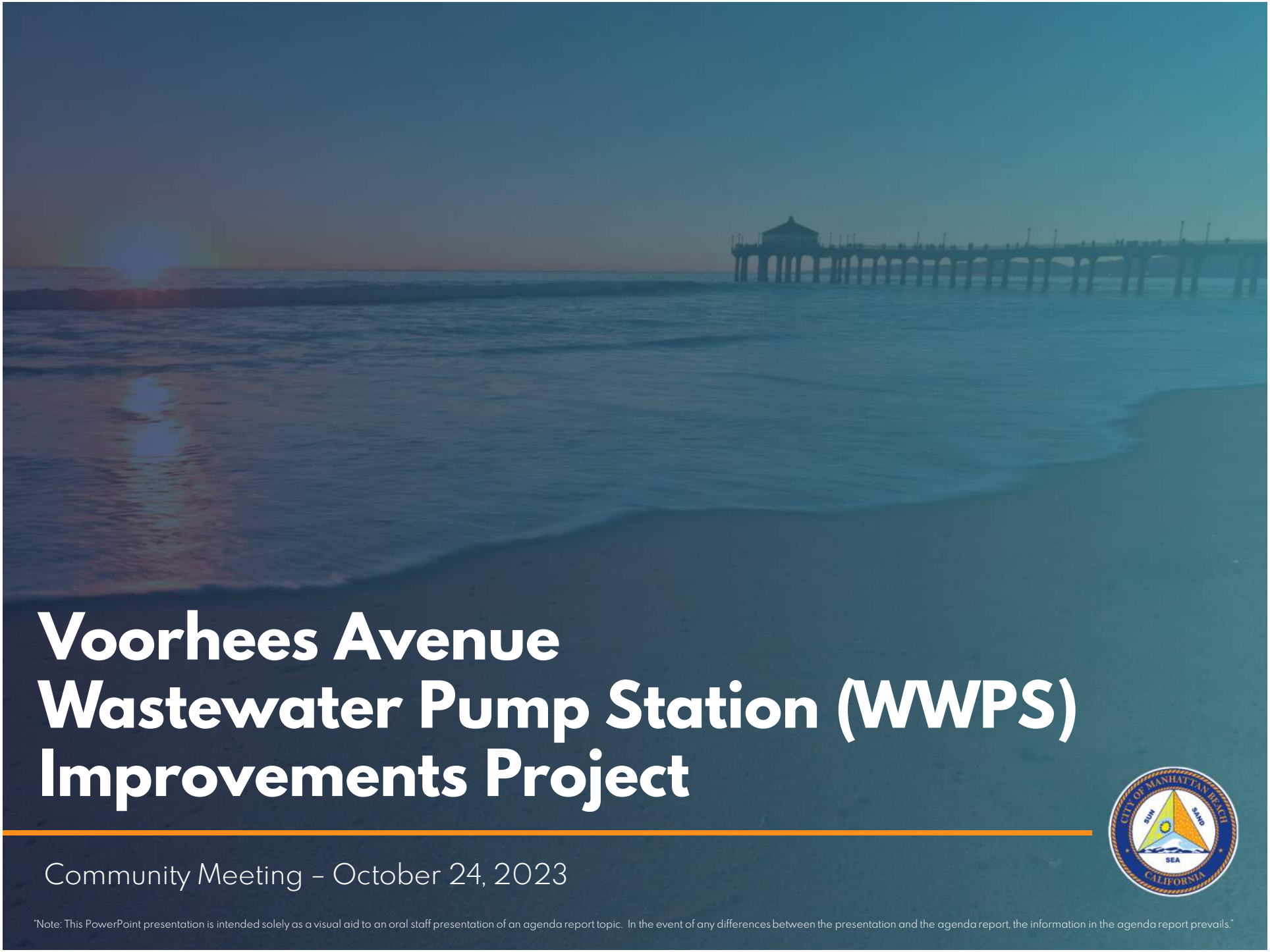
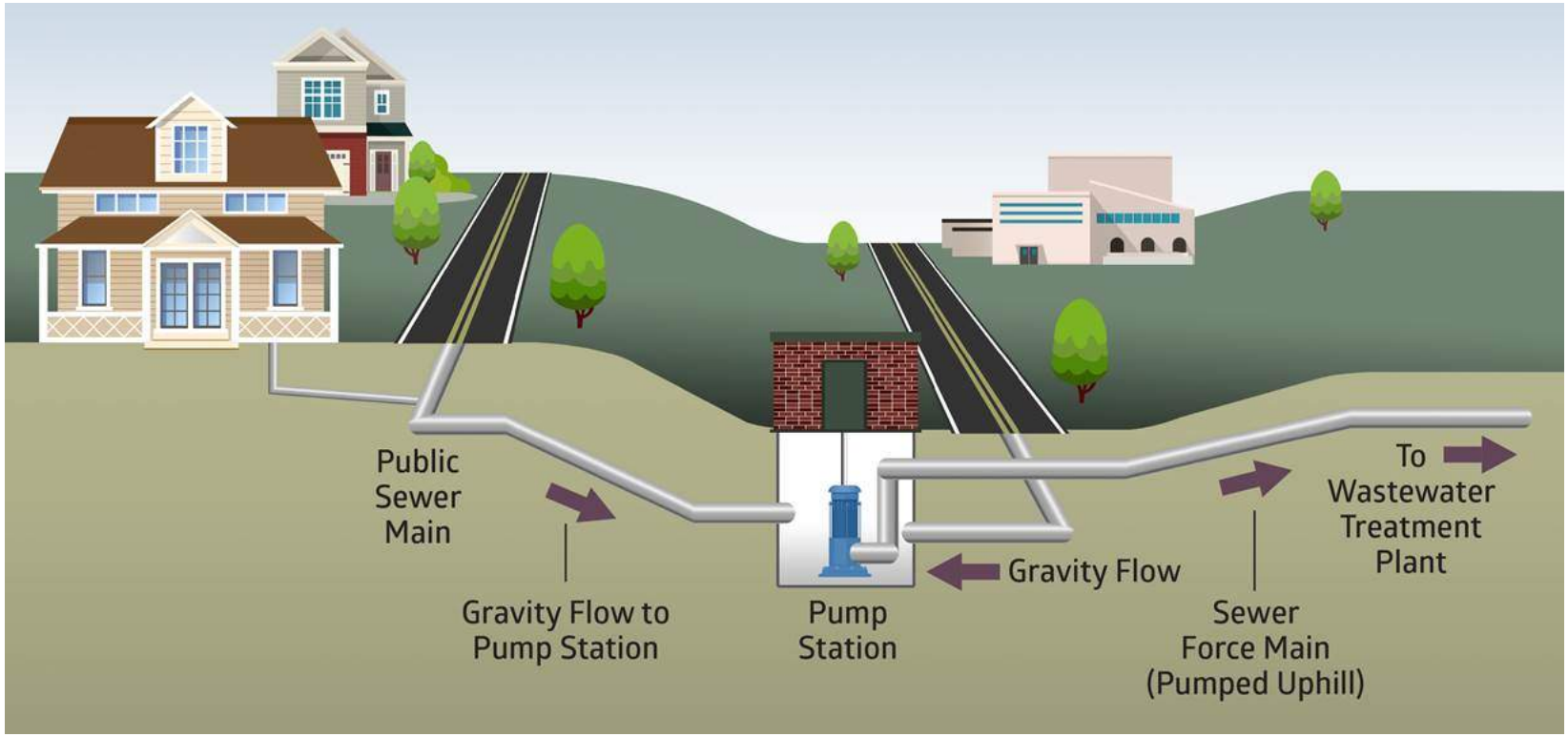


Voorhees Avenue Wastewater Pump Station (WWPS) Improvements Project

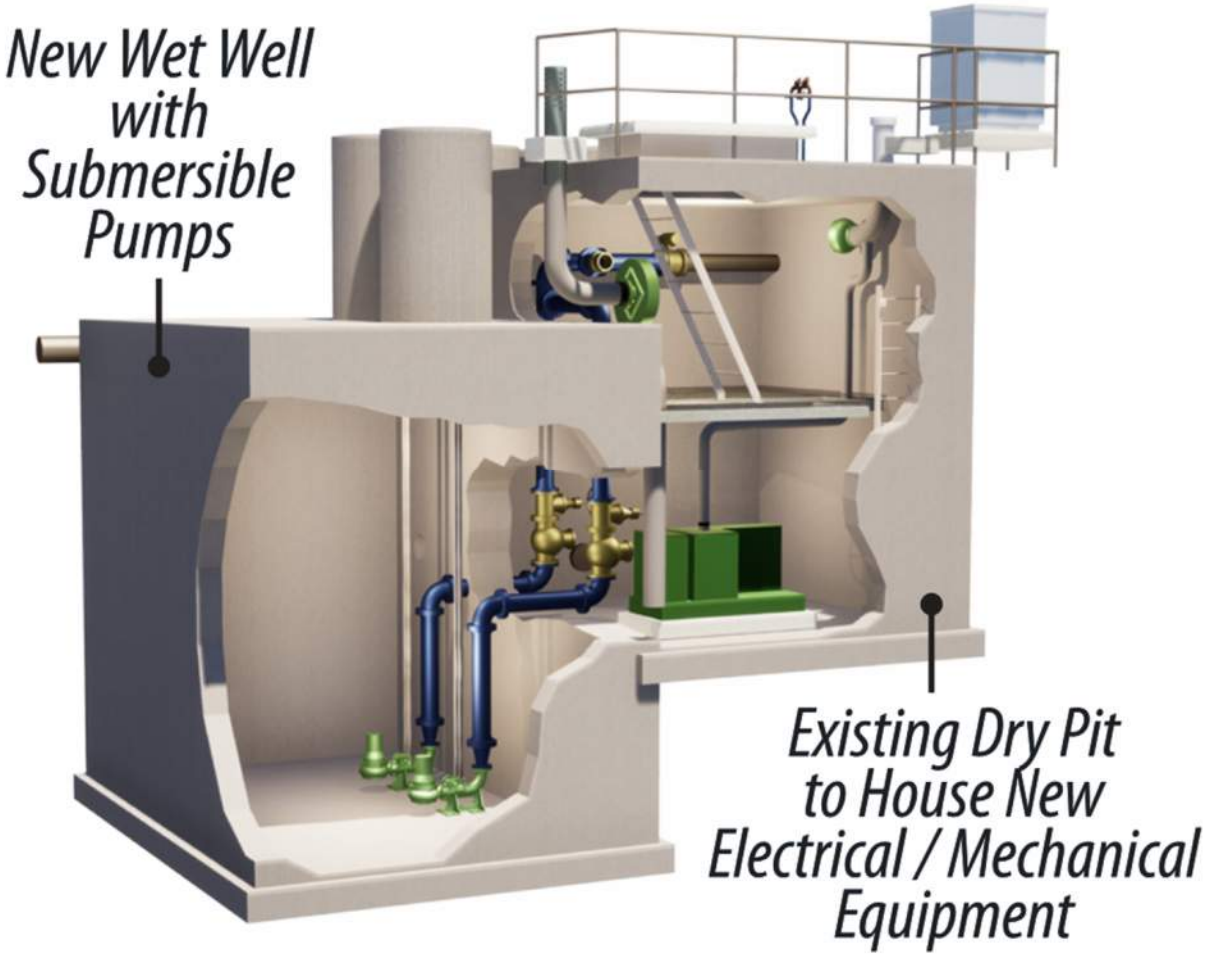
Community Meeting – October 24, 2023

"Note: This PowerPoint presentation is intended solely as a visual aid to an oral staff presentation of an agenda report topic. In the event of any differences between the presentation and the agenda report, the information in the agenda report prevails."

Typical Sewer Service

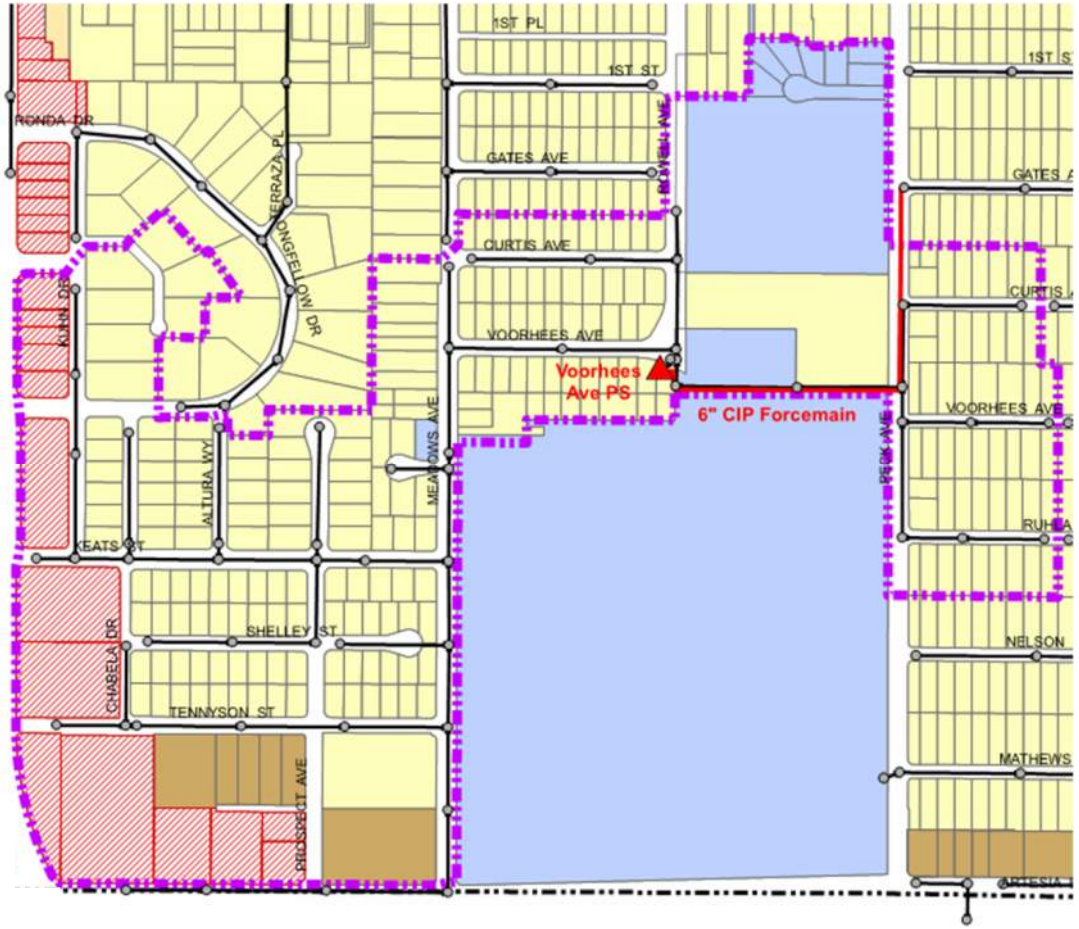


Typical Pump Station Overview



Voorhees WWPS Wastewater Sub-Basin

- Why a PS?
  - Topography
- Where is a PS located?
  - Lowest point.
- What does a PS do?
  - Moves sewage to a higher elevation in the gravity sewer system.



History & Background

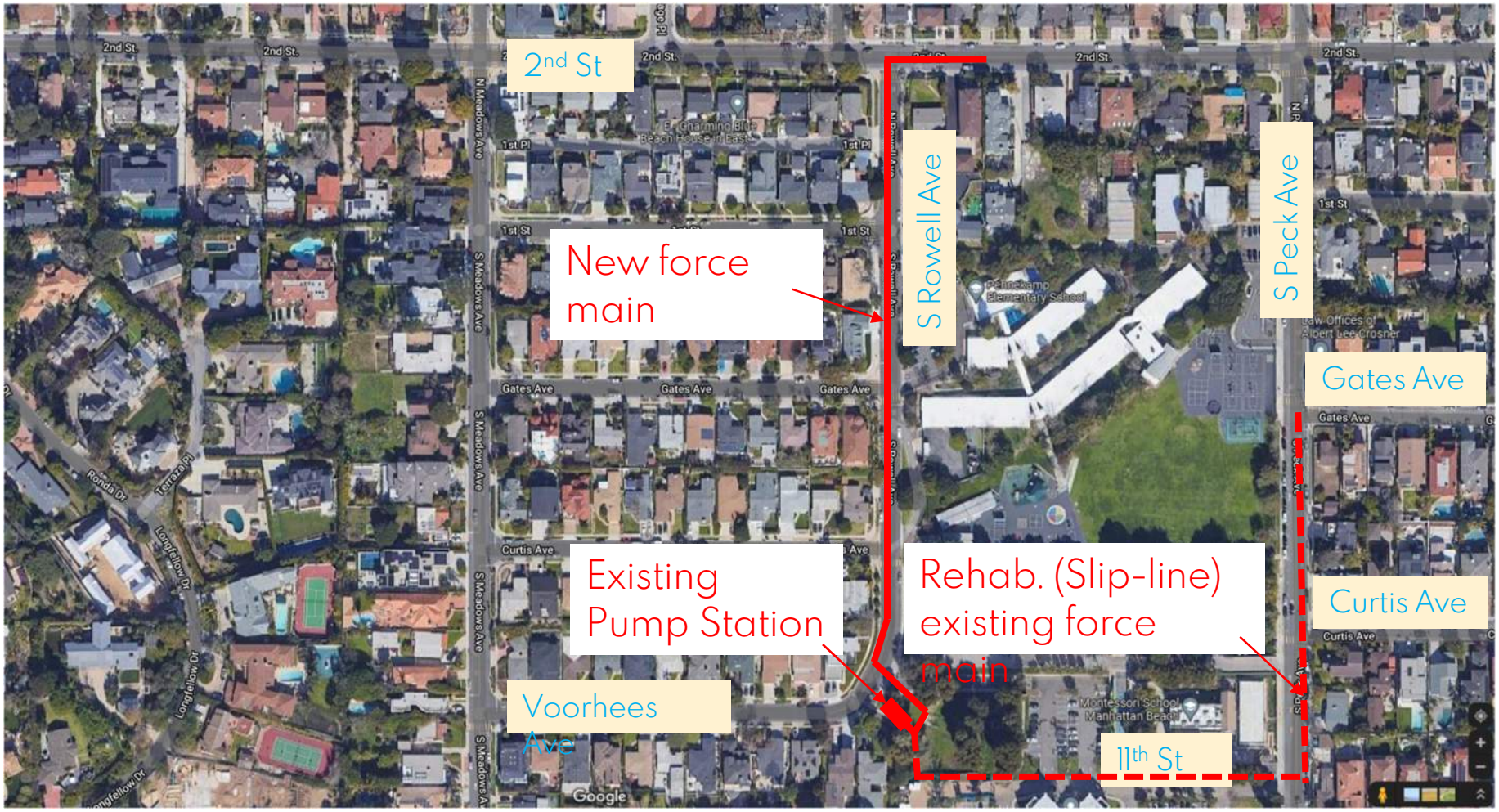
- 1960s Voorhees Ave WWPS and force main was constructed
- 1990s Mechanical and electrical upgrades
- 2010 Wastewater Master Plan identified the facility as approaching the end of useful live and this aging system further exasperated by periodic power outages
- 2019 Preliminary Engineering began with Basis of Design Reports for three WWPS including Voorhees
- 2022 Basis of Design Reports received by City Council
- 2023 Final Design

Project Summary

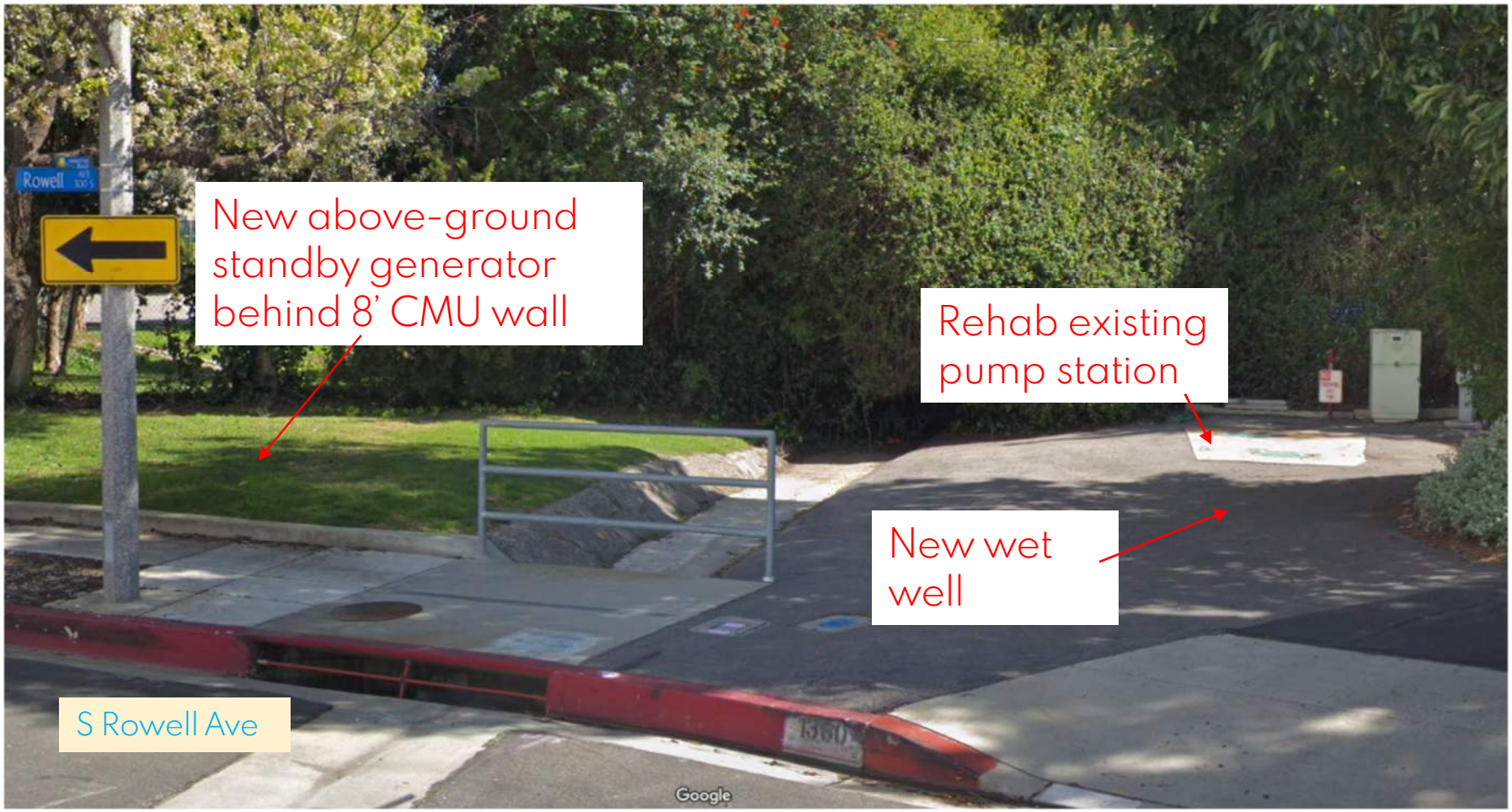
- Proposed Upgrades
  - New above-ground standby generator
  - New larger wet well (>30 minutes emergency storage)
  - New 350gpm submersible pumps
  - Rehabilitation of existing pump station
  - New Force main (~1,300')
  - Slip-line of existing force main (~1,400')

- During construction
  - Minimize the use of above-ground temporary bypass

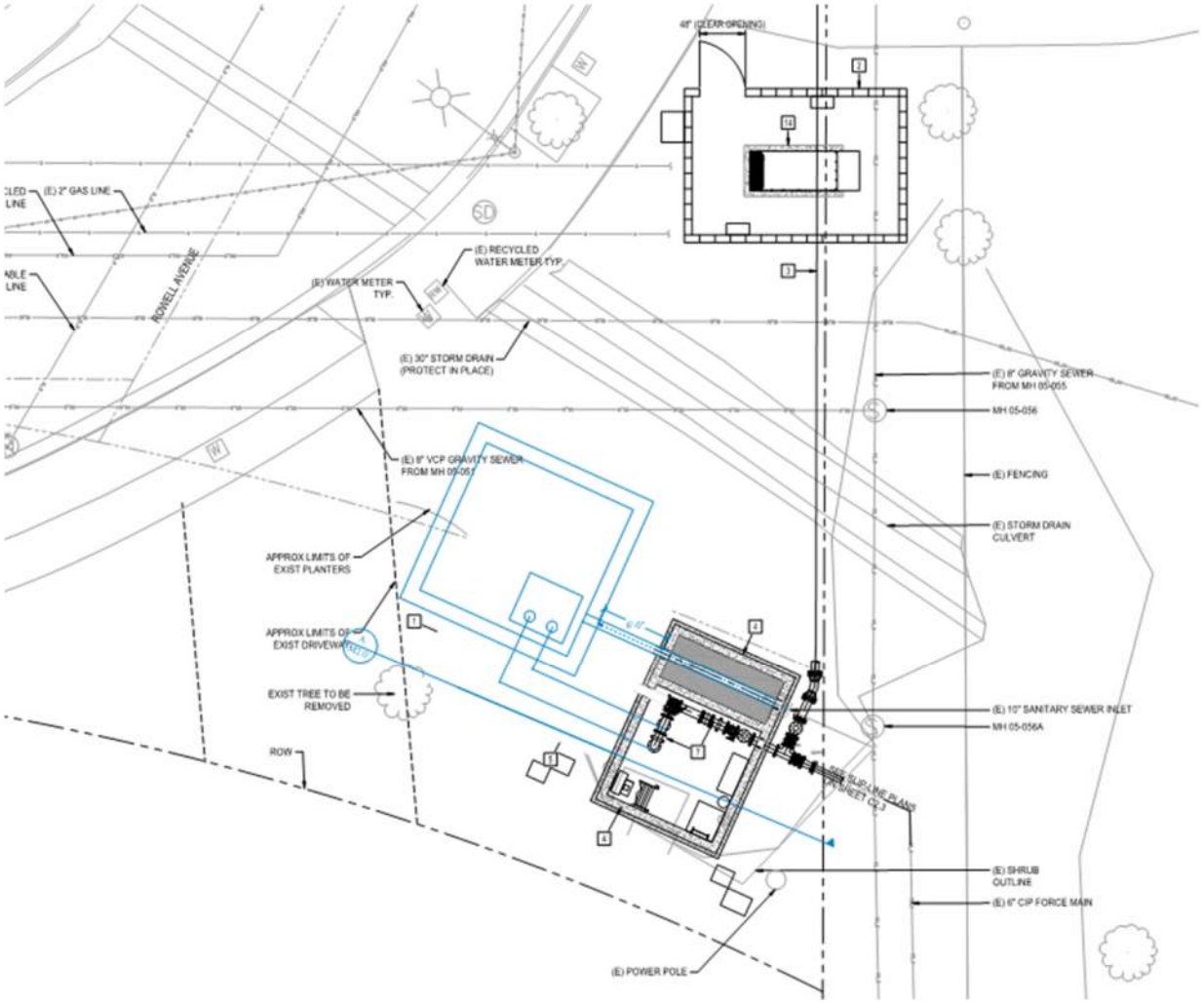
Site Map



Proposed Improvements



Plan View

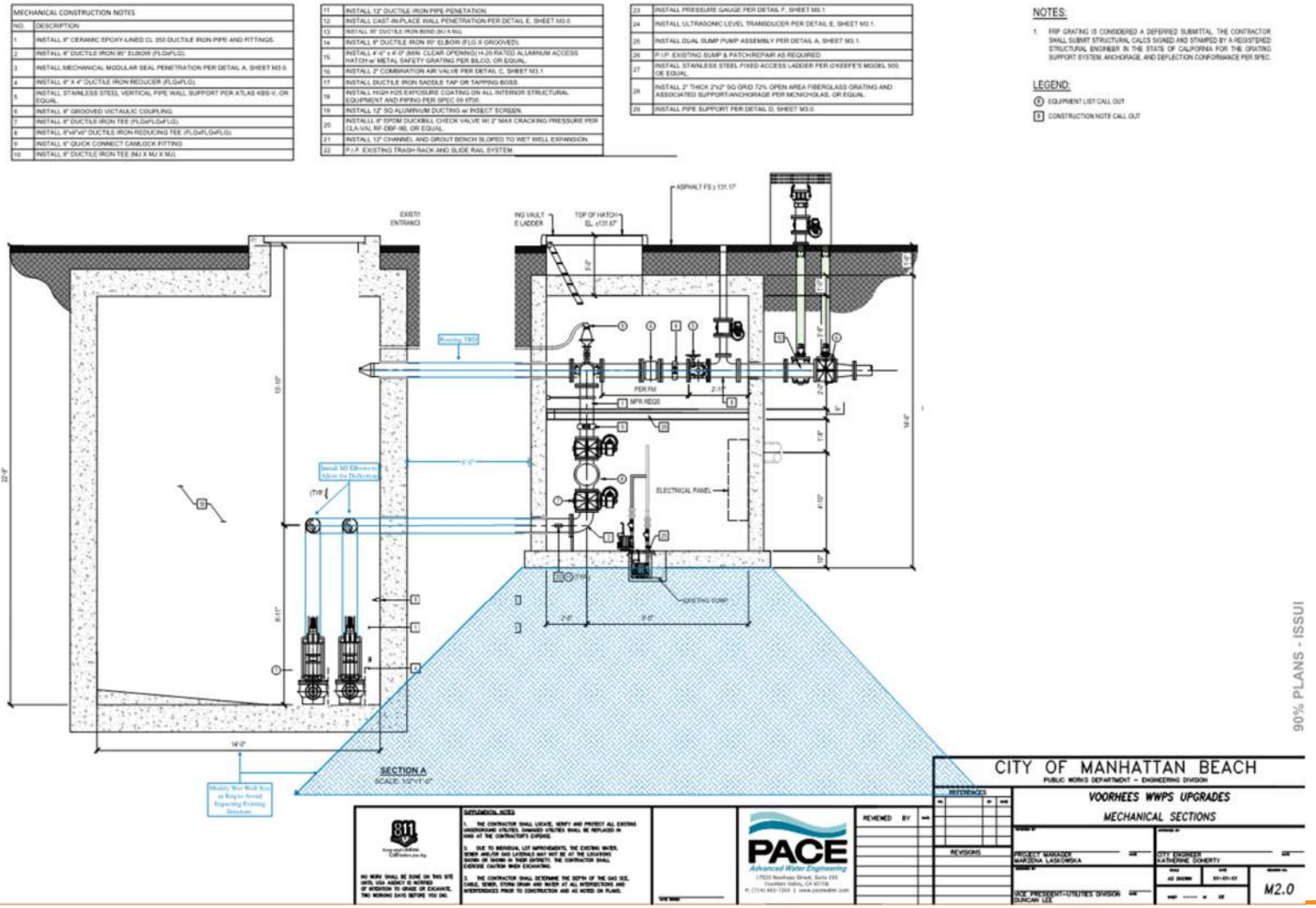


CIVIL CONSTRUCTION NOTES	
NO.	DESCRIPTION
1	INSTALL CAST-IN-PLACE WET WELL PER STRUCTURAL.
2	INSTALL CMU GENERATOR ENCLOSURE PER STRUCTURAL.
3	INSTALL 8" CERAMIC EPOXY LINED CL 350 DUCTILE IRON FORCE MAIN (TNEMEC PERMA-SHIELD 431) W/ JOINT BONDING AND POLYETHELENE WRAP
4	EXISTING VOORHEES LIFT STATION TO BE PROTECTED IN PLACE.
5	RELOCATE EXISTING GAS METER.
7	INSTALL LIFT STATION PROCESS EQUIPMENT UPGRADES PER MECHANICAL.
14	INSTALL STANDBY GENERATOR PER ELECTRICAL.

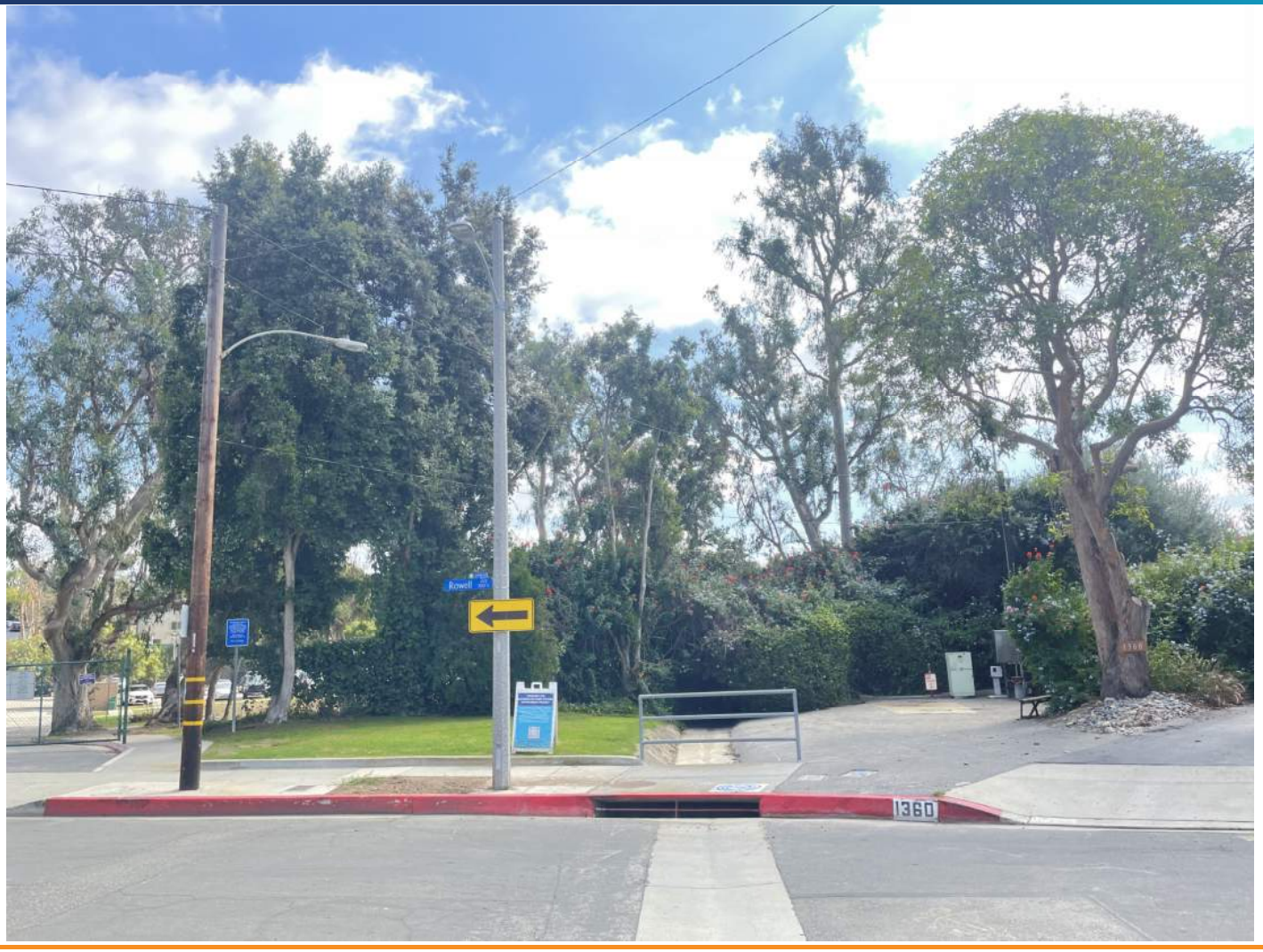
LEGEND

- PROPOSED 8" SEWER FORCE MAIN
- WROUGHT IRON FENCE
- LOT LINE
- (E) EXISTING

Section View



Existing Site



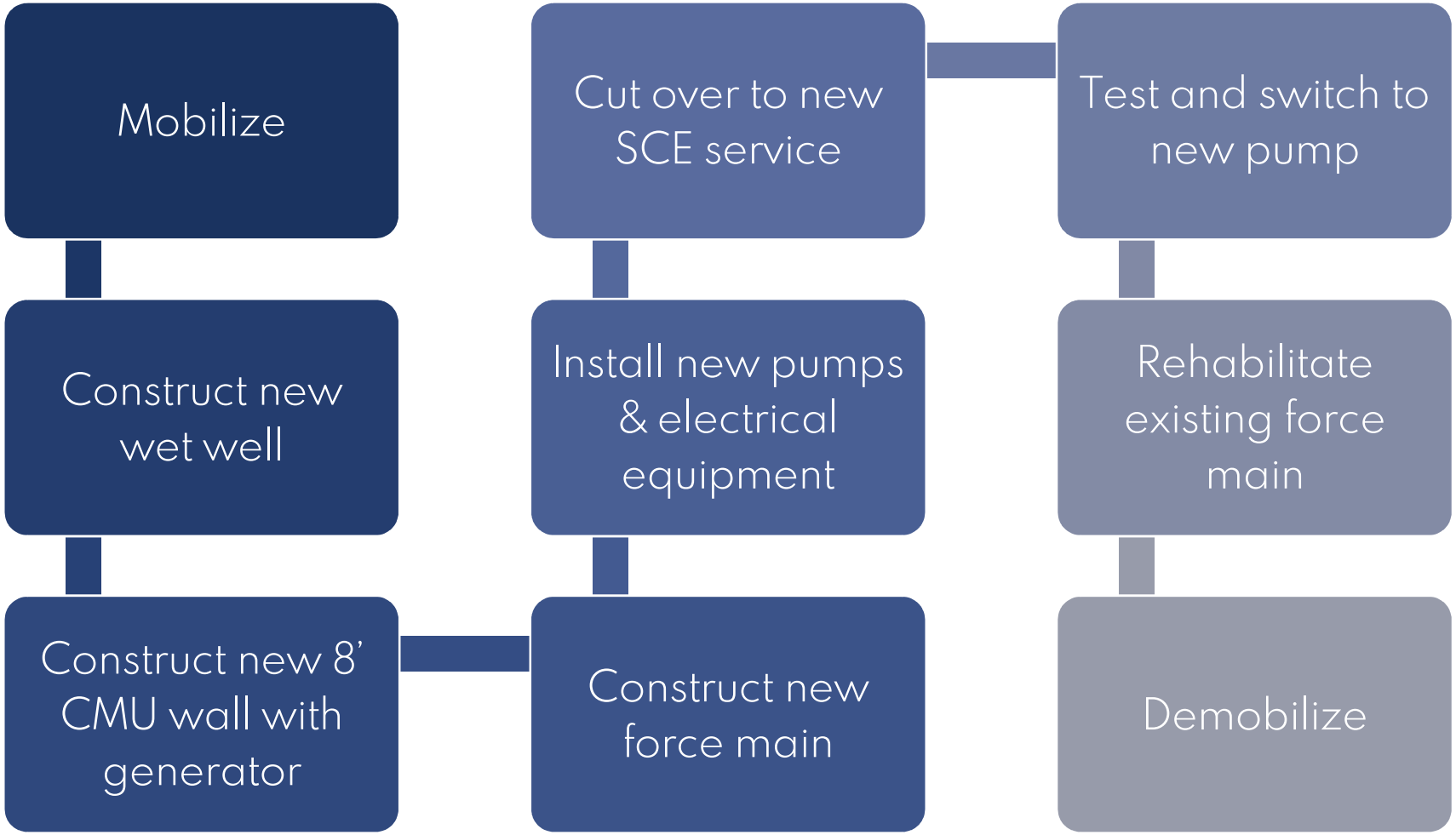
Proposed Site Rendering

Environmental Review

- The Phase 1 preliminary engineering BODR included a pre-screening Initial Study, prepared in accordance with the California Environmental Quality Act (CEQA), to disclose and evaluate short-term construction-related and long-term operational impacts initial determination of the Voorhees Sewer Lift Station Upgrade project.
- Based on the Pre-Screening Initial Study analysis, no potentially significant impacts would occur from the proposed project.
- The study may be found on City of Manhattan Beach Public Works CIP page for Voorhees Sewer Lift Station.

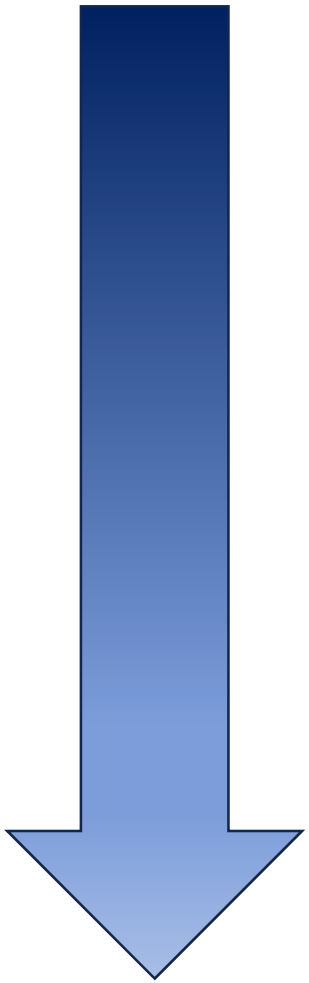
Construction Objectives

Preliminary Construction Sequence



Preliminary Timeline

Winter 2023/24	· Complete Final Design
Spring 2024	· Bid/Award
Summer 2024	· Construction Start
Fall 2025	· Construction End
Winter 2025/26	· Close Out



Potential Impacts & Mitigations

- Construction Noise
  - Excavators
  - Dump trucks
  - Hoist / Crane
  - Compactor
  - Other typical construction vehicles / equipment
- Mitigations
  - Follow ROW permit and allowed construction hours.

Potential Impacts & Mitigations

- Traffic Related
  - No Parking Signage
  - Traffic Pattern Modifications
- Mitigations
  - Follow ROW permit allowed traffic
  - modification hours.
- Potential Mitigations
  - Portion of construction outside the site (i.e. street) may take place in summer.
    - New force main installation.
    - Existing force main slip-lining.

Potential Impacts & Mitigations

- Removal of interfering shrubs and/or trees

- Mitigations
  - Moved the new wet well away from tree.
  - Kept electrical panels in existing dry vault.

- Potential Mitigations
  - Plant new trees
  - New landscape
  - Sacrificial shoring on tree side

Questions and Answers

Questions? Contact… Marzena Laskowska

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O: (310) 802-5325