

## UTILITY SERVICES AGREEMENT

This **UTILITY SERVICES AGREEMENT** (the "Agreement") is entered into as of \_\_\_\_\_, 20\_\_, between **THE CITY OF TEXAS CITY, TEXAS**, a home rule municipality located in Galveston County, Texas (the "City"), **TEXAS CITY 490, LTD.**, a Texas corporation (the "Developer"), and **GALVESTON COUNTY MUNICIPAL UTILITY DISTRICT NO. 57**, a conservation and reclamation district and a political subdivision of the State of Texas (the "District").

### Recitals

The City is a municipal corporation that provides a full range of governmental services to its citizens. The City owns and operates water production and distribution and wastewater collection and treatment facilities, and provides other municipal services.

The District is a municipal utility district created by an Order of the TCEQ on February 21, 2007, located within the City and comprising 489.39 acres, as more particularly described in **Exhibit "A"** attached hereto and incorporated herein for all purposes (the "Property").

The Developer and the District wish to contract with the City to obtain from the City water production and wastewater treatment services for the Property.

The District intends to construct and finance a regional water supply and distribution system, wastewater collection and treatment system improvements to serve the Property and other areas adjacent or near the Property (the "Service Area"). Such improvements shall be financed in accordance with the terms and conditions of cost-sharing agreements entered into between the District, the City, the Developer, and any additional affected conservation and reclamation districts (each, a "Regional District"), as set forth in this Agreement.

The Developer wishes to contract with the District for the District to provide for the construction and financing of (i) water distribution, wastewater collection, and storm sewer drainage facilities to serve the Property, which may be transferred to the City for ownership, operation, and maintenance after completion and acceptance by the City, and (ii) lakes, ponds, and other detention facilities and open ditches, open drainage channels, and other open stormwater drainage improvements to serve the Property, to be owned, operated and maintained by someone other than the City, all subject to the terms of this Agreement.

### AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises, obligations, and benefits contained herein, the City, the Developer, and the District agree as follows:

**ARTICLE 1.  
DEFINITIONS**

Unless the context indicates otherwise, capitalized terms used in this Agreement shall have the following meanings:

*City* means the City of Texas City, Texas.

*City Water System* means all the water production pumps, lines, meters, components, facilities, and equipment owned and used by the City to pump, treat, monitor, convey, supply, and distribute water to the public.

*City Wastewater System* means all the wastewater treatment facilities, lines, components and equipment owned and used by the City to collect, convey, treat, monitor, regulate, and dispose of wastewater.

*CIP Improvements* means the improvements to the City Water System and City Wastewater System that are necessary to serve the needs of the Service Area, and that have been included in the City's Capital Improvement Plan.

*District* means Galveston County Municipal Utility District No. 57, and all land to be included in the District at creation and thereafter.

*District System* means the District Water System, the District Wastewater System, and any drainage facilities necessary to serve the Property.

*District Water System* means the on-site water supply and distribution system that will be constructed by the Developer or the District for the distribution of potable water to serve the Property, ending at the Point of Water Connection.

*District Wastewater System* means the wastewater system that will be constructed by the Developer or the District to serve the Property for the collection of wastewater received from customers on the Property, ending at the Point of Wastewater Connection, and will include any sewer force main, booster pumps and lift stations that will be required to transport wastewater to the Point of Wastewater Connection.

*Point of Water Connection* means that point where the District Water System connects to the City Water System at a location determined by the City Engineer or his designee.

*Point of Wastewater Connection* means that point where the District Wastewater System connects to the City Wastewater System at a location determined by the City Engineer or his designee.

*Regional CIP Facilities* means the regional water and wastewater facilities to serve the Service Area that are included in the City of Texas City CIP Plan.

*Submerged Storm Sewer* means the portion of a storm sewer system where the flow line of the storm sewer pipe lies below the designed permanent water surface elevation.

*TCEQ* means the Texas Commission on Environmental Quality and any successor agencies exercising any of its duties and functions related to municipal utility districts.

*Wastewater* means the water-carried wastes, exclusive of ground, surface, and storm waters, normally discharged from the sanitary conveniences of dwellings, including apartments, houses, hotels, office buildings and institutions, of a domestic, not industrial, nature, meeting the requirements of the City set forth in the City's Code of Ordinances, as may be amended or superseded by the City from time to time.

*Wastewater Services* means the services provided by the City in receiving, treating, testing, and disposing of Wastewater from the District Wastewater System to the City Wastewater System in accordance with this Agreement.

*Water* means potable water that meets federal and state standards for consumption by humans.

*Water Services* means the services provided by the City in producing and distributing Water from the City Water System to the District Water System in accordance with this Agreement.

## **ARTICLE 2. DISTRICT SYSTEM AND DETENTION**

### **2.1 Construction of District System, Open Drainage, and Detention.**

- 2.1.1** The Developer or the District will finance, design, and construct the District System as required to serve the Property pursuant to plans and specifications approved by the City in accordance with the Consent Conditions and applicable laws and ordinances. The District Water System shall include all facilities necessary to convey water from the Point of Water Connection to the customers located on the Property. The District Wastewater System will include all facilities necessary to transport Wastewater from the customers located on the Property to the Point of Wastewater Connection. If the District System is constructed by the District rather than the Developer, the Developer will advance to the District all funds necessary to finance the District System. In financing the District System, the District shall comply with all TCEQ rules, regulations,

and requirements, particularly the “economic feasibility” rules. As the Project is developed, the Developer shall finance, and the City or the District, as applicable, shall construct the CIP Improvements to the extent that the City does not have adequate funds on hand to construct such improvements in accordance with the terms and conditions of the Development Agreement entered into between the City and the Developer.

Neither the Developer nor the District will construct any irrigation wells without the consent of the City. Any irrigation wells constructed, controlled or regulated by the Developer or the District will be constructed to prevent any cross-contamination with the District Water System or the City Water System, and all plans therefor shall be submitted to the City for review and approval, and as-built drawings shall be provided to the City upon completion.

The plans and specifications for the District System, as well as any extensions, additions, or modifications thereto, shall be submitted to the City for review and approval prior to the installation or construction of same by the Developer or the District. Subject to the provisions of Article IV, the District System, or modifications thereto, shall be designed and constructed in accordance with City standards and specifications, the requirements of Galveston County, the TCEQ, and any other governmental agency having or acquiring jurisdiction over such systems. All easements in which any part of the District System are to be constructed or installed shall be dedicated to the public for installation of public utilities.

The Developer and the District agree that all construction contracts for the District System that will be ultimately conveyed to the City shall require standard payment and performance bonds for public projects and a one-year warranty/maintenance bond to the Developer or the District, assignable to the City, in compliance with the bonding requirements of the City then applicable to the construction of public facilities. The Developer shall assign its rights under such bonds and warranties to the City upon conveyance of the District System, or any components thereof, to the City.

- 2.1.2** Upon completion of facilities comprising a component of the District System in accordance with all permits and approvals and upon acceptance thereof by the City, the Developer or the District, as applicable, or both, will convey such facilities to the City, free and clear of all liens and encumbrances (but subject to the Developer’s rights of reimbursement from the District for funds advanced by the Developer to the District, if any, with respect thereto) for ownership, operation and maintenance by

the City. The Property shall have reserved to it all capacity funded by the Developer or the District in any conveyed facilities; provided that any excess capacity not required to serve the Property following full build-out within the Property shall be available to the City to serve other areas. The conveyance instrument shall be in the form attached hereto as **Exhibit "B."** The City shall incorporate conveyed facilities into the City System and shall serve the Property with water production and wastewater treatment capacity as reasonably required in conjunction with the development of the Property. The City shall bill and collect for services from its customers, including customers located on the Property. All revenues from conveyed facilities shall be the property of the City.

- 2.1.3** The Developer or the District will finance and construct all lakes, ponds, and other detention facilities and open ditches, open drainage channels, and other open stormwater drainage improvements and the City will have no responsibilities with respect thereto. The detention facilities, if any, will be constructed in accordance with the requirements of the City, Galveston County, and any applicable drainage district, and will be maintained by the District or by the property owners' association or associations serving the Property, as appropriate.

**2.2 Standard of Service.** After conveyance of any component of the District System, services that are provided by the City to the Property under this Agreement shall be substantially equivalent in quality to the water and wastewater services the City provides to other City customers not located on the Property. Charges, fees and rates of City customers on the Property shall be the same as similarly situated customers within the City as a whole. Property residents will be required to request service, taps and other service requirements from the City.

**2.3 Inspection by the City.** Consistent with the Consent Conditions, the City shall have access at all reasonable times to inspect the construction of the District System as the City deems necessary or desirable to verify compliance with this Agreement. The District and/or Developer shall pay the City for the City's costs associated with such inspections.

**2.4 No Tax Rebate.** The City does not have any ad valorem tax that overlaps the services to be financed by the Developer with its own funds or the District with its ad valorem taxes; therefore, the City will not rebate any of its ad valorem taxes to the Developer or the District.

**2.5 Projection of New Improvements.** To enable the City to effectively manage its water and wastewater system capacities, the Developer or the District shall provide to the City by September 30 of each year during the term of this Agreement, a written projection of the new improvements within the District expected to be

connected to the City Water System and the City Wastewater System within the coming year and such other related information as the City may reasonably require.

**2.6 Letter of Capacity Assurance.** The City agrees that the City Engineer shall, upon reasonable request from the owner of platted property within the District, confirm water and wastewater utility availability for such platted property. If, at any time during the term of this agreement, the City is unable to provide water or wastewater treatment capacity to serve the needs of the District after a written request therefor from the District, the Developer or the District may finance the next phase of improvements to the City's water or wastewater treatment facilities which shall serve, at a minimum, the remaining needs of the District. The parties acknowledge that the City's inability to provide water or wastewater treatment facility capacity may negatively impact and hinder construction in the District, therefore, the City will give written notice to the District at such time as 90 percent of the capacity in its water or wastewater treatment facilities is actually being used. Any construction at the City's water supply or wastewater treatment facilities sites will be designed and managed by the City Engineer, who may impose reasonable requirements and conditions for the construction.

Subject to the provisions of Article III, the Developer, the District, or their designee shall be entitled to a credit against City water or wastewater impact fees, as appropriate, to the extent of any funds advanced by the Developer or the District for improvements to the City's water and wastewater treatment capacity. To the extent allowed by law and the City's impact fee ordinance, City water or wastewater impact fees, as appropriate, generated from development in the City outside of the Property served by the improvements to the City's water or wastewater treatment capacity financed by the Developer or the District shall be used to reimburse the Developer or the District for funds advanced for improvements to the City's water and wastewater treatment capacity, to the extent that the Developer or the District advanced funds in excess of the total amount of City water or wastewater impact fees owed for the Property. The Property shall have reserved to it all capacity funded by the Developer or the District in any facilities constructed under this section; provided that any excess capacity not required to serve the Property following full build-out within the Property shall be available to the City to serve other areas.

The City shall not allow connection to any improvement to the Facilities for which the appropriate Capital Recovery Fee has not been paid. The City may amend the Capital Recovery Fee from time to time in accordance with the requirements of state law; provided, however, the Capital Recovery Fee shall be the same as the capital recovery fee required outside the District and within the City Limits.

**ARTICLE 3.  
REGIONAL FACILITIES**

**3.1 Regional CIP Facilities.** All construction of Regional CIP Facilities will be completed pursuant to plans and specifications consistent with the City’s CIP Plan and approved by the City. Each affected Regional District in the Service Area will contract with the District, the City, and the Developer to assist in the financing of the Regional Facilities required to serve development within the Service Area (each such agreement being referred to herein as a “Cost Sharing Agreement”). Each Cost Sharing Agreement shall specifically provide for (i) which entity or entities shall be responsible for the management of the design and construction of the Regional CIP Facilities, (ii) capacity and cost allocation for such Regional CIP Facilities, (iii) timing of payments for reimbursable costs related to the construction of such Regional CIP Facilities, (iv) use of impact fees and/or TIRZ funds, if applicable, and (v) provisions for cost-sharing among entities that subsequently receive capacity from such Regional CIP Facilities.

**3.2 Conveyance of Regional CIP Facilities to the City.** If the District designs and constructs a Regional CIP Facility, upon the completion of such Regional CIP Facility in accordance with all permits and approvals and upon acceptance thereof by the City, the District will convey such facilities to the City, free and clear of all liens and encumbrances (but subject to the Developer’s rights of reimbursement from the District for funds advanced by the Developer to the District, if any, with respect thereto) for ownership, operation and maintenance by the City. The District shall have reserved to it all capacity funded by the District or the Developer in any conveyed Regional CIP Facility; provided that any excess capacity not required for the Service Area following full buildout within the Service Area shall be available to the City to serve other areas. The conveyance instrument shall be in the form attached hereto as **Exhibit “B.”** The City shall incorporate conveyed Regional CIP Facilities into the City System and shall serve the Service Area with water production and wastewater treatment capacity as reasonably required in conjunction with the development of the Service Area.

**ARTICLE 4.  
SPECIAL PROVISIONS**

**4.1 Special Provisions Relating to Water.** The following special provisions relate to the construction and operations of the Regional District System with respect to water facilities, and the District Water Systems:

**4.1.1** The design will be based on the specifications and details provided by the City of Texas City Ordinances, Chapter 159 for Subdivisions and details located on the City of Texas City website as of the date the preliminary plat is submitted for review with the exception of major design considerations as noted below. The TCEQ and the City of Houston criteria dated September 2018, or as may be subsequently amended, and Harris County criteria published January 1<sup>st</sup>,

2019, or as may be subsequently amended, will be applied for items not addressed by the Texas City criteria or noted below. In the event of a conflict between TCEQ, Harris County, and City of Houston design criteria, the stricter shall apply.

**4.1.2** Each fire hydrant shall have a minimum capacity of 750 gallons per minute with a residual of 40 PSI based on a supply pressure from the City of 55 PSI at the point of connection to the District.

**4.1.3** A flow of 428 gallons per day per equivalent single-family connection shall be used for design.

**4.1.4** Water lines shall be constructed with C-900 pipe for pipe with 12-inch and smaller diameter and C-905 pipe for pipe with 16-inch and greater diameter.

**4.1.5** All water piping in wet sand conditions shall be constructed using City and AWWA Standards.

**4.1.6** Any interconnect or temporary water facilities connecting the Service Area to any other water supply system must be approved by the City. Any application to the TCEQ for a waiver of elevated storage requirements must be approved by the City prior to submittal.

**4.1.7** The use of raw surface water from GCWA if approved by GCWA may be used for make-up water for amenity lakes and landscaping irrigation.

**4.1.8** Easement widths shall be based on City of Houston requirements where the City of Texas City criteria is not applicable.

**4.1.9** The use of dead-end water lines should be allowed in cul-de-sacs as follows: If less than 15 connections, with a minimum 6-inch diameter water line that dead ends at a fire hydrant. If 16 to 30 connections, with a minimum 8-inch diameter water line that dead ends at a fire hydrant. If over 30 connections, looping will be required. All permanent dead ends shall terminate with an automatic flushing device satisfactory to the City.

**4.1.10** The maximum valve spacing should be 1,000 feet for 6-inch to 12-inch pipe and 2,000 feet for 16-inch to 20-inch pipe.

**4.1.11** The use of three valves at "T" intersections and four valves at cross intersections is generally required.

**4.2 Special Provisions Relating to Wastewater.** The following special provisions relate to the construction and operations of the Regional District System with respect to wastewater facilities, and the District Wastewater Systems:

**4.2.1** The design will be based on the specifications and details provided by the City of Texas City Ordinances, Chapter 159 for Subdivisions and details located on the City of Texas City website as of the date the preliminary plat is submitted for review with the exception of major design considerations as noted below. The City of Houston criteria dated September 2018, or as may be subsequently amended, and Harris County criteria published January 1<sup>st</sup>, 2019, or as may be subsequently amended, will be applied for items not addressed by the Texas City criteria or noted below. In the event of a conflict between Harris County, and City of Houston design criteria, the stricter shall apply.

**4.2.2** Lines depth shall not exceed 18 feet. However, requests to allow depths over 18 feet will be considered on an individual basis based on soil conditions and other factors that may affect overall line depth.

**4.2.3** Manholes should be spaced at a maximum of 500-feet for 8-inch to 12-inch pipe and a maximum of 800-feet for 18-inch to 48-inch pipe based on City of Houston criteria.

**4.2.4** A flow of 315 gallons per day per equivalent single-family connection shall be used for design.

**4.2.5** The use of SDR 26 pipe for 15-inch and smaller sanitary sewer and HOBAS for 18-inch and larger sanitary sewer should be allowed.

**4.2.6** All wastewater piping in wet sand conditions shall be constructed using special bedding, when applicable.

**4.2.7** The minimum easement widths shall be based on City of Houston requirements where the City of Texas City criteria is not applicable.

**4.3 Special Provisions Relating to Drainage.** The following special provisions relate to the construction and operations of the Regional District System with respect to drainage facilities, and the District Systems for drainage:

**4.3.1** The design will be based on the specifications and details provided by the City of Texas City Ordinances, Chapter 159 for Subdivisions and details located on the City of Texas City website as of the date the preliminary plat is submitted for review with the exception of major design considerations as noted below. The City of Houston criteria dated September 2018, or as may be subsequently amended, and Harris County criteria published January 1<sup>st</sup>, 2019, or as may be subsequently amended, will be applied for items not addressed by

the Texas City criteria or noted below. In the event of a conflict between Harris County and City of Houston design criteria, the stricter shall apply.

**4.3.2** Drainage hydraulic calculations should be designed to the criteria addressed by Galveston County Drainage District No. One or Galveston County Drainage District No. Two (as applicable).

**4.3.3** Twenty-five percent of the Service Area may contain Submerged Storm Sewers. Storm sewer siphons are not allowed. All Submerged Storm Sewers must be constructed with HOBAS pipes or the equivalent and provided with plugging systems to allow isolation of Submerged Storm Sewers for repair or inspection.

**4.3.4** All drainage lines in wet sand conditions shall be constructed using special bedding, when applicable.

**4.3.5** Easement widths shall be based upon requirements of the City of Texas City.

**4.3.6** Side slopes of drainage channels shall be as specified by a qualified geotechnical engineer and follow criteria of the applicable drainage district.

## **ARTICLE 5. DISTRICT INDEBTEDNESS**

**5.1 Generally.** Bonds will be issued by the District only for the purpose of purchasing and constructing, or purchasing or constructing under contract with the City, or otherwise acquiring waterworks systems, sanitary sewer systems, storm sewer systems, drainage facilities, fire-fighting facilities, parks and recreational facilities, and street, road and bridge facilities or parts of such systems or facilities, and to make any and all necessary purchases, construction, improvements, extensions, additions, and repairs thereto, and to purchase or acquire all necessary land, right-of-way easements, sites, equipment, buildings, plants, structures, and facilities therefor, and to operate and maintain same, and to sell water, sanitary sewer, and other services within or without the boundaries of the District.

**5.2 Bond and Other Financial Information Provided to City.** The District shall provide the City with copies of all submittals to the TCEQ related to the approval of bonds issued by the District at the same time such information is submitted to the TCEQ. The District shall also provide the City with copies of the Preliminary Official Statement and Official Statement related to any bonds issued by the District at such time as such statements are approved by the District. The District will provide the City with a copy of the District's annual audit report at such time as the audit is approved by the District.

**5.3 Refunding Bond Requirements.** Any refunding bonds of the District must provide for a minimum of three percent (3%) present value savings and no maturity of the refunding bonds may extend beyond the latest maturity of the refunded bonds, unless approved by the City in writing prior to the sale thereof.

**ARTICLE 6.  
MISCELLANEOUS**

**6.1 Compliance with Laws and Regulations.** The Developer and the District will promptly, at their sole cost, take whatever action is necessary relating to the construction of the District System in compliance with any federal or state law or regulation and the City discharge permits.

**6.2 Records and Reports.** The Developer and the District will promptly provide to the City upon request, and without charge, copies of any records or documents relating to the District System.

**6.3 Term.** This Agreement shall be effective as of the date of its approval by the City Commission (the "Effective Date") and shall remain in effect for an initial term of 50 years from the Effective Date and shall automatically renew for consecutive one-year terms thereafter unless otherwise terminated as provided for herein.

**6.4 Termination for Default.** Any party to this Agreement who believes that the other party to this Agreement has defaulted in the performance of any condition, term, or obligation owed to that party under the Agreement shall give written notice of the default to the defaulting party, specifying in detail the provision or provisions of the Agreement that have been breached and specifying what action must be taken to cure or correct the default. Should the party receiving the notice fail to correct the default within 60 days following receipt of the written notice, if such corrective action is within the power of the defaulting party, the party giving the notice of default may terminate this Agreement by giving a written termination notice to the defaulting party specifying the termination date.

**6.5 Remedies Cumulative.** The parties expressly agree that the remedy of specific performance of this Agreement is an appropriate and necessary remedy and agree that either party may employ the remedy of specific performance in the event of a breach of this Agreement. It is not intended hereby to specify (and this Agreement shall not be considered as specifying) an exclusive remedy for any default, but all remedies, including specific performance and mandamus, may be availed of by any party and shall be cumulative of any other remedy herein specified.

**6.6 Successors.** Subject to Section 4.13 hereof, this Agreement shall be binding upon the successors or assigns of the parties hereto.

**6.7 Force Majeure.** If any party is rendered unable, wholly or in part, by force majeure to carry out any of its obligations under this Agreement, except the obligation to pay amounts owed or required to be paid pursuant to the terms of this Agreement, then the obligations of such party, to the extent affected by such force majeure and to the extent that due diligence is being used to resume performance at the earliest practicable time, shall be suspended during the continuance of any inability so caused to the extent provided but for no longer period. As soon as reasonably possible after the occurrence of the force majeure relied upon, the party whose contractual obligations are affected thereby shall give notice and full particulars of such force majeure to the other party. Such cause, as far as possible, shall be remedied with all reasonable diligence. The term "force majeure," as used herein, shall include without limitation of the generality thereof, acts of God, strikes, lockouts, or other industrial disturbances, orders of any kind of the government of the United States or the State of Texas or any civil or military authority other than a party to this Agreement, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, partial or entire failure of water supply resulting in an inability to provide water necessary for operation of the water and sewer systems hereunder or in an inability of the City to provide Water or receive Wastewater, and any other incapacities of any party, whether similar to those enumerated or otherwise, which are not within the control of the party claiming such inability, which such party could not have avoided by the exercise of due diligence and care. It is understood and agreed that the settlement of strikes and lockouts shall be entirely within the discretion of the party having the difficulty, and that the above requirement that any force majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demands of the opposing party when such settlement is unfavorable to it in the judgment of the party experiencing such difficulty.

**6.8 Applicable Law.** This Agreement shall be governed by the law of the State of Texas and no lawsuit shall be prosecuted on this Agreement except in a court of competent jurisdiction located in Galveston County.

**6.9 No Additional Waiver Implied.** No waiver or waivers of any breach or default (or any breaches or defaults) by any party hereto of any term, covenant, condition, or liability hereunder, or the performance by any party of any duty or obligation hereunder, shall be deemed or construed to be a waiver of subsequent breaches or defaults of any kind, under any circumstances.

**6.10 Addresses and Notice.** Unless otherwise provided in this Agreement, any notice, communication, request, reply, or advice (herein severally and collectively, for convenience, called "Notice") herein provided or permitted to be given, made, or accepted by any party to the other (except bills), must be in writing and may be given or be serviced by depositing the same in the United States mail postpaid and registered or certified and addressed to the party to be notified, with return receipt requested, or by

delivering the same to such party, addressed to the party to be notified. Notice deposited in the mail in the manner hereinabove described shall be conclusively deemed to be effective, unless otherwise stated in this Agreement, from and after the expiration of three days after it is so deposited. Notice given in any such other manner shall be effective when received by the party to be notified. For the purpose of notice, addresses of the parties shall, until changed as hereinafter provided, be as follows:

If to the City, to:

City of Texas City, Texas  
P.O. Box 2608  
Texas City, Texas 77592  
Attn: Mayor

If to the District, to:

Galveston County Municipal Utility District No. 57  
c/o Allen Boone Humphries Robinson LLP  
3200 Southwest Freeway, Suite 2600  
Houston, Texas 77027  
Attn: Greer Pagan

If to Developer, to:

TEXAS CITY 490, LTD.  
c/o Prime Capital  
Attn: Mr. Jerry Turboff  
5851 San Felipe, Suite 800  
Houston, TX 77057

The parties shall have the right from time to time and at any time to change their respective addresses and each shall have the right to specify any other address by written notice to the other parties at least 15 days prior to the effective date thereof.

**6.11 Merger and Modification; Prevailing Terms.** This Agreement, including the exhibits, along with the Consent Conditions embody the entire agreement between the parties relative to the subject matter hereof. This Agreement shall be subject to change or modification only with the written mutual consent of the parties. To the extent of any conflict between the Consent Conditions and the terms of this Agreement, the terms of this Agreement shall prevail.

**6.12 Severability.** The provisions of this Agreement are severable, and if any part of this Agreement or the application thereof to any person or circumstances shall ever be held by any court of competent jurisdiction to be invalid or unconstitutional for any reason, the remainder of this Agreement and the application of part of this Agreement to other persons or circumstances shall not be affected thereby.

**6.13 Assignability.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their successors. The City may give its written consent

to a full or partial assignment of the Developer's duties and obligations hereunder to another entity that purchases all or any portion of the Property.

**6.14 Benefits of Agreement.** This Agreement is for the benefit of the City, the District and the Developer and their successors and assigns and shall not be construed to confer any benefit on any other person or entity except as expressly provided for herein.

**6.15 Consents and Approvals.** Whenever this Agreement provides for the approval or consent of one of the parties, such consent or approval shall not be unreasonably withheld or delayed.

**6.16 City Codes and Permitting Requirements.** The Developer shall cause builders constructing improvements on the Property to comply with City codes and permitting requirements.

**6.17 District Exercise of Eminent Domain Powers.** The District shall not exercise its eminent domain powers without first obtaining the City's written consent to such exercise.

[EXECUTION PAGES FOLLOW]

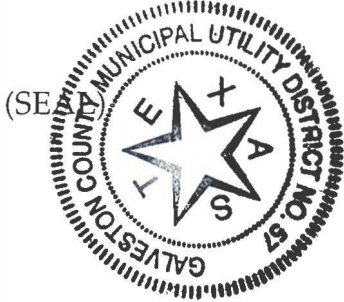


GALVESTON COUNTY MUNICIPAL  
UTILITY DISTRICT NO. 57

By:   
President, Board of Directors

ATTEST:

  
By: \_\_\_\_\_  
Asst. Secretary, Board of Directors



**CITY OF TEXAS CITY, TEXAS**

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Dedrick D. Johnson, Mayor

ATTEST:

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City Secretary

(SEAL)

APPROVED AS TO FORM:

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City Attorney

**Exhibit "A"**

Metes and Bounds Description of the District

EXHIBIT A

GALVESTON COUNTY MUD NUMBER 57  
489.39 ACRES

MARCH 29, 2006  
JOB NO. LTC02-T1

DESCRIPTION OF 489.39 ACRES OF LAND  
SITUATED IN THE  
ALEXANDER FARMER LEAGUE, ABSTRACT NUMBER 11  
CITY OF TEXAS CITY, GALVESTON COUNTY, TEXAS

BEING 489.39 acres of land situated in the Alexander Farmer League, Abstract No. 11, City of Texas City, Galveston County, Texas, being all of a called 489.39 acre tract of land recorded under Galveston County Clerk's File Number 2006002513, being out of and a part of Oleander Country Club Addition as recorded in Volume 254, Page 1 of the Galveston County Deed Records and being more particularly described by metes and bounds as follows with the basis of bearings being the Texas State Plane Coordinate System, South Central Zone, NAD 1983 :

**BEGINNING** at a 5/8-inch iron rod with cap stamped "Hovis Surveying" found for the most westerly corner of a called 5.000 acre tract recorded under Galveston County Clerk's File Number 2000041886 in the northeasterly right-of-way line of Interstate 45 (380 feet wide) being the most southerly corner of said called 489.39 acre tract;

**THENCE** along the common lines of said Interstate Highway 45 (380 feet wide) and said called 489.39 acre tract, as follows:

N 42° 40' 24" W, a distance of 2,418.69 feet to a 5/8-inch iron rod with cap stamped "Hovis Surveying" found, from which a found Broken TXDOT Monument bears N 52° 31' W, 1.19 feet and from which a found 5/8-inch iron rod bears S 75° 18' W, 1.20 feet;

S 47° 19' 36" W, a distance of 40.00 feet to a 5/8-inch iron rod with cap stamped "Hovis Surveying" found from which a found Broken TXDOT Monument bears N 72° 38' W, 0.53 feet and from which a found 5/8-inch iron rod bears S 55° 26' W, 1.08 feet;

N 42° 40' 24" W, a distance of 70.00 feet to a 5/8-inch iron rod with cap stamped "Hovis Surveying" found and a found Broken TXDOT Monument from which a found 5/8-inch iron rod bears S 57° 55' W, 1.20 feet;

N 47° 19' 36" E, a distance of 40.00 feet to a 5/8-inch iron rod with cap stamped "Hovis Surveying" found from which a Broken TXDOT Monument found bears S 42° 22' W, 0.54 feet and from which a found 5/8-inch iron rod bears S 44° 44' W, 1.14 feet;

N 42° 40' 24" W, a distance of 4006.39 feet to a 5/8-inch iron rod with cap stamped "Hovis Surveying" found from which a found 5/8-inch iron rod bears S 42° 22' W, 0.73 feet, also a found 5/8-inch iron rod bears S 15° 15' W, 3.24 feet and a found 5/8-inch iron rod bears N 67° 40' W, 5.92 feet;

In a northwesterly direction, 521.76 feet, with the arc of a curve to the right, having a radius of 532.97 feet, a central angle of 56° 05' 27" and chord which bears N 17° 33' 39" W, 501.18 feet to a 5/8-inch iron rod with cap stamped "Brown & Gay" found at the end of curve from which a found Broken TXDOT Monument bears S 65° 41' 48" E, 14.68 feet;

N 10° 23' 03" E, a distance of 415.03 feet to a found disturbed TXDOT monument;

N 04° 21' 11" W, a distance of 50.11 feet to a 5/8-inch iron rod with cap stamped "Hovis Surveying" found and a 5/8-inch iron rod found for a southerly corner of a called 806.49 acre tract of land recorded under Galveston County Clerk's File Number 2006002506 and for a northwesterly corner of said called 489.39 acre tract and the herein described tract;

**THENCE** along the common lines of said called 489.39 acre tract and said called 806.49 acre tract and over and across Lots 19, 20 and 21 of said Orchard Country Club Addition, as follows:

N 87° 09' 00" E, a distance of 601.90 feet to a 5/8-inch iron rod with Brown & Gay cap found at the point of curvature of a curve to the left;

In a easterly direction, 360.69 feet, with the arc of a curve to the left, having a radius of 1500.00 feet, a central angle of  $13^{\circ} 46' 38''$  and chord which bears  $N 80^{\circ} 15' 41'' E$ , 359.82 feet to a 5/8-inch iron rod with cap stamped "Brown & Gay" found at the point of tangency;

$N 73^{\circ} 22' 22'' E$ , a distance of 694.66 feet to a 5/8-inch iron rod with Brown & Gay cap found at the point of curvature of a curve to the left;

In a northeasterly direction, 645.50 feet, with the arc of a curve to the left, having a radius of 1500.00 feet, a central angle of  $24^{\circ} 39' 23''$  and chord which bears  $N 61^{\circ} 02' 40'' E$ , 640.53 feet to a 5/8-inch iron rod with cap stamped "Brown & Gay" found at the point of tangency;

$N 48^{\circ} 42' 59'' E$ , a distance of 112.17 feet to a 5/8-inch iron rod with cap stamped "Brown & Gay" found at the point of curvature of a curve to the right;

In a easterly direction, 1733.72 feet, with the arc of a curve to the right, having a radius of 1350.00 feet, a central angle of  $73^{\circ} 34' 53''$  and chord which bears  $N 85^{\circ} 30' 25'' E$ , 1617.01 feet to a 5/8-inch iron rod with cap stamped "Brown & Gay" found at the point of tangency;

$S 57^{\circ} 42' 08'' E$ , a distance of 112.17 feet to a 5/8-inch iron rod with cap stamped "Brown & Gay" found at the point of curvature of a curve to the left;

In a southeasterly direction, 921.06 feet, with the arc of a curve to the left, having a radius of 1500.00 feet, a central angle of  $35^{\circ} 10' 55''$  and chord which bears  $S 75^{\circ} 17' 35'' E$ , 906.66 feet to a 5/8-inch iron rod with cap stamped "Brown & Gay" found at the point of tangency;

$N 87^{\circ} 06' 57'' E$ , a distance of 200.00 feet to a 5/8-inch iron rod with cap stamped "Brown & Gay" found for the southeast corner of said called 806.49 acre tract and the northeast corner of said 489.39 acre tract, also being on a west line of a called 161.634 acre tract of land recorded under Galveston County Clerk's File Number 9633808;

THENCE  $S 02^{\circ} 53' 03'' E$ , a distance of 5,670.74 feet with the westerly line of a said called 161.634 acre tract, the westerly line of a called 49.1586 acre tract of land recorded under Galveston County Clerk's File Number 9633808, the westerly line of a called 100.0006 acre tract of land recorded under Galveston County Clerk's File Number 9627929 and with the westerly line of a called 215.23 acre tract of land recorded under Galveston County Clerk's File Number 9903823 to a 5/8-inch iron rod with cap stamped "Hovis Surveying" found for the most northerly corner of said called 5.000 acre tract and being the easterly southeast corner of the herein described tract;

THENCE  $S 56^{\circ} 18' 54'' W$ , a distance of 1024.36 feet with the northwesterly line of said called 5.000 acre tract to the **POINT OF BEGINNING** and containing 489.39 acres of land.

This document was prepared under 22 Texas Annotated Code #663.21, does not reflect the results of an on the ground survey, and is not to be used to convey or establish interests in real property except those rights and interests implied or established by the creation or reconfiguration of the boundary of the political subdivision for which it was prepared.

The Boundary Map of the tracts shown hereon are being issued under separate cover of even date.



  
Glenn Fisher, TxRPLS 4146  
Brown & Gay Engineers, Inc.  
11490 Westheimer Road, Suite 700  
Houston, Texas 77077  
Telephone: (281) 558-8700



bonds issued subsequent to the date of this conveyance) have been fully paid and discharged. At that time, the District will execute a release of the security interest in a form acceptable to the City Legal Department.

IN WITNESS WHEREOF, this conveyance is executed on \_\_\_\_\_,  
20\_\_.

[Developer]

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

[GALVESTON COUNTY MUNICIPAL  
UTILITY DISTRICT NO. 57]

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

In accordance with the Agreement, the City hereby accepts this Utility  
Conveyance and Security Agreement on \_\_\_\_\_.

CITY OF TEXAS CITY, TEXAS

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

THE STATE OF TEXAS           §  
  §  
COUNTY OF GALVESTON       §

      This instrument was acknowledged before me on  
\_\_\_\_\_, 20\_\_, by \_\_\_\_\_ as  
\_\_\_\_\_ of [Developer Name] [Galveston County Municipal  
Utility District No. 57, a political subdivision of the State of Texas], on behalf of  
said [limited partnership] [political subdivision].

\_\_\_\_\_  
Notary, State of Texas

(NOTARY SEAL)

**Exhibit "C"**

City of Texas City CIP Plan



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## City of Texas City

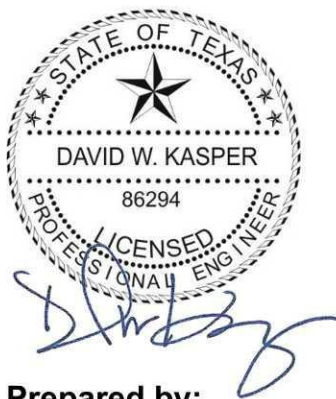
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UPDATE FOR:  
**LAND USE ASSUMPTIONS AND  
CAPITAL IMPROVEMENTS PLAN**

For

## **DEVELOPMENT IMPACT FEE ASSESSMENTS**

**August 8, 2022**



Prepared by:



7322 Southwest Freeway, Suite 1040  
Houston, TX 77074  
Phone: 713-400-2755 | Fax: 713-400-2754  
TX PE FIRM NO. 13872

# 1 EXECUTIVE SUMMARY

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ARKK Engineers LLC has been contracted by the City of Texas City to prepare an update to the City's Capital Recovery Fee study, which was most recently updated in 2017. The study was conducted in compliance with the State of Texas Local Government Code, Title 12, Planning and Development, Subtitle C, Chapter 395, "Financing Capital Improvements in Municipalities, Counties, and Certain Other Local Governments", herein referred to as "Chapter 395". Under Chapter 395 requirements, the City is required to adopt an ordinance, order, or resolution approving land use assumptions and capital improvements plan ("CIP") prior to considering adoption of a Capital Recovery Fee, also referred to herein as an "impact fee."

The objectives of this study are to:

- a) Estimate the probable growth of the City; both in terms of population increases and geographical location.
- b) Estimate the capital improvement costs that will be needed to provide water and wastewater utility service to this growth through the 10-year development horizon;
- c) Calculate the maximum allowable impact fees that may be assessed to new development to defray the cost of the required water and wastewater improvements needed to support the development.

The updated study was developed as follows:

- Water and Wastewater Capital Improvements – Projected water and wastewater capital improvement plan components were updated. The cost estimates for each of the Capital Improvement Plan element were updated based on 2021-2022 construction and engineering costs (See Attachments).
- Calculation of Maximum Capital Recovery Fee - The maximum capital recovery fee was determined based on the updated study items such as land use, projected population, projected land use, the capital recovery plan, and the updated cost estimates. Maximum Capital Recovery Fees were calculated for both Zone 1 and Zone 2. The limits of each zone are shown on **Figure 1**. The Maximum Capital Recovery Fee is calculated on the basis of one (1) equivalent single family Unit ("ESFC" in this study), which is equal to one (1) equivalent service connection.

The maximum impact fee determination was made using the Chapter 395 prescription for use of funds collected. Existing qualifying capital improvements and future facilities that will be required by new development for the study period were identified and tabulated. The estimated construction costs for qualifying capital improvements include basic construction items plus appurtenances, as well as allowances for engineering design, construction management, borrowing costs, and contingencies.

**TABLE 1 - PROPOSED CAPITAL RECOVERY FEES**

ZONE #		2022 Update		Proposed Fee
		Current Fee	Max Fee	
1	Water	\$700	\$1,034	\$1,000
	Wastewater	\$860	\$1,437	\$1,435
		\$1,560	\$2,471	<b>\$2,435</b>
2	Water	\$2,500	\$2,858	\$2,800
	Wastewater	\$2,700	\$3,919	\$3,875
		\$5,200	\$6,777	<b>\$6,675</b>

**MULTIPLYING FACTORS**

- Single Family Dwelling = 1.0 ESFC (Single Family Equivalent Unit)
- Apartment Complex = 0.8 ESFC per living unit when units are billed by the City individually (no master meter). When a master meter is used, refer to table below.
- Mobile Home = 1.0 ESFC per unit or room

Commercial, Retail, Institutional, Light Industrial, Hotel, and all other non-residential development:

Water and Wastewater Fee:

<u>Meter Size:</u>	<u>Factor</u>	<u>Zone 1</u>	<u>Zone 2</u>
5/8" - 3/4"	1.00 ESFC's	\$2,435	\$6,675
1"	1.67 ESFC's	\$4,058	\$11,125
1.5"	3.33 ESFC's	\$8,117	\$22,250
2"	5.33 ESFC's	\$12,987	\$35,600
3"	10.67 ESFC's	\$25,973	\$71,200
4"	16.67 ESFC's	\$40,583	\$111,250
6"	33.33 ESFC's	\$81,167	\$222,500
8"	53.33 ESFC's	\$129,867	\$356,000
10"	76.67 ESFC's	\$186,683	\$511,750
12"	176.67 ESFC's	\$430,183	\$1,179,250

*Note 1: When separate dedicated fire system meters and systems are installed, the fire system meters are not charged a separate capital recovery fee.*

*Note 2: When building fire flow systems are combined with other building water systems, the City Engineer shall determine the equivalency factor based on the meter size that would be required without the fire protection component of the flow.*

## 2. SERVICE AREA

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For the City of Texas City, the current corporate boundaries are used as the service area for derivation of maximum capital recovery fees.

## 3. LAND USE ASSUMPTIONS

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Service sub-areas were developed by ARKK Engineers for each Zone. The projection of growth within each sub-service area was defined on the basis of equivalent single family dwelling unit water Connections ("ESFC "). An ESFC is defined as a single-family residential service connection with a 5/8-inch water meter; a single-family residence is assumed to have 3.0 people per unit, in accordance with historical U.S. Census data for the City of Texas City. Historical water usage in the city was utilized to determine the ESFC. Projected future development densities were estimated by ARKK Engineers, based on factors such as floodplain limits, costal flood zones, wetland zones, detention requirements, and other related factors.

**Table 2** on the following page presents a tabulation of the existing developed properties within Zone 2.

**TABLE 2 - TABULATION OF EXISTING WATER SERVICE CONNECTIONS IN IMPACT FEE ZONE 2**

**SINGLE FAMILY RESIDENTIAL**

*By Service Area:*

Subdivision/Area Name	Connections	Lago Mar	Bucee's	Tanger	LS 29	Rainsong	Marlow	South Point	Del Papa	Far Northeast	48 Inch Gravity
Lago Mar As of Jan 2022	1803	1803									
Rainsong	244					244					
Park Place / I-45	265				265						
Lone Trail	205				205						
Paseo Lobo	27				27						
South Point	368							368			
Lakes of Marlow	174						174				
Pearlbrook	397										397
Twelve Oaks	119										119
Amburn Park	83										83
<b>TOTAL SF RESIDENTIAL:</b>	<b>3,685</b>	<b>1,803</b>	<b>0</b>	<b>0</b>	<b>497</b>	<b>244</b>	<b>174</b>	<b>368</b>	<b>0</b>	<b>0</b>	<b>599</b>

**MULTI FAMILY RESIDENTIAL**

*By Service Area:*

Name	Equiv Connections	Lago Mar	Bucee's	Tanger	LS 29	Rainsong	Marlow	South Point	Del Papa	Far Northeast	48 Inch Gravity
Boterra Apartments 348 units	166	166									
Hunterra Apartments 148 Units	70		70								
Catalon Apartments Phase 1 400 Units	190		190								
Catalon Apartments Phase 2 170 Units	81		81								
Smart Living Apartments 234 Units	114				114						
Windsor Apartments 400 Units	190				190						
Elmcroft Senior Living est 40 ESFU's	40										40
Gatsby Condos Est 70 Units	33										33
Retreat at Texas City 250 Units	119										119
<b>TOTAL MULTIFAMILY:</b>	<b>1,003</b>	<b>166</b>	<b>341</b>	<b>0</b>	<b>304</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>192</b>

**COMMERCIAL TRACTS**

*By Service Area:*

Name	Equiv. Connections	Lago Mar	Bucee's	Tanger	LS 29	Rainsong	Marlow	South Point	Del Papa	Far Northeast	48 Inch Gravity
Lago Mar Pool Facility	50	50									
Bucee's Gas Station	295		295								
Springfield Marriott Hotel 103 Rooms	78		78								
Bank	1		1								
Tanger Outlet Mall	140			140							
I-45 Auto Dealerships	20				20						
Woodspring Suites Hotel 124 Rooms	94				94						
Funeral Home	2				2						
Home2 Suites Hotel 90 Rooms	68				68						
La Quinta Inn Hotel 86 Rooms	65				65						
Holiday Inn Hotel 70 Rooms	53				53						
Quality Inn Hotel 63 Rooms	48				48						
Starbucks via Pvt Force Main EF Lowery	5				5						
Chinese Buffet Restaurant	10				10						
Comfort Inn Hotel Est. 63 Rooms	49				49						
Best Western Hotel 53 Rooms	36				36						
Misc. Small Commercial Buildings FM 2004	5				5						
Jack in the Box FM 2004	5				5						
Bank FM 2004	1				1						
Mall of the Mainland (see breakdown)	126				126						
Beyond Burger	10				10						
Olive Garden	10				10						
Gringos	10				10						
Gas Station Century at Lowery	1				1						
Farmers Copper	5				5						
GCAD Offices	20				20						
Strip Center EF Lowery / Century	17				17						
Popeyes Century / EF Lowery	5				5						
Chamber of Commerce Century / EF Lowery	1				1						
Discount Tire Century / FM 2004	1				1						
Office Depot Century / FM 2004	1				1						
Storage EF Lowery / 12 Oaks	1										1
Wellness Center EF Lowery / 12 Oaks	1										1
Strip Center EF Lowery / Twelve Oaks	3										3
Dialysis Clinic EF Lowery / 12 Oaks	2										2
Linns Donut Shop	3										3
Moody Bank	1										1
Insurance Office	2										2
City Engineering / Pub Works Offices	3										3
Dentist / Amburn Park	1										1
Dr Office Amburn Park	1										1
Neighborhood Pool	1										1
Del Papa Distributor	50								50		
UTMB Urgent Care Center	10								10		
DISD Middle School	25									25	
<b>TOTAL COMMERCIAL:</b>	<b>1,336</b>	<b>50</b>	<b>374</b>	<b>140</b>	<b>668</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>25</b>	<b>19</b>

**SUBTOTAL BY SERVICE AREA:**

**2,019      715      140      1,469      244      174      368      60      25      810**

**TOTAL ALL:**

**6,024**

## 4. POPULATION PROJECTIONS

---

For future development in the City, it is assumed that each single family unit will have 3.0 residents on average. This is typical of the existing developed areas of the City. The following is a summary of the population projections for the City of Texas City:

**Table 2 - Population Projections**

	Sq. Miles	Year End 2021 Population Estimate	Estimated 10 Year Population	Estimated Full Build Out Population
Zone 1	26.88	37,784	39,673	45,704
Zone 2	44.13	12,189	31,546	62,351
TOTAL:	71.01	49,973	71,219	108,055

Detailed development projection tables are presented in the Appendix section of this report.

## 5. WATER DEMANDS

---

Water demand projections are derived directly from the land use projections in terms of ESFC 's. Based on recent historical usage by the residents of Texas City, one ESFC is equivalent to:

- 0.6 gallons per minute total water supply requirement per ESFC (TCEQ Rules);
- 329 gallons per day (actual 2020) of peak month surface water (purchased water supply) per ESFC; For planning, 400 gallons per day per ESFC is allocated.
- 219 gallons per day of average daily water use per ESFC was used in 2020.

**Table 3** below shows the water demands experienced in the City in 2020.

**TABLE 3 - City Water Use Data and Connection Types**

	# of Meters	Annual Water Use (Gal)	Daily Use Per Meter (Gal)	Conversion to ESFC (gal/day)	Equivalent Connections
Meter Count					
Residential, Single Family	15,668	820,031,000	2,246,660		15,668
Residential, Multi-Family	148	237,369,000	650,326	400	1,626
Institutional	195	148,075,000	405,685	400	1,014
Commercial	951	196,306,000	537,825	400	1,345
Industrial	55	317,223,000	869,104	400	2,173
Agricultural	35	1,089,000	2,984	400	7
Unmetered	1	58,500,000	160,274	400	401
Total =	17,053	1,778,593,000	4,872,857		22,233

Average Daily Water Use: 4,872,857 Gallons per Day  
 Average Daily Water Use: 219 Gal per Day per ESFC  
 Peak Month: 219,520,000 Gallons, all of July 2020  
 Peak Month Usage in Gallons Per Day: 7,317,333 Gallons per Day, July 2020  
 Peak Month Usage in Gallons Per Day per ESFC: 329 Gallons per Day per ESFC

TCEQ Requirements:	<i>Based on</i>	22,233 Equivalent Water Service Connections
Water Supply (Surface + Wells):		13340 GPM
Booster Pumps:		13340 GPM
Total Storage:		4,446,699 Gallons
Elevated Storage:		2,223,349 Gallons

In the 10-year planning period, it is projected that the City will add 726 connections in Zone 1 and 7,445 new connections in Zone 2, for a total of 8,171 new equivalent connections. This will bring the total number of connections to be served to 30,404 connections.

10 Year Plan Needs:		
Water Supply (Surface + Wells):		18243 GPM
Booster Pumps:		18243 GPM
Total Storage:		6,080,899 Gallons
Elevated Storage:		3,040,449 Gallons

**Table 4** on the following page presents a summary of existing water supply facilities and proposed water supply needs.

**TABLE 4 - WATER SUPPLY AND STORAGE CAPACITY SUMMARY:**

Number of Water Service Connections in Ten Years:	30,404 Connections
---	--------------------

**Part 1: Water Supply (Wells and Surface Water)**

Surface Water Contract in Place (2022):	7,990 Gallons per Minute
Surface Water Supply Recommended for 2032 (0.25 gpm/Connection):	7,601 Gallons per Minute
<i>*0.25 gpm/connection provides for peak month Average Use</i>	
Well Water Supplies in Place (2022):	7,545 Gallons per Minute
Surface Water Supply Recommended for 2032 (0.35 gpm/Connection):	10,642 Gallons per Minute
RESULT: Will need to Add Well Capacity of a Minimum of:	3,097 Gallons per Minute
Estimated Number of New Wells Needed:	3 New Wells 2 - Lago Mar 1 - North Dickinson

**Part 2: Water Supply Booster Pumps**

Booster Pump Facilities in Place (2022):	14,537 Gallons per Minute
Booster Pump Capacity Recommended for 2032 (0.6 gpm/Connection):	18,243 Gallons per Minute
RESULT: Will need to Add Booster Pump Capacity of a Minimum of:	3,706 Gallons per Minute
Estimated Pump Stations Needed @ 3,000 gpm per Station:	1 New Station (Lago Mar) 1 Improvement (North Dickinson Bayou)

**Part 3 - Elevated and Pressurized Storage**

Elevated Water Facilities in Place (2022)*:	2,850,000 Gallons Elevated Storage
<i>*Figure Does not Include the New Lago Mar Tank</i>	
Elevated Tank Capacity Recommended for 2032 (100 gal/Connection):	3,040,449 Gallons Elevated Storage
RESULT: Will need to Add Elevated Tank Capacity of a Minimum of:	190,449 Gallons
- Proposed 1 MG EST at Lago Mar	1,000,000 Gallons
- Proposed hydrotank Improvements at North Dickinson Bayou:	20,000 Gallons

**Part 4 - Total Water Storage**

Total Water Storage Facilities in Place (2022):	7,097,000 Gallons Total Storage
Total Water Storage Recommended for 2032 (200 gpm/Connection):	6,080,899 Gallons Total Storage
RESULT: Recommended Ground Tank Additions as Follows:	
- Proposed 1 MG GST at Lago Mar	1,000,000 Gallons
- Proposed Ground Tank Improvements at North Dickinson Bayou	500,000 Gallons

## 6. WASTEWATER FLOWS

---

### **Wastewater Treatment:**

The average annual daily flow per ESFC is estimated to be 225 gallons per day. The existing wastewater treatment plant is permitted for an average daily flow of 12.400 million gallons per day. For the existing 22,233 connections in the City, the average daily wastewater flows are approximately 5.0 million gallons per day. Therefore, the full capacity of the wastewater treatment plant is 40% utilized.

The City's permit requires that when the wastewater treatment plant flow reaches 90% of capacity, construction on a plant expansion must commence. Thus, the estimated number of remaining connections in the plant is:

90% of plant capacity = 11.16 million gallons per day

One ESFC uses: 225 gallons per day

Remaining Capacity:

[ 90% Capacity minus Used Capacity ] =

[ 11.16 MGD – 5.0 MGD ] = 6.16 MGD

Remaining connections before a plant expansion begins construction is:

(6.16 million gallons per day capacity\* / 225 gallons per day per ESFC ) = 23,377  
new connections available in the wastewater treatment plant

*(8,171 new connections are projected in the 10-year planning period)*

### **Lift Stations and Trunk Main:**

**Table 5** on the following page presents a summary of the recommended lift station, force main, and trunk main capacities and improvements. As part of this study, areas of growth were identified, and a plan was developed to extend wastewater service to each of the 10-year development areas. Provisions in the plan were also made to account for needed capacity in the wastewater collection system for the 10-30 year period.

**TABLE 5 - CAPACITY SUMMARY - LIFT STATIONS AND TRUNK MAINS**

		Projected Required Firm Capacity - 10 Year Plan (GPM)	Projected Required Firm Capacity - Ultimate	Proposed Force Main Length - 10 Year Plan (FEET)	Proposed Force Main Length - Ultimate (FEET)	Design Velocity (FPS)	Target Size (INCHES)	Plan Year
<b>LIFT STATIONS</b>								
EXISTING LIFT STATIONS	Lago Mar Lift Station	3,733	3,733	20,609	(See 10 Year)	3.5	24	0 - 10
	Bucee's Lift Station	497	497	(Exist 8")	(Exist)	n/a	(Use Exist)	11 - 30
	Tanger Lift Station	104	104	(Exist 6")	(Exist)	n/a	(Use Exist)	n/a
	Lift Station 29	2,141	3,058	(Exist 12")	8,700	3.5	16	11 - 30
	Rainsong Lift Station	286	286	(Exist 8")	(Exist)	n/a	(Use Exist)	n/a
	Marlow Lift Station	224	231	(Exist)	(Exist)	n/a	(Use Exist)	n/a
	South Point Lift Station	230	390	(Exist 8")	(Exist)	n/a	(Use Exist)	n/a
	Far Northeast Lift Station	751	1,763	(Exist 16")	(Exist)	n/a	(Use Exist)	n/a
	Attwater Lift Station	1,400	2,308	(Exist 12")	(Exist)	n/a	(Use Exist)	n/a
	Lift Station 10	17,779	25,515	(Exist 36")	19,350	3.5	Paralell 36	0 - 10
FUTURE LIFT STATIONS	Lago Clara Lift Station	699	699	3,590	(See 10 Year)	3.5	10	0 - 10 (Developer)
	MIG Development Lift Station	0	881	n/a	4,690	3.5	10	11 - 30
	MHI Lift Station	774	2,224	18,730	(See 10 Year)	3.5	16	0 - 10
	Holland Rd Lift Station	170	453	7,035	(See 10 Year)	3.5	8	0 - 10 (Developer)
	FM 2004 N. Canal Lift Station	0	168	n/a	11,290	3.5	6	11 - 30
	25th Ave LS 1 Lift Station	0	536	n/a	2,394	4	8	11 - 30
	25th Ave LS 2 Lift Station	0	349	n/a	2,755	4	8	11 - 30
	25th Ave LS 3 Lift Station	0	571	n/a	2,944	4	8	11 - 30
	Far NE Phase 2 Lift Station	0	2,406	n/a	Use Exist 16"	n/a	(Use Exist)	n/a
	Attwater Preserve Lift Station	0	908	n/a	10,650	3.5	10	11 - 30
	South Moses Lift Station	0	82	n/a	2,900	4	4	11 - 30
	San Leon Waterfront Lift Station	0	153	n/a	11,150	3.5	4	11 - 30
	<b>TRUNK MAINS</b>							
EXISTING	48" Trunk Main Segment 1 - Amburn to Interurban	9,949	12,134	(Exist 48")	(Exist)	n/a	(Use Exist)	n/a
	48" Trunk Main Segment 2 - Interurban to Highway 3	12,723	16,358	(Exist 48")	(Exist)	n/a	(Use Exist)	n/a
	48" Trunk Main Segment 3 - Highway 3 to Attwater Inflow	13,474	18,764	(Exist 48")	(Exist)	n/a	(Use Exist)	n/a
	48" Trunk Main Segment 4 - Attwater Inflow to LS 10	14,874	22,610	(Exist 48")	(Exist)	n/a	(Use Exist)	n/a
FUTURE	FM 517 TRUNK MAIN - WEST	736	839	3,200	(See 10 Year)	2.3	12	0 - 10
	FM 517 TRUNK MAIN - EAST	0	153	n/a	1800	2.3	8	11 - 30
	FM 517 TRUNK MAIN - CENTRAL	0	948	n/a	1830	2.3	12	11 - 30

## 7. PROPOSED FACILITIES

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Utility demands for the service area were projected using the assumptions for development density and population projections. The demand per acre for each land use was applied to the projected land uses to determine water service demands. In order to deliver treated water and to treat and transport wastewater, several facilities and utility improvements have been planned. Each proposed improvement has been assigned a timetable and assigned cost estimate. Water system improvements are summarized on **Table 6 – Water Capital Recovery Fee Calculations**. **Figure 2** presents a map showing the general location of each planned Water capital improvement associated with this study update.

Wastewater system improvements are summarized on **Table 7 – Wastewater Capital Recovery Fee Calculations**. **Figure 3** presents a map showing the general location of each planned Wastewater capital improvement associated with this study update.

### Changes from Previous Plan - Water

- a) In Zone 2, water infrastructure planning has been updated to reflect current conditions and needs. The changes are related to water distribution in the far west end of the City, including the Lago Mar development and surrounds. Updates are also made in the North Dickinson Service Area.

### Changes from Previous Plan - Wastewater

The following changes have been made to the Wastewater Capital Facilities Plan since the last Plan Update.

- a) In Zone 2, wastewater collection system infrastructure planning has been updated to reflect current conditions and needs. The changes are related to the Lift Station 29 service area and the Lago Mar development in the far west side of the City
- b) In Zone 2, in the North Dickinson Bayou area, updates are made to the wastewater collection system capital improvement planning
- c) Lift Station No. 10 serves both Zone 1 and Zone 2. Current capacity of 14,300 gpm is not sufficient for the projected increase in flow within the next 10 years. A project to replace the four (4) 150 HP pumps with four (4) 215 HP pumps is included in the 10-year CIP at an estimated cost of \$1.5 million

**TABLE 6 - WATER CAPITAL RECOVERY FEE CALCULATIONS**

<b>PART 1: Water Distribution System</b>		Estimated Construction Cost	Estimated Professional Services	Interest on Principal (1.5% Rate, 20 Year Term)	Total
1	West Side Water Well No. 2 @ Lago Mar (Serves 2850 Connections)	\$ 2,500,000	\$ 375,000	\$ 454,563	\$ 3,329,563
2	West Side Water Well No. 3 @ Lago Mar (Serves 2850 Connections)	\$ 2,500,000	\$ 375,000	\$ 454,563	\$ 3,329,563
3	West Side Ground Storage Tank @ Lago Mar (Serves 10,000 Connections)	\$ 1,500,000	\$ 165,000	\$ 263,251	\$ 1,928,251
4	West Side Booster Pump Station @ Lago Mar (Serves 10,000 Connections)	\$ 1,000,000	\$ 150,000	\$ 181,825	\$ 1,331,825
5	Northeast Service Area Water Plant Phase 2 - 500,000 Gal GST, Hydrotanks, Booster Improvements	\$ 1,275,000	\$ 158,650	\$ 226,673	\$ 1,660,323
6	Northeast Service Area Water Well No. 1 (Serves 2850 Connections)	\$ 2,500,000	\$ 375,000	\$ 454,563	\$ 3,329,563
<b>TOTAL 10 YEAR CAPITAL IMPROVEMENT PLAN - WATER DISTRIBUTION:</b>					<b>\$ 14,909,088</b>
NUMBER OF PROJECTED 10 YEAR CONNECTIONS:					8171
<b>COST PER CONNECTION - WATER DISTRIBUTION (Zone 2):</b>					<b>\$ 1,825</b>

**PART 2: Surface Water Supply**

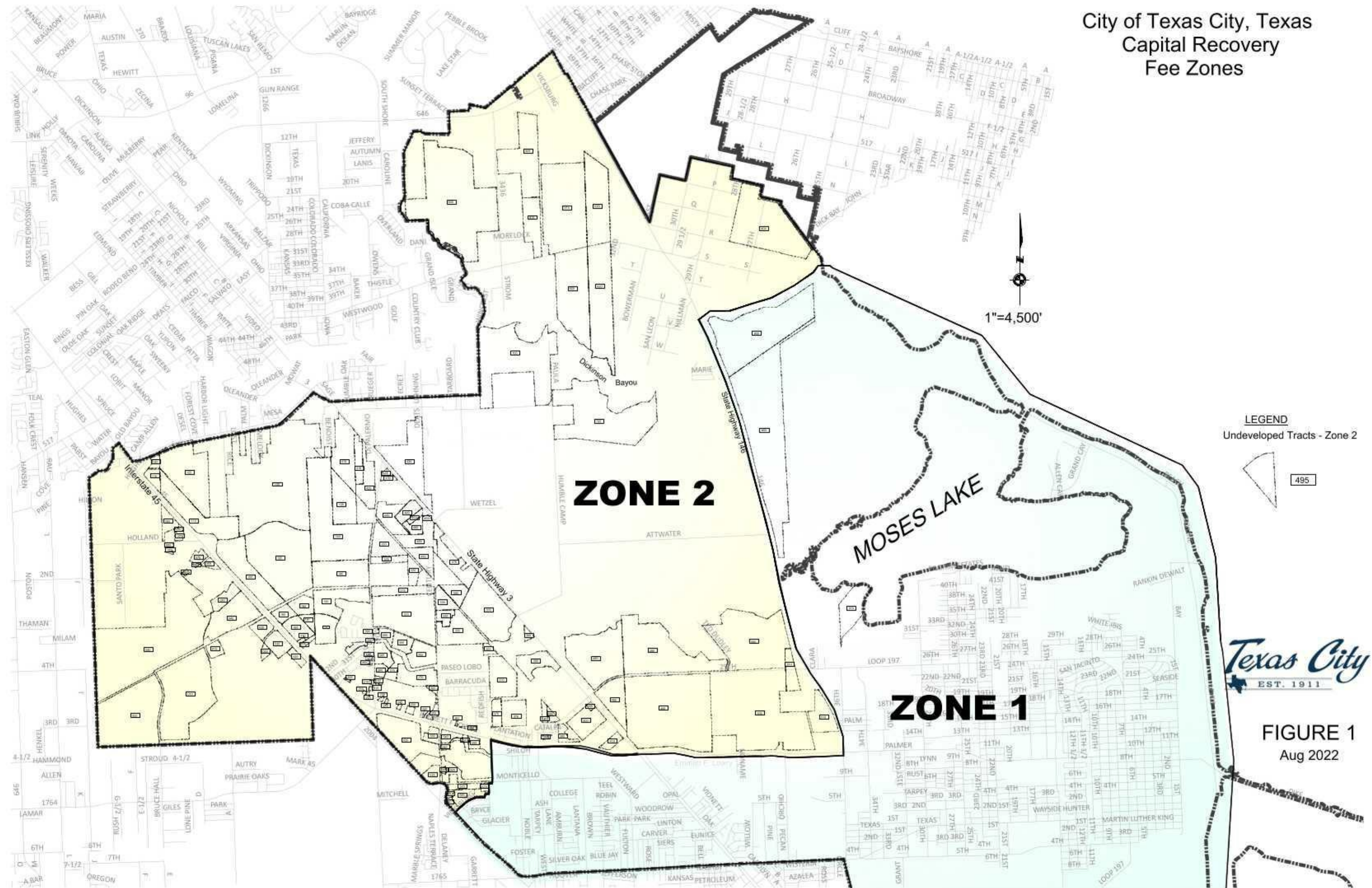
Current Contracted Surface Water Supply Daily Flow From GCWA (MGD):	11.505
Existing Annual Average Daily Flow Average:	5.500
Existing Estimated Max Monthly Flow	8.000
Remaining Capacity (MGD)	3.505
Existing Equivalent Water Connections Currently Serviced (Based on 400 gal/day/connection):	20,000
Existing Summer Month Gallons per Connection (Gallons per Day per Connection):	400
Projected Additional Capacity Available @400 gal/day per connection (New Connections):	8,763
Cost of Remaining Water Treatment Capacity*:	\$ 9,058,322
<i>*Basis = COTC 2016 purchase of 1.09 MGD surface water capacity from NRG/GCWA contract of \$2.5844 per gallon</i>	
<b>Subtotal Cost per Connection of Surface Water Treatment Capacity (Zone 1 &amp; Zone 2):</b>	<b>\$ 1,034</b>

<b>MAXIMUM WATER CAPITAL RECOVERY FEE - ZONE 1:</b>	<b>\$ 1,034</b>
<b>MAXIMUM WATER CAPITAL RECOVERY FEE - ZONE 2:</b>	<b>\$ 2,858</b>

**TABLE 7 - WASTEWATER CAPITAL RECOVERY FEE CALCULATIONS**

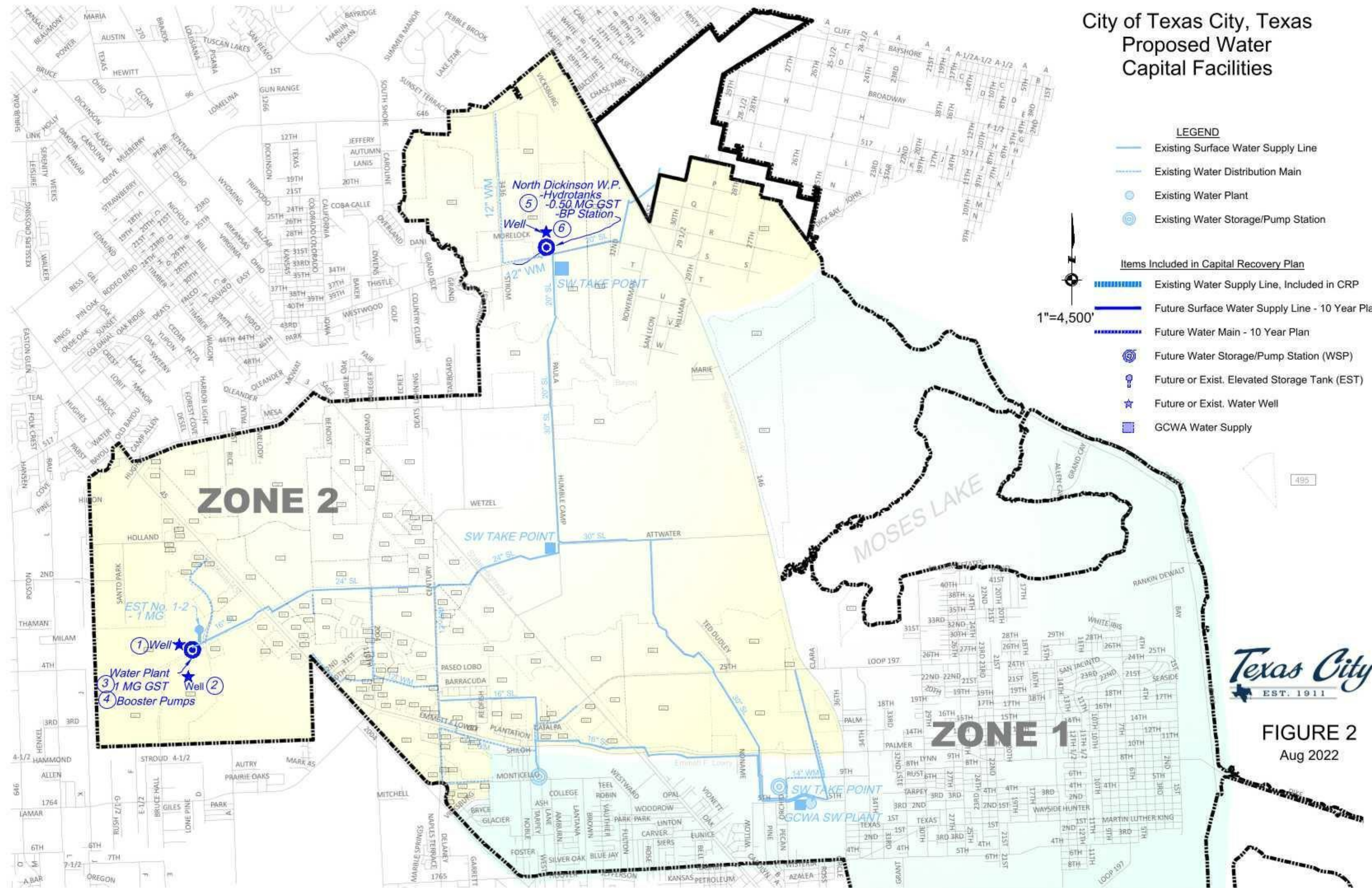
<b>PART 1: Wastewater Collection System (Zone 2)</b>		Estimated Construction Cost	Estimated Professional Services	Interest on Principal (1.5% Rate, 20 Year Term)	Total
1	Lago Mar Force Main Phase 1	\$ 3,282,000	\$ 492,300	\$ 596,751	\$ 4,371,051
2	Lago Mar Force Main Phase 2	\$ 2,440,500	\$ 366,080	\$ 443,746	\$ 3,250,326
3	MHI Development Regional Lift Station 2,200 gpm	\$ 1,400,000	\$ 210,000	\$ 254,555	\$ 1,864,555
4	MHI Development Regional Force Main	\$ 3,918,250	\$ 587,740	\$ 712,437	\$ 5,218,427
5	Northeast Service Area Regional Lift Station 1,800 gpm	\$ 1,400,000	\$ 210,000	\$ 254,555	\$ 1,864,555
6	FM 517 Wastewater Utility Extension to South Lake (Gravity Main and Force Force Main)	\$ 1,327,500	\$ 199,130	\$ 241,374	\$ 1,768,004
7	Lift Station 10 Pump Capacity Upgrades	\$ 1,500,000	\$ 180,000	\$ 265,623	\$ 1,945,623
<b>TOTAL 10 YEAR CAPITAL IMPROVEMENT PLAN - WASTEWATER COLLECTION:</b>					<b>\$ 20,282,541</b>
NUMBER OF PROJECTED 10 YEAR CONNECTIONS (ZONE 2):					8171
<b>COST PER CONNECTION - Wastewater Collection (Zone 2):</b>					<b>\$ 2,482</b>
<b>PART 2: Wastewater Treatment Capacity</b>					
	Current Annual Average Daily Flow (MGD):				5.000
	Plant Average Daily Flow Capacity (MGD):				12.400
	90% of Plant Average Daily Flow Capacity (MGD):				11.160
	Remaining Capacity before 90% Capacity is Reached (MGD)				6.160
	Wastewater Connections Currently Served:				22,222
	Existing Average Daily WW flow per Connection (Gallons per Day per Connection):				225
	Projected Additional Capacity Available @225 gal/day per connection (New Connections):				28,651
	Value of Remaining Unused Wastewater Treatment Capacity:				\$ 49,280,000
	<i>Basis = Plant Expansion Est. Cost of \$8.00 per gallon daily treatment capacity</i>				
<b>Subtotal Cost per Connection of Unused Wastewater Treatment Capacity (Zone 1 &amp; Zone2):</b>					<b>\$ 1,720.00</b>
<b>Cost Per Connection with 50% Reduction for Ad Valorem Tax Credit (Zone 1 &amp; Zone 2):</b>					<b>\$ 860.00</b>
<b>PART 3: 36" Force Main Serving LS 10 (Zone 1+2)</b>		Estimated Construction Cost	Estimated Professional Services	Interest on Principal (1.5% Rate, 20 Year Term)	Total
8	Lift Station 10 Force Main Improvements (36")	\$ 9,868,500	\$ 1,480,280	\$ 1,794,344	\$ 13,143,124
	Number of New Tract Development Connections (30 year) to Be Served by 36" Force Main				19,293
	Number of Infill Development (30 year) to Be Served by 36" Force Main				3,500
<b>Subtotal Cost per Connection of 36" Force Main Serving Lift Station 10: (Zone 1 &amp; Zone2):</b>					<b>\$ 576.63</b>
<b>MAXIMUM WASTEWATER CAPITAL RECOVERY FEE - ZONE 1:</b>					<b>\$ 1,437</b>
<b>MAXIMUM WASTEWATER CAPITAL RECOVERY FEE - ZONE 2:</b>					<b>\$ 3,919</b>

# City of Texas City, Texas Capital Recovery Fee Zones



**FIGURE 1**  
Aug 2022

# City of Texas City, Texas Proposed Water Capital Facilities



### LEGEND

- Existing Surface Water Supply Line
- Existing Water Distribution Main
- Existing Water Plant
- Existing Water Storage/Pump Station

### Items Included in Capital Recovery Plan

- Existing Water Supply Line, Included in CRP
- Future Surface Water Supply Line - 10 Year Plan
- Future Water Main - 10 Year Plan
- Future Water Storage/Pump Station (WSP)
- Future or Exist. Elevated Storage Tank (EST)
- Future or Exist. Water Well
- GCWA Water Supply

1"=4,500'



**ZONE 2**

**ZONE 1**

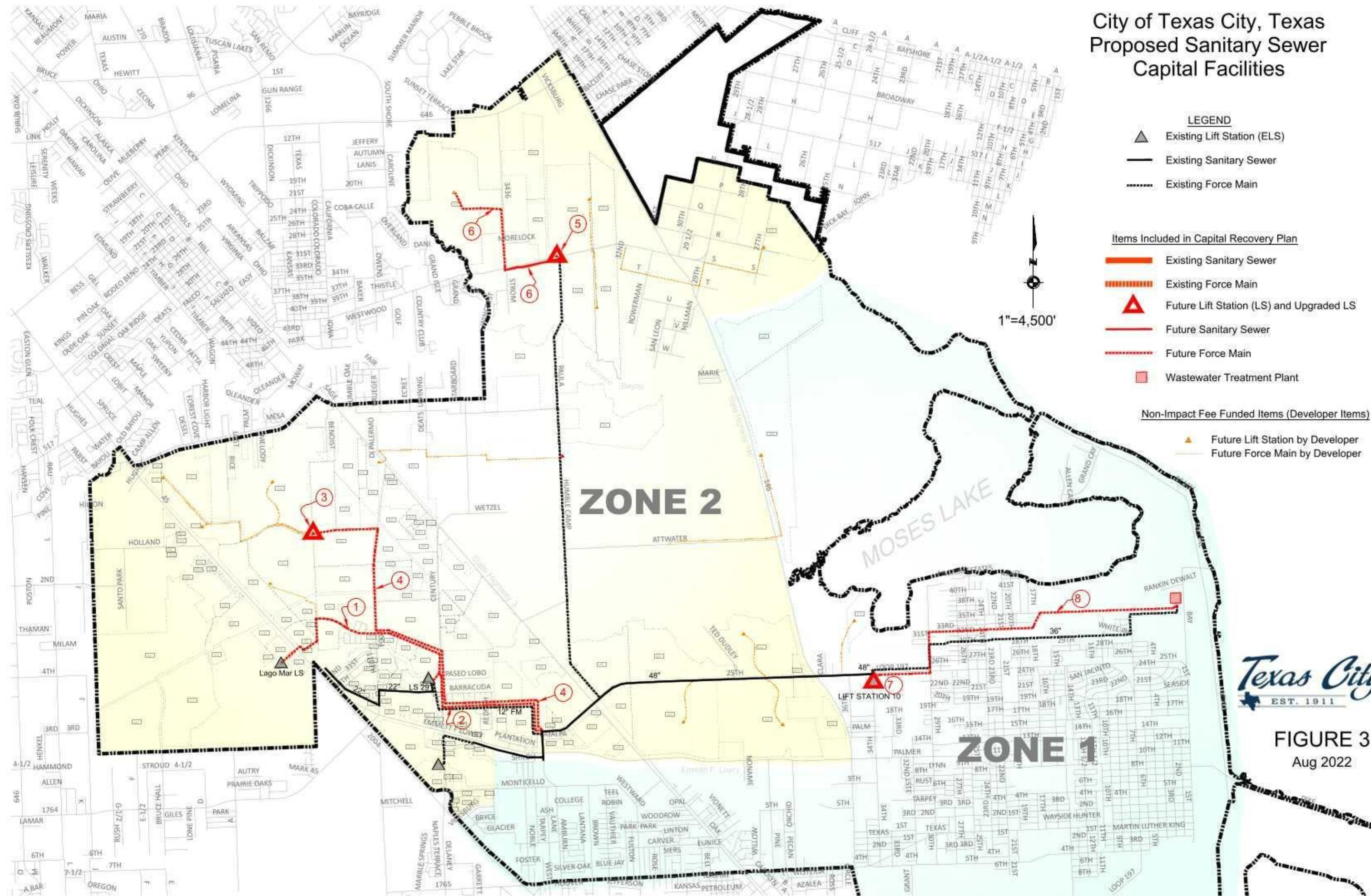
North Dickinson W.P.  
-Hydotanks  
-0.50 MG-GST  
-BP Station  
Well (5)  
Well (6)

EST No. 1-2  
-1 MG  
Well (1)  
Water Plant  
1 MG GST  
Well (2)  
Booster Pumps (3, 4)

*Texas City*  
EST. 1911

**FIGURE 2**  
Aug 2022

# City of Texas City, Texas Proposed Sanitary Sewer Capital Facilities



- LEGEND**
- ▲ Existing Lift Station (ELS)
  - Existing Sanitary Sewer
  - - - Existing Force Main

- Items Included in Capital Recovery Plan**
- Existing Sanitary Sewer
  - - - Existing Force Main
  - ▲ Future Lift Station (LS) and Upgraded LS
  - Future Sanitary Sewer
  - - - Future Force Main
  - Wastewater Treatment Plant

- Non-Impact Fee Funded Items (Developer Items)**
- ▲ Future Lift Station by Developer
  - Future Force Main by Developer



**ZONE 2**

**ZONE 1**

Lago Mar LS

LIFT STATION 10



**FIGURE 3**  
Aug 2022