

MEMORANDUM

TO: Board of Trustees

THROUGH: Steven J. Pinkerton
General Manager

THROUGH: Joseph J. Pomroy, P.E.
Director of Public Works

FROM: Bradley A. Johnson, P.E.
Director of Asset Management

Michael T. Lefrancois, P.E.
Senior Engineer

SUBJECT: Review, discuss and possibly authorize an Early Opening of the 2017/2018 Capital Improvement Program Budget and Award Multiple Contracts for the 2017 Watermain Replacement and Fire Flow Enhancement Project – 2017/2018 CIP Project: Fund: Utility; Program: Water; Project # 2299WS1703; Vendor: Gerhardt and Berry Construction, Inc. in the amount of \$904,713.80 and Tri Sage Consulting in the amount of \$48,735

STRATEGIC PLAN: Long Range Principle #5 – Assets and Infrastructure

DATE: March 10, 2017

I. RECOMMENDATION

That the Board of Trustees makes a motion to:

1. Authorize an early opening of the 2017/2018 Capital Improvement Program Budget for the 2017 Watermain Replacement and Fire Flow Enhancement Project – 2017/2018 CIP Project: Fund: Utility; Program: Water; Project # 2299WS1703.
2. Award a unit price construction contract to Gerhardt and Berry Construction, Inc. in the amount of \$904,713.80 for the 2017 Watermain Replacement and Fire Flow Enhancement Project.

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Multiple Contracts for the 2017 Watermain
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3. Authorize Chair and Secretary to execute the contract with Gerhardt and Berry Construction, Inc. based on a review by Staff and General Counsel.
4. Authorize Staff to issue change orders to the unit price construction contract for additional work not anticipated at this time of up to 10% of the project bid – \$90,000.
5. Authorize staff to enter into an Additional Services Addendum with Tri Sage Consulting totaling \$48,735 for construction inspection services for the 2017 Watermain Replacement and Fire Flow Enhancement Project.

II. DISTRICT STRATEGIC PLAN

Long Range Principle #5 – Assets and Infrastructure – The District will practice perpetual asset renewal, replacement, and improvement to provide safe and superior long term utility services and recreation activities.

- The District will maintain, renew, expand, and enhance District infrastructure to meet the capacity needs and desires of the community for future generations.
- The District will maintain, procure, and construct District assets to ensure safe and accessible operations for the public and the District's workforce.

III. BACKGROUND

The District maintains approximately ninety miles of watermains to deliver safe and reliable potable water to all areas of Incline Village and Crystal Bay. As a substantial portion of the District was developed using corrosion and leak prone thin wall steel pipe, the District has a robust annual watermain replacement program. Since 1980, the District has replaced nearly forty one miles of steel watermains throughout Incline Village and Crystal Bay. There is approximately six miles of steel watermains (roughly seven percent of the District's total watermain inventory) still slated for replacement.

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The 2017 Watermain Replacement and Fire Flow Enhancement Project will be completed in three schedules. The watermain contained within all three schedules have seen numerous recent leaks and are due for replacement.

Schedule A – Sawmill Road: The work includes replacing 600 linear feet of six inch steel watermain and 985 linear feet of eight inch steel watermain with eight inch C900 PVC watermain, connections to 29 residential service lines, and the installation of three new fire hydrants.

Schedule B – Selby Drive: The work includes replacing 970 linear feet of six inch steel watermain with eight inch C900 PVC watermain and connections to 10 residential service lines.

Schedule C – Pine Cone Road: The work includes replacing 475 linear feet of six inch steel watermain with eight inch C900 PVC watermain, connections to 6 residential service lines, and the installation of one new fire hydrant.

All schedules will improve available fire flows to the area and the project qualifies for up to 50% funding by the United States Forest Service (USFS). Additionally, completing these three schedules will replace the last remaining sections of original thin wall steel watermain in the Mill Creek neighborhood.

This project is included in the proposed 2017/2018 Capital Improvement Program Budget under the Watermain Replacement – Sawmill, Pine Cone, and Selby Roads project. The District had originally planned to complete this work after the start of the new fiscal year with work likely beginning in August and complete by October 15, 2017. However, Washoe County has noticed the District that it intends to complete a stormwater improvement project on Sawmill in June 2017 followed by a paving project on Sawmill, Pine Cone, Selby, and a number of other Mill Creek streets beginning in late July or early August 2017.

In order to avoid schedule conflicts with Washoe County's projects and to avoid cutting into newly restored pavement, the District must complete the watermain work in advance of the start of Washoe County's work. This has meant accelerating the project schedule to allow mobilization by May 1 in order to finish Sawmill Road by June 1 and Pine Cone Road and Selby Drive no later than August 1.

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IV. BID RESULTS

IVGID publicly advertised this project for bidding and plan sets were sent out to sixteen potential bidders and builders' exchanges. Three bids were received and opened on March 9, 2017. The Engineer's estimate for the project was \$887,145. The bid results are as follows:

Contractor	Total Bid Amount
Gerhardt and Berry Construction, Inc.	\$904,713.80
Burdick Excavating Co, Inc.	\$917,365.00
MKD Construction, Inc.	\$929,000.00

The low responsive bidder is Gerhardt and Berry Construction, Inc. District Staff reviewed the bid and checked references for the contractor and recommends award of this project to Gerhardt and Berry Construction, Inc. Gerhardt and Berry Construction, Inc. last worked for the District in 2009 successfully completing the 2009 Watermain Replacement Project. If awarded, the project is scheduled to start as early as May 1, 2017 and be complete and ready for final payment no later than July 28, 2017.

Tri Sage Consulting was selected by District Staff to provide daily construction inspection activities based on the quality and comprehensive project experience of their field staff. Tri Sage has previously worked for the District providing construction inspection activities on the 2014, 2015, and 2016 Watermain Replacement Projects; the Spooner Pump Station Improvements Project; the Burnt Cedar Water Disinfection Plant Improvements Project; and the Water Pump Station 4-1/5-3 Improvements Project.

V. FINANCIAL IMPACT AND BUDGET

This project is included in the proposed 2017/2018 Capital Improvement Program Budget under the Watermain Replacement – Sawmill, Pine Cone, and Selby Roads project (see attached data sheet). There is a total of \$1,122,000 allocated for this project in the proposed 2017/2018 budget.

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The project is eligible for up to 50% funding via the Lake Tahoe Community Fire Prevention Partnership with the USFS. There is \$114,787 available in remaining 2016 grant funds and the USFS has indicated there will be \$115,624 in federal fiscal year 2017 funds allocated to the District via the Partnership for eligible expenditures beginning May 1, 2017. The total grant funding available to support this project is \$230,411.

The total available budget to complete the project is \$1,352,411.

The estimated project construction budget is presented in the following table.

Project Construction Budget

Description	Amount
Construction Contract	\$904,713.80
Construction Contingency at 10%	\$90,000.00
Construction Inspection	\$48,735.00
Estimated Washoe County Street Cut Permits and Pavement Restoration Costs	\$8,600.00
Special Inspection and Materials Testing	\$9,200.00
District Staff Time	\$100,000.00
Project Total	\$1,161,248.80
USFS Share	\$230,411.00
District Share	\$930,837.80

VI. ALTERNATIVES

None; not awarding the contract defers necessary watermain replacement work to later years and would prevent the District from completing work in the Washoe County Right-of-Way in advance of Washoe County's scheduled improvements. Doing so could also mean forgoing \$230,411 in grant funding from the USFS. This project improves critical water infrastructure and increases available fire flows to the community of Incline Village.

VII. COMMENTS

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The District has sent letters to 54 property owners impacted by the project in order to notify them of the upcoming project. The District will conduct additional outreach and communication to residents within the project area in advance of mobilization and throughout the project duration.

VIII. BUSINESS IMPACT

This item is not a “rule” within the meaning of NRS, Chapter 237, and does not require a Business Impact Statement.



Project Summary

Project Number:	2299WS1703	
Title:	Watermain Replacement - Sawmill, Pine Cone, and Selby Roads	
Asset Class:		
Division:	21 - Supply & Distribution	
Budget Year:	2018	
Scenario Name:	Main	Active: Yes
Budget Status:	Data Entry	
Locations:		
Project Something:	WS - Water System	

Project Description

This project is a continuation of the multi-year program to replace 1960's era thin-wall steel watermain and other **deficient watermain**s. Replacement criteria is twofold: Replace those watermain with the most leaks and in streets with aging pavement. Since our water loss is now less than 6%, our main objective is to **work closely** with the Washoe County Road Department to replace watermain just prior to the County's repaving the street. We also work closely with the North Lake Tahoe Fire Protection District to **determine** areas of low fire flow, which may indicate a need for increased capacity in that area. There is approximately 6 miles of old steel watermain remaining in the system.

Our watermain replacement strategy involves meeting with Washoe County prior to each **budget year** and jointly agreeing on **streets** to be paved and watermain to be replaced. This project budgets to replace approx. 6 miles of pipeline in 15 years at \$1,500,000 per mile. Without additional **escalators**, that is \$9,000,000 in 15 years or \$600,000 per year. Adjustments have been made to allow for the trend of a high year then low year of work scheduled.

Project Internal Staff

Engineering will perform Design, Engineering, Bidding, Contract Administration and Inspection **tasks**. Outside **contractor to do the work**. IVGID resources remain available for ongoing maintenance activities and emergency response.

Project Justification

Our overall goal is to replace deficient watermain to keep our **unaccounted for water** loss to under **6%** and to avoid costly pavement patch penalties imposed by Washoe County. The original watermain installed in much of Incline Village in the 1960's were **thin-walled steel**. These pipes are **now** failing repeatedly and need replacement. Washoe County has high pavement penalty costs for replacing watermain in newly paved streets. Replacing watermain in newly paved **streets** or streets **with** an excellent pavement condition could increase project costs by up to 50% due to pavement cut penalties.

Forecast

Budget Year	Total Expense	Total Revenue	Difference
2018			
Construction Inspecting & Testing	85,000	0	85,000
Internal Planning and Design	55,000	0	55,000
Pine Cone Road Watermain Construction	81,000	0	81,000
Sawmill Road Watermain Construction	534,000	0	534,000
Selby Road Construction	297,000	0	297,000
Washoe Co Street Repair and Penalties	70,000	0	70,000
Year Total	1,122,000	0	1,122,000
	1,122,000	0	1,122,000

Year Identified	Start Date	Project Partner	Manager	Est. Completion Date
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2017	Jul 1, 2017		Senior Engineer	Dec 31, 2017
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DRAFT

Watermain Replacement Program

