


AGENDA

**ENGINEERING COMMITTEE MEETING
LEUCADIA WASTEWATER DISTRICT
Wednesday, May 7, 2014 – 8:30 a.m.
1960 La Costa Avenue, Carlsbad, CA 92009**

- 1. Call to Order**
- 2. Roll Call**
- 3. Public Comment**
- 4. New Business**
 - A. Receive and file the 2014 Pump Stations Assessment Report completed by Infrastructure Engineering Corporation. (Pages 2 - 4)
- 5. Information Items**
 - A. La Costa Pump Station Rehabilitation Project - Completion (Page 5)
 - B. Gravity Line Rehabilitation Project - Verbal Report
 - C. B2 Force Main Replacement Project - Verbal Report
- 6. Director's Comments**
- 7. General Manager's Comments**
- 8. Adjournment**

MEMORANDUM

DATE: April 30, 2014
TO: Engineering Committee
FROM: Paul J. Bushee, General Manager 
SUBJECT: 2014 Pump Station Condition Assessment Report

RECOMMENDATION:

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

1. Receive and file the 2014 Pump Stations Assessment Report completed by Infrastructure Engineering Corporation.
2. Discuss and take other action as appropriate.

DISCUSSION:

The 2013 Asset Management Plan (AMP) recommended that the District complete a pump station condition assessment during Fiscal Year 2014 to identify pump station rehabilitation projects for the District's Capital Improvement Program (CIP). To implement this recommendation, in June 2013 staff executed an agreement with Infrastructure Engineering Corporation (IEC) to conduct the 2014 Pump Stations Assessment. IEC has completed their assessment and has submitted a report of their findings and recommendations.

The assessment team consisted of personnel from both the District and IEC as follows:

District

Jeff Stecker
 Marvin Gonzalez
 Steve Krason

IEC and Subcontractors

Jim Ashcraft
 Jamie Fagnant
 Joe Moraes (Moraes Pham & Associates)
 Randy Geving (RF Yeager Engineering)

IEC collected input from District staff and conducted pump station site visits. IEC then categorized their findings into discrete and clearly defined projects that are recommended for the District to accomplish in the next five years. The recommended projects for Fiscal Year 2015 (FY15) are as follows:

- Encina Effluent Pump Station (EEPS) Rehabilitation
- Saxony Pump Station Rehabilitation
- Replace Two Variable Frequency Drives (VFD) at Leucadia Pump Station
- Annual Cathodic Protection Inspection of the Batiquitos (B2 and B3) and Leucadia (L1 and L2) Force Mains and Satellite Pump Stations

The projects for ensuing fiscal years are listed in the report's executive summary, attached for your review. A copy of the report is available upon request.

In regards to EEPS, this year's budget (FY 14) included several items that have been identified in the Pump Station Assessment Report and staff has begun to make these improvements. The remainder of items related to EEPs have been included in the Proposed FY 15 Budget and will be reviewed by the Board at the May 6th Budget Workshop.

Additionally, IEC recommended the District consider the eventual phase out of the existing Smith & Loveless "Packaged" pump stations, such as the Encinitas Estates Pump Station, and replace them with submersible pump stations for the following reasons:

1. the "packaged" pump stations are nearing the recommended design life for their cast in place concrete wet wells
2. provide a safer working environment for Field Service staff
3. provide an alternative to sole source retrofitting from Smith & Loveless for future rehabilitation
4. simplify maintenance and operation

IEC recommended that the replacement of the four Smith & Loveless pump stations be completed in phases, with two being replaced in the next 5 years and the remaining two in 20 years.

Jamie Fagnant, IEC, will present an overview of the report at the meeting.

rym:PJB

Attachment


EXECUTIVE SUMMARY

IEC has compiled input from site visits to pump stations and input from District staff into 17 discrete and clearly defined capital improvement projects recommended for the District to pursue in the next five years. The projects are summarized in the below table.

FISCAL YEAR	PROJECT	ESTIMATED COST
14/15	Encina Effluent Pump Station Rehabilitation	\$283,905
14/15	Saxony Pump Station Rehabilitation	\$592,110
14/15	Leucadia PS Variable Frequency Drive (VFD) Replacement	\$267,300
14/15	Annual Cathodic Protection Inspection	\$7,500
15/16	Leucadia Pump Station Improvements	\$206,550
15/16	Encinitas Estates and Village Park 5 Pump Station Replacements	\$1,553,580
15/16	Batiquitos PS VFD Replacement	\$267,300
15/16	Annual Cathodic Protection Inspection	\$7,500
16/17	Avocado and Diana Main Breaker Replacement	\$118,260
16/17	Systemwide Control Upgrades	\$641,520
16/17	Annual Cathodic Protection Inspection	\$7,500
17/18	Leucadia PS VFD Replacement	\$267,300
17/18	Village Park 7 Rehabilitation	\$621,270
17/18	Annual Cathodic Protection Inspection	\$7,500
18/19	Leucadia Pump Station Structural Assessment	\$15,600
18/19	Rancho Verde Pump Station Improvements	\$156,816
18/19	Annual Cathodic Protection Inspection	\$7,500
	Subtotal Wastewater	\$4,745,106
	Subtotal Recycled Water	\$283,905

IEC recommends the District phase out the existing Smith & Loveless metal can pump stations including Encinitas Estates, Village Park 5, Village Park 7 and La Costa Pump Stations, because these four pump stations are nearing the recommended design life for their cast in place concrete wet wells, to provide a safer working environment for District staff and to provide an alternative to sole source retrofitting from Smith & Loveless for future rehabilitation. To spread out the additional capital improvement costs it is recommended that the District pursue replacing Encinitas Estates and Village Park 5 in the next five years and La Costa and Village Park 7 in approximately 20 years.

MEMORANDUM

DATE: April 30, 2014
TO: Engineering Committee
FROM: Paul J. Bushee, General Manager 
SUBJECT: La Costa Pump Station Project – Project Completion

RECOMMENDATION:

1. This item is presented for information purposes.

DISCUSSION:

Piperin Corporation completed work on the La Costa Pump Station Rehabilitation Project on April 18, 2014. This project consisted of installing two replacement pumps, replacing plug and check valves, installing a cathodic protection system, and replacing the programmable logic control (PLC). Staff filed the Notice of Completion with the County of San Diego on April 22, 2014. Four change orders totaling \$29,709.47 were issued during the project. The change order total was 12.3% of the original contract amount of \$242,000. Therefore, the final project cost was \$271,709.47.

rym:PJB