Town of Lake Park

Stakeholder Meeting

August 22, 2022

OLD DIXIE SEPTIC TO SEWER CONCEPTUAL REPORT

PRESENTED BY:

ENGENUITY GROUP INC

1280 N Congress Ave, Suite 101

West Palm Beach, FL 33409

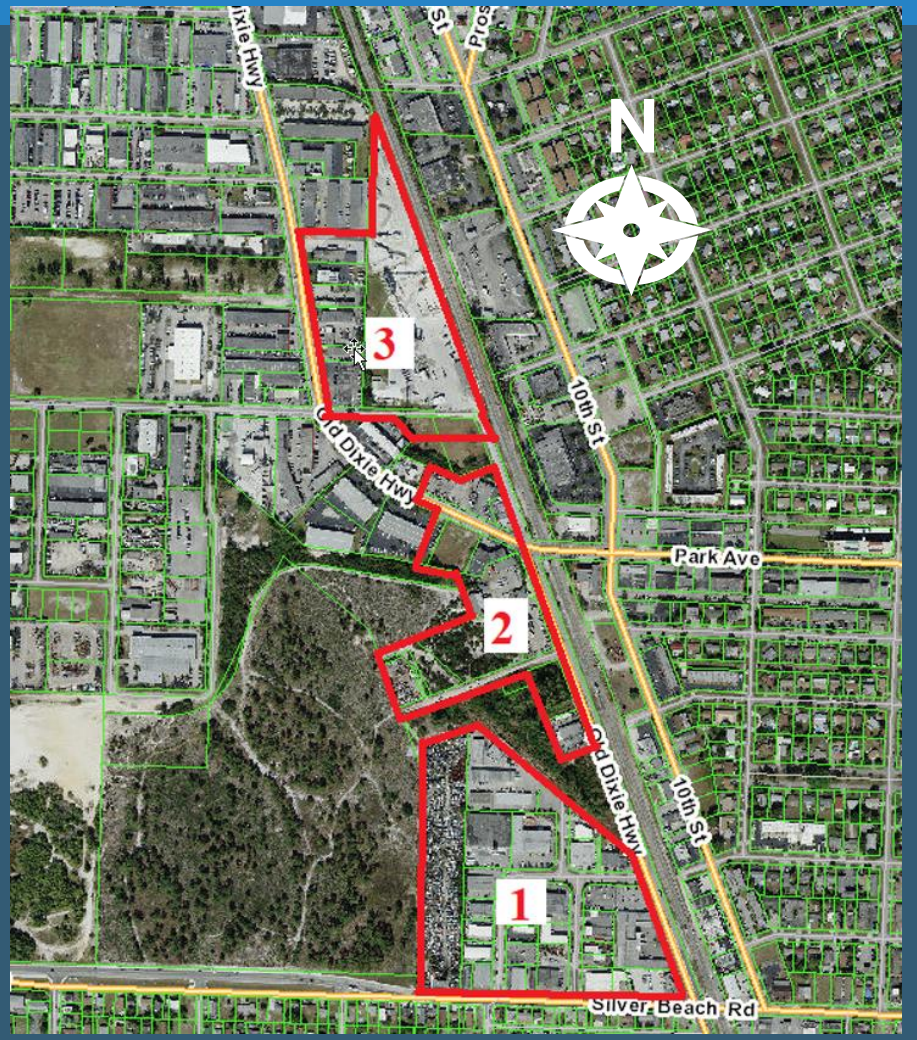
T: 561-655-1151

Job#: 18187.27

THE 3 SECTIONS

- Section 1 - South-Section – Tri City Industrial Park
  29 Properties
- Section 2 – Mid-Section – Lake Park Public Works
  6 Properties
- Section 3 – North-Section
  7 Properties

Total of 42 Properties

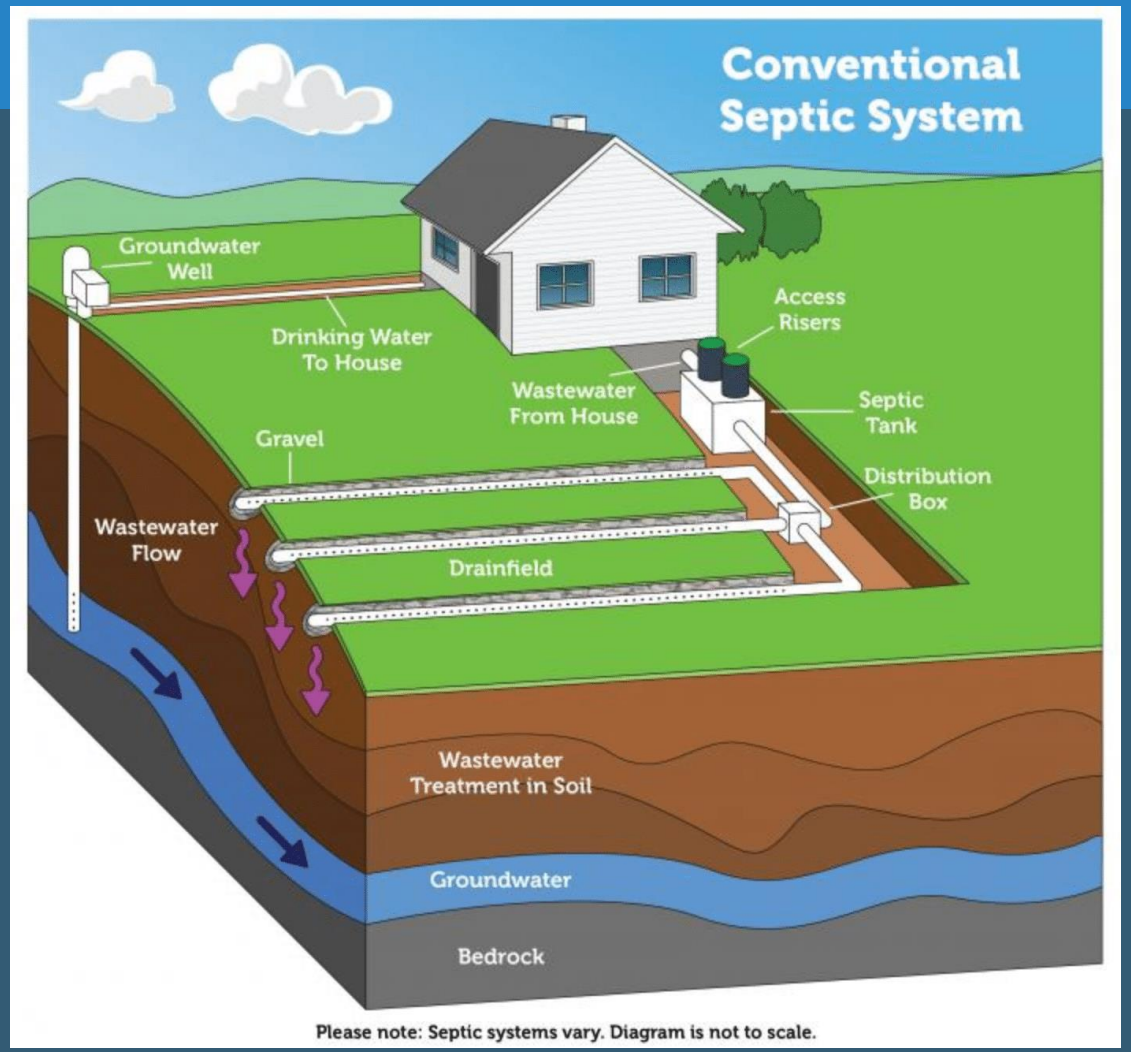


CURRENT SITUATION

- All 42 properties are on septic-type systems
- Groundwater contamination concerns ongoing
- State regulations are discussed annually regarding the adverse environmental impact of these systems
- Palm Beach County Health Department continues to tighten their regulations
- Re-development could be a potential problem
- Property values may remain stagnant

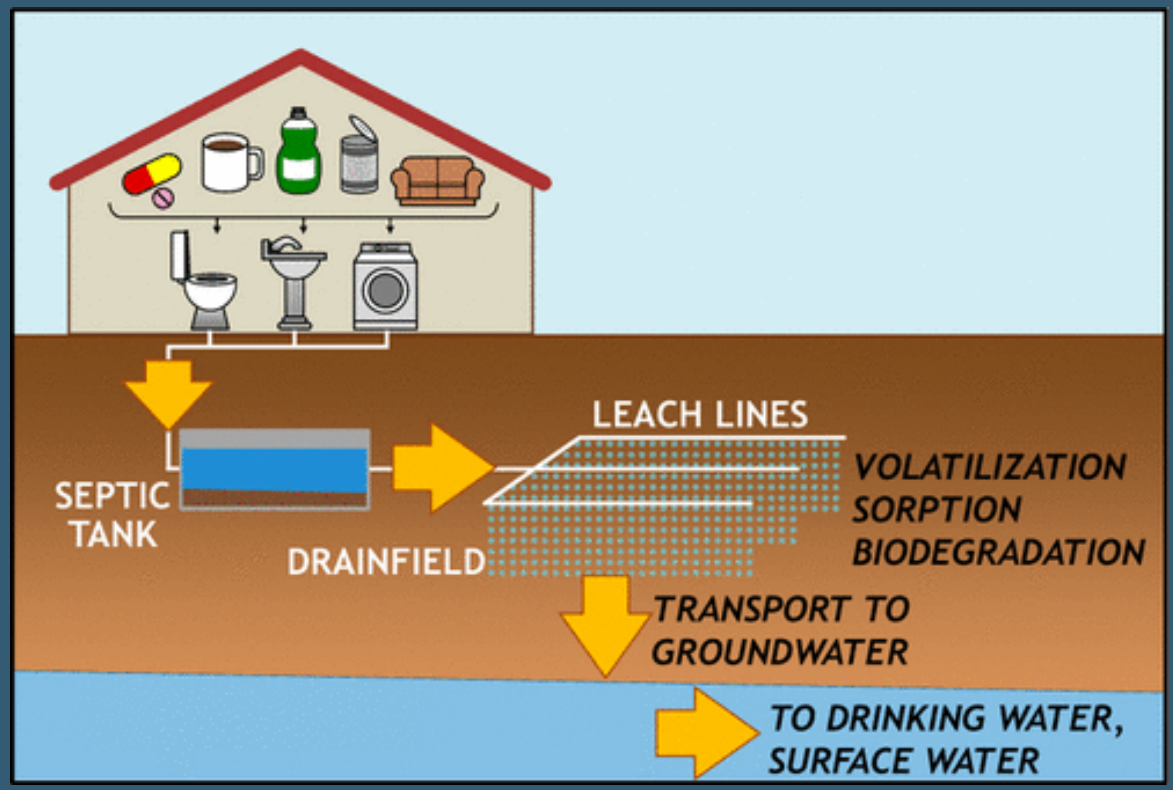
CURRENT WASTEWATER SYSTEM

- THE SEPTIC TANK PROCESS:
  - An underground chamber holds wastewater from a building or home
  - The waste settles and is broken down by naturally occurring enzymes and bacteria
  - The treated wastewater is then drained through underground drainage pipes on the property



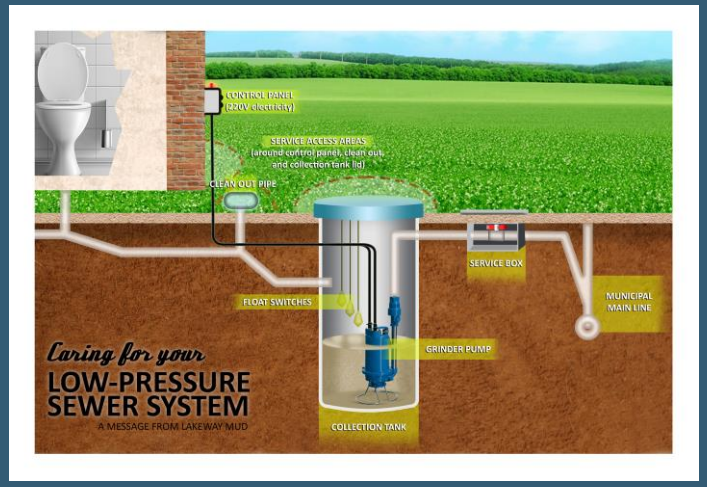
CURRENT SEPTIC TANK CONCERNS

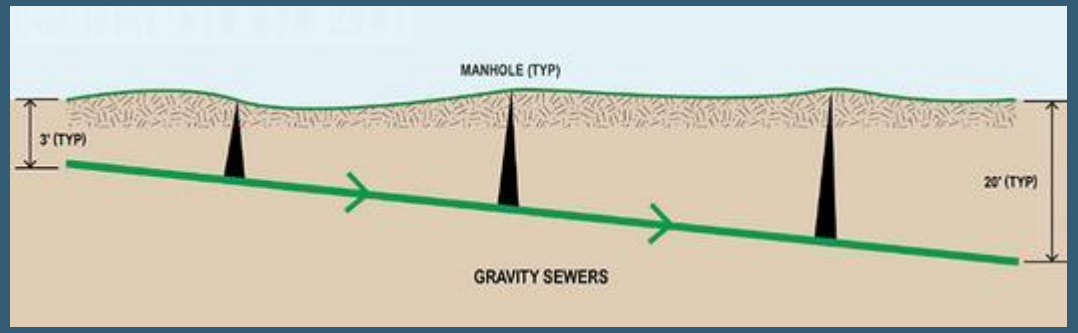
- Concern over effectiveness of the septic tanks for larger-scale industrial use
- Concern over hazardous waste discharge which cannot be treated by septic tanks



TWO REPLACEMENT ALTERNATIVES

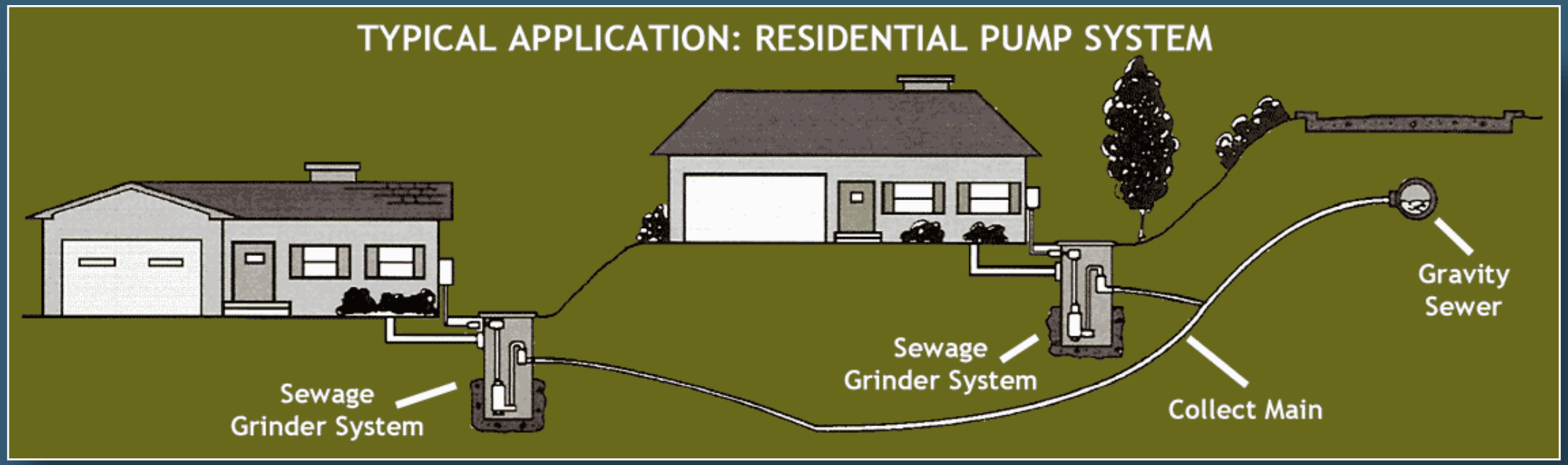
- *The low pressure system* in which every property will have one
- *The gravity/low pressure combination system* where the South-Section (1) will have a gravity sewer, and the rest will have *the low pressure*





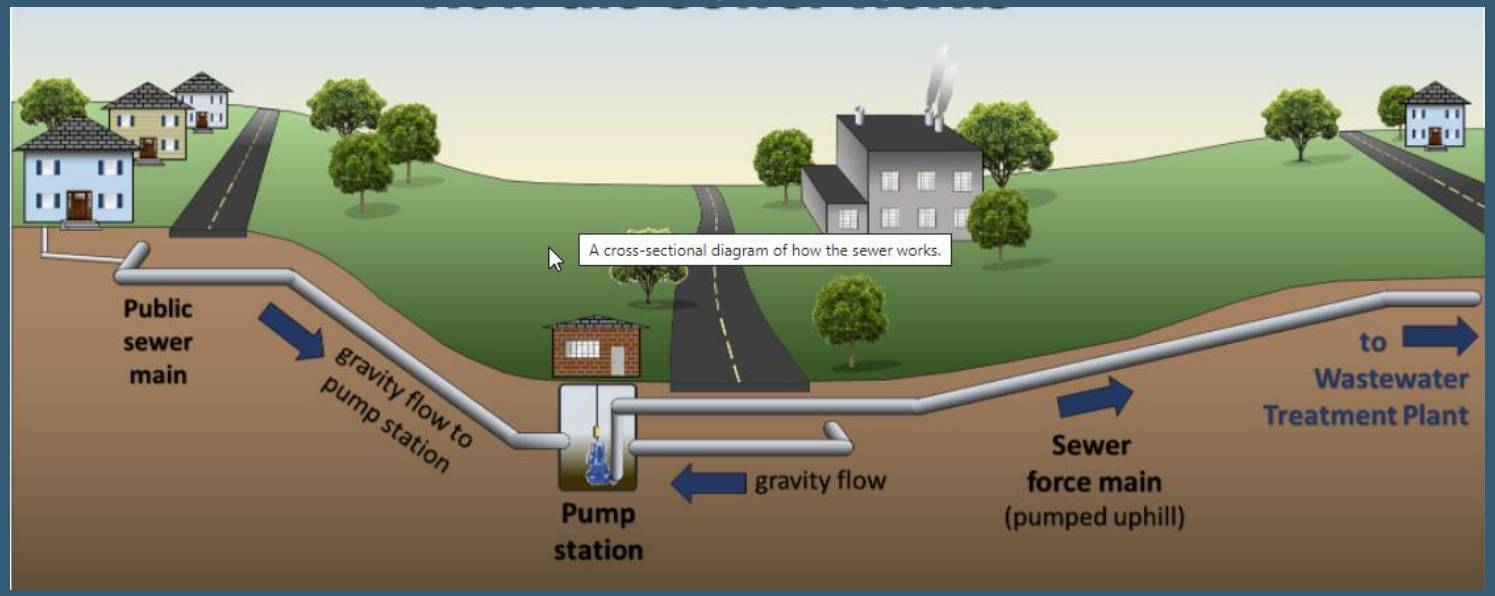
LOW PRESSURE

- The low pressure sewer system:
  - Uses a small pump station located at each property to move wastewater from the building to the regional wastewater treatment facility



GRAVITY SEWER

- The gravity sewer system:
  - Use pipe that are constructed by gravity (called laterals) from a building to a main gravity system.
  - All of the wastewater will travel to a lift station, where it pumps the wastewater to another pump station or a treatment plant.



COST SUMMARY: LOW PRESSURE

Septic to Sewer Feasibility Report

April 2022
Project No. 18187.27

Summary of Estimated Costs -Low Pressure System

		Conceptual Capital Construction Cost[1]	Operation and Maintenance Estimated Annual Costs[2]	Annual Construction Cost - Amortized over 20 years at 4% interest rate	Total annual cost (Maintenance and amortized construction cost)	Average annual cost per property[3]
Proposed Alternatives	Proposed SUA Public System	~$1.04 million	Paid by SUA. (excludes monthly sewer billing)	$75.6k	$75.6k	$1,800
	Proposed Onsite Private System (All 42 properties)	~$3.80 million	~$190k (paid by property owner)	$276k	$466k	$11,090
	Total	~$4.84 million	~$190k (paid by property owner)	$352k	$542k	$12,890

[1] Cost does not include Seacoast Utilities fees for *reservation and administration charges*.

[2] Cost includes the following assumptions: SUA sewer base fee of $30 per month per property as well as usage fee of $0.79/1000 gallons, $1,000 per year per property for lift station maintenance, electricity costs, and 3% of construction cost for ongoing annual renewal and replacement costs.

[3] This cost is the total cost divided evenly over the 42 properties analyzed in this report, and is an average. This is an estimate of the annual total costs during a 20-year loan payback period. The actual cost to each property will vary per the enclosed detailed cost breakdowns – see Appendix J

Systems Summary

COST SUMMARY: GRAVITY/LOW PRESSURE

Septic to Sewer Feasibility Report

February 2022
Project No. 18187.27

Summary of Estimated Costs -Gravity / Low Pressure Combination System

		Conceptual Capital Construction Cost[1]	Operation and Maintenance Estimated Annual Costs[2]	Annual Construction Cost Amortized over 20 years at 4% interest rate	Total annual cost (Maintenance and amortized construction cost)	Average annual cost per property[3]
Proposed Alternatives	Proposed SUA Public System	~$3.14 million	Paid by SUA. (excludes monthly sewer billing)	$217k	$217k	$5,160
	Proposed Onsite Private System (All 42 properties)	~$1.60 million	~$60k (paid by property owner)	$116k	$176k	$4,190
	Total	~$4.74 million	~$60k (paid by property owner)	$333k	$393k	$9,350

[1] Cost does not include Seacoast Utilities fees for *reservation and administration charges*.

[2] Cost includes the following assumptions: SUA sewer base fee of $30 per month per property as well as usage fee of $0.79/1000 gallons, 2% of construction cost for ongoing annual renewal and replacement costs.

[3] This cost is the total cost divided evenly over the 42 properties analyzed in this report, and is an average. This is an estimate of the annual total costs during a 20-year loan payback period. The actual cost to each property will vary per the enclosed detailed cost breakdowns – see Appendix K

HOW WILL IT BE PAID?

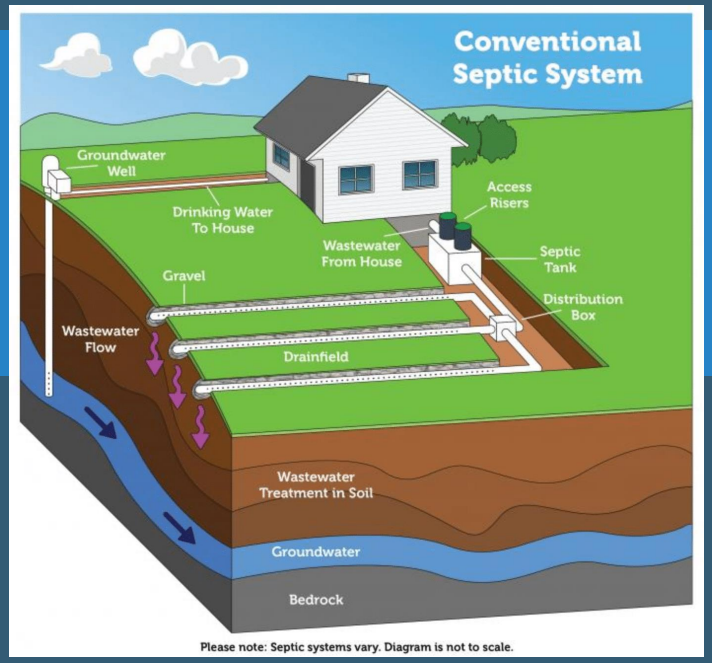
- Several Options
  - Special assessments
  - For public utilities: State/Local taxes or public grants/loans (ARPA Project)
  - For private parcels: direct billing or local taxes
  - Potential bond referendum from Palm Beach County ($30 million)

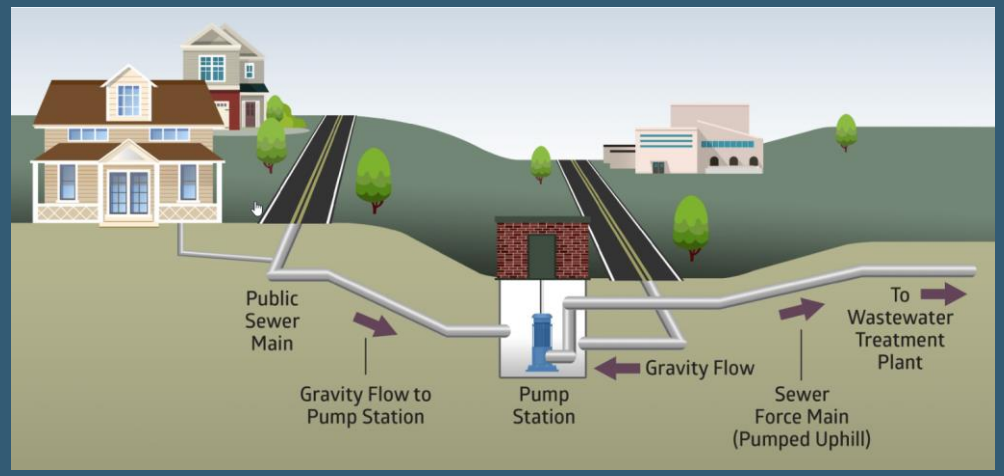


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SUMMARY/ RECOMMENDATION

- Both the gravity and low pressure systems have their advantages and limitations.
- The gravity/low pressure combination system is the recommended option due to lowest construction and maintenance costs.





NEXT STEPS

- Meet with the stakeholders this summer to discuss the project and seek public input (August 22, 2022)
- Engage a financial management consulting firm to discuss funding options for both private and public properties
- Continue to coordinate with Seacoast Utilities to monitor any utility changes, cost changes, and design needs
- Decide on the ultimate alternative in order to prepare a construction set of plans and an opinion of cost
- Have a funding plan in place to ultimately bid out the project for construction

ANY QUESTIONS?



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