## Lift Station 87 Wet Weather Flow Transfer Project

**Engineering and Capital Improvements Department** 

Nov. 18, 2021



#### **MEETING AGENDA**

- 6:00 6:05 Introductions
- 6:05 6:25 Presentation
- 6:25 7:25 Questions and Answers
- 7:25 7:30 Closing Remarks





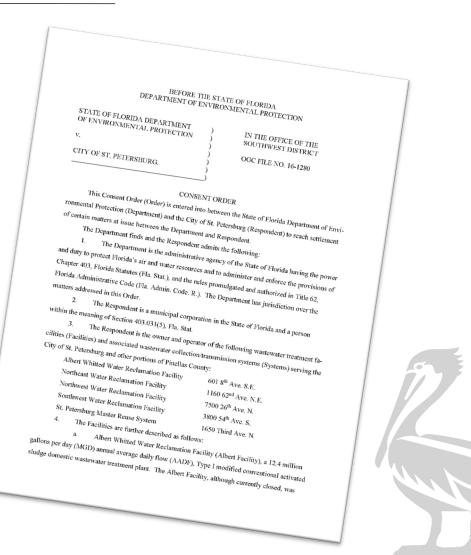
#### **PROJECT LOCATION**



#### ADDRESSING WET WEATHER OVERFLOWS

 Required by Florida Department of Environmental Protection Consent Order No. 16-1280





## **PROJECT NEED & GOALS**

- Minimize potential for wet weather overflows
- Protect the environment & public health
- Move wastewater more efficiently through the system
- Improve wastewater service reliability







## SUSTAINABLE INFRASTRUCTURE

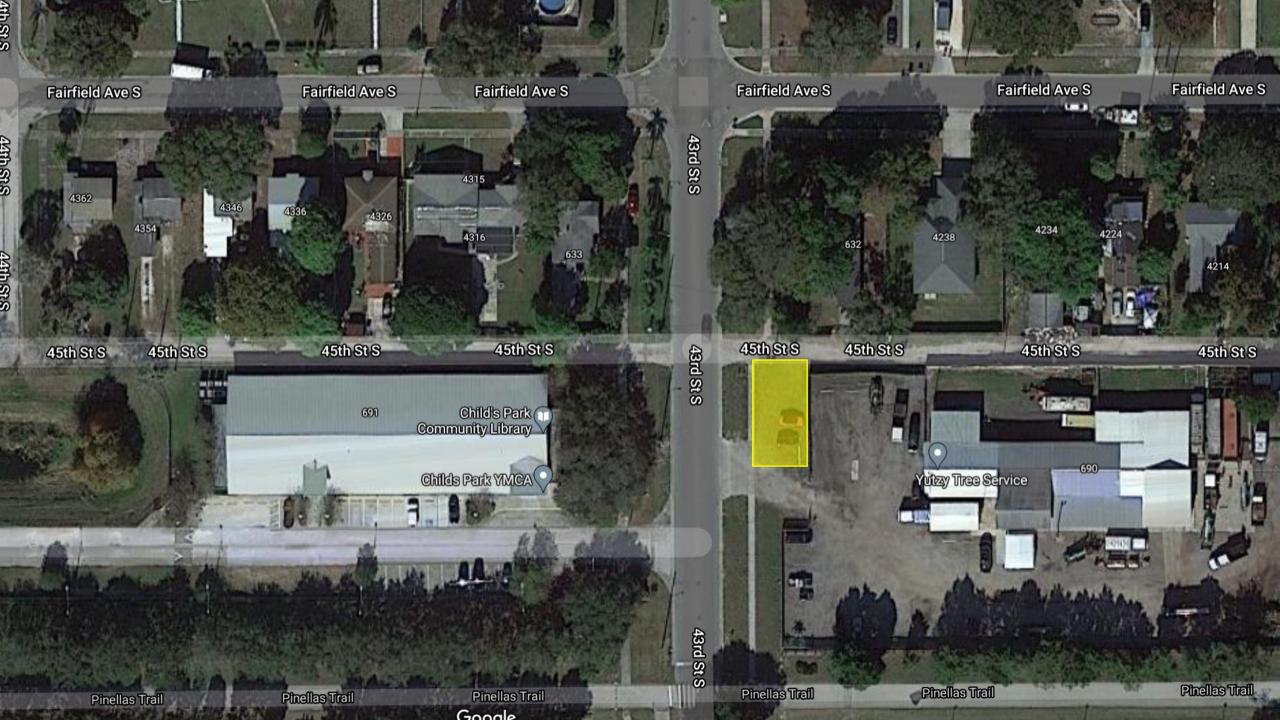
- Envision Verification
  - Third-party sustainability certification
  - $_{\circ}\,$  "Are we doing the right project?" and
  - o "Are we doing the project right?"
- Design-build ensures expedited delivery

#### **Envision Categories and Sub-Categories**









#### **SITE SELECTION PROCESS**

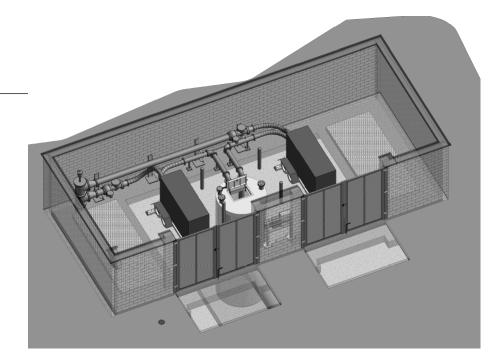
Site selected based on system geography and hydraulics Depth of City sewer system
Ideally situated between
Northwest and Southwest water reclamation facilities





## **NEW UNMANNED LIFT STATION**

- Operated manually <u>only</u>
   <u>during heavy rainfall</u>
- New wet well, connecting pipelines and valves
- Improved operational flexibility:
  - Send wet weather flow to the Northwest or Southwest water reclamation facilities



3-D Rendering facing 43<sup>rd</sup> Street S. Not to scale.





#### **REPLACING AGING INFRASTRUCTURE**



Three aging brick manholes will be replaced

Replacement of approximately 460 feet of sanitary sewer pipe that exhibits signs of degradation





## **ENGAGING STAKEHOLDERS - PRIMARY**

- Neighborhood Associations

   Field trip with Childs Park representatives
- Residents
- Businesses and Churches
   YMCA
  - Fairmount Park Elementary School
  - Pasadena Community Church; Faith Fellowship



 Royal Palm Cemetery, Woodlawn Memory Gardens and more





# **ENGAGING STAKEHOLDERS - SECONDARY**

- Florida Department of Environmental
   Protection
- Florida Department of Transportation
- Pinellas County Building & Development Right of Way
- PSTA SunRunner





Stakeholder Concern	Action Taken
Visual Appearance	<ul> <li>Landscaping to beautify lift station enclosure</li> <li>Community coordination for mural on lift station wall</li> </ul>
Noise	<ul> <li>No noise 99% of time (lift station is idle)</li> <li>12-foot sound attenuating wall</li> <li>During operations, target level at 40 feet: 55 decibels</li> </ul>
Odor	<ul> <li>None. Closed system and post-operation cleaning will prevent odors.</li> </ul>
Socio-economic	<ul> <li>No impact. Horizontal directional drilling minimizes impacts on business access.</li> <li>Advance notice of on-street parking closures or limited access.</li> </ul>

Stakeholder Concern	Action Taken
Financial	<ul> <li>Employment opportunities discussed with Childs Park Neighborhood Association</li> </ul>
Safety	<ul> <li>Secured work zones; pedestrian and motorist detours/wayfinding signs</li> <li>Outreach and advance notice to Fairmount Park Elementary School; Argonauta School</li> <li>Paving alleyway between 66<sup>th</sup> Street South and Pinellas Way to improve road conditions and safety</li> </ul>
Health	<ul> <li>No negative impacts; positive impact - minimizing potential overflows protects public health &amp; safety</li> </ul>

Stakeholder Concern	Action Taken
Historic/Cultural	<ul> <li>Supporting Childs Park Neighborhood Association's desire to improve the neighborhood appearance with mural and landscaping</li> </ul>
Environmental	<ul> <li>Protects watershed/waterways from wastewater overflows</li> </ul>
Sustainability	<ul> <li>Mechanical equipment (pumps) maintained off site until needed during heavy rainfall</li> <li>Manual operation eliminates complex power and control systems that would remain primarily unused</li> <li>No potable water connection – wash down and cleaning done using reclaimed water</li> </ul>

Stakeholder Concern	Action Taken
Resiliency	<ul> <li>Enables transfer of flows between Northwest and Southwest water reclamation facilities for operational redundancy</li> <li>Fiberglass manholes and wet wells to prevent infiltration as sea level and groundwater rises</li> </ul>
Planning/ Interdependency	<ul> <li>PSTA Sunrunner</li> <li>Replacing gravity sewer and manholes on 43<sup>rd</sup> in conjunction with this project</li> </ul>

#### **PROJECT COST & FUNDING**

- Estimated project cost: \$11.5 million
- Funding source: City's Water Resources Capital Projects Fund
  - Already budgeted for in recent rate analysis
  - No rate increase as a result of this project





### **SCHEDULE & NEXT STEPS**

- Design & Permitting now thru late 2021
- Public Meeting Fall 2021
- Construction Start Late November/Early December 2021
  - Substantial completion May 23, 2022
  - Final completion June 2022 (tentative)

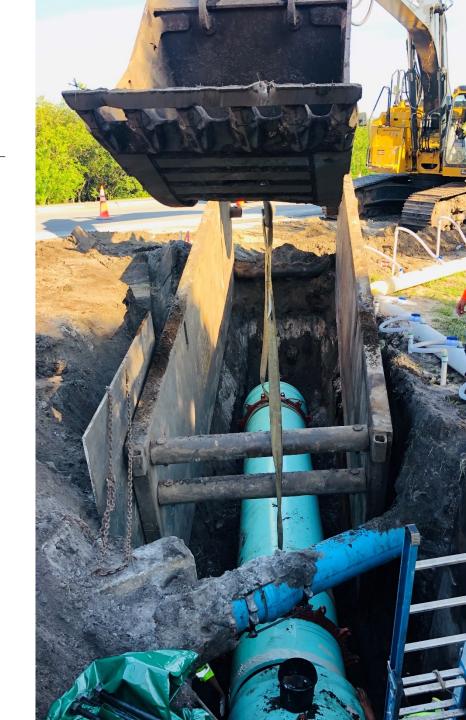


Schedule is subject to change based on weather, permitting or other unforeseen conditions.



## **CONSTRUCTION IMPACTS**

- Construction activity, noise and minor vibration from 7 a.m. – 7 p.m. Monday-Friday
  - Some night or weekend work may be required
- Lane closures and detours in construction zone
- Sidewalk closures will be clearly marked



### **CONSTRUCTION IMPACTS – 1<sup>ST</sup> AVENUE SOUTH**





- South side of 1<sup>st</sup> Avenue South will be closed
  - Construction will affect City right-ofway, on-street parking, southern-most travel lane
  - Impeded driveway access for 5-7 days during horizontal directional drilling
    - Long segments of fused pipe will be strung along roadway
  - Door hanger in advance of driveway impact

## **CONSTRUCTION IMPACTS – 43RD STREET SOUTH**

- 43<sup>rd</sup> Street South closed temporarily from YMCA to southwest corner of Fairmount Park Elementary
  - Currently planned for early 2022
  - Will work with YMCA to ensure access
  - No impacts to school



• Temporary lane closures/detours



#### AFTER THE MEETING



#### Your input is important!

- www.StPete.org/LiftStation87
- Email: <u>StPeteLS87@gmail.com</u>
- Call: (813) 486-0361
- Fill out survey and provide questions/comments

