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City of Oxnard

Public Works Integrated Master Plan

WASTEWATER

**PROJECT MEMORANDUM 3.9
CATHODIC PROTECTION ASSESSMENT**

FINAL DRAFT
December 2015



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CATHODIC PROTECTION ASSESSMENT

1.0 INTRODUCTION

As part of the Public Works Integrated Master Plan (PWIMP), JDH Corrosion Consultants, Inc. (JDH) was contracted to conduct an asset corrosion assessment and CP evaluation survey for both the water and wastewater infrastructure within the City of Oxnard (City). Water transmission mains, water and wastewater treatment facilities, and other important City assets were included in this report. A survey was done to assess the existing level of cathodic protection and recommendations were made that outline needed improvements. The combined water and wastewater report (September 2014) can be found in Appendix A of Project Memorandum (PM) 2.7.

1.1 PMs Used for Reference

The findings outlined in the Cathodic Protection Assessment were made in concert with recommendations and analyses from other related PMs:

- PM 2.1 - Water System - Background Summary.
- PM 2.4 - Water System - Condition Assessment.
- PM 2.7 - Water System - Cathodic Protection Assessment.
- PM 3.1 - Wastewater System - Background Summary.
- PM 3.5 - Wastewater System - Condition Assessment.

2.0 FINDINGS

Below is a summary of the findings and recommendations for the City's wastewater infrastructure as it relates to cathodic protection:

- General Wastewater Treatment Plant: Most all piping tested did not meet NACE Criteria for protection. Thus a complete replacement of the entire cathodic protection system plant-wide is recommended immediately.
- Clarifiers and Digesters: Currently no cathodic protection exists at these facilities. It is recommended that cathodic protection be installed for the submerged surfaces of metallic components at these locations.

In addition to the projects recommended above, this PWIMP also recommends conducting an annual cathodic protection survey and report for all City facilities. A more detailed discussion of these findings and their associated costs can be found in Supplemental Report (August 2015) in Appendix B of PM 2.7.