



NORTH TRUNK SEWER REPLACEMENT – MENDOCINO AVE TO TERRA LINDA DR PROJECT

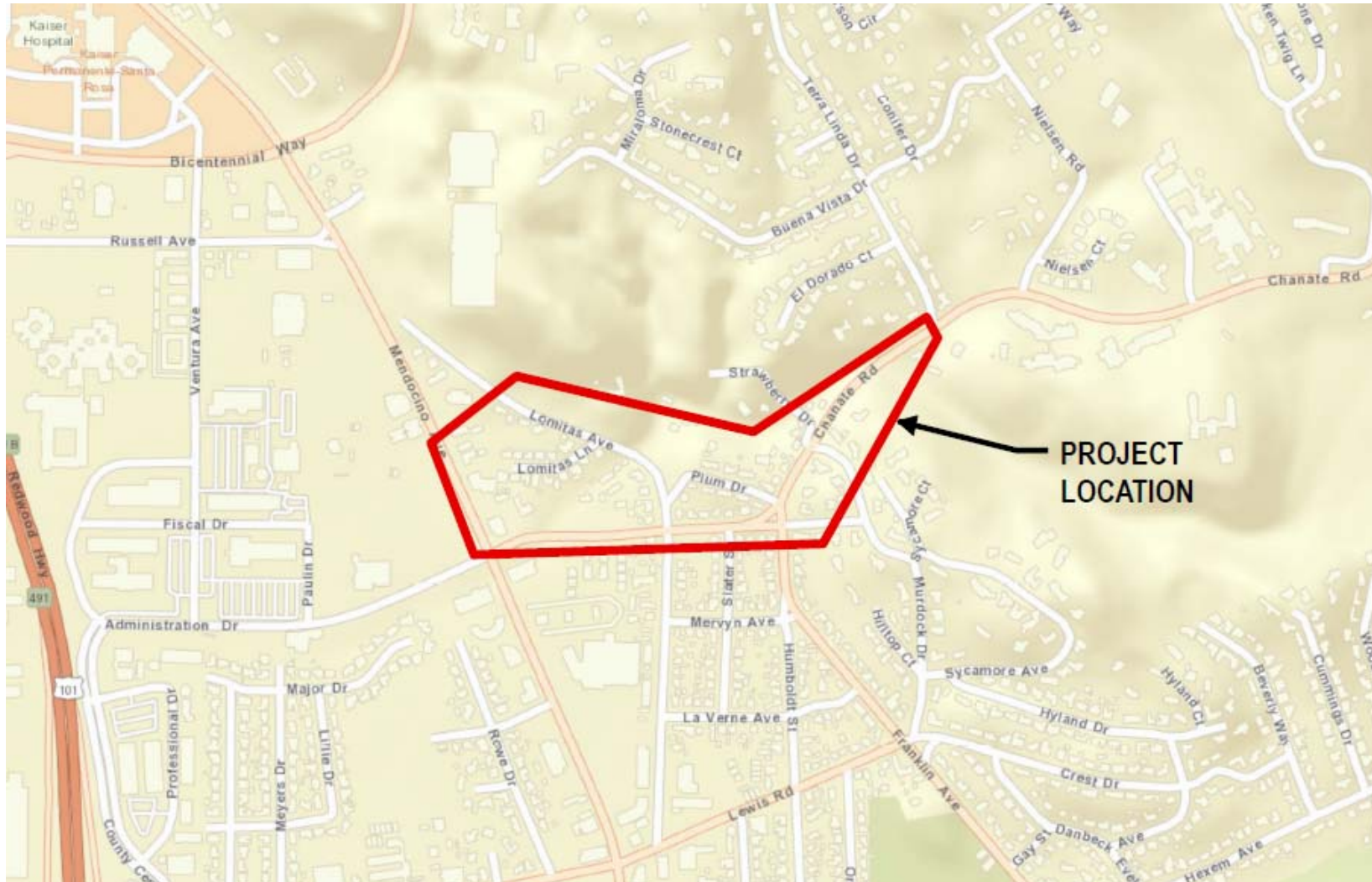
Board of Public Utilities
March 21, 2019

Tracy Duenas
Supervising Engineer
Transportation and Public Works

Objectives

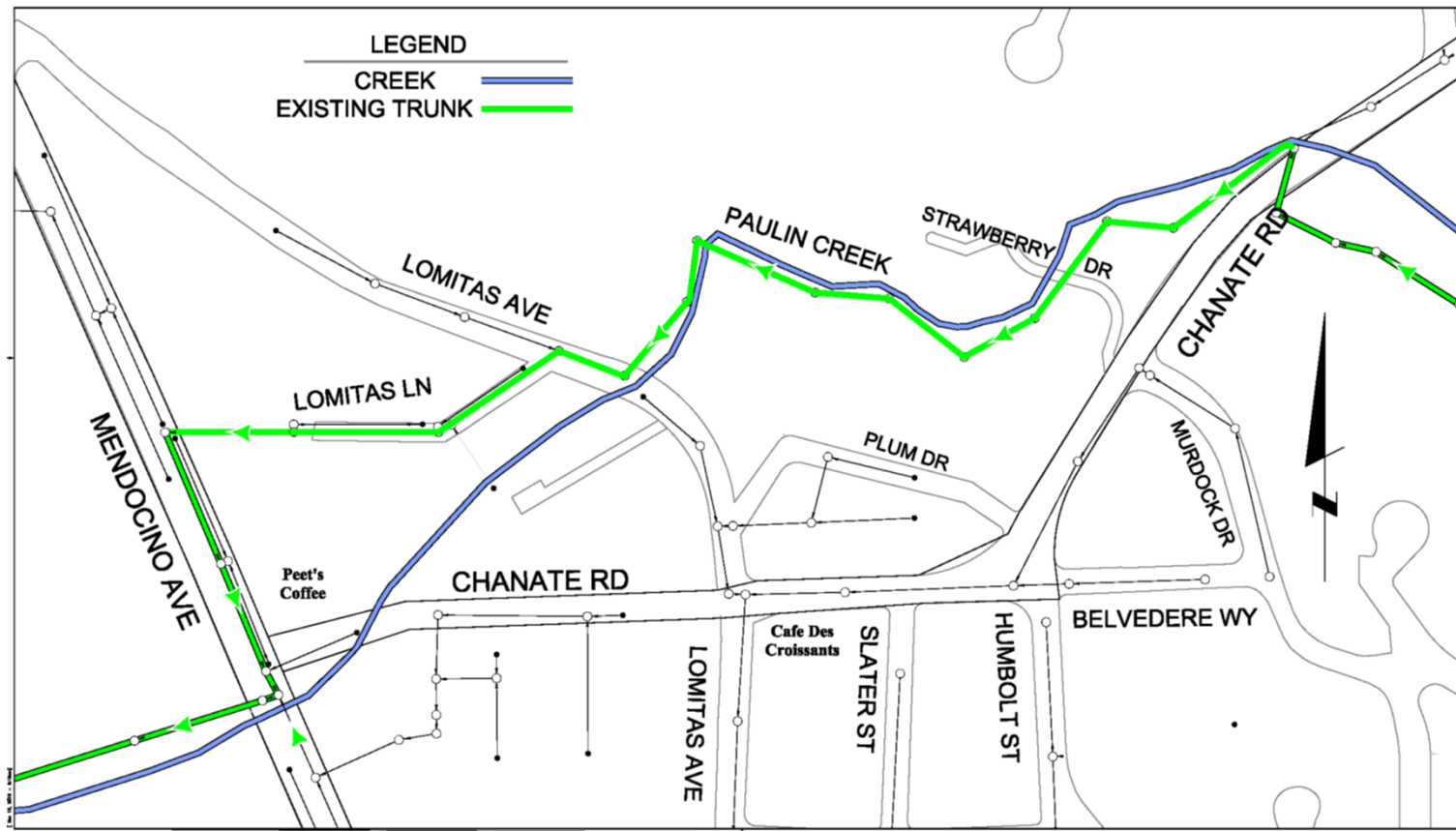
- Project Background
 - Feasibility Analysis
 - Proposed Improvements
- Initial Study/Proposed Mitigated Negative Declaration (IS/Proposed MND)
- Recommendations

Project Background



Project Background

Existing Trunk Sewer and Creek



Project Background

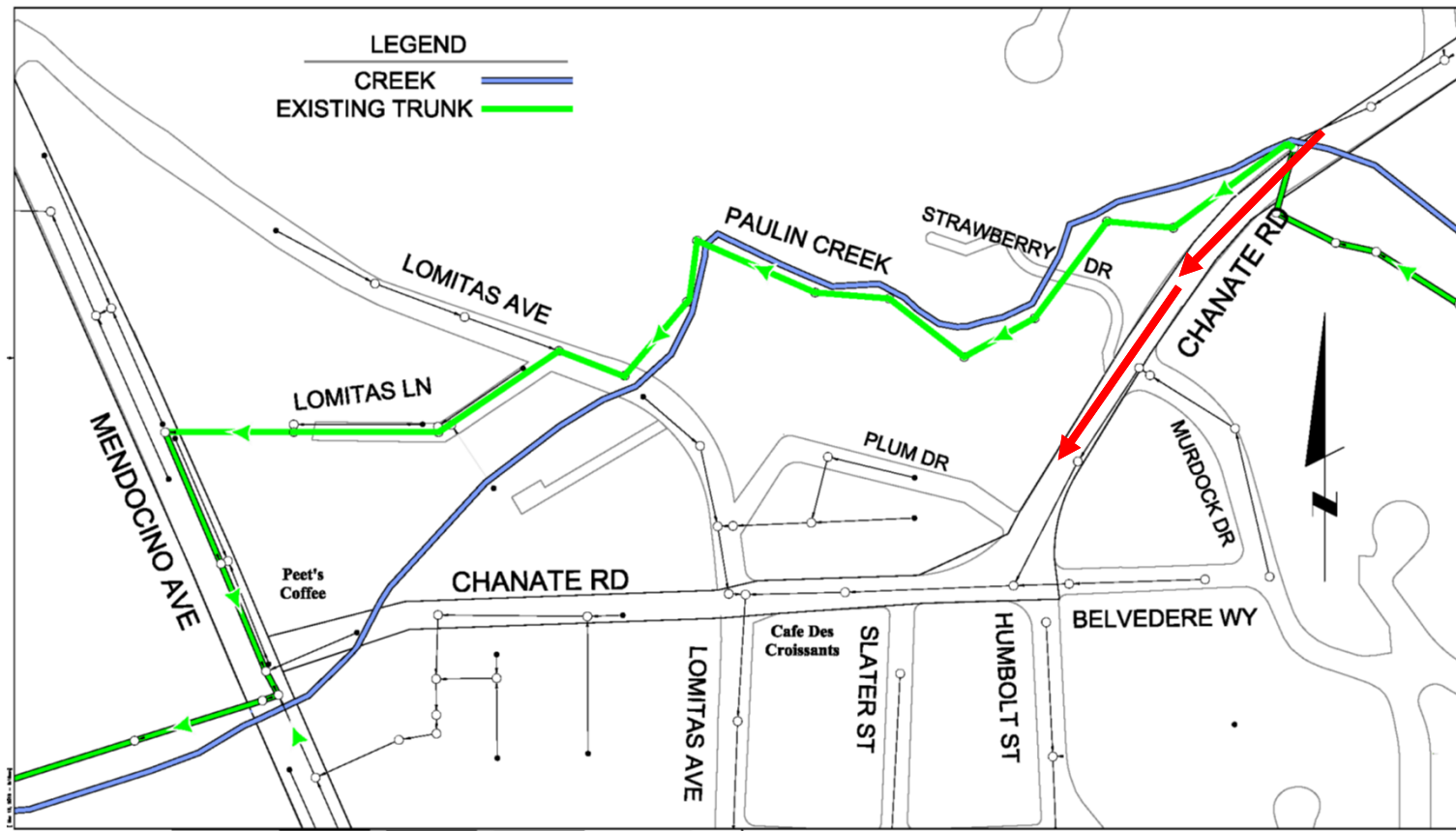
Existing Trunk Sewer and Creek

- Limited Access
- Age
- Risks



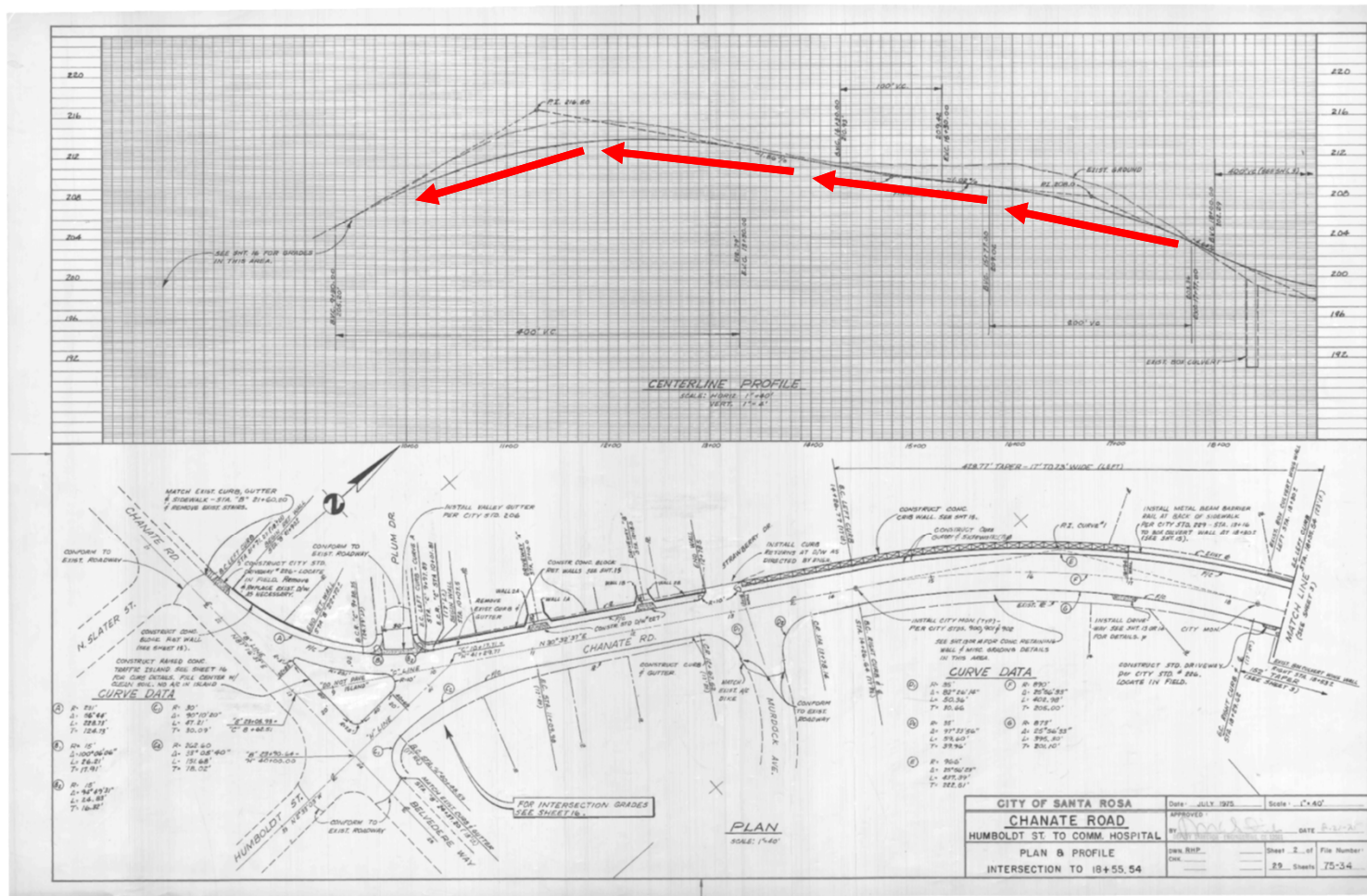
Project Background

Existing Trunk Sewer and Creek



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Existing Trunk Sewer and Creek



Project Background

Feasibility Analysis

DCM Consulting
P.O. Box 225, Lafayette, CA 94549, Tel: 925-281-1100

To: Alex Culick
GHD, Inc.

From: Dave Mathy
DCM Consulting, Inc.

Subject: Geotechnical Investigation
North Trunk Sewer Replacement
City of Santa Rosa

March 19, 2012
File: 548.10a1r.doc

City of Santa Rosa
Engineering Development Section
69 Stony Circle
Santa Rosa, California 95407

Attn: Mr. Tracy Duenas

Re: Geotechnical Report
Chanate Road - New
Santa Rosa, California

1.0 INTRODUCTION

This Geotechnical Design Study is a geotechnical and trenchless Replacement Project. The 15-inch and 18-inch inside-diameter and beneath Lomas Avenue trunk pipelines will be installed along Lomas Avenue and Strathmore Avenue.

- approximately 147 feet
- approximately 465 feet
- approximately 177 feet
- approximately 310 feet
- approximately 2,200 feet

The project designer is GHD, Inc. The project was completed in 2015, has been complete investigation for the project completed as groundwater along and near the project design plans completed by GHD, Inc. in January, 2015.

All references to the project diameter, pipeline alignment, and other information are as shown on the project design plans, dated January, 2015.

Miller Pacific Engineering Group
554 Redwood Blvd., Suite 100, Santa Rosa, CA 95407

March 19, 2012
File: 548.10a1r.doc

City of Santa Rosa
Engineering Development Section
69 Stony Circle
Santa Rosa, California 95407

Attn: Mr. Tracy Duenas

Re: Geotechnical Report
Chanate Road - New
Santa Rosa, California

Introduction

This letter summarizes our geotechnical investigation of the North Trunk Sewer project located at Chanate Road, Santa Rosa, California.

The purpose of our investigation is to provide recommendations for the design and construction of the North Trunk Sewer project. The project involves the replacement of the existing distribution system (15-inch and 18-inch inside-diameter) with new 15-inch and 18-inch inside-diameter trenchless installed (Trenchless Installed) (TI) and open-cut and trenchless installed (OTI) methods. Preliminary plans for the project were prepared by GHD, Inc. in January, 2015.

Regional Geology

The site is located within the topography is characterized by valleys that were formed by the erosion of the surrounding hills.

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The purpose of this Technical Memorandum is to provide the City of Santa Rosa with the geotechnical investigation results for the North Trunk Sewer Replacement Project. The project includes the replacement of the existing distribution system (15-inch and 18-inch inside-diameter) with new 15-inch and 18-inch inside-diameter trenchless installed (Trenchless Installed) (TI) and open-cut and trenchless installed (OTI) methods. Preliminary plans for the project were prepared by GHD, Inc. in January, 2015.

2.0 HISTORIC EARTHQUAKE PERFORMANCE

The purpose of this section is to provide the City of Santa Rosa with the geotechnical investigation results for the North Trunk Sewer Replacement Project. The project includes the replacement of the existing distribution system (15-inch and 18-inch inside-diameter) with new 15-inch and 18-inch inside-diameter trenchless installed (Trenchless Installed) (TI) and open-cut and trenchless installed (OTI) methods. Preliminary plans for the project were prepared by GHD, Inc. in January, 2015.

Miller Pacific Engineering Group
554 Redwood Blvd., Suite 100, Santa Rosa, CA 95407

February 27, 2015
File: 1206.175a1r.doc

GHD
2235 Mercury Way Suite 150
Santa Rosa, California 95407

Attn: Mr. Alex Culick, P.E.

Re: Geotechnical Investigation
North Trunk Sewer Replacement
Santa Rosa, California

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DCM Consulting, Inc.
P.O. Box 225, Lafayette, CA 94549, Telephone: 925-281-1100

To: Alex Culick
GHD, Inc.

From: Dave Mathy
DCM Consulting, Inc.

Subject: Seismic Vulnerability
North Trunk Sewer
City of Santa Rosa
Santa Rosa, California

Reference A: 40% Design Plans
City of Santa Rosa
North Trunk Sewer
By: GHD
Dated: January 20, 2015

Reference B: Geotechnical Investigation
North Trunk Sewer
Santa Rosa, California
By: Miller Pacific Engineering Group
Dated: February 2, 2015

Reference C: Geotechnical Design
North Trunk Sewer
City of Santa Rosa
By: DCM Consulting, Inc.
Dated: April 13, 2015

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GHD

North Trunk Sewer
Constructability and Cost

This document is in draft form. The contents, including any opinions, conclusions, or recommendations, are preliminary and should not be relied upon. GHD reserves the right, at any time, to modify or withdraw any part of this document. To the maximum extent permitted by law, GHD disclaims any responsibility for the use of this document.

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROJECT MANAGEMENT

**North Trunk Sanitary Sewer Replacement
Feasibility Analysis of
Chanate Rd Alignment**

for City of Santa Rosa

Prepared May 7, 2013 by
LESCURE ENGINEERS, INC.

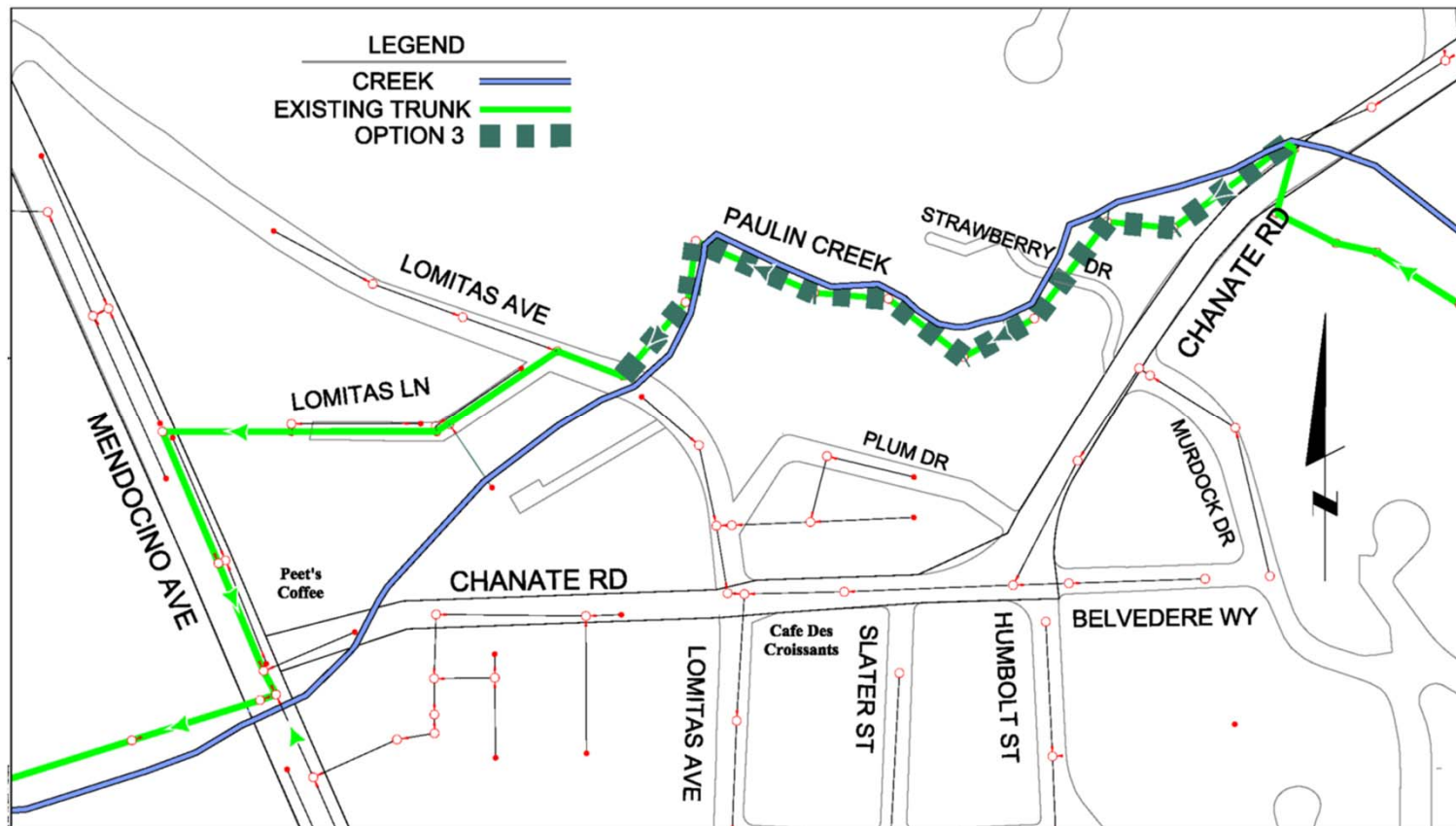
Engineering for Sustainability



Project Background

Feasibility Analysis

- “Trenchless” Cured-in-place pipe



Project Background

Feasibility Analysis

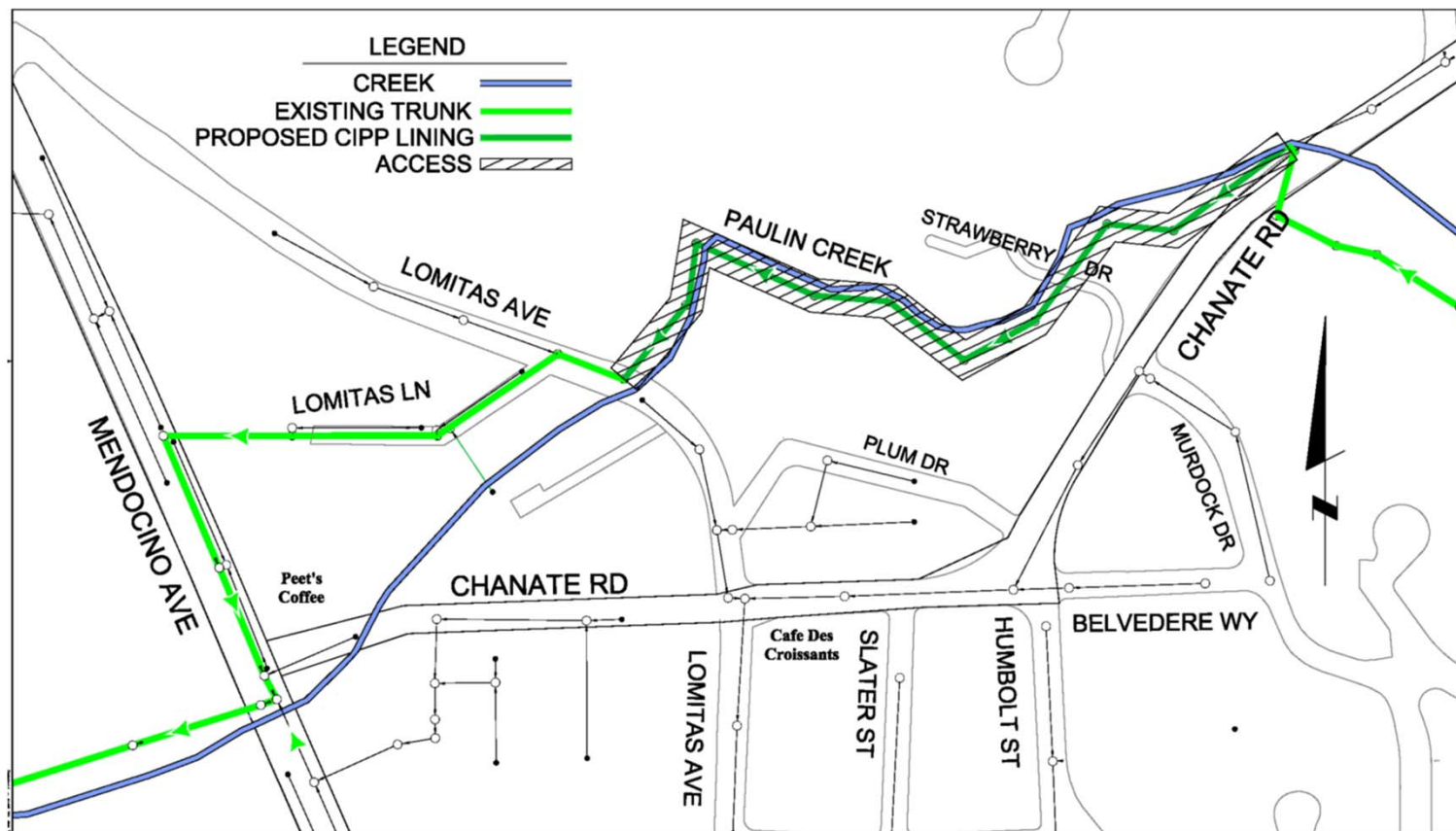
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Project Background

Feasibility Analysis

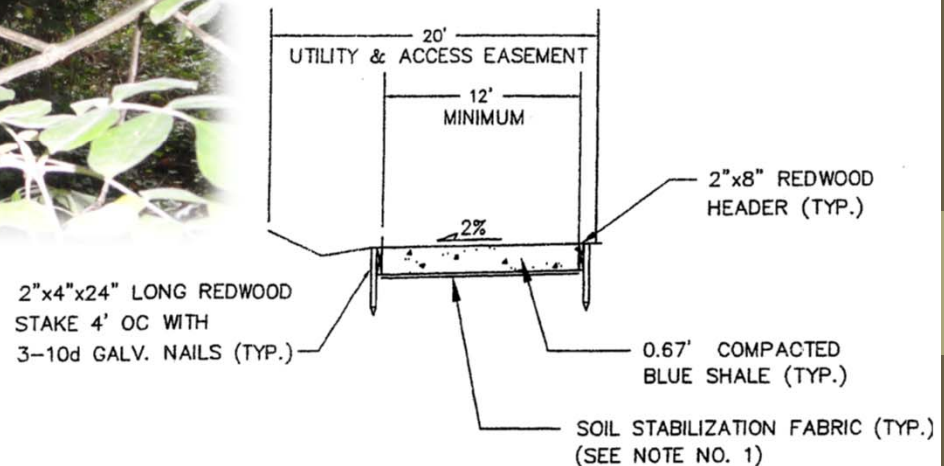
- “Trenchless” Cured-in-place pipe



Project Background

Feasibility Analysis

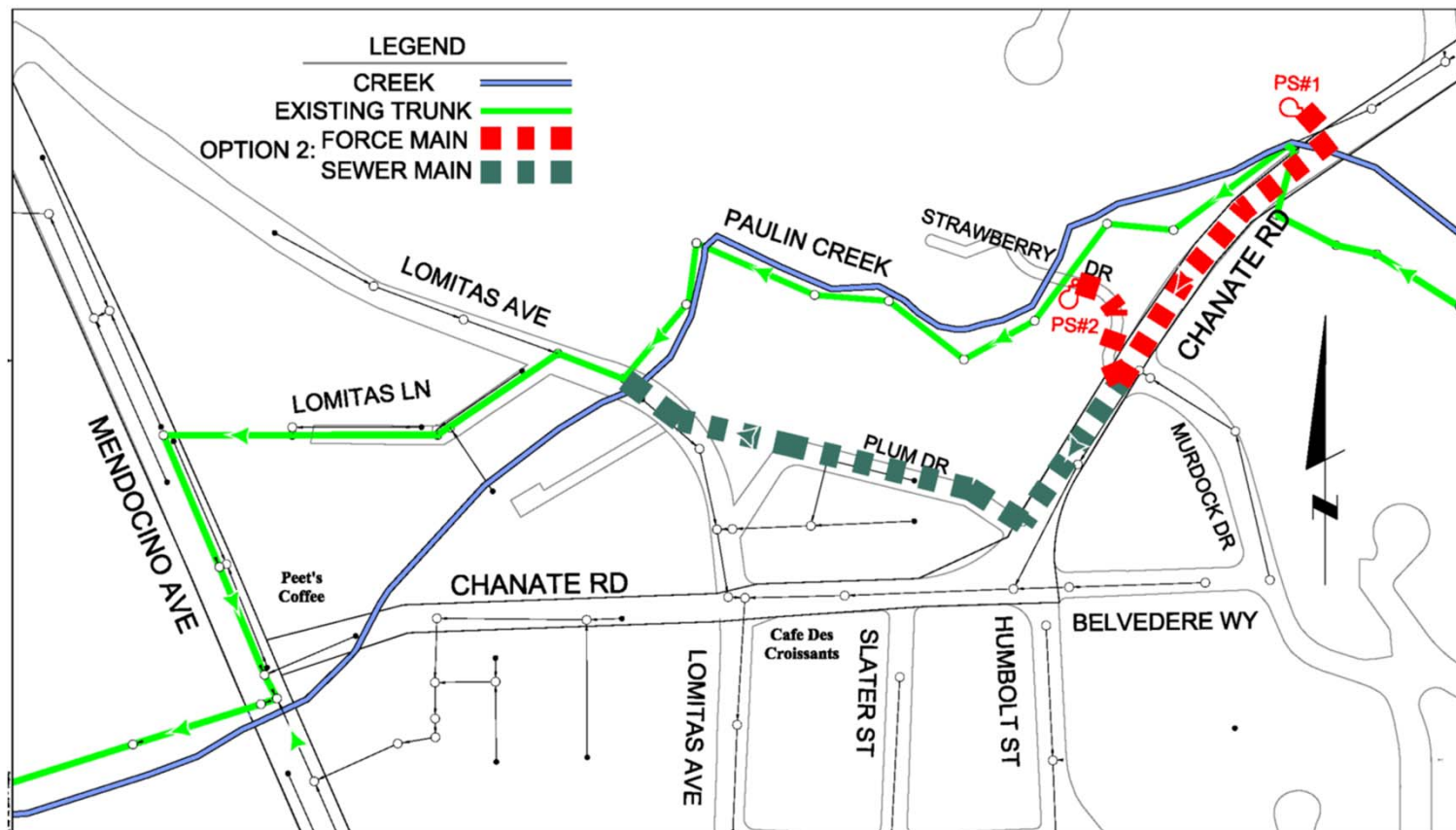
- “Trenchless” Cured-in-place pipe



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Feasibility Analysis

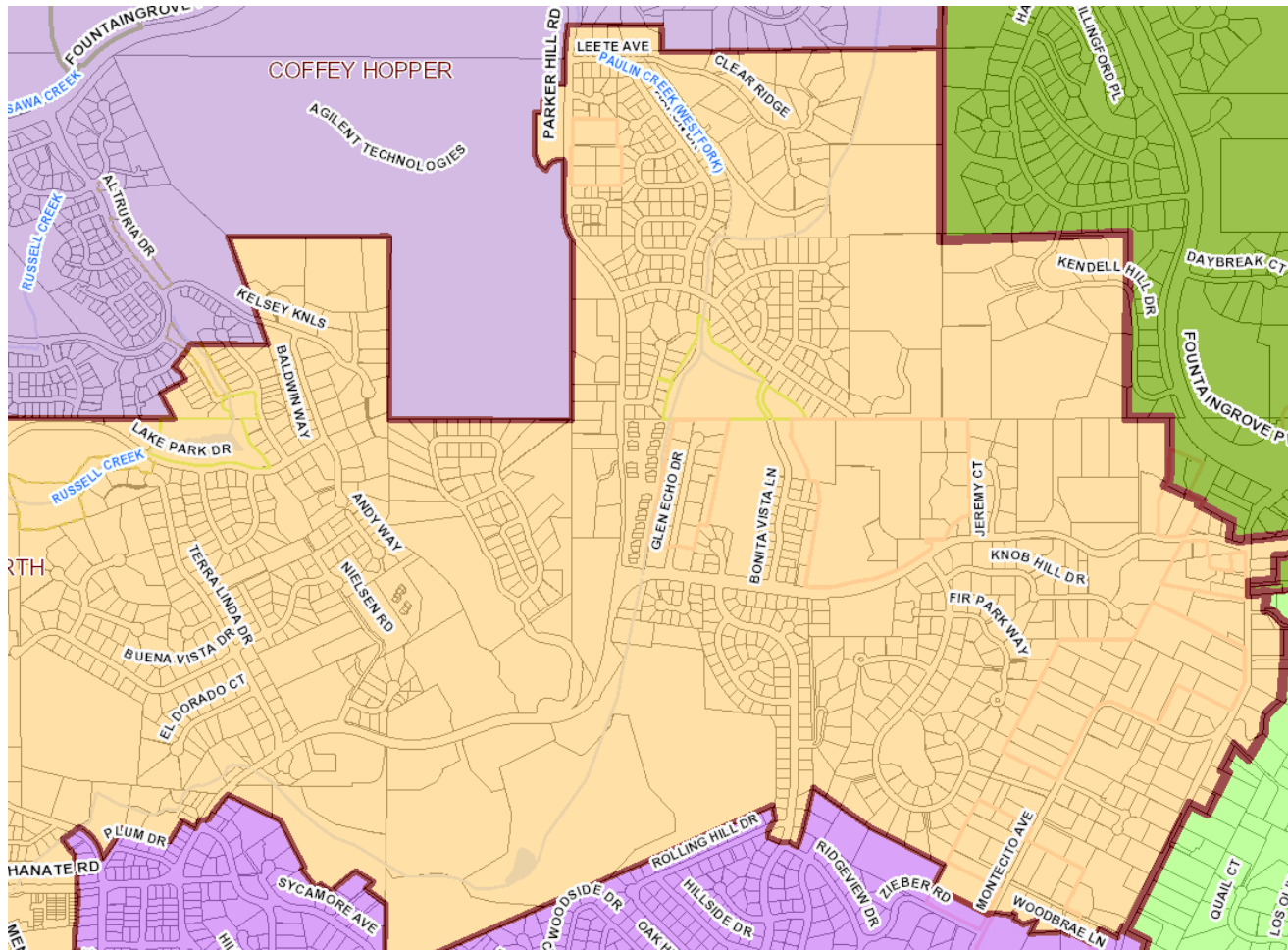
- Pumping Stations/Force Main



Project Background

Feasibility Analysis

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Feasibility Analysis

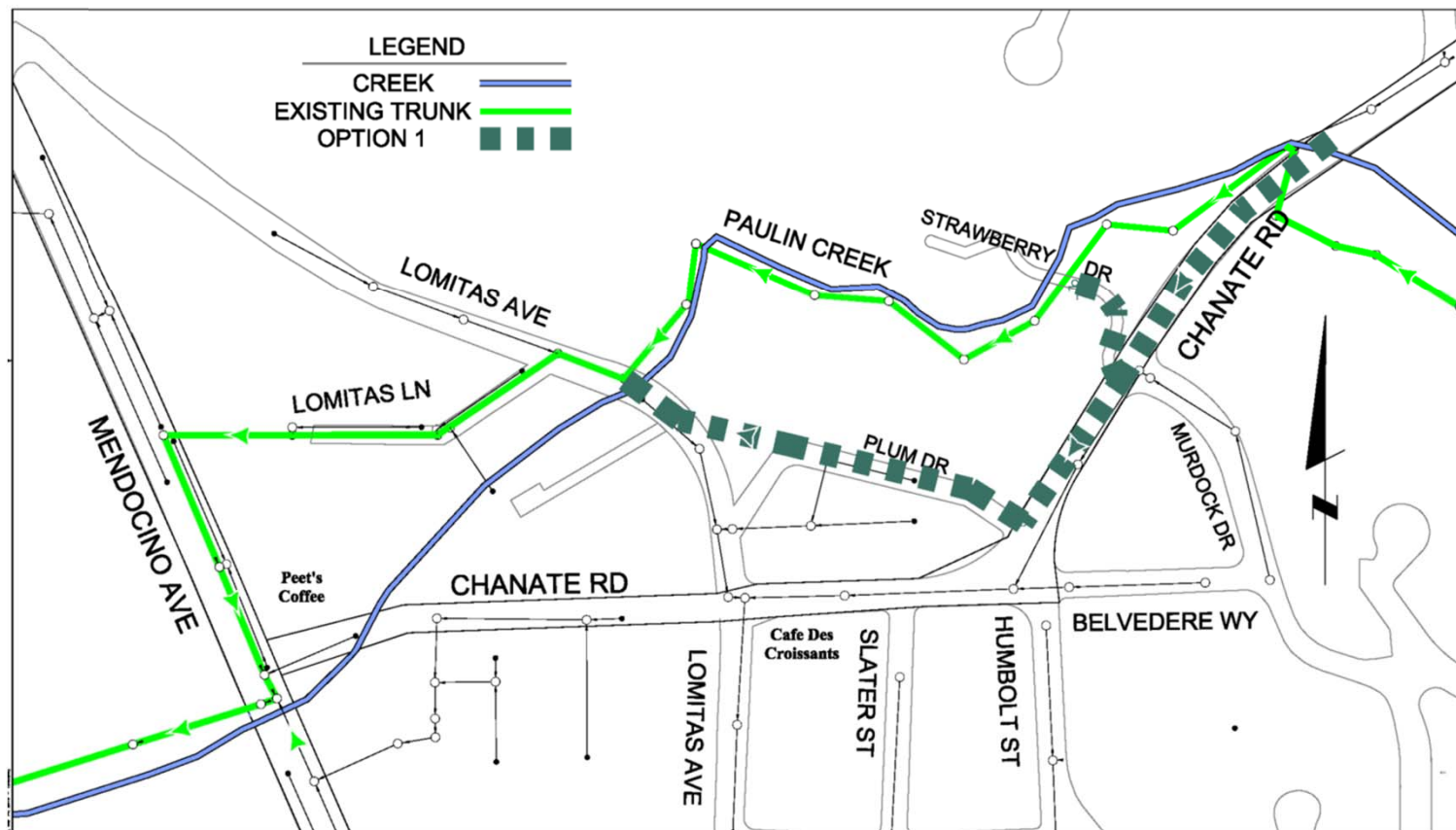
- Pumping Stations/Force Main



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Feasibility Analysis

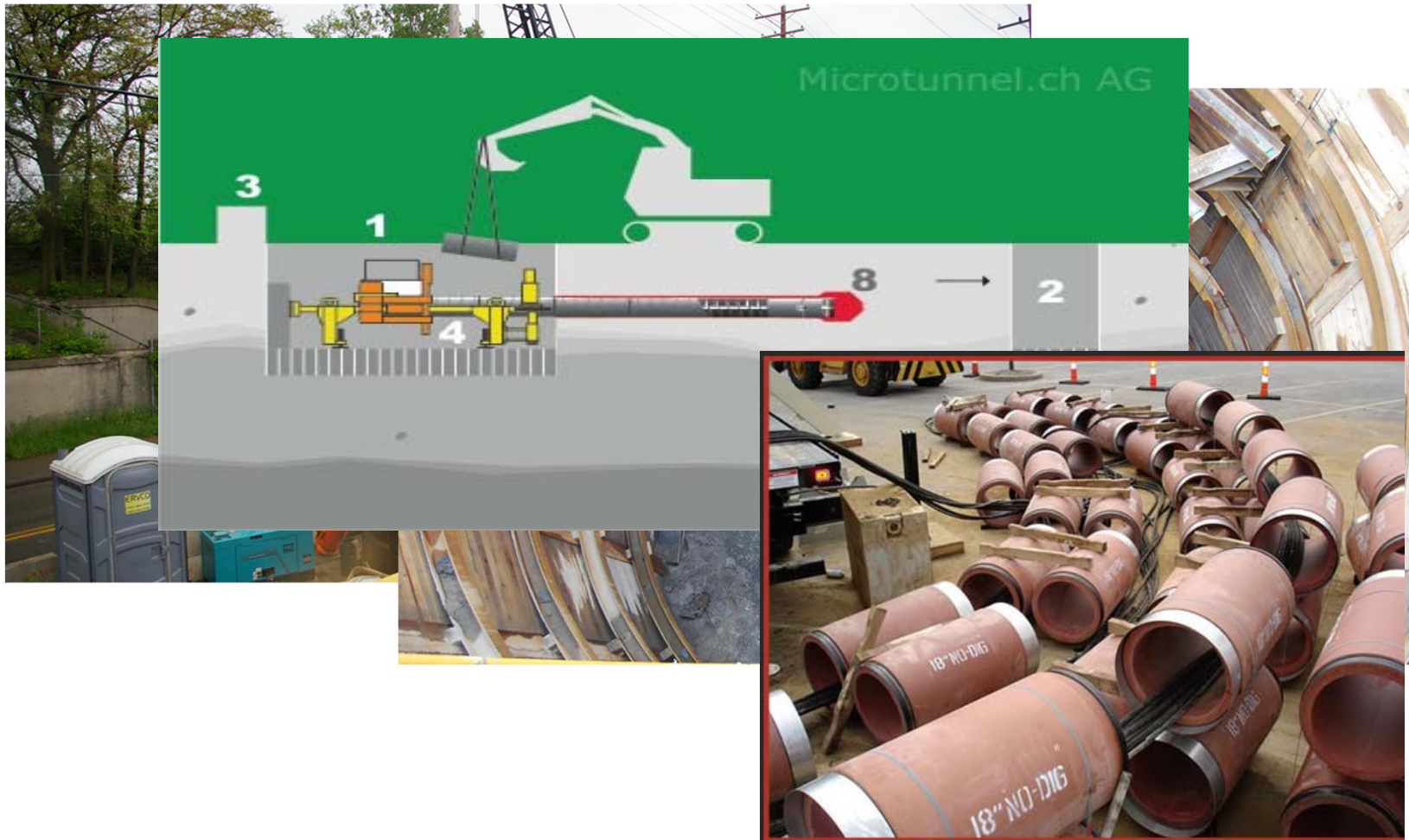
- Deep Gravity Trunk Main



Project Background

Feasibility Analysis

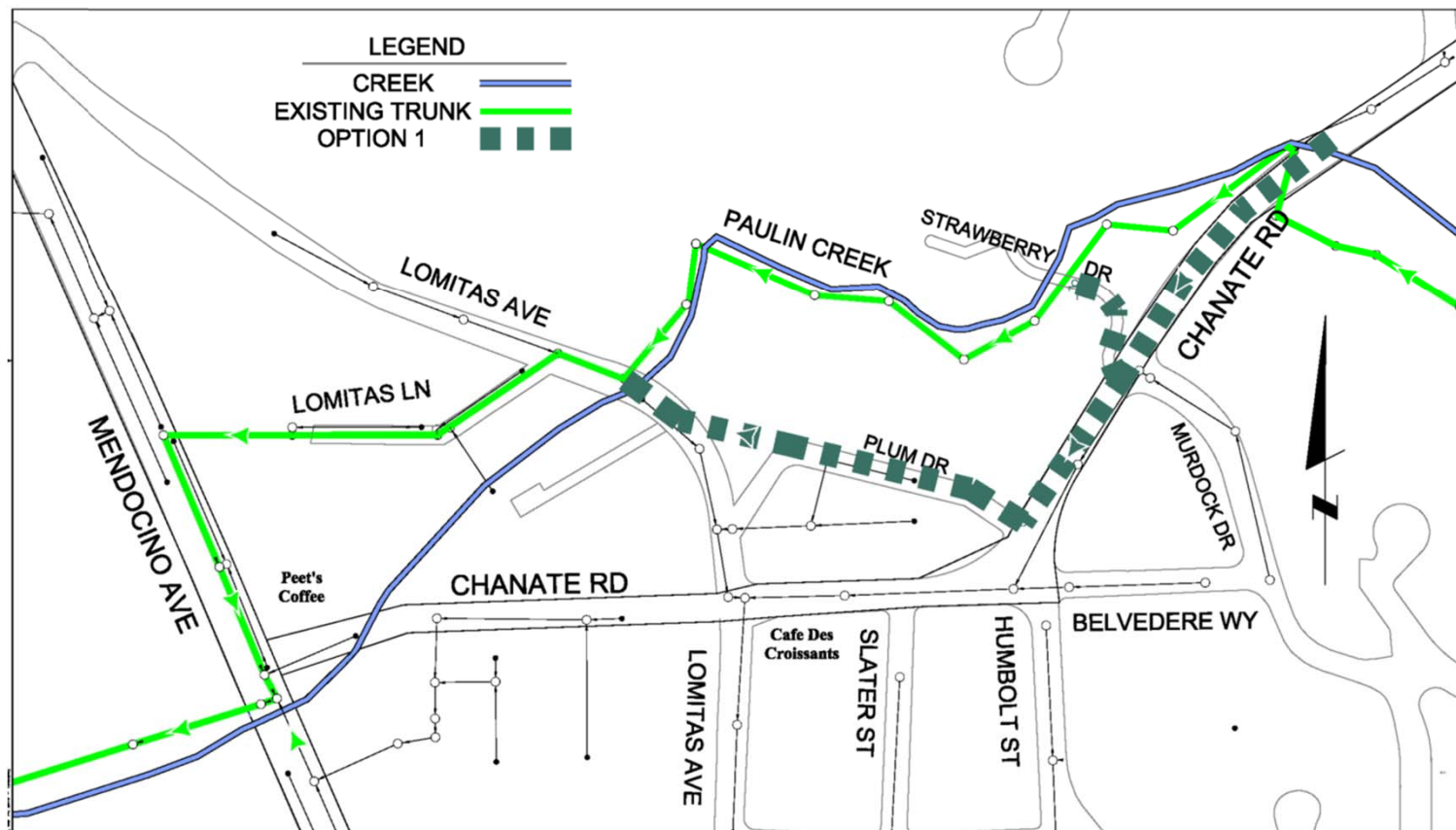
- Deep Gravity Trunk Main



Project Background

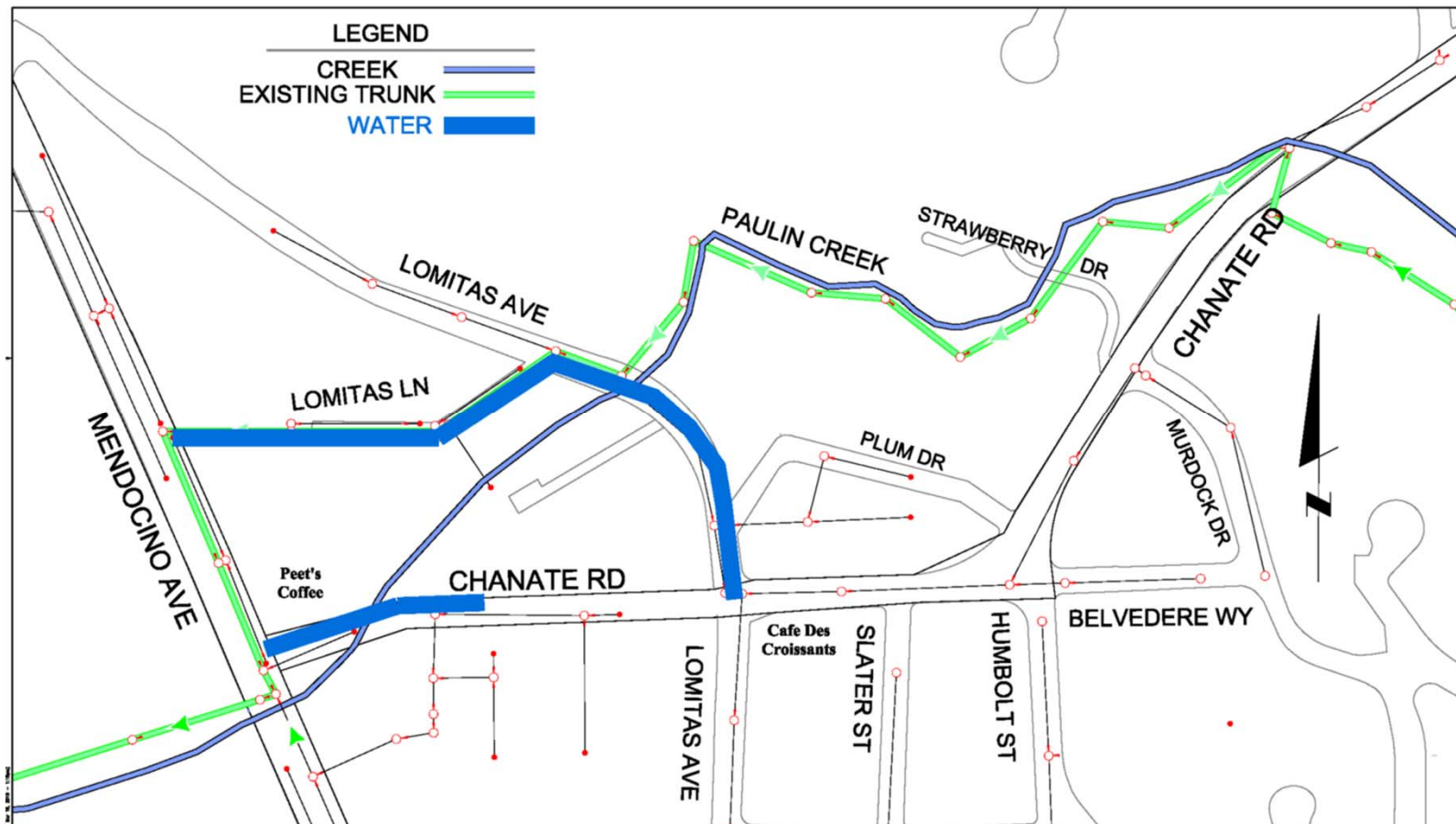
Feasibility Analysis: Recommended option

- Deep Gravity Trunk Main



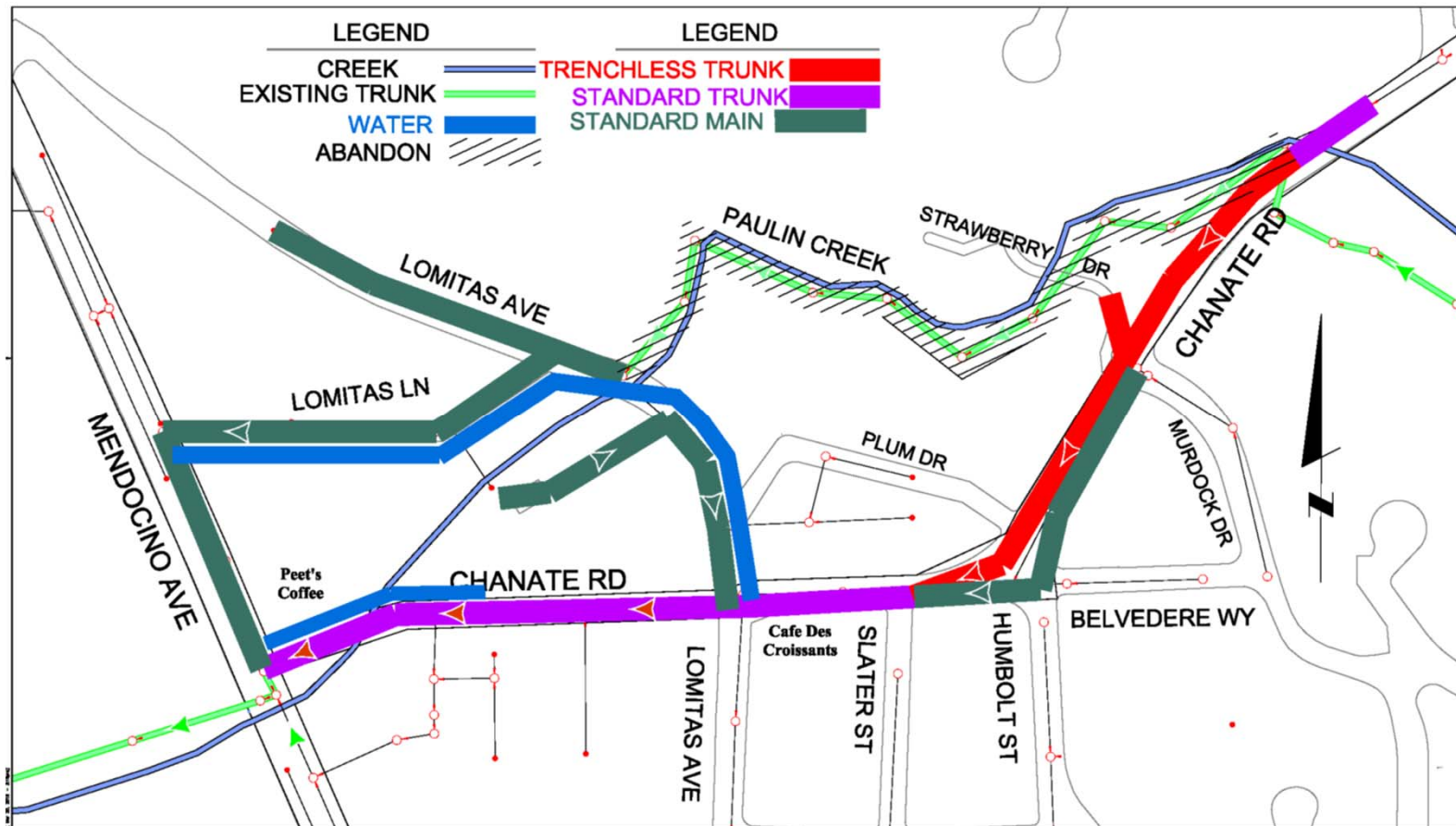
Project Background

Proposed Improvements



Project Background

Proposed Improvements



IS/Proposed MND

Environmental Protection Actions

- Geotechnical Design Recommendations
- Air Quality Control Measures
- Climate Action Plan Measures
- BMP for sewer abandonment along Paulin Creek

IS/Proposed MND

Other Less than Significant Impacts with Mitigation Incorporated:

- Aesthetics
- Biological Resources
- Cultural Resources
- Hazardous Materials
- Water Quality
- Noise
- Traffic
- Tribal Cultural Resources

IS/Proposed MND

30 day Public Review -

- Circulated August 17, 2018

IS/Proposed MND sent to the:

- State Clearinghouse
- Local Resource Agencies
- Posted on City Website

Notice of Intent

- Published in the Press Democrat and;
- Mailed to landowners in the Project Vicinity.

Recommendations

BPU Recommendations

1. Adopt the Mitigated Negative Declaration (MND) North Trunk Sewer Replacement – Mendocino Ave To Terra Linda Dr Project
2. Approve the Project
3. Adopt the Mitigation and Monitoring Program for the project
4. Direct Staff to file a Notice of Determination