

# PASADENA 36-INCH FORCE MAIN REPLACEMENT PROJECT – PHASE III

ENGINEERING AND CAPITAL IMPROVEMENTS DEPARTMENT SEPTEMBER 2020



### BACKGROUND

- The original Pasadena Transmission Force Main was constructed in 1979 and conveys wastewater flow to the Northwest Water Reclamation Facility.
- In addition to serving St Petersburg residents, this pipe also conveys wastewater for the following communities:
  - St Pete Beach
- South Pasadena
- Treasure Isle
- Pinellas County Bear Creek
- The original Transmission Force Main was constructed with pipe manufactured by the now defunct Interpace Pipeline Corporation which was fabricated with tensioning wire that was susceptible to accelerated corrosion failure.
- This type of pipe was used extensively in the City during that time and is being systematically replaced. Phases I and II of the Transmission Force Main replacement are complete and in service. This Project represents Phase III.





## PROJECT DESCRIPTION

- The Transmission Force Main pipe conveys wastewater from the City's Lift Station 61 Pasadena Master to the Northwest Water Reclamation Facility.
- Phase III (red line) will construct approximately 5,300 feet of 36-inch diameter ductile iron pipe between Lift Station 61 and 72<sup>nd</sup> Street N at 8<sup>th</sup> Avenue.
- Construction cost is approximately \$7,000,000.
- Construction phase is set to begin in the Spring of 2021 and should be completed in approximately 12 months.







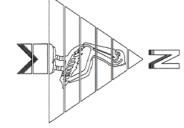
## CONSIDERATIONS

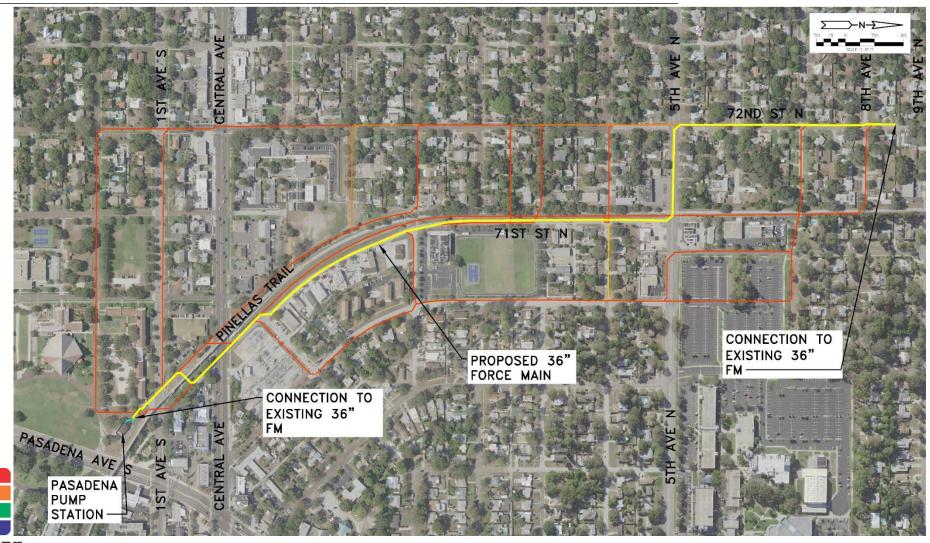
- The Transmission Force Main pipe route has been designed to minimize public inconvenience and cost, maximize safety, and preserve residential roadways and tree canopies.
- Risk to the Transmission Force Main operations is reduced by replacing the final leg of the existing defective pipe with new durable materials.
- Resiliency and sustainability has been increased by the selection of ductile iron pipe for the replacement because of its rigidity, durability and expected service life.
- Traffic congestion and detours on major roadways during construction have been avoided by utilizing trenchless methods such as jack and augering technology.
- Inconvenience to residents and businesses has been diminished through review of multiple Transmission Force Main pipe routes.





## ROUTE ALTERNATIVES







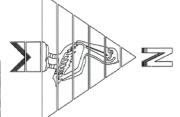
## ROUTE SELECTED

- Pipeline Corridor (South to North)
  - 71st Street N (Traveler's Way)
  - 5<sup>th</sup> Avenue N
  - 72<sup>nd</sup> Street N
- Trenchless Crossings
  - 1st Avenue S
  - Pinellas Trail between 1<sup>st</sup> Avenue S and Central Avenue
  - Central Avenue
  - 8<sup>th</sup> Avenue N





## ROUTE SELECTED







#### CONSTRUCTION CONCERNS

 The City has endeavored to minimize these concerns, but there are elements to be aware of:

#### Road Closures and Detours

Due to the location of the new Force Main pipe and the existing underground facilities, it will be necessary to temporarily close traffic lanes and detour traffic. The contractor will be required to maintain access for residences, businesses, St. Petersburg College, bus routes, emergency vehicles, mail delivery, solid waste collection, etc. throughout construction. Additionally, the Force Main pipe construction will be staged and limited to smaller portions of the overall project, and road restoration and opening will be performed as these stages of the pipe installation are completed.

#### Noise

The nature of construction will result in additional noise related to the construction activities. However, the contractor will be required to comply with the City noise control ordinance. The contractor will be required to use pumps with sound barriers suitable for residential areas to minimize noise during non-construction periods.

#### Dust and Debris

Dust and debris can be expected as related to the construction activities. However, the contractor will be required to apply water to dust producing areas and replace road pavement and grass as soon as practical. The contractor will be required to remove all extraneous construction debris on a daily basis.



## YOUR INPUT IS IMPORTANT

- After the meeting
  - Website stpete.org/PasadenaFMR
  - Email: StPetePasadenaFM@gmail.com
  - Provide questions/ comments through October 30<sup>th</sup>



