

**AGENDA**

**ENGINEERING COMMITTEE MEETING  
LEUCADIA WASTEWATER DISTRICT**  
Wednesday, December 7, 2016 – 9:00 a.m.  
1960 La Costa Avenue, Carlsbad, CA 92009

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1. **Call to Order**
2. **Roll Call**
3. **Public Comment**
4. **New Business**
  - A. Authorize the General Manager to execute an Agreement with Insituform Technologies for construction services to complete the Leucadia Scenic Cured-In-Place Lining Project in an amount not to exceed \$172,602. (Pages 2 - 8)
  - B. Authorize the General Manager to execute a purchase Agreement with Charles King Company for the purchase of a new trailer mounted engine driven pump in an amount not to exceed \$47,668.78. (Pages 9 - 10)
5. **Information Items**
  - A. Village Park No. 5 Pump Station Replacement Project status update. (verbal)
6. **Director's Comments**
7. **General Manager's Comments**
8. **Adjournment**

**MEMORANDUM**

**DATE:** December 1, 2016  
**TO:** Engineering Committee  
**FROM:** Paul J. Bushee, General Manager   
**SUBJECT:** **Leucadia Scenic Cured-In-Place Pipe (CIPP) Lining Project Construction Contract**

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**RECOMMENDATION:**

Staff requests that the Engineering Committee recommend that the Board of Directors:

1. Authorize the General Manager to execute an Agreement with Insituform Technologies for construction services to complete the Leucadia Scenic Cured-In-Place Lining Project in an amount not to exceed \$172,602.
2. Discuss and take other action as appropriate.

**BACKGROUND:**

**Tactical Goal: Infrastructure and Technology / L1 Force Main West Section Replacement**

In March 2015 the Board authorized an Agreement with IEC to design the Leucadia (L1) Force Main West Section Replacement Project. The project will replace the L1 Force Main in La Costa Avenue from the southbound Interstate 5 (I-5) connector ramps west to Highway 101. The work adjacent to the I-5 connector ramps require a Caltrans right-of-way (ROW) Permit. Obtaining the Caltrans ROW Permit extended the design phase because of the painstaking and time consuming approval process.

Subsequently, in July 2015 the Board authorized the execution of an agreement with IEC to design the 2016 Gravity Pipeline Rehabilitation Project. Originally, the Cured-in-Place Pipe (CIPP) lining of the Leucadia Scenic gravity line was included in that project. The Leucadia Scenic line runs adjacent to the on ramp to southbound I-5 from La Costa Avenue and east under I-5. Please refer to the diagram below.





Due to the location of the work, it was removed from the 2016 Gravity Pipeline Rehabilitation Project and transferred to the L1 Force Main Replacement Project to encompass the combined work under a single Caltrans ROW permit. Additionally, this would enable a single contractor to complete the CIPP lining of the segment in La Costa Avenue for added structural integrity of the gravity line prior to the open trench replacement of the adjacent L1 Force Main.

The design for the L1 Force Main West Section Replacement Project, including an approved Caltrans ROW Permit, was completed and put out for bids in September 2016. Bids were due on November 3, 2016 and two bids were received. The two bids were significantly higher than the Engineer's Estimate of \$1.4M. The bid submitted by Burtech Pipeline was 39.6% higher at \$1,954,550 and SC Valley Engineering was 61.3% higher at \$2,258,500. As a result of the high bids and minimal competition on the bid solicitation, Staff rejected the two submitted bids and

separated out the CIPP lining portion of the project into the Leucadia Scenic CIPP Lining Project. The bid solicitation for L1 Force Main west section replacement portion of the project was performed separately at a later date.

**DISCUSSION:**

In November, IEC finalized the plans and specifications for Leucadia Scenic CIPP Lining Project. The project was advertised for bid on November 14<sup>th</sup> with bids due on November 29<sup>th</sup>. Three bids were received with the following results:

<u>Construction Firm</u>	<u>Bid Submitted</u>
Insituform Technologies	\$172,602
Nu Line Technologies	\$183,210.75
Southwest Pipeline	\$297,438

The bids were reviewed by Marie Fawcett, Jamie Fagnant and Robert Weber at IEC. The bid review memorandum is attached for your review. Based on the required documents submitted with their bid, Insituform has the requisite knowledge and experience to perform the work on the project. Additionally, Insituform successfully completed the CIPP lining and Cured-In-Place Manhole lining installations on the District's Scott's Valley Rehabilitation Project in March 2016. The bid submitted by Insituform Technologies (Insituform) was 51% lower than the Engineer's Estimate of \$350,000.

As a result of their evaluation, IEC recommends that Insituform be awarded the contract as the lowest responsive and responsible bidder. Staff concurs with IEC's assessment and recommends that the Board award the construction contract for the Leucadia Scenic CIPP Lining Project to Insituform Technologies in an amount not to exceed \$172,602.

**FISCAL IMPACT:**

The FY 17 budget contains sufficient funds to cover the construction of the Project.

PJB:rym

Attachment





***BID REVIEW MEMORANDUM***

Date: November 30, 2016

**Subject: Leucadia Scenic Cured-in-Place Pipe Lining Project**

Prepared By: Marie Fawcett, EIT  
Reviewed By: Jamie Fagnant, PE and Robert Weber, PE

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**PURPOSE**

This memorandum provides a summary of our evaluation of bid results and the responsiveness of the submitted bids for the subject project.

**BID RESULTS**

Three bids were received and opened on November 28<sup>th</sup>, 2016. The bids are summarized on Table 1 - Bid Summary (see attached) and characteristics of the bids are as follows:

Low Bid (Insituform):	\$172,602
2 <sup>nd</sup> Lowest Bid (NuLine):	\$183,211
High Bid (Southwest Pipeline):	\$297,238
Engineer's Opinion of Probable Cost:	\$350,780

This project was originally bid in conjunction with the L1 Force Main West Side Replacement Project. However, upon review of the bids received it was apparent that inclusion of the lining work as part of the larger force main project resulted in unusually elevated bids and a small pool of bidders. The initial bids on this larger project were rejected and the project repackaged to split the lining portion of the project out from the force main replacement. This resulted in significantly lower bids as shown above.

**REVIEW OF LOW BIDDER**

Insituform Technologies, LLC. (Insituform or Contractor), Chesterfield, Missouri, submitted the apparent low bid. IEC has reviewed Insituform's bid and recommends the District award the project to Insituform for the following reasons:

**Contractor's License:** The Contractor holds the required Class A License (No. 758411). The license is current and active.

**Bid Bond:** A bid bond in the amount of ten percent (10%) of the bid amount was submitted with Travelers Casualty and Surety Company of America as surety. Travelers Casualty and Surety Company of America has a Best's Key Rating of A++, XV

**Signatures:** The Contractor's Contracting & Attesting Officer, Ursula J. Youngblood signed the Closing Statement and Non-Collusion Affidavit. Ursula J. Youngblood and the Contractor's Attorney-in-Fact, Barbara Buchhold, signed the Bidder's Bond.

**Project Manager's Experience:** The Contractor has identified Seth Ganesan as the project manager. His resume has been enclosed as part of the bid documents. IEC has reviewed his resume and found his experience suitable to manage the Leucadia Scenic Cured-in-Place Pipe Lining Project.



**Approach to Work:** The Contractor addressed the anticipated project issues as required in the Approach to Work section of the Bid Documents. IEC followed up with Insituform via a phone call on November 29, 2016 to confirm that Insituform fully understood the complex bypass situation on the project, part of which is expected to require a trucked bypass to line the sewer leading to and crossing under Interstate 5. Terry Henry of Insituform confirmed that they were prepared to perform the work for the bid amount provided and that the trucked portion of the bypass would be performed utilizing vector trucks by Insituform and their subcontractor, Tunnelworks.

**Worker's Compensation Insurance:** Policy is in affect through 07/01/2017. The most recent workers' compensation experience modification factor for Insituform is 0.80%.

**Experience Requirements:** The bid documents require the Contractor to submit three project references where the Contractor was required to install at least 1,500 linear feet cured-in-place-pipe (CIPP) lining into a 12 inch or greater diameter pipe, and perform sewer bypassing of 1 MGD or greater, without spill, in each project. Insituform provided the requisite project references.

**References:** IEC contacted Insituform's listed references to perform an assessment of the Contractor's prior work. In all cases, Insituform was recommended as a good contractor with no record of claims.

**Registration with the Department of Industrial Relations (DIR):**

As of 03/01/2015 contractors and their subcontractors are required to be registered with the DIR prior to bidding a public works project. The table below demonstrates that Insituform and each of its subcontractors have met this requirement.

Contractor Legal Name	Registration Number	Registration Date	Expiration Date
Insituform Technologies, LLC.	1000009689	05/10/2016	06/30/2017
Tunnelworks Services, Inc.	1000020031	08/08/2016	06/30/2017

Source: <https://efiling.dir.ca.gov/PWCR/Search.action>

**List of Subcontractors:**

Contractor Legal Name	Location of Business	Portion of Work
Tunnelworks Services, Inc.	Whittier, CA	Clean & CCTV

At this time, IEC has no concern regarding the Contractor's ability to complete the work for the cost given.



**RECOMMENDATION**

IEC recommends award of the contract to Insituform Technologies, LLC. based on their knowledge and experience record and responsiveness to the bidding requirements.

Attachments

Table 1 – Bid Summary

**LEUCADIA WASTEWATER DISTRICT  
LEUCADIA SCENIC CURED-IN-PLACE PIPE LINING PROJECT  
Table 1 - Bid Summary**

Item	Article	Unit	Qty.	Engineer's Opinion of Probable Construction Cost	Insituform Technologies	Nuline	Southwest Pipeline
1	Mobilization, Bonds, Permits, Cleanup and Demobilization	LS	1	\$16,000	\$7,000	\$3,000	\$8,000
2	Traffic Control	LS	1	\$25,000	\$12,200	\$2,000	\$44,000
3	Cured-in-Place Pipe Lining	LF	2019	\$242,280	\$117,102	\$149,911	\$205,938
4	Remotely Grind Concrete/Encrustation	EA	160	\$60,000	\$28,800	\$20,800	\$32,000
5	Allowance - Caltrans Inspection Fees	LS	1	\$7,500	\$7,500	\$7,500	\$7,500

**TOTAL:**                    \$350,780                    \$172,602                    \$183,211                    \$297,438

Check Total:                    \$172,602                    \$183,211                    \$297,438

Amount in Words:                    \$172,602                    \$183,211                    \$297,438

<b>Engineer's Opinion of Probable Construction Cost</b>
\$350,780



**MEMORANDUM**

DATE: December 1, 2016  
 TO: Engineering Committee  
 FROM: Paul J. Bushee, General Manager   
 SUBJECT: **Trailer Mounted Engine Driven Pump – Purchase Award**

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**RECOMMENDATION:**

Staff requests that Engineering Committee recommend that the Board of Directors:

1. Authorize the General Manager to execute a purchase Agreement with Charles King Company for the purchase of a new trailer mounted engine driven pump in an amount not to exceed \$47,668.78.
2. Discuss and take other action as appropriate.

**DISCUSSION:****Tactical Goal: Services / Purchase New Portable By-Pass Pump**

The District currently owns and maintains a 1996 Rain-For-Rent trailer mounted portable diesel engine driven pump (Portable Pump) for use in emergency situations, such as to by-pass flow around a collapsed mainline or a pipeline blockage that cannot immediately be cleared. Additionally, the Portable Pump can be used to by-pass a satellite pump station in emergency situations when a pump station is inoperable due to mechanical or electrical failure until normal service is restored.

Although it is still operable, the current Portable Pump has reached the end of its useful life. Additionally, on January 1, 2017 stricter air pollution control requirements for portable diesel engines that power portable pumps will take effect. The current Portable Pump does not meet the new air pollution control standards. Staff researched the option to recondition or overhaul the Portable Pump. The cost to retrofit the pump to meet the stricter requirements exceeded 60% of the estimated cost of a new pump. Based on these factors, staff determined it is prudent to procure a new Portable Pump to replace the existing one.

Staff, with the assistance of District Engineer (DE) Steve Deering, determined the specifications of a portable trailer mounted diesel engine driven pump that would meet the District's needs. Based on those specifications, three pumps from competing manufacturers were identified as meeting the hydraulic and pressure capacity needs of the District. Staff prepared and issued the Request-For-Bids to the three pump suppliers in compliance with the District's Procurement Policy.

All three suppliers responded to the bid solicitation and submitted sealed bids as follows:

<b>PUMP SUPPLIER</b>	<b>BID PRICE</b>	<b>DELIVERY TIME</b>
Charles King Company	\$ 47,668.78	8 weeks
Godwin	\$ 58,000.00	12 weeks
Rain For Rent	\$ 67,349.99	12 to 14 weeks

It should be noted that Charles King Company (CKC) was the only bidder that provided a credit for removal of the existing trailer mounted pump. Therefore, the CKC bid of \$47,668.78 includes a credit of \$1,500 subtracted from the actual pump price of \$49,168.78.

DE Deering evaluated the bid packages and determined that CKC, as the apparent low bidder, submitted all information requested in the bid solicitation and met or exceeded the specified pump criteria. For example, CKC proposed a CA6NM stainless steel pump impeller, which has superior resistance to possible cavitation damage when compared to the bid specified Type 316 stainless steel. It is important to note that the District will be trading in the current trailer mounted portable pump.

Therefore, Staff has determined that CKC is the lowest responsive responsible bidder and recommends that the Board approve the purchase of a new trailer mounted engine driven pump from Charles King Company in an amount not to exceed \$47,668.78.

**FISCAL IMPACT:**

The FY 17 Capital Acquisition Budget includes sufficient funding for the purchase of this replacement portable engine driven pump.

PJB:js