

**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

Charley Miller, P.E.  
Principal Engineer

**SUBJECT:** Review, discuss and possibly award a Construction Contract for the Water Resource Recovery Facility Access and Decant Improvements Project – 2016/2017 CIP Project: Fund: Utility; Division: Sewer; Project # 2599LI1801; Vendor: Burdick Excavating, Inc. in the amount of \$417,555.

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

**DATE:** June 16, 2017

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**I. RECOMMENDATION**

That the Board of Trustees moves to:

1. Award a construction contract to Burdick Excavating, Inc. in the amount of \$417,555 for the construction of the Water Resource Recovery Facility Access and Decant Improvements Project.
2. Authorize Chair and Secretary to execute the contract based on a review by General Counsel and Staff.
3. Authorize Staff to approve change orders to the construction contract for additional work not anticipated at this time of up to 10% of the project bid – \$41,000.

## **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's Water Resource Recovery Facility (WRRF) property is bisected by the large concrete aeration basins located in the middle of the site. The back of the WRRF property contains a number of critical process equipment and facilities including the clarifiers, the mechanical equipment building, the recirculation pumps, the aeration blowers, the emergency power generator and fuel tank, the effluent storage tank, and the upper emergency effluent storage pond, and the wastewater decant facility. Large vehicle and equipment access to the back of the WRRF property is via a narrow access road that is bordered by the aeration basin walls on one side and a steep cut slope held in place by a wood retaining wall on the other. The narrowness of the access road and the adjacency to critical process infrastructure makes access of large vehicles and heavy equipment to support maintenance, repair, and/or construction activities very challenging particularly during inclement weather and/or at night. Additionally, the wood retaining wall that holds the cut slope in place is in poor condition and, following the severe winter, has collapsed in several locations and must be replaced.

This project will widen the access road and replace and expand the existing retaining wall. The improved access will facilitate on-going WRRF operations and maintenance as well as the planned and budgeted lining of the upper emergency effluent pond as mandated by the Nevada Department of Environmental Protection (NDEP). Additionally, this project will formalize the District's wastewater decant facility to better serve the District's sewer pipeline cleaning and repair operations. Wastewater decanting is the process of separating debris and grit (which must be sent to a landfill) from liquids (which can be processed at the Plant) emptied from the District's Vactor truck following sewer pipeline cleaning and repair operations.

Design of this project was completed via an engineering services contract authorized by the Board of Trustees at the June 24, 2015 meeting. The widened access road and expanded retaining wall will be constructed on the land the District acquired from NV Energy and approved by the Board of Trustees at the March 30, 2016 meeting.

#### **IV. BID RESULTS**

IVGID publicly advertised this project for bidding and plan sets were acquired by seventeen interested bidders and builders' exchanges. Four bids were received and opened on June 15, 2017. The Engineer's estimate for the project was \$350,000. The bid results are as follows:

<b>Contractor</b>	<b>Bid Amount</b>
Burdick Excavating, Inc.	\$417,555
Four Points construction	\$582,550
F.W. Carson Company	\$611,655
MKD Construction	\$677,640

The low responsive bidder is Burdick Excavating. District Staff reviewed the bid and checked references for the contractor and recommends award of this project to Burdick Excavating. Burdick Excavating has successfully completed numerous projects for the District in the past including the 2014 and 2016 Watermain Replacement and Fire Flow Enhancement Projects as well as four of the five phases of the Incline and Third Creeks Restoration Project. If awarded, the project is scheduled to start July 15, 2017 and be substantially complete by October 15, 2017.

#### **V. FINANCIAL IMPACT AND BUDGET**

\$150,000 is included in the 2016/2017 Capital Improvement Program Budget under the Upper Pond Access and Decant Upgrade Improvements Project (Project # 2599LI1801 – see attached data sheet) and an additional \$283,650 carried forward and available from previous fiscal years.

The total available budget to complete the proposed work is \$433,650.

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

### Project Construction Budget

<b>Description</b>	<b>Amount</b>
Construction Contract	\$417,555
Construction Contingency at 10%	\$41,000
Design Services During Construction	\$16,690
Special Inspection and Materials Testing	\$7,500
District Staff Time	\$15,000
<b>Estimated Project Total</b>	<b>\$497,745</b>

The total estimated project budget to complete the proposed work is \$497,745 and, if the contract is approved, the additional \$64,095 will come from the Utility Sewer Fund reserves where there is an adequate available projected fund balance of \$13,660,804 (\$12,026,276 from the June 30, 2016 audit plus \$1,869,600 from the recently adopted budget projected results for June 20, 2017 less \$235,072 for the unbudgeted WRRF Low Pressure Air System Improvements Project approved by the Board on June 12, 2017.

#### **VI. ALTERNATIVES**

None. Following the severe winter, the existing retaining wall at the WRRF is failing in several locations and must be replaced to maintain safe passage to the backside of the WRRF. Additionally, lining of the upper emergency effluent storage pond, as mandated by the NDEP, depends on the access improvements associated with this project.

#### **VII. BUSINESS IMPACT**

This item is not a "rule" within the meaning of Nevada Revised Statutes, Chapter 237, and does not require a Business Impact Statement.



## Project Summary

<b>Project Number:</b>	2599L11801	<b>Active:</b>	Yes
<b>Title:</b>	Upper Pond Access and Decant Upgrade Improvements		
<b>Asset Class:</b>			
<b>Division:</b>	99 - General Administration		
<b>Budget Year:</b>	2017		
<b>Scenario Name:</b>			
<b>Budget Status:</b>	Data Entry		
<b>Locations:</b>			
<b>Project Something:</b>	LI - Land Improvements		

<b>Project Description</b>				
<p>The wastewater treatment plant operates two large pond/basins for emergency storage. The primary pond is the Upper Pond located directly south of the Wastewater Treatment Plant (WWTP). This man made basin is capable of holding approximately 2.8-million gallons. It is primarily used to store treated effluent during emergency periods when the effluent export system has been shut down for an extended period. The project budget allocated in Year 1 provides for the construction of a decant facility, access improvements, and retaining wall repair and replacement. If the Nevada Division of Environmental Protection requires a lining of the upper Pond, that work will be covered under the 2524SS1010 Effluent Export Line - Phase II.</p>				
<b>Project Internal Staff</b>				
Engineering Division Staff will manage and oversee this project.				
<b>Project Justification</b>				
<p>Maintenance and Equipment access to the Upper Pond is via a narrow roadway that is hemmed in by a retaining wall supported hillside on one side and WWTP facilities on the other. The width of the roadway makes large equipment access challenging and dangerous. Additionally, the retaining wall on the hill side of the road is in poor condition and is in need of repair. At present the District has no formal means for decanting raw sewage from a Vactor Truck into the Treatment Plant which necessitates off-site disposal of the materials at considerable time and expense.</p>				
<b>Forecast</b>				
<b>Budget Year</b>	<b>Total Expense</b>	<b>Total Revenue</b>	<b>Difference</b>	
2017				
Construction	150,000	0	150,000	
Year Total	150,000	0	150,000	
	150,000	0	150,000	
<b>Year Identified</b>	<b>Start Date</b>	<b>Project Partner</b>	<b>Manager</b>	<b>Est. Completion Date</b>
2014			Director of Asset Management	Dec 31, 2016