



CITY OF KIRKLAND
Department of Public Works
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MEMORANDUM

To: Kurt Triplett, City Manager

From: Aaron McDonald, P.E., Senior Project Engineer
Dave Snider, P.E., Capital Projects Manager
Kathy Brown, Public Works Director

Date: January 22, 2015

Subject: DECANT FACILITY UPGRADE - AWARD CONTRACT

RECOMMENDATION:

It is recommended that the City Council take the following actions:

- Award the construction contract for the Decant Facility Upgrade Project to Santana Trucking & Excavating of Redmond, WA, in the amount of \$859,542.15, and
- Authorize the use of \$125,200 from Surface Water Construction Reserves to fully fund the Project including a 10% construction contingency plus additional engineering expenses due to the discovery of contaminated soils.

BACKGROUND DISCUSSION:

As required by the City's National Pollutant Discharge Elimination System Permit (NPDES), and consistent with ordinary maintenance practices, the City operates a waste water/solid decanting facility. This facility receives materials (liquids and solids) generated during routine cleaning of the City's storm drainage system, including street sweeping operations, as well as from certain maintenance related to the sanitary sewer system. The waste materials are placed in bays where the liquid separates from the solids through gravity; the liquid portion is then discharged into the sanitary sewer system under a separate permit with King County Wastewater. The solid portion is stockpiled for removal by a sub-contracted trucking firm and ultimately disposed of at a permitted hazardous waste landfill.

The City's existing decant facility is located at the Maintenance Center (see Attachment A) and consists of two covered and two uncovered bays. There is also one existing vault where liquids are discharged to the sanitary sewer after settling. This one settling vault discharges to the sanitary sewer with a maximum permitted discharge of 13,500 gallons/day; however, due to the size of the existing decant facility, there is currently less-than adequate settlement of solids

prior to discharge resulting in the overburdening of the system including increased sewer system maintenance work by City crews.

With the approximately 60 percent increase in surface water infrastructure and street sweeping following the 2011 annexation of the City's northern neighborhoods, the existing system is inadequate to meet current needs. In order to provide additional capacity, remove additional material from the discharge stream, and reduce maintenance needs the subject Project will:

- Add a second settling vault to provide more complete removal of solids, allowing for an increase in permitted discharge capacity,
- Add a new vault to remove solids from the decant discharge prior to entering the sanitary sewer system,
- Add flow-monitoring equipment to accurately track total daily discharge of liquids to the sanitary sewer system (see bullet below discussing radio telemetry system),
- Replace and expand the roof over the decant solid bays to cover two additional currently uncovered bays (resulting in a total of four covered bays),
- Replace existing distressed/failing asphalt in the decant operations area,
- Provide two water-quality treatment facilities to mitigate run-off from the paved area prior to discharge to the surface water system,
- Provide a radio telemetry system to accurately track liquid discharges to the sanitary sewer system (discharges in excess of the allowable permit amount can result in substantial monetary fines), and
- Install a 10 foot truck scale to aid in tracking both decant solid amounts and materials used in daily operations by maintenance.

The current \$1,268,000 funding for the Project is a combination of local surface water funds of \$317,100 and a \$950,900 grant from the Washington State Department of Ecology's Municipal Stormwater Capacity Program. With an engineer's estimate of \$839,129 for construction the Project was first advertised on December 11 and, with Supplemental Bidder Responsibility Criteria added to the contract documents, bids were opened on January 7, 2015. A total of 6 bids were received with Santana Trucking & Excavating being the lowest responsive bidder, as shown in Table 1 below:

Table 1: Bid Summary

Contractor	Amount
<i>Engineer's Estimate</i>	<i>\$839,129</i>
Santana Trucking & Excavating	\$859,542
Faber Construction	\$ 862,766
Gary Harper Construction	\$ 871,627
Interwest Construction	\$ 900,858
R.L. Alia Company	\$ 982,984
Award Construction	\$1,005,489

During the project's design phase, contaminated soils were discovered in the area of the project near Vault #1 (Attachment A). An investigation was subsequently begun to identify the type and extent of contaminants, which were confirmed to be hydrocarbons and oils that likely originated from a former City fueling facility located in the same general area. While the levels discovered technically could require clean-up actions, discussion with the state Department of

Ecology (DOE) resulted in a determination that the contaminated area may be left in-place at this time. The contamination was recorded with DOE, as necessary, and there is a requirement that the information be disclosed and/or mitigated prior to any future sale of the property. The contaminated excavation spoils generated from the Project, if any, will be appropriately handled and disposed of during construction phase.

Due to the discovery of contaminated soils additional engineering costs were incurred during the design phase. These added costs included specialized geotechnical investigations, soils testing, and resultant re-design and enhanced specification efforts. While the DOE is not requiring extensive removal or mitigation efforts for the contamination zone, it is certain that contaminated soils will be encountered and, as a result, it is anticipated that the Project will require additional funding for fulfilling all required protocols for contaminated material handling, tracking and disposal. Other "soft costs" that have led to an increased budget need for the Project include building permit fees of nearly \$22,000 and permit required special seismic structural inspection charges by a qualified consultant for the new decant structure located at the southeast corner of the work zone (Attachment A). As a complex project with multiple components, staff also recommends maintaining a 10% construction contingency for the Project.

As a result of all incurred and anticipated costs, there is currently a projected budget shortfall of \$125,200, as shown in Table 2, and staff has identified Surface Water Reserves as the recommended funding source (Attachment B).

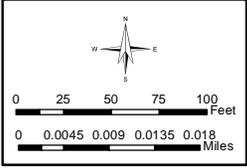
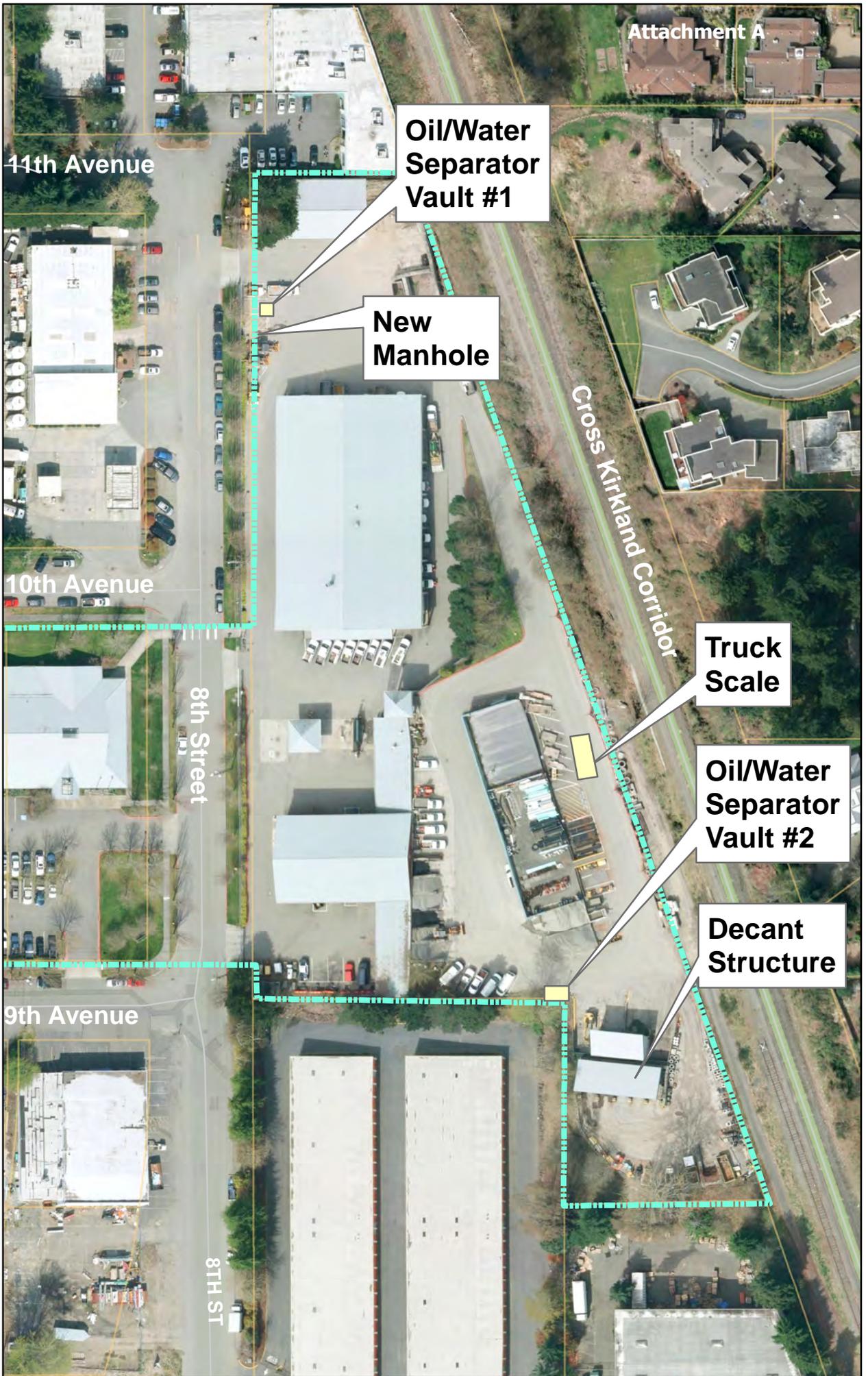
Table 2: Budget

Category	Projected Costs to Complete	Original	Difference	Comments
Engineering	\$ 447,700	\$ 246,200	\$201,500	Increased need due to contaminated soils
Construction	\$ 859,542	\$ 928,800	(\$ 69,258)	Known bid amount
Contingency	\$ 85,958	\$ 93,000	(\$ 7,042)	Maintaining a 10% contingency
TOTAL	\$1,393,200	\$1,268,000	\$125,200	Anticipated need to complete

With a City Council award of the construction contract at the February 3 meeting, construction will begin in early March with a 115 working day schedule. In advance of the construction, staff will renew the public outreach process by notifying adjacent property owners with a mailing describing the upcoming work. Project information, along with a regularly updated construction schedule, will also be posted on the City's web site.

Attachment A: Vicinity Map
Attachment B: Fiscal Note

Kirkland
Storm water
Decant
Upgrades



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Author:
Name: Kirkland Decant upgrade
Date Saved: 10/27/2014 9:21:21 AM

FISCAL NOTE

CITY OF KIRKLAND

Source of Request							
Kathy Brown, Public Works Director							
Description of Request							
Funding for the Decant Facility Upgrade (CSD 0082 000) as described in the attached memo. Request of \$125,200 from the Surface Water Construction Reserve to fully fund the project including a 10% construction contingency.							
Legality/City Policy Basis							
Fiscal Impact							
One-time use of \$125,200 from Surface Water Capital Reserve							
Recommended Funding Source(s)							
<i>Reserve</i>	Description	2015 Est End Balance	Prior Auth. 2015-16 Uses	Prior Auth. 2015-16 Additions	Amount This Request	Revised 2015 End Balance	2015 Target
	Surface Wtr. Const. Rsv.	7,828,203	337,200	0	125,200	7,365,803	N/A
	Prior Authorized Uses of Reserves: Park Lane (\$132,500); 100th Ave Corridor (\$204,700)						
<i>Revenue/Exp Savings</i>							
<i>Other Source</i>							
Other Information							
Prepared By	Tom Mikesell, Financial Planning Manager				Date	January 23, 2015	