

GALVESTON COUNTY
MUNICIPAL UTILITY DISTRICT No. 12
ENGINEER'S REPORT
FOR
2026 BOND AUTHORIZATION ELECTION

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Galveston County Municipal Utility District No. 12
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I. INTRODUCTION

The Galveston County Municipal Utility District No. 12 (the "District") was created by an order of the Texas Water Commission, which is now the Texas Commission on Environmental Quality ("TCEQ" or "Commission") effective September 1, 1981. At the time of creation, the District encompassed approximately 289.75 acres. The District presently contains approximately 377.4 acres of land. A District Boundary map is included as Exhibit A.

The District has made improvements to the utility infrastructure over the years to keep up with changes in regulations and as problems have arisen. The District has an ongoing obligation to maintain the water and wastewater infrastructure, comply with changes in regulations and replace infrastructure that has reached the end of its design life. As part of this effort, the District has decided to request Bond Authorization to fund the needed capital projects that have been identified for the next several years.

The proposed Bond Authorization request is for needed projects to be done in the next 3 to 10 years. The Bond Authorization request is \$ 9,880,000 for bonds to be sold later in the future when the projects are ready to be done and when tax funds are available. It is currently anticipated that when these bonds are sold in the future, it will be broken up and done at multiple different times to cover the work needed and match the tax funds that are available.

II. EXISTING DISTRICT FACILITIES

a. SANITARY SEWER FACILITIES

The Existing Wastewater Treatment Plant is permitted and rated for an average daily flow of 0.40 MGD and was constructed to replace the existing wastewater treatment plant in 1996. It is a concrete plant with a concrete foundation. The plant consists of two aeration basins, two circular clarifiers, a chlorine contact basin, and two aerobic digesters. There are also chemical feed systems, a non-potable water system, an on-site lift station with a bar screen, a control building and a generator on site. The wastewater plant is located at 3031 Highway 6 in Bayou Vista, Texas.

The plant discharges the treated effluent to a canal at the end of Pompano Drive that leads to Galveston Bay.

There are five, main line lift stations located throughout the District.

The collection system consists of manholes, cleanouts and pipes of various materials ranging in size from 6 inch through 12 inch.

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b. POTABLE WATER FACILITIES

There is one existing potable water plant and one remote well that serves the District.

The Water Plant consists of one surface water meter station, two 284,000 gallon ground storage tanks, three 1050 gallon per minute booster pumps, two 25,000 gallon hydro-pneumatic tanks, chemical feed systems, control building and generator. The plant is located at 3035 Hwy 6 in Bayou Vista, TX and shares the same site with the wastewater treatment plant.

The remote well site consists of one 750 gpm 800 ft deep well with submersible pump and motor. The remote well is located at 109 Barracuda in Bayou Vista.

The District purchases treated surface water from the Gulf Coast Water Authority and has a meter station at the water plant. The District has a reserved water contract for 450,000 gallons per day.

The Water Distribution system consists of underground piping, valves, hydrants, and blow offs. The distribution lines range in size from 2 inch through 8 inch. Construction materials include asbestos cement, ductile iron, galvanized and PVC.

c. OTHER DISTRICT FACILITIES

The District also has an office building in the District located at 2929 Highway 6 in Bayou Vista, TX. The office has a primarily metal exterior with a metal roof. The office houses the District Staff and records and is where the Board meets for monthly Board meetings. It is also where residents can pay bills and meet with District Staff to discuss concerns and have questions answered. The building also houses the City of Bayou Vista offices, Police Department and the Fire Department.

III. IMPROVEMENTS NEEDED

In general, the capital improvements identified for the District consist of correcting problems with existing infrastructure, replacing or rehabilitating infrastructure that has reached the end of its useful design life and maintaining existing infrastructure.

Any new development in the District which requires upgrades or additions to District Facilities is paid for by the Developer as required under District rules and regulations. Individual residents who want to build a house on an existing lot do not fall under the "Developer" rules. The District's philosophy is that existing residents should not have to pay the cost of infrastructure improvements needed to serve new development. As a result, the Capital Improvements identified for this bond election are not for new development other than normal growth for the District.

The District has identified several projects that are needed within the District. These projects are planned to be completed in the next three to ten years. The Bond funds needed for these projects total \$15,000,000 which includes engineering, construction, and contingencies as well as the costs associated with issuing the Bonds in phases as needed. Even though the District is requesting authorization for these bonds at this time, the bonds will not be sold until needed and tax funds are available to pay for the bonds. The various locations of the capital projects identified are shown on Exhibit A.

a. SANITARY SEWER FACILITIES

Operations Building, and site improvements:

At the wastewater treatment plant, there is an elevated building that houses the Wastewater plant's electrical controls and blowers. The building is a combination of concrete, CMU and steel framing with steel exterior and roof. The metal framing of the building is covered in fire retardant and is deteriorating. Six steel columns have had to be replaced to secure the building and keep it structurally sound. The steel components of the building need to be replaced or the building needs to be replaced with a more corrosion resistant CMU style building. The cost of repairs makes redesign a more cost-effective option. The new CMU construction with a concrete panel roof will be more dependable and more corrosion resistant than steel framing. There are also various site improvements needed to the Wastewater Treatment plant site as well, New fencing and gates, improved access roads for better accessibility.

Emergency Generator upgrade and blower replacement:

The emergency generator at the wastewater plant is only sized to run a limited portion of the plant. This project will replace and reconfigure the existing Generator to power and run both the wastewater plants at a level needed to provide service to the District and its residents. As winter storm Uri demonstrated, an emergency

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generator is needed for more than just hurricane evacuation events. In addition, the existing positive displacement blowers are reaching the end of their design life. These type blowers wear to the point they are no longer able to be refurbished so it becomes necessary to replace them.

Raw Sewage Lift Stations:

Over the next 5 to 15 years the five District Lift Stations will require various degrees of rehabilitation. This is the result of normal deterioration with the harsh environments associated with raw sewage, saltwater air and as equipment reaches the end of its design life. This rehabilitation will include items such as painting or replacement of piping and equipment, coating of wet wells, pump replacement, refurbishing electrical control panels and valve and piping replacement. The first phase of this work would be done on two of the lift stations as part of the previous Bond Authorization. The funds from this bond election will be used on the three primary lift station in the District (pompano, Bonita and Omega). Emergency generators are also planned for these lift stations.

b. POTABLE WATER FACILITIES

Water Plant Relocation

After considering various options and repairs needed to the existing water plant it was recommended and approved that the water plant essentially be relocated at the existing well site. The existing water plant is on the same site as the wastewater treatment plant. This contributes to corrosion of the water plant equipment and limits the potential expansion and construction are needed for the wastewater treatment plan. At the new Water Plant site, two welded steel ground storage tanks will be constructed, the existing hydropneumatics tanks will be relocated to the new site and refurbished, a new pump and equipment platform will be constructed out of concrete and will be the location of the three new booster pumps, upsized generator, electrical controls and chemical feed equipment. This work has been started with the previous bond funds and this bond election is intended to provide the funds for the completion of the water plant relocation. Additional work at the new water plant site will include replacing the existing bulkheads at both the existing and the new site with concrete bulkheads if possible. In addition, the existing well will be refurbished as part of this bond authorization request.

Water Distribution – Water meter replacement:

The existing water meters are not reading accurately and are not consistently placed in the District's easements. The District has been working hard at replacing the meters and have replaced the majority of them. There are about 225 meters left to replace and they are all in the difficult category of replacement that will require significant funds to replace because driveways will need to be cut and repaired and the existing meters are a significant distance from the water main and easement. The funds made available through this bond election will be used to reimburse the district for the meters replaced to date and to fund the replacement of the remaining difficult meters. The average is estimated to be \$5000 per remaining meter. The new meters will also provide better accuracy with measuring usage and billing and will improve the District's water accountability.

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IV. ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COSTS

A summary of the probable construction and bond costs is shown below. A breakdown of these costs is presented in Exhibit B for Bond Project Cost Estimates.

BOND AUTHORIZATION PROJECTS

Construction Costs

Sanitary Sewer Facilities	
WWTP Building Renovation & Site Improvements	\$ 1,800,000
Refurbishment of lift stations and site generators	\$ 1,200,000
WWTP Blower Replacement Generator upgrade	\$ 800,000
Potable Water Facilities	
Complete Water plant relocation	\$ 3,223,000
Concrete Bulkheads at plants	\$ 480,000
Water Well Refurbishment	\$ 250,000
Water meter replacement reimbursement	\$ 500,000
Complete water meter replacement	\$ 1,125,000
Contingencies, Engineering, Other	<u>\$ 3,516,750</u>
Estimated Total Construction Costs	\$ 12,894,750
**Non-Construction Bond Costs	\$ 2,100,000
TOTAL	\$ 14,994,750

Round up to nearest \$10,000 for Actual Bond Sales

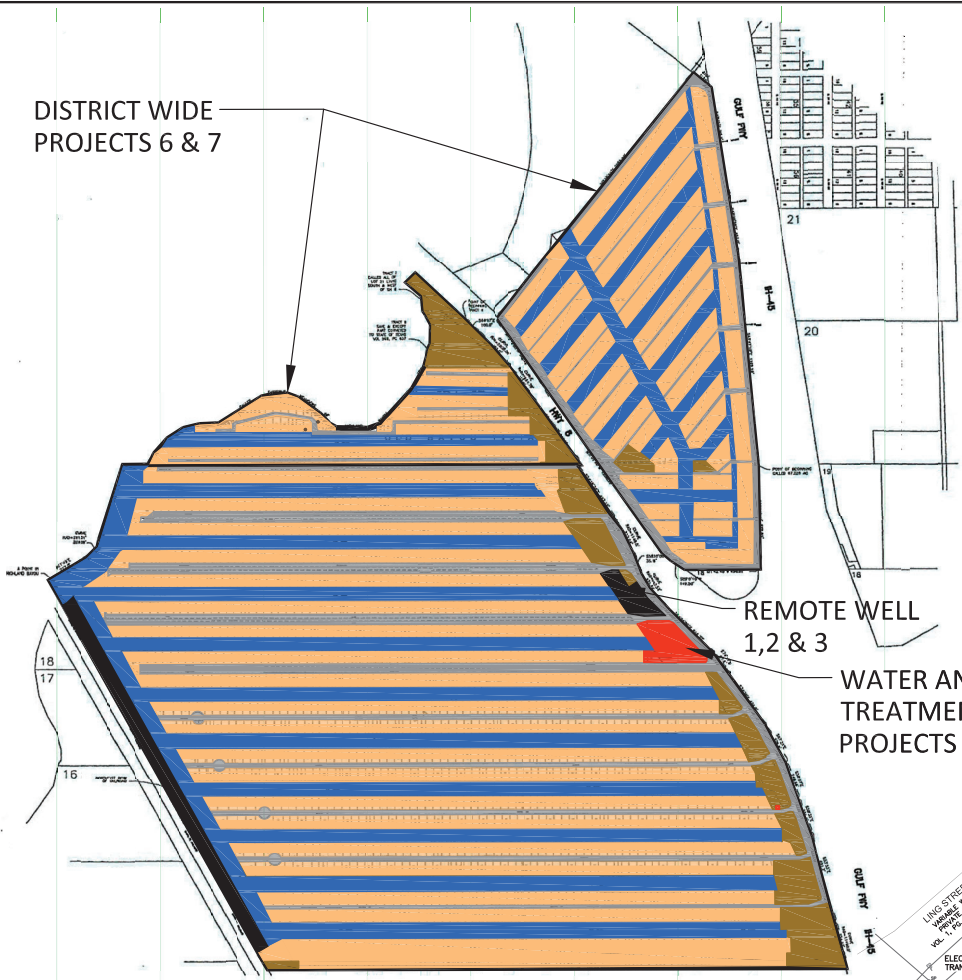
TOTAL BOND AUTHORIZATION REQUEST \$ 15,000,000

**Non construction bond costs include TCEQ fees, Legal fees, financial advisor fees, capitalized interest, Underwriters discount, Bond issuance expenses, bond reports, filing fees and Attorney General Fees

Exhibit A

**District Boundary Map
With
Project Locations**

DISTRICT WIDE PROJECTS 6 & 7

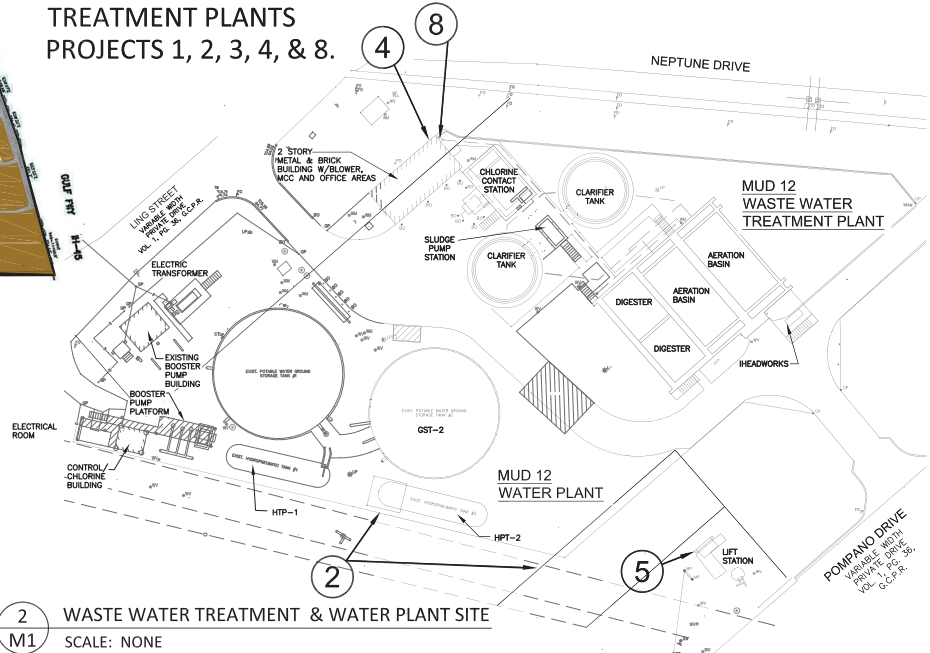


LIST OF PROJETS TO BE FUNDED:

1. WP - Complete plant relocation (2nd GST, 2nd HPT moved, elec, Chem Feed, Generator)
2. WP - Concrete bulkheads at existing site and new site
3. WP - Refurbish existing well
4. WWTP - Building Rehabilitation and Site Renovations
5. Refurbishment of Lift Stations and add generators
6. Completion of water meter replacement (225@\\$5000each)
7. Meter Replacement to date
8. WWTP Blower replacement and upgrade plant generator

REMOTE WELL
1, 2 & 3

WATER AND WASTEWATER TREATMENT PLANTS PROJECTS 1, 2, 3, 4, & 8.



LEGEND

- DISTRICT BOUNDARY
- CANALS
- COMMERCIAL PROPERTY
- DISTRICT FACILITY
- RESIDENTIAL LOTS
- RESERVES
- ROADWAYS

1 DISTRICT BOUNDARY MAP
M1 SCALE: NONE

2 WASTE WATER TREATMENT & WATER PLANT SITE
M1 SCALE: NONE

EXHIBIT A

BENCHMARK

SANDER ENGINEERING CORPORATION
CONSULTING ENGINEERS, SURVEYORS
Texas Board of Professional Engineers Firm No. F-6117
Texas Board of Professional Land Surveyors Firm No. 10230300
2801 WILCREST DRIVE, SUITE 550
HOUSTON, TEXAS 77042
(713) 756-6520



GALVESTON COUNTY MUD NO. 12
BAYOU VISTA / OMEGA BAY
TEXAS

LOCATIONS OF BOND PROJECTS TO BE FUNDED WITH BOND ELECTION REVISIONS

NO.	DATE	DESCRIPTION

DATE: APRIL, 2026 JOB NO. 19-059-4
SCALE: N.T.S. SHEET NO. ___ OF ___

P:\19-059 GC MUD No. 12\19-059-4 - Bond Exhibits\PLANS\District Boundary & Land Use Map.dwg

Exhibit B
Bond Project Cost Estimates

GALVESTON COUNTY MUNICIAPL UTILITY DISTRICT No. 12
FUTURE CAPITAL PROJECTS FOR BOND AUTHORIZATION - Option 2

Water Utility Projects for Funding with 2026 Bond Election:

1	WP - Complete plant relocation (2nd GST, 2nd HPT moved, elec, Chem Feed, Generator)	\$	3,223,000.00
2	WP – Concrete bulkheads at existing site and new site	\$	480,000.00
3	WP - Refurbish existing well	\$	250,000.00
4	WWTP - Building Rehabilitation and Site Renovations	\$	1,800,000.00
5	Refurbishment of Lift Stations and add generators	\$	1,200,000.00
6	Completion of water meter replacement (225@\$5000each)	\$	1,125,000.00
7	Meter Replacement to date	\$	500,000.00
8	WWTP Blower replacement and upgrade plant generator	\$	800,000.00
	Construction Total	\$	9,378,000.00
	20% Contingencies	\$	1,875,600.00
	15% Engineering	\$	1,406,700.00
	3% Survey & GeoTech	\$	234,450.00
	Project Total	\$	12,894,750.00
	** 14% Non Construction Bond Costs	\$	2,100,000.00
	Total of Bond Projects	\$	14,994,750.00
Voter Request amount	Round to	\$	15,000,000.00

** Non construction bond costs include TCEQ fees, Legal fees, financial advisor fees, capitalized interest Underwriters discount, Bond issuance expenses, bond reports, filing fees and Attorney General Fees