construction to manage field changes and /or design change requests made by Kirkland and any requests for information
- Perform survey as needed during construction for layout of improvements, and complete record drawings
- In the event of unforeseen slope instability or foundation concerns, retain the King County DOT Materials Lab for consultation on any field change or design change related to geotechnical concerns. King County previously performed site-related geotechnical studies and completed a review of existing construction plans with the King County DOT Materials Lab
- Change of scope resulting in more than 10% of total construction cost will be jointly approved by the County and the City prior to proceeding.

### **Construction**

Construct Phase 1 and Phase 2 of the Project as per the engineering plans.

### **Closeout**

- Perform project management activities to complete project records and files, invoice and billings, records transfer to the City of Kirkland

## **Anticipated Milestones/Schedule**

<b>Milestone</b>	<b>Estimated Timeline</b>
All permits acquired	September 19, 2011
Construction plans and schedule approved	September 23, 2011
Construction Cost estimate approved	September 23, 2011
Notice to proceed issued	September 26, 2011
Construction completed	December 31, 2011

## **Estimated Project Costs**

<b>Item</b>	<b>Estimated Cost (\$)</b>
Project Management	5,000
Engineering Design and Permits/Easements	32,200
Construction and CM&I	142,200
Closeout	1,200
<b>Total Project Cost</b>	<b>\$180,600</b>

## **Cost Shares**

<b>Organization</b>	<b>Funding (\$)</b>
King County	60,000
Kirkland	Up to 120,600