

CITY OF COOS BAY CITY COUNCIL
Agenda Staff Report

MEETING DATE June 7, 2016	AGENDA ITEM NUMBER
-------------------------------------	---------------------------

TO: Mayor Shoji and City Councilors

FROM: Jennifer Wirsing, Wastewater Project Engineer

THROUGH: Rodger Craddock, City Manager *see*
Jim Hossley, Public Works Director *JH*

ISSUE: Consideration of Approval of Feasibility Analysis for Isthmus Slough Force Main and Eastside's Pump Station upgrades

BACKGROUND:

In 2010, the City performed a temporary repair on the Isthmus Slough Force Main. This is the sanitary sewer line that is aligned under the slough, near the bridge, that serves Eastside. This force main conveys the sanitary sewer from Eastside and ultimately transmits it to Plant 1. The line under the slough needs to be replaced because it is past its useful life and is over capacity.

The City requested that The Dyer Partnership review the temporary repair and the soils report that was prepared by SHN in 2010. Upon completion of review, Dyer was to provide a recommendation and scope of work for design of a permanent solution. Based on their preliminary review, they are concerned that the construction of a new force main, in the vicinity of the existing force main, may cause a frac-out, which is the inadvertent return of drilling fluid/lubricant. A frac-out would potential cause damage to the water quality in the slough. Additionally, if the force main is upsized it may have adverse impacts at the point where the Bunker Hill flows confluence with the Isthmus Sough Force Main. Dyer has also expressed concern with respect to the capacity of the pumps and wet well of Pump Station 17. Pump Station 17 serves the Isthmus Slough Force Main.

Dyer has proposed that they perform a feasibility analysis that would consist of analyzing the feasibility of lining the existing pipe under the slough, determining an alternate route that would not have significant frac-out concerns, analyzing the hydraulics at the Bunker Hill and Isthmus Slough Force Main confluence, and determining what upgrades, if any, should occur at the pump station. Additionally, they will analyze lining the existing force main and potentially separating the flows (keeping a portion at pump station 17 and conveying it through the newly lined force main and installing a new force main that would serve one of the other pump stations in Eastside).

ADVANTAGES:

Due to the frac-out concerns, along with potentially adversely impacting the flows associated with Bunker Hill Sanitary District, additional analysis is warranted and would be beneficial in determining the best ultimate solution for Eastside.

The loan and grant obtained from IFA is for the completion of a portion of the projects from the City's

20-year take down list for sanitary sewer and storm drain improvements. The upgrade design for Isthmus Slough Force Main is one of the projects from that take down list. If Council approves the award of this contract, the City can complete the project and upgrade and expand the capacity of the force main that serves Eastside thus minimizing the potential for future sanitary sewer overflows.

DISADVANTAGES:

Staff sees no disadvantages.

BUDGET IMPLICATIONS:

Funds for this project will come from the IFA loan, Wastewater Improvement Fund, Wastewater Collection – IFA #1 (29-810-530-3015). The IFA loan budgeted \$650,000 for design and construction of the force main. Dyer's feasibility analysis will cost \$22,782; Staff has recommended a 15% contingency of \$3,417 for a total amount of \$26,199. Upon completion of the alternative analysis, a recommendation for design will be presented to Council. At that time, staff will also present a scope and fee for that recommendation.

ACTION REQUESTED:

If it pleases the City Council, approve the contract for a feasibility analysis for Isthmus Slough Force Main and Eastside's Pump Station Upgrades for an amount not to exceed \$26,199.