



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

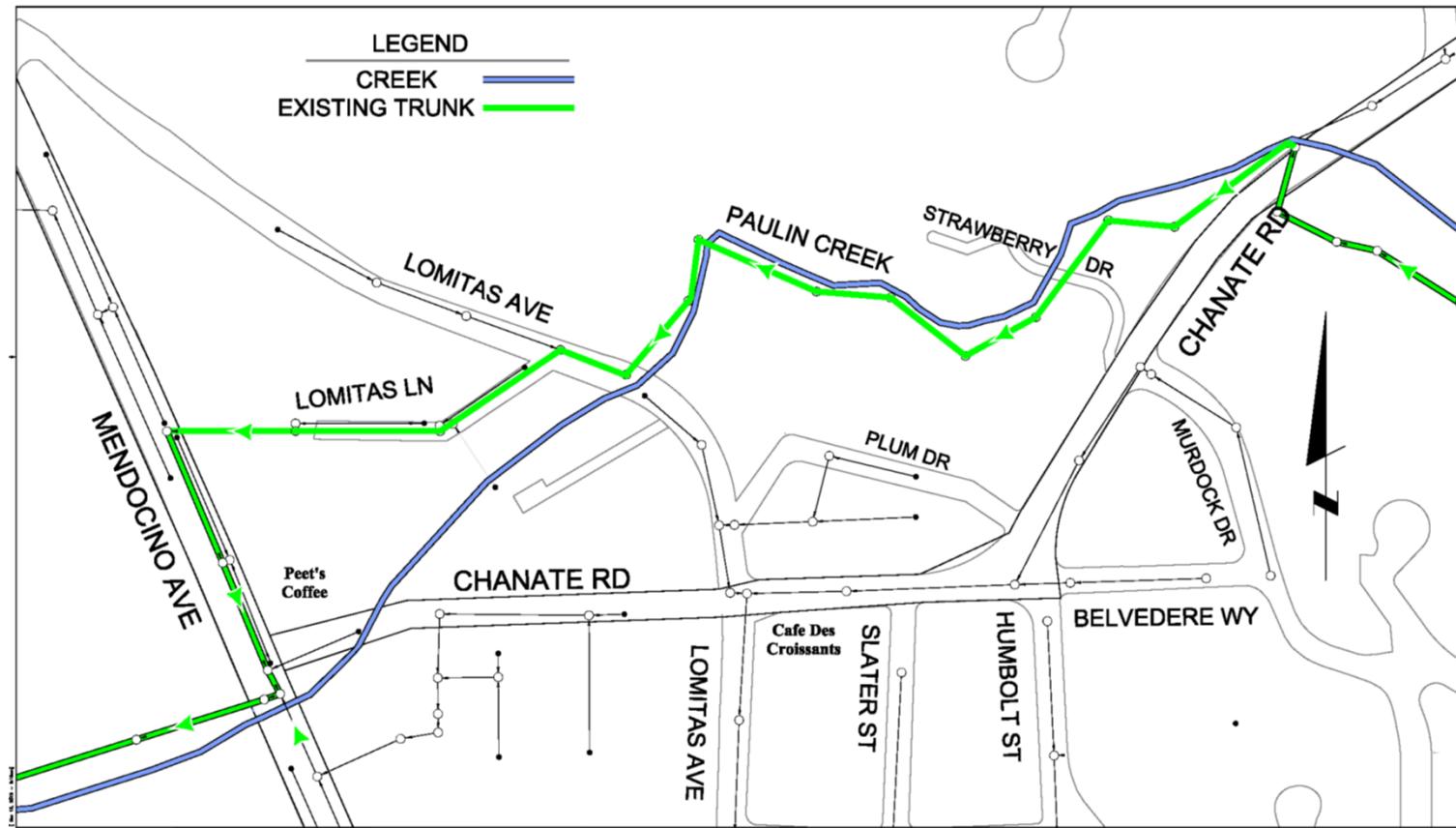
- Project Background
 - Feasibility Analysis
 - Proposed Improvements
- Initial Study/Proposed Mitigated Negative Declaration (IS/Proposed MND)
- Recommendations

Project Background



Project Background

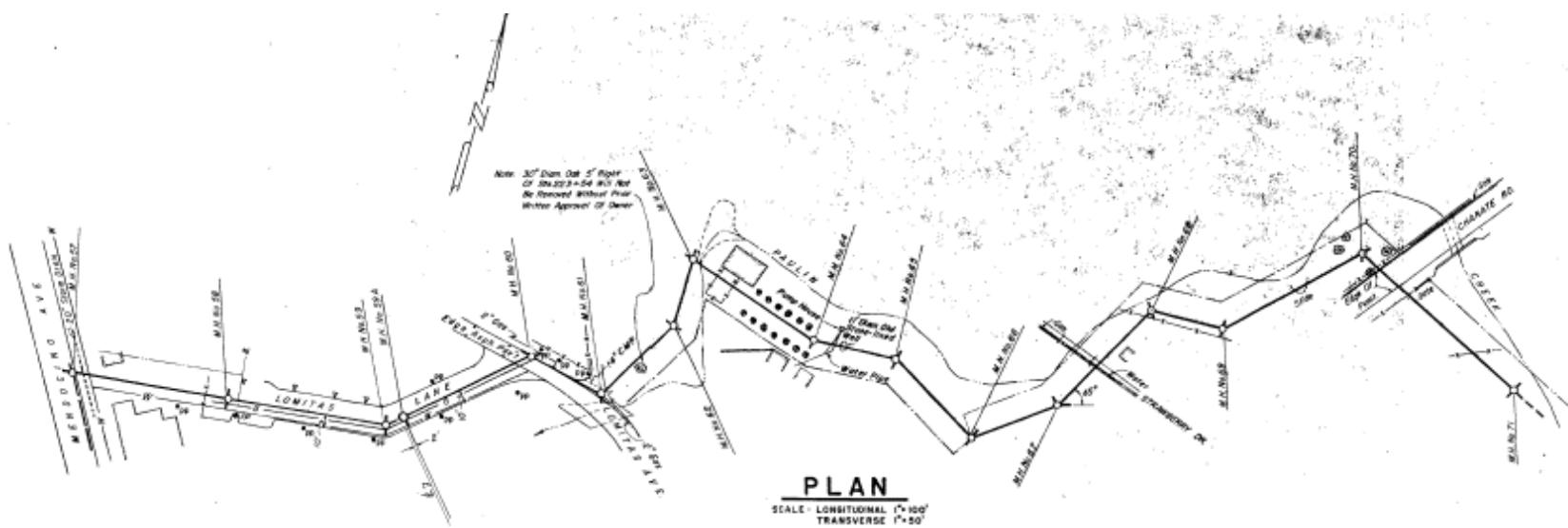
Existing Trunk Sewer and Creek



Project Background

Existing Trunk Sewer and Creek

- Original construction in 1956



Project Background

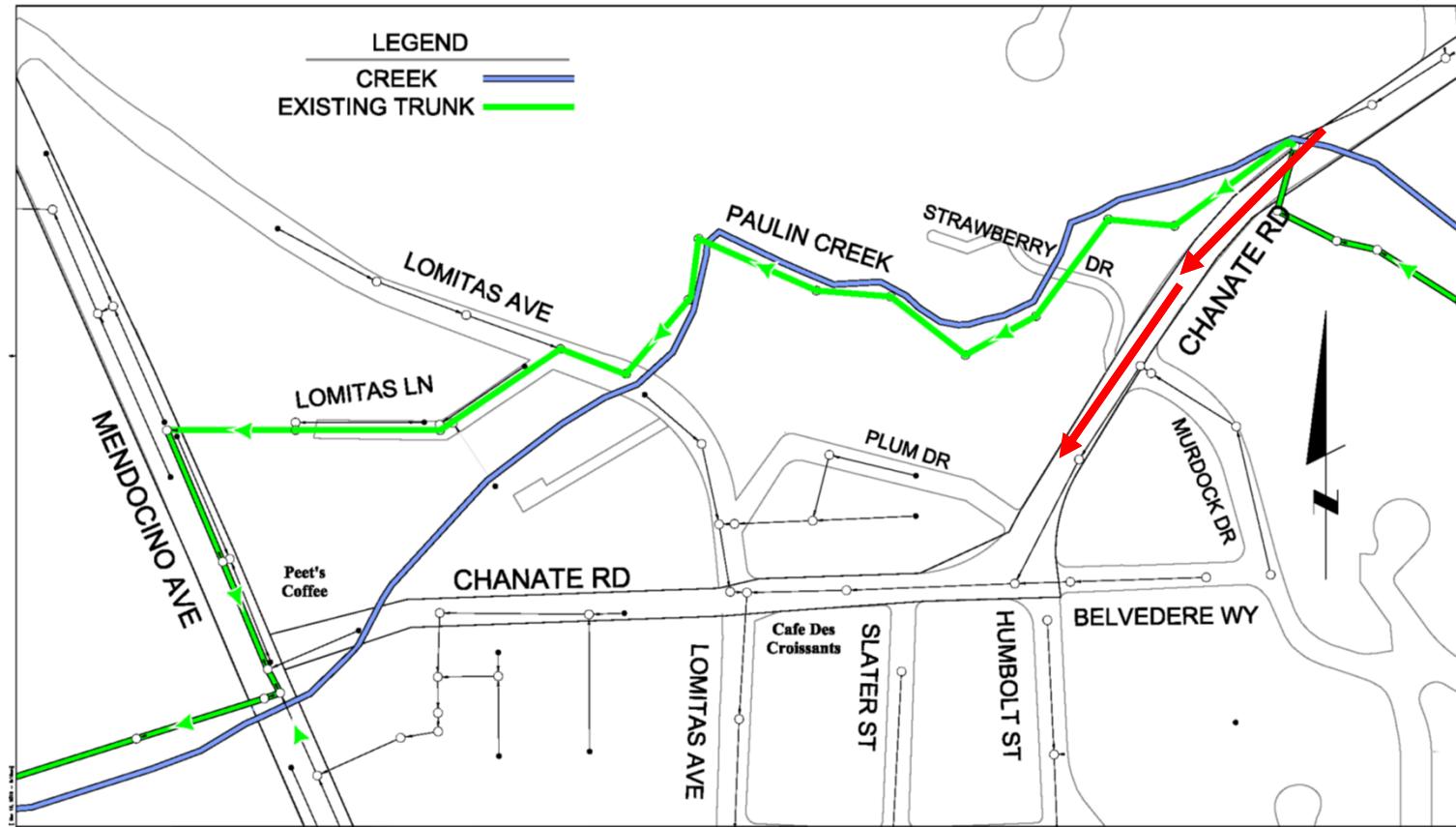
Existing Trunk Sewer and Creek

- Limited Access
- Age
- Risks



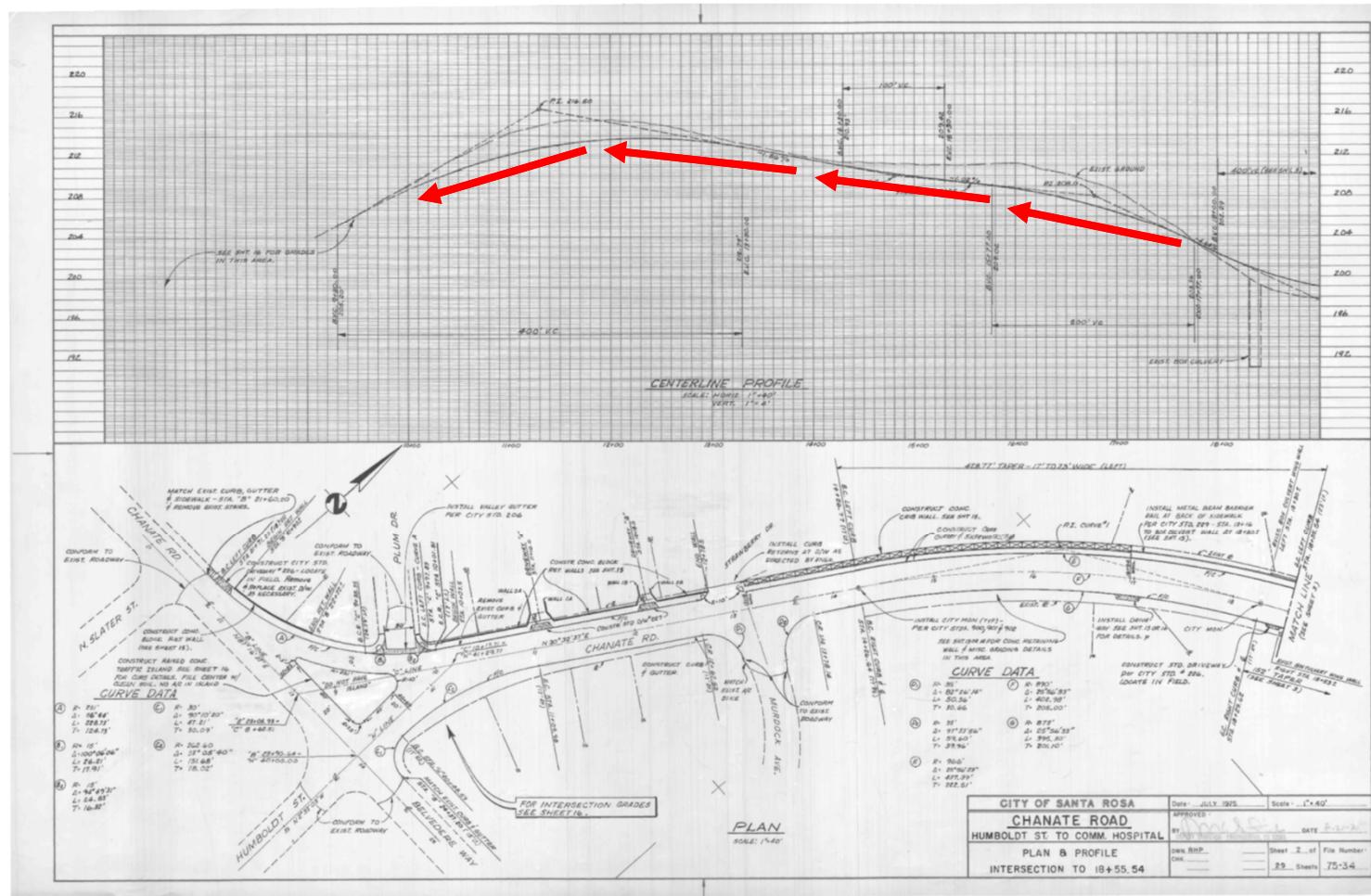
Project Background

Existing Trunk Sewer and Creek



Project Background

Existing Trunk Sewer and Creek



Project Background

Feasibility Analysis

DCM Consulting
P.O. Box 225, Lafayette, CA 94548, Tel: 925-449-1000
To: Alex Culick
GHD, Inc.
From: Dave Maty
DCM Cons
Subject: Geotechnical
North Trunk
City of Santa
Santa Rosa

1.0 INTRODUCTION
This Geotechnical Design Services geotechnical and trenchless Replacement Project. The inch- and 15-inch-inside-dia and beneath Lomitas Avenue trunk pipelines will be installed. Lomitas Avenue and Straub:

- approximately 147
- approximately 465
- approximately 177
- approximately 310 segments currently in inch; and
- approximately 2,200

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

All references to the proposed diameter, pipeline alignment, January, 2015.

Miller Pacific
ENGINEERING GROUP
400 Broadway Blvd

March 19, 2012
File: 548.104fr.doc
City of Santa Rosa
Engineering Development S
69 Stony Circle
Santa Rosa, California 95407
Attn: Mr. Tracy Duenas
Re: Geotechnical Report
Chanate Road – North
Santa Rosa, California

February 27, 2012
File: 1206.175fr.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

Introduction
This letter summarizes our Trunk Sewer project located 1.

The purpose of our investigation recommendations for the general accordance with our subsurface conditions with our in-house library, labor and summarizing our geotechnical services data for use in the design and construction of the new system.

Project Description
The project involves the design and construction of a new open-cut and trenchless 15-inch-dia. Preliminary plans¹ feet deep. Ancillary improvements tie-ins to the existing system. Figure 2.

Regional Geology
The site is located within the topography is characterized by valley floors that were formed by the Lomitas River.

¹ Miller Pacific Engineering Group, 4.1", Job No. 548-03, December 30, 2011.

² Lescure Engineers, "City of Santa Rosa, California", Job No. 548-03, November 2011.

³ GHD, "City of Santa Rosa, North Trunk Sewer Project", Job No. 548-03, January 2015.

MILLER PACIFIC

DCM Consulting, Inc.
P.O. Box 225, Lafayette, CA 94548, Telephone: 925-449-1000
To: Alex Culick
GHD, Inc.
From: Dave Maty
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 2015
Reference B: Geotechnical Investigation
North Trunk Sewer
Santa Rosa, California
By: Miller Pacific
Dated: February 27, 2012
Reference C: Geotechnical Design
North Trunk Sewer
City of Santa Rosa
By: DCM Consulting
Dated: April 13, 2012

1.0 INTRODUCTION
The purpose of this Technical Memo is to describe the City of Santa Rosa's North Trunk Sewer project description and geotechnical investigation section applicable gravity pipelines. The depth below grade is approximately 4.4 feet deep as 40 feet. Approximately 4,400 linear feet of the balance of approximately 1,100 linear feet.

2.0 HISTORIC EARTHQUAKE PERFORMANCE
In the absence of:

- fault rupture offset;

North Trunk Sewer Construction and Construction

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WATER | ENERGY & RESOURCES | ENVIRONMENT | PLANNING

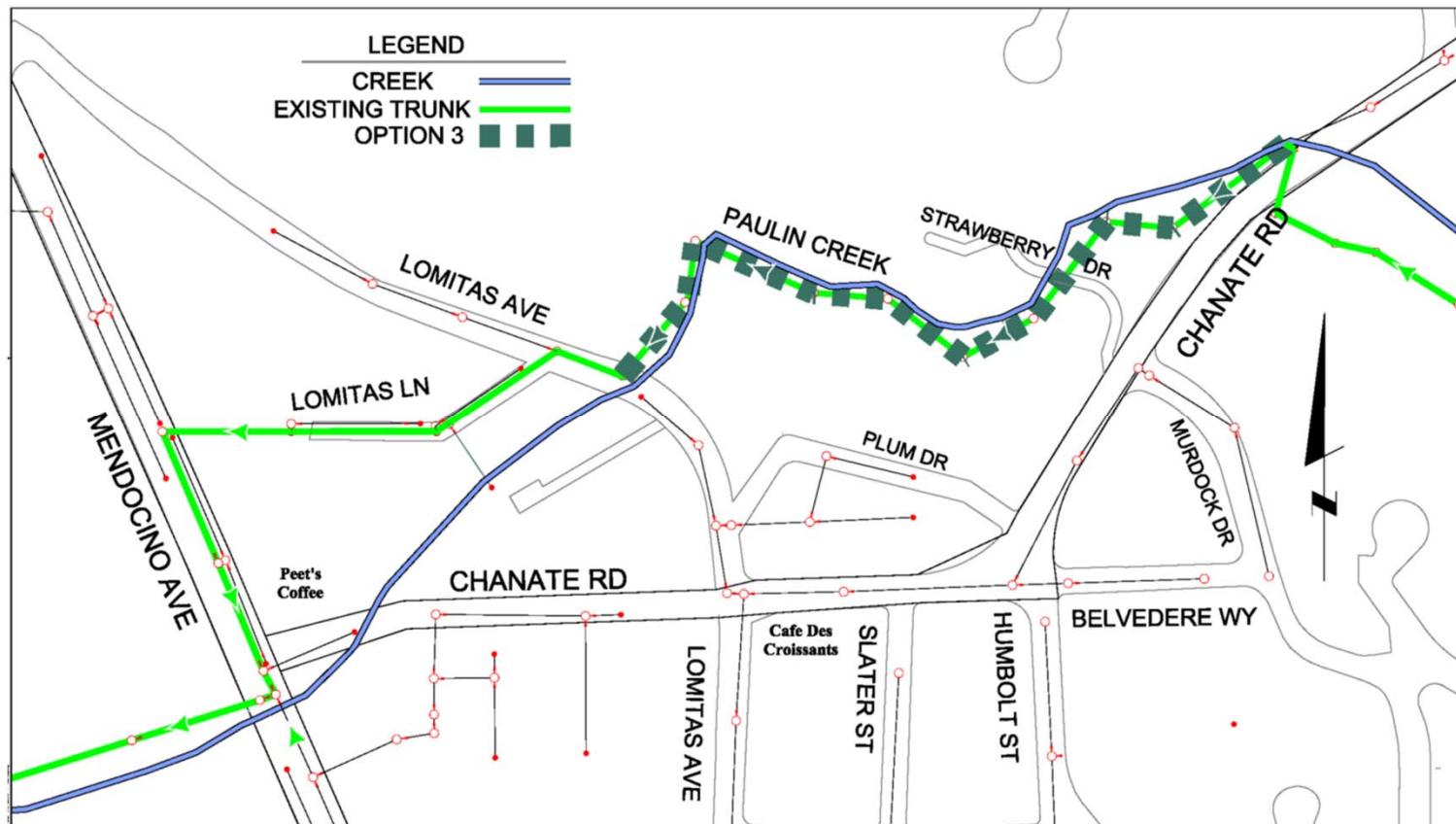
North Trunk Sanitary Sewer Replacement Feasibility Analysis of Chanate Rd Alignment
for City of Santa Rosa
Prepared May 7, 2013 by
LESCURE ENGINEERS, INC.
Engineering for Sustainability



Project Background

Feasibility Analysis

- “Trenchless” Cured-in-place pipe



Project Background

Feasibility Analysis

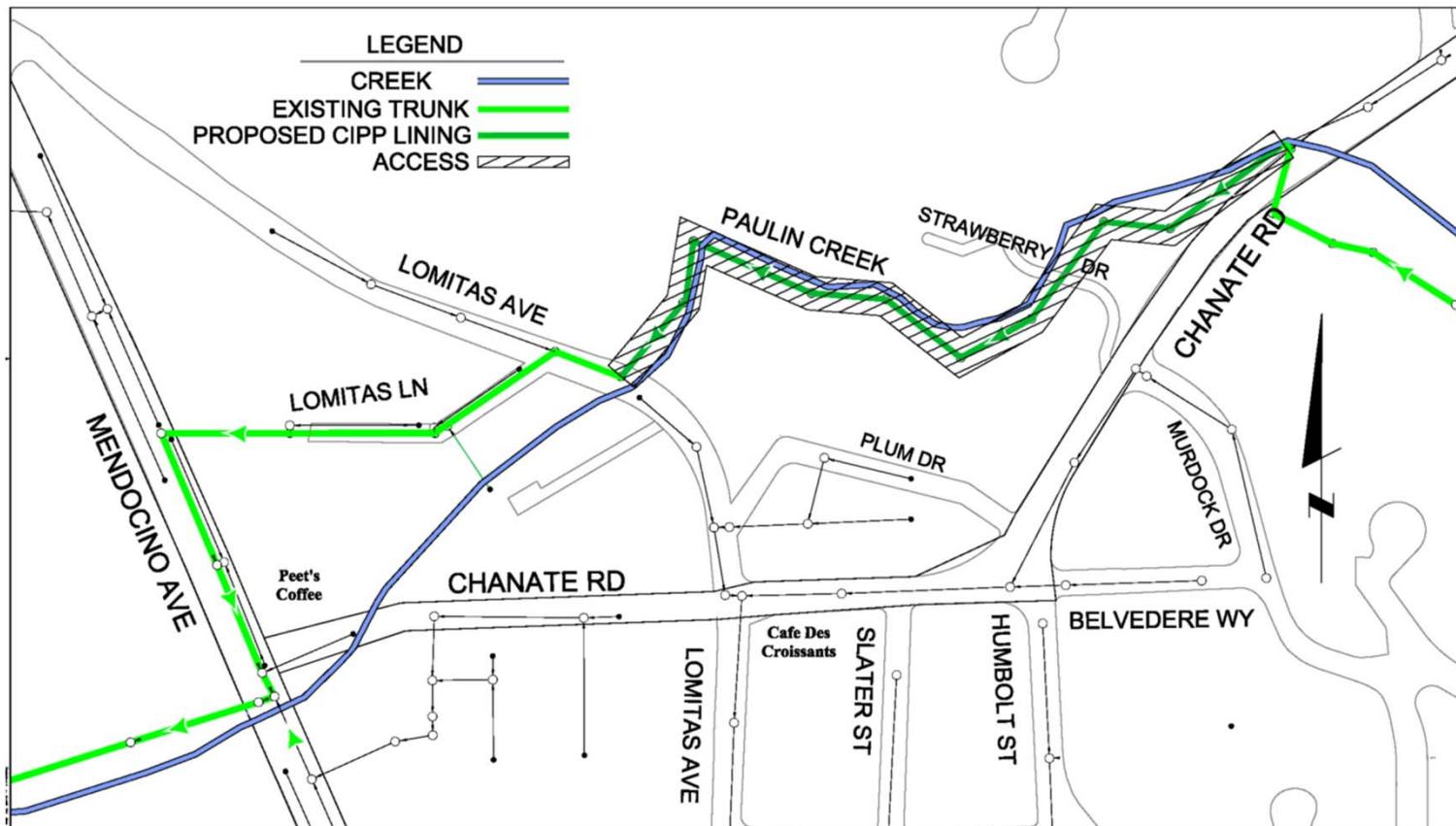
- “Trenchless” Cured-in-place pipe



Project Background

Feasibility Analysis

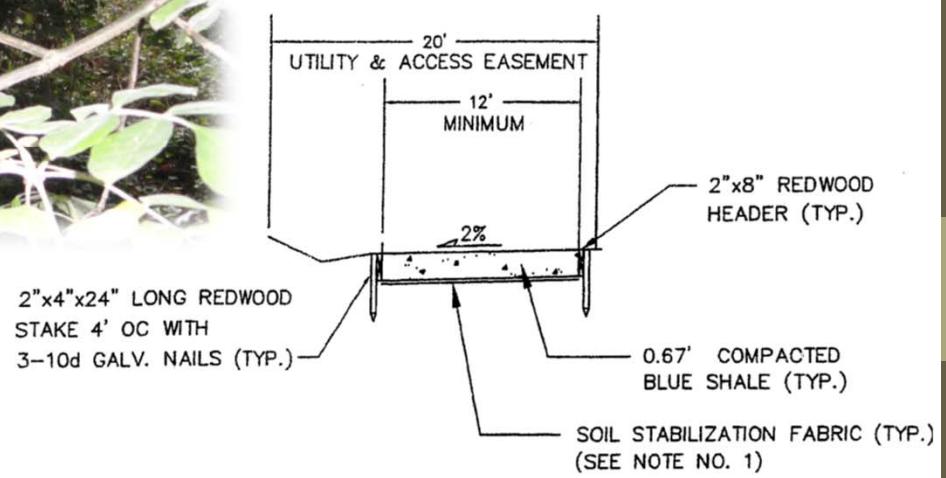
- “Trenchless” Cured-in-place pipe



Project Background

Feasibility Analysis

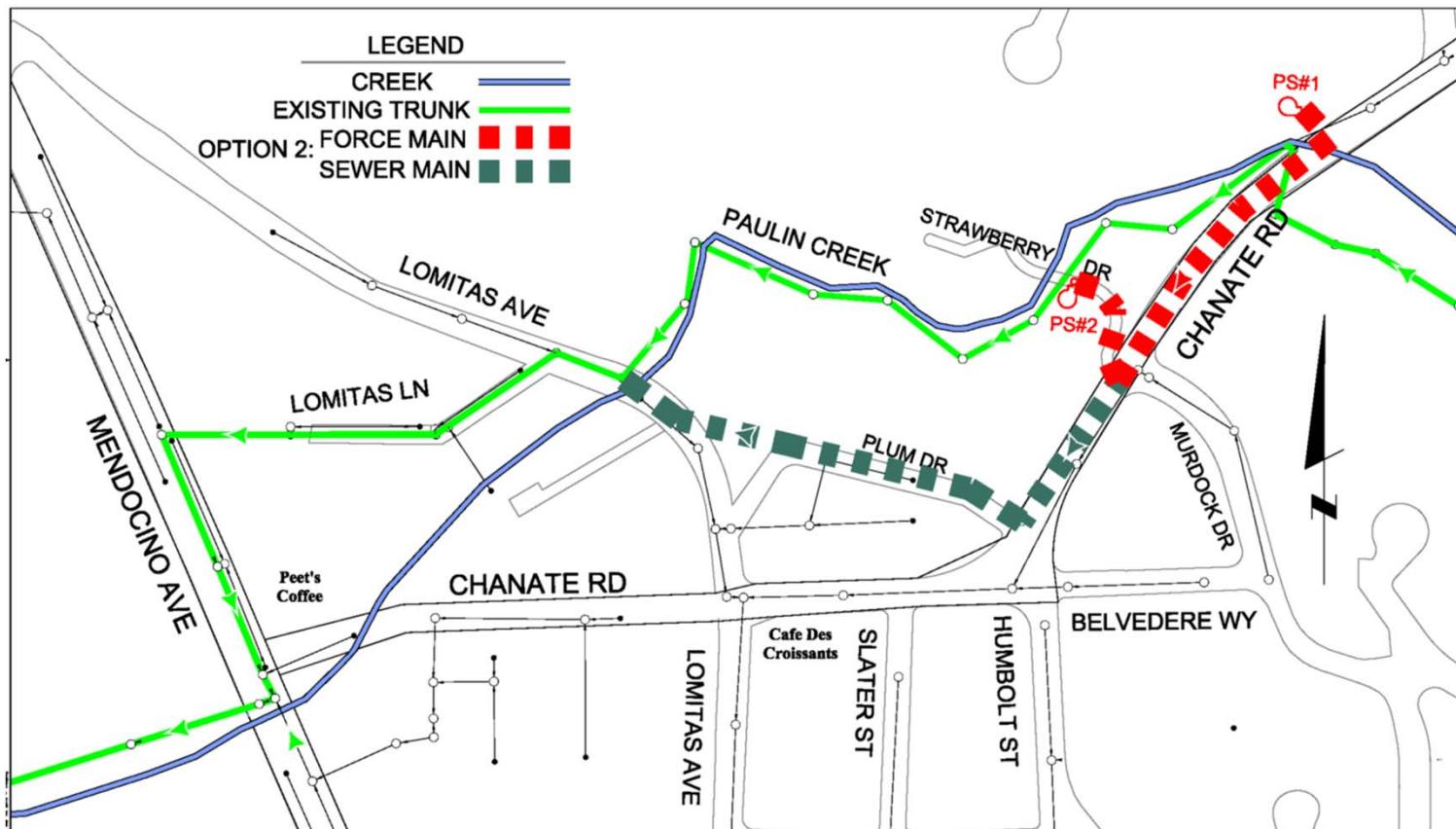
- “Trenchless” Cured-in-place pipe



Project Background

Feasibility Analysis

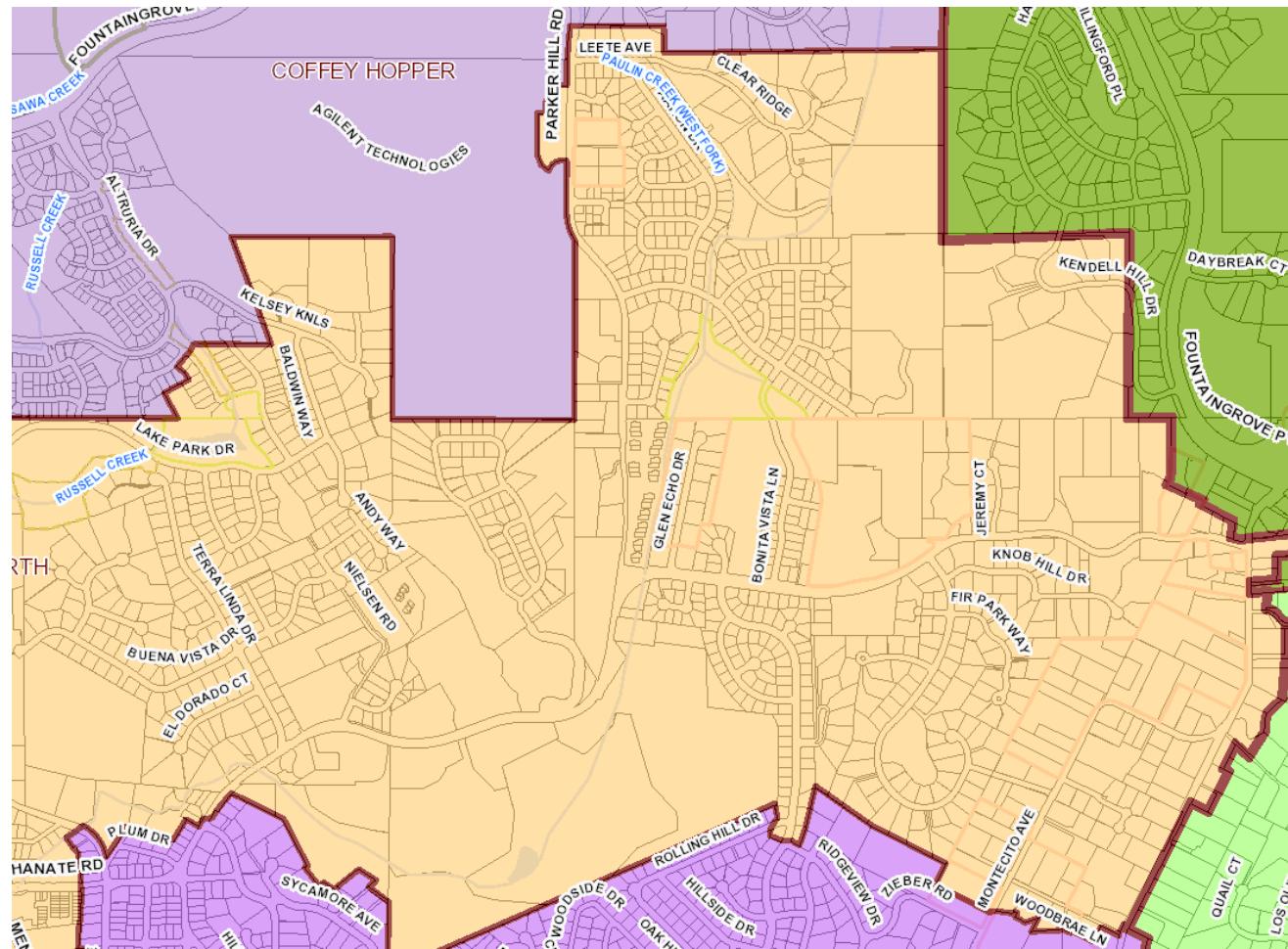
- Pumping Stations/Force Main



Project Background

Feasibility Analysis

- Pumping Stations/Force Main



Project Background

Feasibility Analysis

- Pumping Stations/Force Main



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Project Background

Feasibility Analysis

- Pumping Stations/Force Main

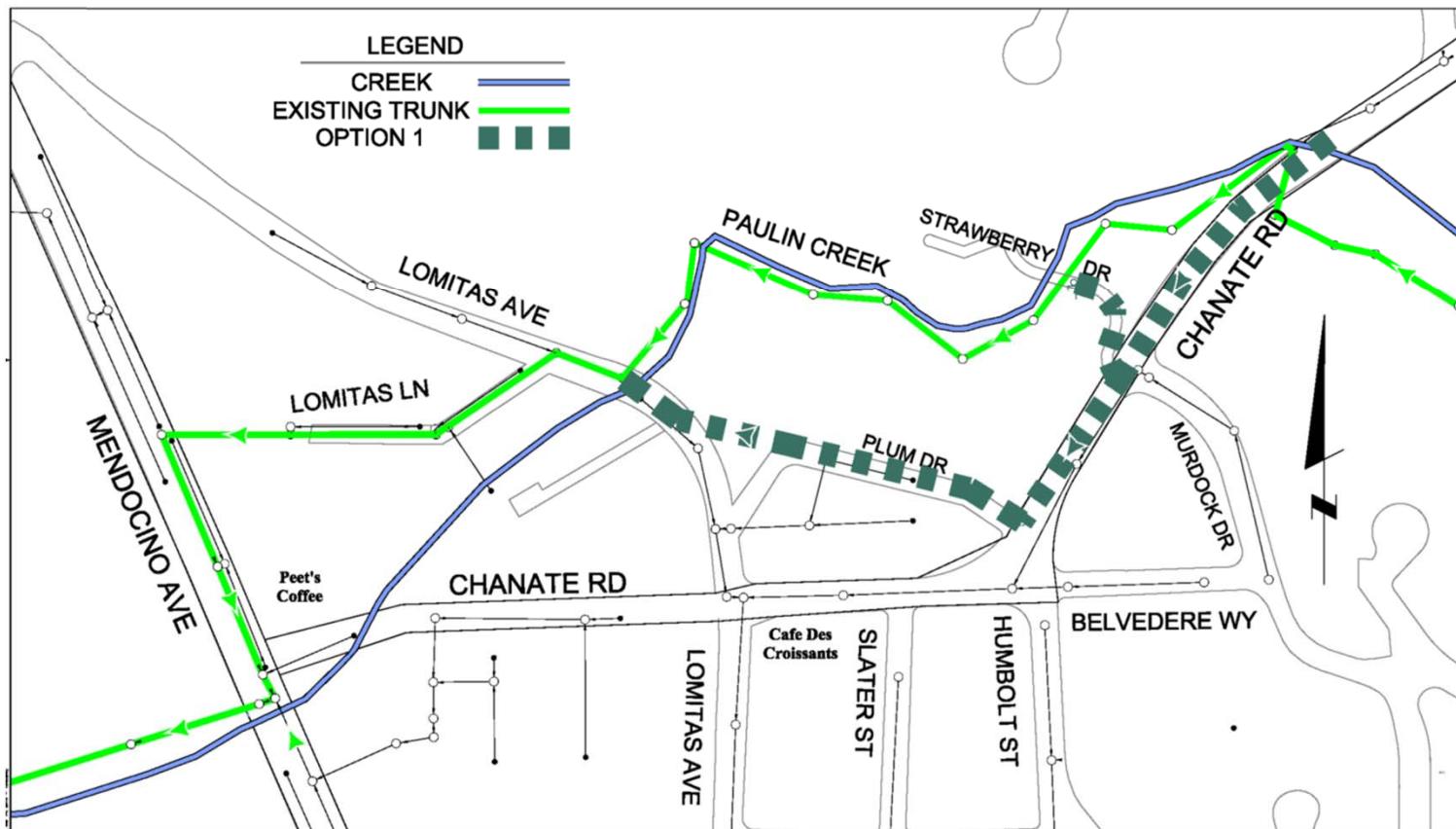


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Project Background

Feasibility Analysis

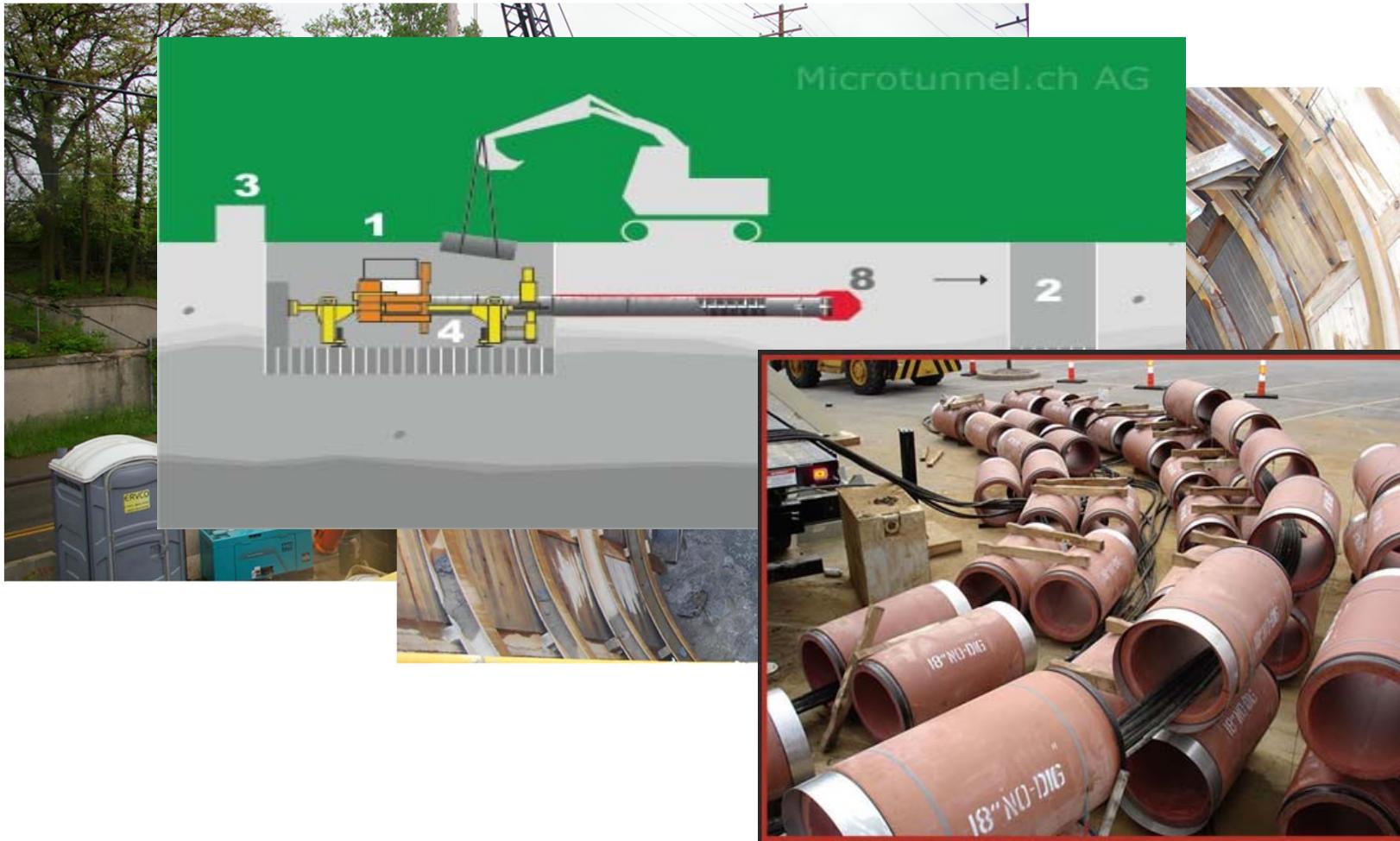
- Deep Gravity Trunk Main



Project Background

Feasibility Analysis

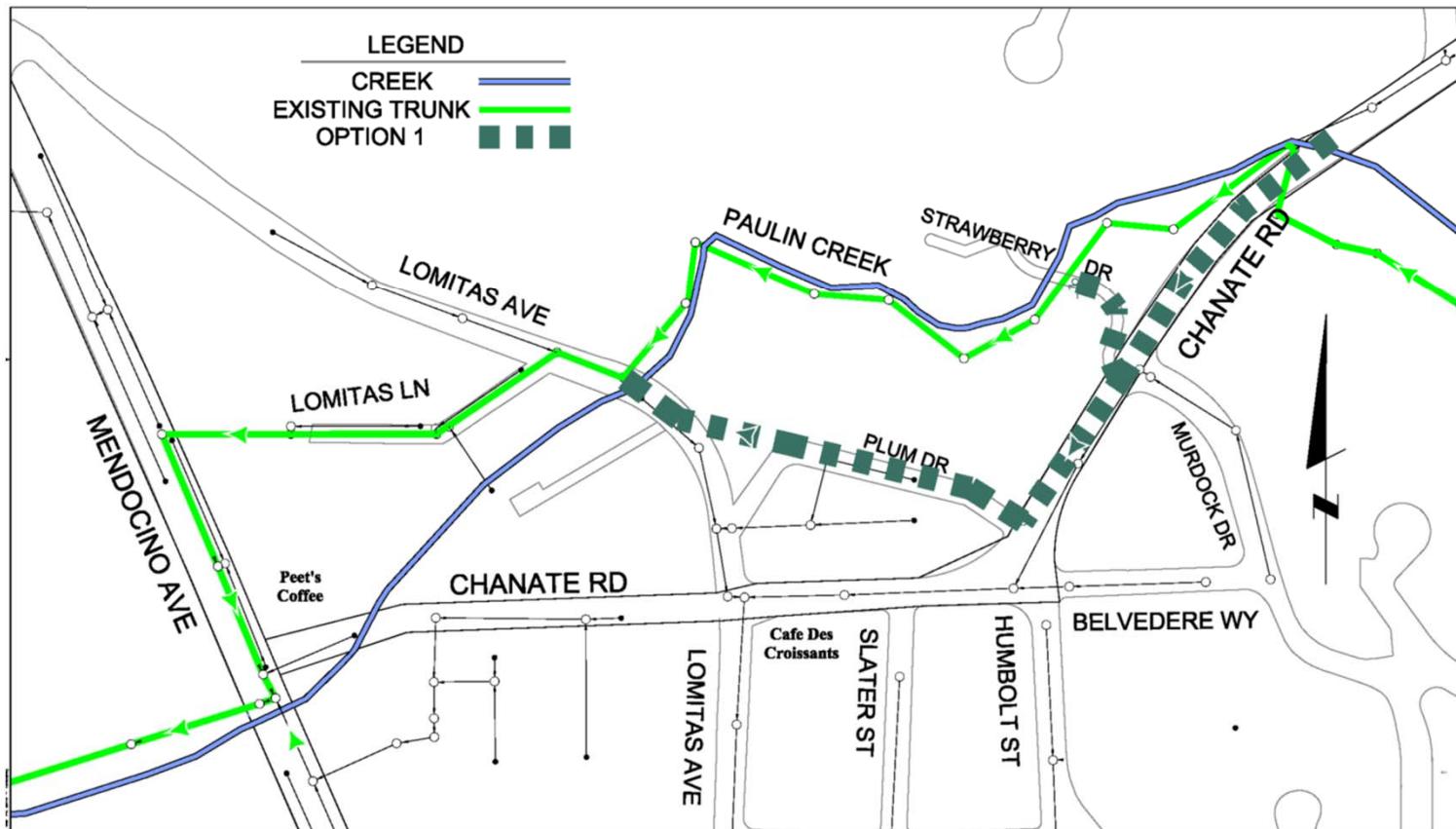
- Deep Gravity Trunk Main



Project Background

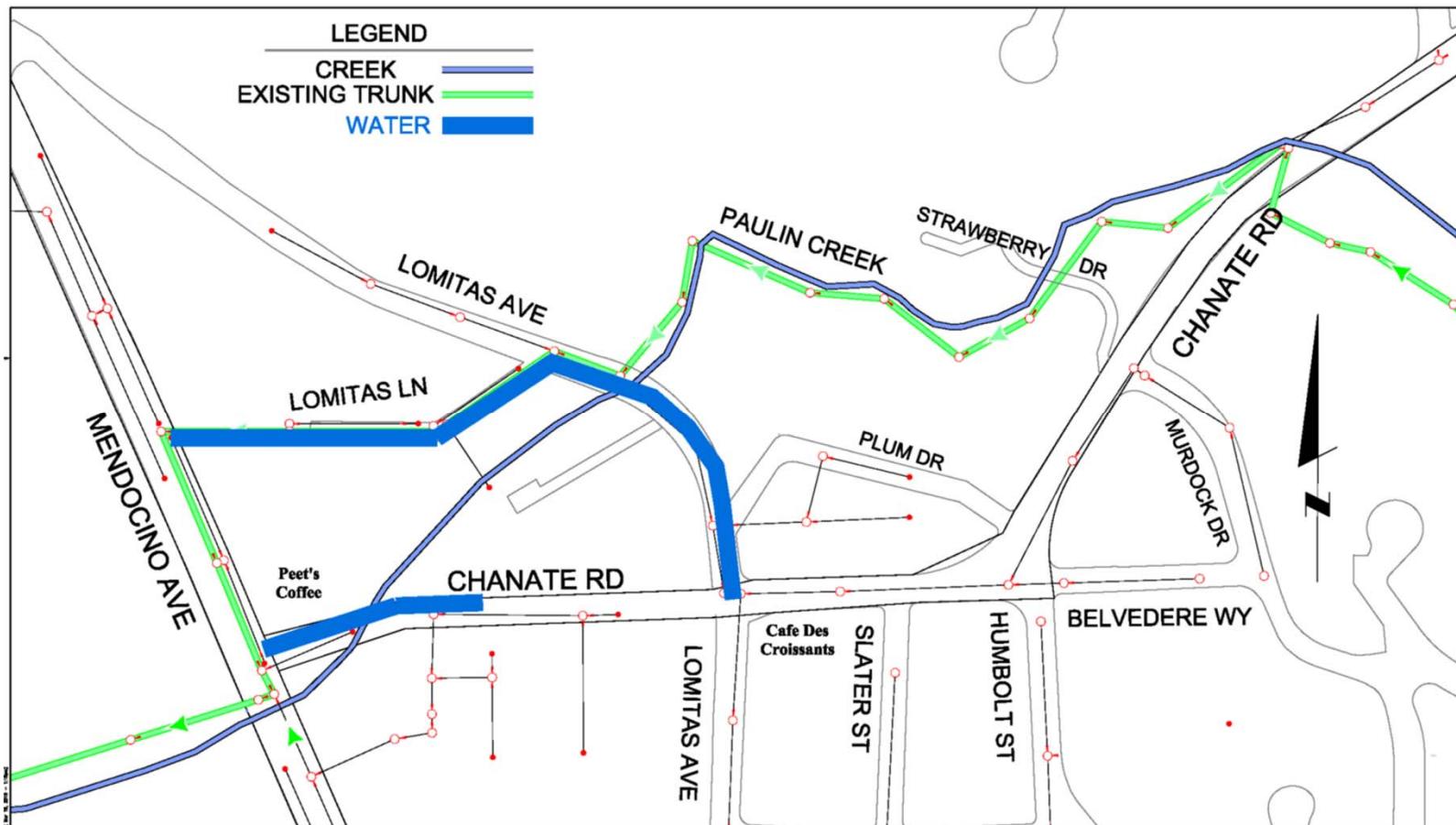
Feasibility Analysis: Recommended option

- Deep Gravity Trunk Main



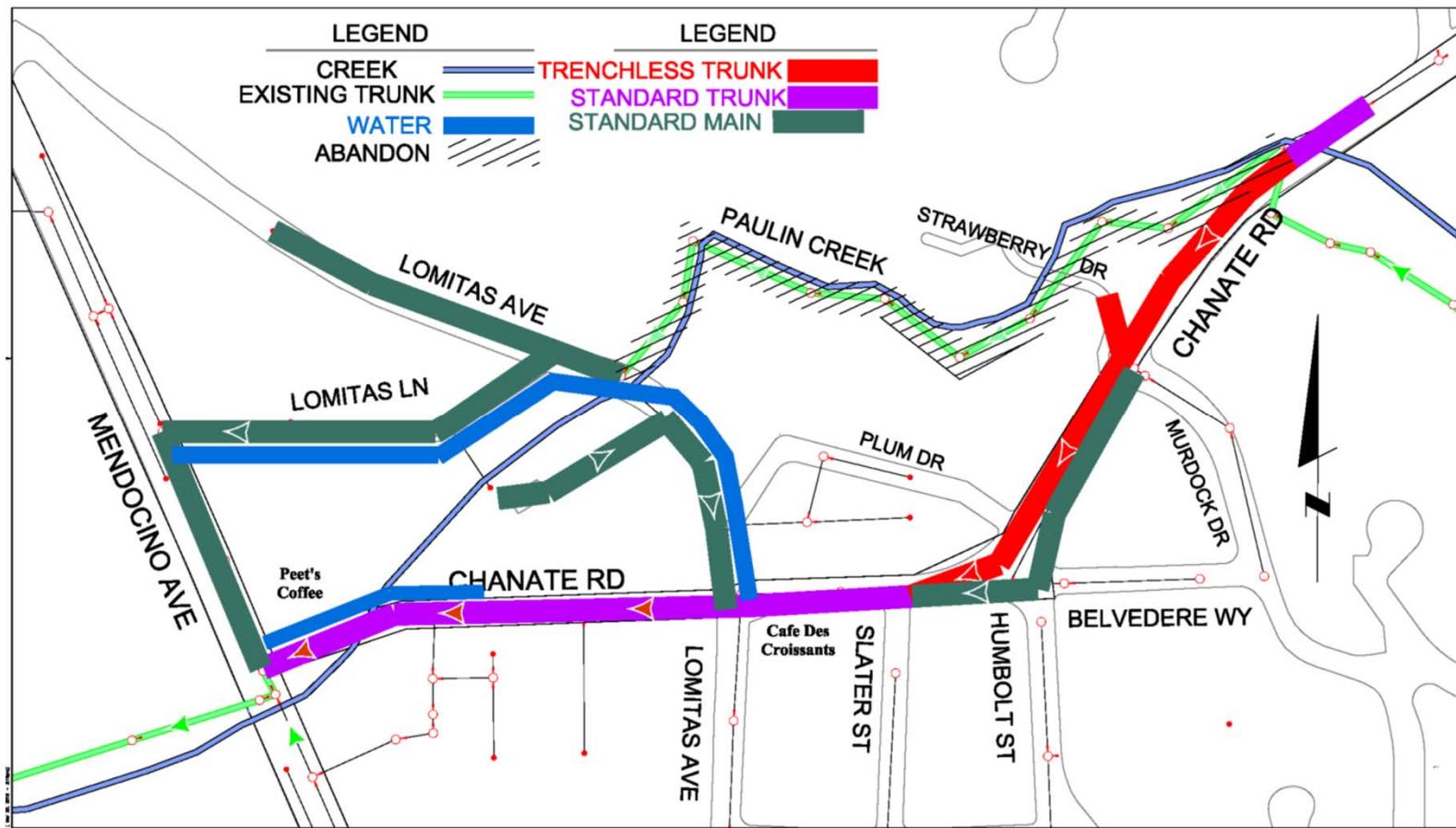
Project Background

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