

**CITY OF JACINTO CITY  
1301 MERCURY DRIVE  
HOUSTON, TEXAS 77029  
PH: 713-674-8424  
WATER CONSERVATION PLAN**

**May 2024**



Prepared by:

**LJA Engineering, Inc.**  
East Houston Office  
11821 East Freeway, Suite 360  
Houston, Texas 77029  
713-450-1300

---

TABLE OF CONTENT

1.0	INTRODUCTION .....	1
2.0	GOALS .....	2
2.1	Water Loss .....	2
3.0	BEST MANAGEMENT PRACTICES .....	4
3.1	System Water Audit and Water Loss .....	4
3.2	Metering (BMP) .....	5
3.3	Water Conservation Pricing .....	7
3.4	Prohibition on Wasting Water .....	8
3.5	Residential Toilet Replacement Program.....	9
3.6	Public Information.....	10
3.7	School Education.....	11
3.8	Water Wise Landscape Design and Conservation Program.....	12
3.9	Park Conservation .....	14
3.10	Reuse of Reclaimed Water.....	15
3.11	Coordination with Regional Water Planning Group .....	16

Utility Profile

Appendix A	Definitions of Utility Profile Terms
Appendix B	Definitions of Commonly Used Terms
Appendix C	Water System Map
Appendix D	Sketch of Wastewater Plant and Discharge
Appendix E	Water and Wastewater Rates
Appendix F	Map of Water Plants
Appendix G	Resolution for Adoption of a Water Conservation Plan

### 1.0 INTRODUCTION

The City of Jacinto City (City) was incorporated in 1946. The City is primarily a residential community with few commercial and industrial customers. During the 1990's Jacinto City's population grew by about 10% but in recent years appears to have stabilized. The City has a sparse area in which to expand. The City's service area is approximately two (2) square miles.

The City of Jacinto City is located in the eastern section of Harris County approximately seven (7) miles east of downtown Houston. The City is bounded on the west mostly by Fidelity Street, on the east by Hunting Bayou, and lies just south of Interstate Highway 10.

The Director of Public Works is also responsible for the operations, maintenance, and improvements of the water and wastewater systems.

The City of Jacinto City has a population of 10,703 based on the number of connections times a 3.5 multiplier.

The City of Jacinto City utilizes imported water (purchased from City of Houston) as the Cities major water supply. The well water originates from the Gulf Coast Aquifers.

The City of Jacinto City operates one (1) water well to supply their customers that operates only in emergencies, but the City relies mostly on water received from the City of Houston.

The City owns and operates a water plant which receives surface water from the City of Houston to supply water to the 1,000,000-gallon ground storage tank. The ground storage tank utilizes three (3) 1,000 gallon per minute booster pumps to then pump water to the 300,000-gallon elevated storage. The offsite well will pump water to the ground storage tank when needed for emergencies. The ground storage tank's booster pumps supply adequate volume and pressure for domestic, commercial, and firefighting throughout the distribution system to the elevated storage tank.

The Lone Star Conservation City has mandated that all major users of groundwater within Harris County reduce their water pumpage by at least thirty percent (30%) over the next few years. The exact target date has not been fully established. The City and most other entities within Harris County have grouped together to achieve the required reduction as a whole. Since surface water is more expensive than groundwater, a plan has been set forth for the group participants to share equally in the cost of water, no matter what the source.

The City is committed to maintaining and improving the City's Water Conservation Plan by expanding the existing plan, expanding the educational program, and following the guidelines and information provided by the Texas Water Development Board (TWDB).

The Best Management Practices (BMPs), all or part, that will be included in the City's Water Conservation Plan includes mandatory elements, such as metering, system water audit, retro fit BMPs, school educational programs, and prohibition of wasting water.



## 2.0 GOALS

The City of Jacinto City's Water Conservation Plan objectives are to improve the efficiency of water use through practices and techniques that will reduce water consumption, reduce summertime usage, especially during dry weather, reduce water loss and increase water reuse.

It is also the goal of the City of Jacinto City to expand and improve the Water Conservation Plan to achieve a one percent reduction per year in total gallons per capita per day (gpcd) over the next five (5) and ten-year (10) periods. The one percent reduction per year is recommended by the Texas State Water Conservation Implementation Task Force.

The City of Jacinto City has fluctuated in water conservation, as the City's consumption of 54 gpcd in 2019, 58 gpcd in 2022, and 64 gpcd in 2023 reflected an increase of 6.

The City does not have a Water Conservation Plan set in place present day; however, implementing the procedures and goals outlined in this plan will surely decrease the per capita consumption. This shall be in result of the City combining conservation efforts, including the City's accounting program, water system inspection program, the water meter program, system repairs, and public education.

The five (5) and ten (10) - year gpcd target goals are shown in Table No. 1a below.

**Table No. 1  
Water Consumption Goals Based on Gallons Per Capita Per Day (gpcd)**

	Actual		Target Goals		
Year	2019	2023	2028	2033	2038
Total gpcd	54	64	69	74	79

The above calculations were made by dividing the water diverted or pumped for treatment for potable use by the population served.

**Table 1b  
Water Consumption Goals for 5- and 10-Years (gpcd)**

	Historic 5yr Average	Baseline (2023)	5-yr Goal for year 2028	10-yr Goal for Year 2033
Total GPCD	58	62	69	74
Residential GPCD	43	50	45	48
Water Loss (GPCD)	7	1	1	1
Water Loss (Percentage)	13%	2%	2%	2%



## 2.1 Water Loss

Water loss is a primary concern of the City of Jacinto City and the percentage of water losses and losses in gallons per capita per day (gpcd) for the last three (3) years (2021-2023) are shown in Table 2 below.

**Table 2**  
**Water Loss Percentage and Gallons Per Capita Per Day (gpcd)**

Year	Population	Water Loss (1,000 gals)	% Loss	gpcd
2021	10717	40,004	18	10
2022	10717	17,715	8	5
2023	10703	3,866	2	1

The goal/target of the City of Jacinto City is to maintain the current water loss over the next five- (5) and ten- (10) year periods.

The water loss projected goals/targets expressed in gallons per capita per day (gpcd) for five- (5) and ten- (10) year periods are reflected in Tables 3 & 4 below.

**Table 3**  
**Five- (5) Year Water Loss Goals/Targets (gpcd)**

Year	Population Est.	Water Loss Est. (1,000 gals)	gpcd Loss
2024	10,754	5,084	1*
2025	10,782	5,177	1*
2026	10,811	5,269	1*
2027	10,840	5,363	1*
2028	10,868	5,456	1*

\*The District is assuming that there will be some water loss even with the measures they take.

**Table 4**  
**Ten- (10) Year Water Loss Goals/Targets (gpcd)**

Year	Population Est.	Water Loss Est. (1,000 gals)	gpcd Loss
2029	10,897	5,550	1*
2030	10,926	5,644	1*
2031	10,954	5,739	1*
2032	10,983	5,834	1*
2033	11,012	5,930	1*

\*The District is assuming that there will be some water loss even with the measures they take.

### **3.0 BEST MANAGEMENT PRACTICES**

Water consumption in the City of Jacinto City is driven by a wide variety of domestic, commercial, and institutional needs. Best Management Practices (BMPs), as recommended by the Texas Water Development Board (TWDB), have been developed and utilized by the City of Jacinto City to improve water use efficiency and for programs to assist and improve the City's water customers in the efficient use of water.

BMPs that are presently in effect and some that will be considered for implementation are described in the next paragraphs and in greater detail in the following sections.

The System Water Audits and Water Loss BMP allow the City of Jacinto City to reliably track water use and provide the information needed to address unnecessary water and revenue losses. The Metering of All New Connections BMP has been established to create equity among customers, reduce water waste, and reduce flows to wastewater facilities. The City of Jacinto City does not have a Retrofit Program as the County's inspection section would be responsible for any type of Retrofit Program. However, the City could explore the feasibility of a joint venture with Harris County. The City is responsible for the plumbing inspection of all residential and commercial structures. The Water Conservation Pricing BMP is designed to discourage the wasting of water while assuring the fiscal obligations of the system are met. The Prohibition of Wasting Water BMP is aimed at customers who continue to wastewater despite Water Utility efforts to educate customers to reduce the wasting of water.

Public information BMP affects water consumption through changes in behavior as customers learn about water resources, the wise use of water, and the conservation program. The Water-Wise Landscape Design Program BMP saves water through the installation of water-wise landscape material supplemented with education to ensure efficient irrigation of new and existing landscapes.

#### **3.1 System Water Audit and Water Loss**

To maximize the benefits of this BMP, the City uses the information from the water audit to revise meter testing and repair practices, reduce unauthorized water use, improve accounting for authorized but unbilled water and implement effective water loss management strategies. HB 3338 requires a retail public utility providing potable water to perform and file with the Texas Water Development Board (TWDB) every five years a water audit computing its most recent annual audit system water lost. The City of Jacinto City will explore the implementation of a more frequent water auditing and loss reduction by conducting an annual audit of the system.

The City already tracks water loss by their leak detection program, leak repair, meter change out, and water use by the City. All City facilities are presently being metered.

Leak detection consists of utilizing the City's leak detection crews to monitor older water mains and connections and to record all water leaks so water mains with excessive leaks can be replaced. The leak detection program encompasses continuous monitoring of the distribution system, especially in areas of heavy traffic, constant monitoring of storage tank levels, daily visual inspection, monitoring distribution pressure and flows, monitoring for illegal connections, water theft and to educate and inform water customers to report any and all leaks promptly.



## Water Conservation Plan

---

The City of Jacinto City has completed the Texas Water Development Board's Utility Profile form 1965-R and is included in the Water Conservation Plan. The City will utilize the information in the Utility Profile in the completion of their annual water audit.

In accordance with House Bill 3338, the City of Jacinto City will improve and refine their System Water Audit and Water Loss by utilizing information and assistance from the Texas Water Development Board (TWDB).

1. Monthly water pumpage records from the water well plants and monthly total water billing records will be compiled for each water service area. Wastewater flow records from the wastewater treatment plant will be maintained on a monthly basis.
2. Existing maintenance and repair records will be compiled and improved; this information may be used to track water loss from water leaks.
3. Comparisons of the pumpage versus billed water will be made to identify potential water loss or accountability.
4. Potential ideas for water reuse will be evaluated: The City does not have a golf course, but the City plans to use the wastewater treatment plant effluent to operate the chlorinators and for plant washdown.

The City will provide a more detailed overall picture of water losses by using existing records, by improving overall accountability.

To track this BMP, the City will collect, assemble, and maintain the following:

1. Prepare an annual audit reflecting percentage water losses and actions implemented to address data and recommendations generated by the annual audit.
2. Leak Detection - Work orders will be maintained, reflecting all leak repairs as to location, number of leaks repaired size of line and estimated water loss. The City of Jacinto City can take advantage of the TWDB's leak detection equipment and water conservation expertise.
3. The number of customer service line leaks, line size, estimated water loss, and actions taken to repair these leaks.
4. Additional revenue generated by initiating this BMP.

### 3.2 Metering (BMP)

The City of Jacinto City will implement a meter replacement program in place and in addition to the meter section; the City will employ the services of an outside meter contractor on a regular basis. The contractor checks and calibrates the master meter at the Water Well Plant and is utilized as needed in other areas. Meter calibration ensures that the City will receive the maximum savings on water pumped from the three well sites.

Note: All metering and meter calibrations are within an accuracy of plus or minus 5%.



The City's Metering Program will consist of the following:

1. The City's meter readers are responsible for physically reading and inspecting all meters.
2. An effective monthly meter-reading program in which readings are estimated only in cases of an inoperable meter or other extenuating circumstances; broken or inaccurate meters are given top priority and or repaired or replaced as soon as possible.
3. All meters are to be routinely replaced every ten (10) years or when they reach a reading of one million gallons.
4. Meter readers fill out work orders on meters that appear to have irregularities or broken or damaged.
5. The water accounting section flags water bills that appear to be too high or too low.
6. Construction meters are used to track water usage in the construction industry.
7. All City facilities are presently being metered.
8. Texas Water Code 13.502 requires all new townhouses and apartments to be either directly metered by the utility or submetered by the owner.
9. An accounting of water savings and revenue gains through the implementation of the City's water meter repair and replacement procedures.

The City will ensure that the meter program is maintained through the regular review of metered data and revision of metering policies to ensure that the maximum amount of water consumption is accounted for.

To track the effectiveness of the Metering BMP the City will provide the following:

1. Number and size of water meters replaced on an annual basis
2. Number and size of water meters repaired annually
3. Number of meters tested and results of each test
4. Estimate of water savings achieved through meter repair and replacement program
5. Number of work orders generated for meter repair/replacement.

Every year the City will estimate its annual water savings from the Meter BMP and from records generated by the water accounting section and meter replacement section. The City will look into the monitoring of water accountability on a monthly basis and maintain a running 12-month average for water loss.

### 3.3 Water Conservation Pricing

This BMP is intended for all utilities wishing to send price signals to customers to encourage water conservation. Water conservation pricing discourages the inefficient use or waste of water. The goal of conservation pricing is to develop long run consumption patterns consistent with cost. The City will educate their customers on the type of rate structure that the utility uses and can be provided feedback through the water bill on their monthly water use.

The City has a water and sewer rate structure that includes a progressive scale for one thru four family Units and for increases in meter sizes up to six (6) inches, which provides for service and billing for water and wastewater service based on the actual metered water use. A copy of the latest water and sewer rates and related charges are attached as Appendix E. The rates include a consumption charge based on actual gallons metered so that increasing water consumption results in a larger bill for the customer.

The City raised water rates (effective 6-26-2015) and anticipates that conservation pricing will have the advantage of providing stronger feedback to the customers, who will see a larger percent increase in their water bill than the increase in water use. The rate structure is not presently shown on the customer's water bill, but the City will explore this option.

The increase in water rates has shown that conservation pricing has provided incentives to customers to reduce average and/or peak use.

The City will review the consumption patterns (including seasonal use) and its income and expense levels to determine if the conservation rates are effective and make appropriate, regular rate structure adjustments as needed.

To track this BMP, the City should maintain the following documentation:

1. A copy of the City's water and wastewater rates.
2. Customer numbers and water consumption by customer class at the beginning and end of the reporting period.
3. A copy of the education materials sent to residential, commercial, and industrial customers for each calendar year, and provide water conservation literature and material to new customers when they apply for service.
4. A utility bill as stated above.
5. A utility bill reflecting water conservation information.

### 3.4 Prohibition on Wasting Water

This BMP should be considered by utilities that have customers who continue to waste water despite the efforts of the utility to educate customers to reduce the waste of water. Water Waste Prohibition measures are enforceable actions and measures that prohibit specific wasteful activities. Under this BMP, the City has enforcement powers to prohibit wasteful activities including:

1. Failure to fix outside faucet leaks
2. Failure to repair service line leaks (customer's side)
3. Failure to repair personal water lines, faucets, water closets, and water heaters
4. Allowing sprinklers and water hoses to run excessive by allowing water to run down the street and gutters and to run during rainy conditions
5. Operate irrigation systems with missing heads and leaks
6. Leaks and water loss from car washes and commercial laundry systems

The BMP is implemented by the regular maintenance and operating personnel of the City and work orders are written on all leaks and repaired by work crews who are available on a twenty-four (24) hour basis.

To track this BMP the City will maintain the following documentation:

1. Copy of water waste prohibition ordinances enacted in the service area.
2. Copy of compliance or enforcement procedures implemented by the City.
3. Records of enforcement actions including public complaints of violations and utility response.
4. Records of all work orders
5. Record estimated water loss from each area.

Total water savings for this BMP can be estimated from each water-wasting measure eliminated through the actions taken under this BMP. There will be additional savings from the education of customers who may change some of their inefficient water usage practices. The City will explore other avenues and additional methods to improve this program.



### 3.5 Residential Toilet Replacement Program

This BMP is intended for a Municipal Water Utility that has at least twenty (20) percent of homes and apartment units in the service area constructed prior to 1995 and for which there has not been an active retrofit program to replace high flush volume toilets with 1.6 gallons per flush (gpf) toilets.

State and Federal requirements prohibit the installation of new toilets using more than 1.6 gpf or more in single-family and multi-family residences. The implementation of this BMP will consist of the following:

1. A retrofit mandate for all new structures and existing structures undergoing substantial modification or additions. The buyer and seller certify that the plumbing fixtures meet the efficiency standards of the most recent plumbing code.
2. The City's water & wastewater section has its own inspection section and can expand on the retrofit program.
3. A retrofit requirement and/or ordinance triggered when ownership of the property changes. The City will require all plumbing fixtures in the single-family or multi-family unit, leased property, and rental property to meet current plumbing standards when new structures and existing structures undergo substantial modification or additions.
4. The City as time permits could set up a system to inspect all single-family and multi-family units and ensure that all conform to the current plumbing codes.

The following proposed schedule will be implemented:

1. The Inspectors will prepare documentation on all inspections on all single-family residences and multi-family units that are rented, leased or if ownership of the property changes; the documentation will reflect the kind and number of units replaced, and installation completion date
2. A plan will be developed to educate homeowners, apartment owners and managers, plumbers, and realtors about this program
3. The City will strive to improve the implementation and expansion of the retrofit program.

To track this BMP, the City should gather the following:

1. The number of Ultra Low Flushing Toilet (ULFT) installations credited to the participant's replacement program, by year, including brand and model of toilets installed.
2. The average persons per household for single-family residences; the average person per household for multi-family units.
3. Description of ULFT replacement program.
4. Estimated water savings per ULFT replacement.

The City will continue to educate homeowners, multi-unit owners, managers, plumbers, and realtors about this program and work toward developing a compliance program.

### 3.6 Public Information

A program for providing water conservation information to the public is an effective means of both promoting specific water conservation programs and practices and educating the public about the importance of using water efficiently.

Public information programs can result in both short and long-term water savings, though they may not be directly related to any equipment or operational change. Behavioral changes by customers will only occur if a reasonable yet compelling case can be presented with sufficient frequency to be recognized and absorbed by customers.

One of the goals is to educate customers of the overall picture of water resources in the community and how conservation is needed to meet the goals of managing and sustaining existing water supplies and to avoid or delay building new facilities. An equally important part of the program is to provide data and information on specific actions and measures the customers should take to implement these community goals. When customers know the results of their actions have made a difference, they are encouraged to continue participation in conservation efforts.

There are a variety of tools that can be effectively used to communicate water conservation by means of public education. These include use of print, radio, television, billboards, board meetings, schools, direct distribution of materials and facility tours.

School Education will be addressed in the School Education Section.

The City of Jacinto City utilizes the following to inform the public the importance of water conservation and the value of water in sustaining and enhancing life:

1. Public at Large –The City holds regular meetings of the Council every month, which are open to the public; anyone is free to speak to the Council, and the Council can inform the Public about water conservation and make recommendations and decisions regarding conservation.
2. Water conservation brochures and information is available and at the City's office.
3. Printed Brochures –Texas Water Development Board Water Conservation literature and pamphlets will be part of the basis for information to the public, as well as pre-printed brochures available from the Water Wise Council of Texas; there are many publications, brochures, videos, DVD's, etc. already available on water conservation that can be used as published or modified to meet the goals of the utility, such as: "Water IQ, Know Your Water"; the following brochures were developed by the Water Conservation Task Force: "Be Water Smart Indoors", "Be Water Wise Outdoors" and "Top Water Smart Tips In and Around the Home". Other TWDB brochures are: "Water Conserving Tips", "Conserving Water Outdoors", and "Conserving Water Indoors". The Water Lily Press, Inc. (Local) has a wide variety of brochures and material on water conservation.



Brochures also available are published by the Texas Water Wise Council, a public/private partnership that fosters awareness and implementation of sound water management. A few of the brochures that are available are: "Irrigation-Best Management Practices", "Lawn Maintenance-Best Management Practice" and "Landscape-Best Management Practice".

4. The City will begin using inserts and messages with utility billing on a regular basis and can also publish water conservation messages in the local paper.
5. The City will order Leak detection kits from the Texas Water Development Board (TWDB), along with other water conservation information and have available at the City's office.

The goal of the City, at a minimum, is to provide information to each customer at least annually, on each action that the utility would like the customer to take. To track the progress of this BMP, the City gathers the following data:

1. The number of brochures and information distributed to the public.
2. The number of dye kits distributed to the public.
3. The number of water bills with water conservation information included.
4. The number of public-school children who received information on water conservation.
5. The number of persons who toured the City's water and wastewater facilities.
6. The total population of the City for (2018) was 2,385 (3.5 per connection).
7. Results of an annual or biannual customer survey.

Water savings due to public information efforts are difficult to quantify. Water savings for other public information programs that result in specific actions by customers such as changes in irrigation scheduling or reduction in water waste occurrences could also be quantified through surveys or analysis of water waste reporting.

### **3.7 School Education**

Lessons learned by students about good water use habits are often shared with the whole family.

School education programs, which may not result in quantifiable water savings, will improve and enhance a utility's public image, increase customer good will, and increase the viability of its overall water conservation efforts. The message conveyed by students to their families based upon greater knowledge of water sources and conservation can result in behavioral changes resulting in both short and long-term water savings.

The water conservations kits that are available and could be furnished to students consists of: toilet leak detection tablets, showerhead and faucet aerators, water displacement bags and instructions on repairing toilet leaks and other common water leaks.



## Water Conservation Plan

---

A study by the Harris Galveston Subsidence City found an average savings of 18 percent or 1,400 gallons per month in homes where parents of students had installed efficient showerheads and aerators on bathroom and kitchen sinks. The Harris-Galveston Subsidence City does not furnish water conservation material outside their jurisdiction.

The City will strive to improve their school education program by obtaining Water Conservation Education Literature from the Texas Water Development Board, such as their 6<sup>th</sup> grade curriculum called, "Raising Your Water IQ" as well as Water Conservation Lesson Plans.

The program will require utility staff oversight and outreach efforts to schools and students.

The City will track this BMP by:

1. Number of students participating in the water conservation plan.
2. Number of water conservation kits furnished to the classrooms
3. Number of presentations made during the year
4. Grade level and data the program expanded

A true cost-effectiveness analysis cannot be determined without a measure of water savings. The program conducted by the Harris Galveston Subsidence City found that 1,400 gallons per month was saved by installing water savings devices in the home.

### **3.8 Water Wise Landscape Design and Conservation Program**

This BMP is intended for Utility customers who have high water use landscapes which consume more than twice as much water in the summer as in the winter. A Utility impacted by repeated drought may also consider this BMP as a means of reducing outdoor water demand overall in their service area as a step toward long-term change of water use patterns.

The City will realize a decrease in summertime water consumption, peak pumpage and overall use by the installation of water-wise landscapes at residential properties, City properties and subsequent education to ensure efficient irrigation of the new landscapes. Water-Wise landscaping involves not only plant selection, but continued attention to appropriate irrigation and landscape maintenance.

In addition, a public education and outreach program through water-wise brochures, local media, water bills, civic groups, garden clubs and nurseries will help create a program that will bring water-wise landscape design to residential and commercial customers.

The City will explore the feasibility of initiating a landscape program which would require the use of drought-tolerant and low-water use landscaping species on all new homes.

In the typical landscape, turf grass occupies the largest area and, when managed incorrectly, receives the largest amount of irrigation. Water savings can be achieved by installation of practical turf areas and irrigation of only the turf in high impact, highly visible areas of the landscape. Irrigated turf areas should be reduced or eliminated as part of the conservation program.

## Water Conservation Plan

---

Water Wise Landscape programs follow the seven principles of Xeriscape from the Texas A&M Horticulture Department, which are: Planning and design, soil analysis and improvement, appropriate plant selection, practical turf areas, efficient irrigation, use of mulches and appropriated maintenance.

The implementation of this BMP involves continual public education campaigns, including public-private partnerships with gardening clubs, landscape designers and nurseries.

The City will try to establish and continue with an on-going public outreach and educational campaign and the following information would be provided:

1. Landscape Improvement – Best Management Practices; a brochure developed by the Water Wise Council of Texas covers soil improvement, mulch, maintenance, mowing and efficient irrigation.
2. Water IQ – Be Water-Wise Outdoors; a brochure available from the Texas Water Development Board that details Water-Wise Steps to Follow, Water-Wise Landscape Watering, Water-Wise Landscape Maintenance, Water-Wise Irrigation Equipment and Design A Water-Wise Landscape.
3. Xeriscape – Landscape with Less Water; a brochure that details the seven principles of Xeriscaping.
4. Outreach – Continue implementation and outreach program to the public, nurseries, realtors and landscape companies.
5. Rain Sensors – The City will explore the requirement of rain sensors on all automated irrigation systems and the potential to save water.
6. Evapotranspiration Controllers (ET's) – the City will explore the feasibility of requiring ET controllers on all new and reconditioned irrigation systems.

To track this BMP, the City will gather the following documentation:

1. Number of brochures, conservation devices, posters or displays distributed to the public
2. Number of dedicated irrigation meter accounts
3. Estimated water savings based on customer billing records
4. Customer water use records prior to and after conversion of the landscape; this data is best compared in years of similar rainfall and after the landscape has been installed a sufficient time to establish itself
5. Number of rain sensors and ET-controllers on automatic sprinkler systems and customer records prior to and after installation of such devices; this data is best compared in years of similar rainfall and after the landscape has been installed a sufficient time to establish itself

Water savings will be determined from analysis of actual customer-metered water use before and after landscape conversion and after installation of rain sensors or ET controllers.

---



### 3.9 Park Conservation

The City of Jacinto City has one park and public swimming pool in the City; however, the park does not have an irrigation system.

1. Park facilities, playground equipment, and other facilities such as recreational facilities, tennis courts, basketball courts, and park and pool buildings should be swept for regular sanitary purposes and only cleaned with the amounts of water needed for human health and safety purposes. Showerheads, faucets, and toilets in park facilities should be retrofitted with efficient fixtures.
2. All public swimming pools should be equipped with recirculation and chlorination equipment. While not common, there are pools that are filled and drained everyday with potable water and that practice should be discontinued. Swimming pools should be managed to minimize operational losses due to evaporation, splashing and filter backwashing. Proper design, optimal backwash scheduling, and use of a pool cover can help limit all these losses. Regular maintenance during the off-season should include testing for water loss and repair of leaks. Use of pool covers is also an important consideration for reducing water losses due to evaporation, although safety concerns where pools are accessible after hours require careful implementation.
3. Decorative water features at parks including splash pads and fountains should use recirculation systems. Reuse of non-potable water such as reclaimed water should also be considered where available. Rainwater harvesting is also an option for many park facilities with large roof areas.

To track the progress of this BMP, the utility should gather and have available the following documentation:

1. Copy of incentive plan or rules enacted in the service area.
2. Metered water readings before and after any changes are implemented.
3. Copy of compliance or enforcement procedures implemented by utility, if applicable.
4. Survey of public swimming pools and actions taken to increase the efficiency of the pools.
5. Records of enforcement actions including public complaints of violations and utility responses, if applicable.
6. Changes to irrigation systems, retrofits, or upgrades, regular leak detection and maintenance policies, and estimated water savings from conservation practices.



7. Water savings attributable to changes implemented.
8. Costs of incentive plan(s) or ordinance if applicable.

### 3.10 Reuse of Reclaimed Water

The direct use of reclaimed water is an effective method of reducing potable water usage. Reclaimed water is defined in the Texas Administrative Code (TAC) as "domestic or municipal wastewater which has been treated to a quality suitable for a beneficial use, pursuant to the provisions of this chapter and other applicable rules and permits." Direct use of reclaimed water is appropriated for a number of domestic, industrial and irrigation needs where the potential for human contact is limited.

Direct use of reclaimed water is regulated by the Texas Commission on Environmental Quality (TCEQ) and Safe Drinking Water Act Standards. Included in these rules are provisions that require permission from that agency before providing reclaimed water for beneficial use and design guidelines for reclaimed water systems.

Implementation consists of the following:

1. The City plans to construct a new wastewater treatment plant that will use the wastewater effluent to operate the wastewater plant chlorination equipment and for plant washdown.
2. The City does not have the industrial or commercial customer base to consider the expense of installing a separate water reuse water system; however, the City shall evaluate the potential of recycling and reuse of processed wastewater for other uses in other City facilities. The City will also explore the long-range possibilities of additional water reuse as the costs and demand for potable water continues to increase.

Documentation:

1. The wastewater treatment plant is a 1.60 mgd activated sludge process plant operated in the extended aeration mode. Treatment units include a lift station, bar screens, digester, clarifier, belt press, chlorine contact chamber.
2. The City plans to construct a new wastewater treatment plant that will use the wastewater effluent to operate the wastewater plant chlorination equipment and for plant washdown. The City will maintain monthly records of treated effluent used and/or recycled.
3. Number of gallons or acre-feet of previous potable water use replaced by reuse water since the implementation of the BMP.

### Determination of Water Savings:

Water savings are estimated at up to 100 percent of total amount of potable water replaced by reclaimed water. Changes in operating parameters or water balance calculations which depend upon water quality parameters, such as the impact of total dissolved solids (TDS) in irrigation water require different quantities of reused water to be applied for same-end uses.

### **3.11 Coordination with Regional Water Planning Group**

The service area of the City of Jacinto City is located within the Houston Region (H), and the City has provided a copy of this Plan to the Houston Region (H), Regional Water Planning Group, which is headed by Mr. Pudge Willcox, with Windstream. Mr. Willcox may be contacted at (409) 267-6597.

## **UTILITY PROFILE**



## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Fill out this form as completely as possible.  
If a field does not apply to your entity, leave it blank.

### CONTACT INFORMATION

Name of Utility: City of Jacinto City

Public Water Supply Identification Number (PWS ID): [REDACTED]

Certificate of Convenience and Necessity (CCN) Number: [REDACTED]

Surface Water Right ID Number: N/A

Wastewater ID Number: [REDACTED]

Completed By: Kyle Reed Title: Director of Public Works

Address: 1301 Mercury Drive City: Houston Zip Code: 77029

Email: kyle.reed@jacintocity-tx.gov Telephone Number: 713-453-7411

Date: 4/8/2024

Regional Water Planning Group: H [Map](#)

Groundwater Conservation District: HGSD [Map](#)

Check all that apply:

- ☒ Received financial assistance of \$500,000 or more from TWDB
- ☐ Have 3,300 or more retail connections
- ☐ Have a surface water right with TCEQ

## Section I: Utility Data

### A. Population and Service Area Data

1. Current service area size in square miles: 2  
(Attach or email a copy of the service area map.)
2. Provide historical service area population for the previous five years, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Service
2019	10,630	0	10,630
2020	10,696	0	10,696
2021	10,717	0	10,717
2022	10,717	0	10,717
2023	10,703	0	10,703

3. Provide the projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Service
2030	10,925	0	10,829
2040	11,143	0	11,143
2050	11,463	0	11,463
2060	11,793	0	11,793
2070	12,134	0	12,134

4. Describe the source(s)/method(s) for estimating current and projected populations.

3.5 times the Cities number of connections

## B. System Input

Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2019	210,916,400		0	210,916,400	54
2020	213,531,300		0	213,531,300	55
2021	222,305,800		0	222,305,800	57
2022	226,865,570		0	226,865,570	58
2023	249,119,400			249,119,400	64
Historic 5-year Average	224,547,694	0	0	224,547,694	58

## C. Water Supply System (Attach description of water system)

1. Designed daily capacity of system 2,880,000 gallons per day.

2. Storage Capacity:

Elevated 300,000 gallons

Ground 1,000,000 gallons

3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons
City of Houston	Surface	252,000,000
Gulf Coast Aquifer	Ground	51,000,000
	Choose One	
	Choose One	
	Choose One	
	Choose One	

\*Select one of the following source types: *Surface water, Groundwater, or Contract*

4. If surface water is a source type, do you recycle backwash to the head of the plant?

☐ Yes \_\_\_\_\_ estimated gallons per day

☒ No



## D. Projected Demands

1. Estimate the water supply requirements for the next ten years using population trends, historical water use, economic growth, etc.

Year	Population	Water Demands (gallons)
2024	10,754	272,945,153
2025	10,782	296,399,700
2026	10,810	319,966,149
2027	10,839	343,653,501
2028	10,868	367,461,755
2029	10,897	391,390,912
2030	10,925	415,440,972
2031	10,954	439,611,934
2032	10,983	463,903,799
2033	11,011	488,316,566

2. Describe sources of data and how projected water demands were determined. Attach additional sheets if necessary.

Past data analysis and future projection

## E. High Volume Customers

1. List the annual water use, in gallons, for the five highest volume **RETAIL customers**. Select one of the following water use categories to describe the customer; choose Residential, Industrial, Commercial, Institutional, or Agricultural.

Retail Customer	Water Use Category*	Annual Water Use	Treated or Raw
Longhorn Glass	Institutional	12,000,000	Treated
Jacinto City Police Department	Institutional	96,340	Treated
Jacinto City Community Building	Institutional	96,340	Treated
Jacinto City Gym	Institutional	96,340	Treated
Seller Brothers	Commercial	96,340	Treated

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

2. If applicable, list the annual water use for the five highest volume **WHOLESALE customers**. Select one of the following water use categories to describe the customer; choose Municipal, Industrial, Commercial, Institutional, or Agricultural.

Wholesale Customer	Water Use Category*	Annual Water Use	Treated or Raw
N/A	Choose One		Choose One
N/A	Choose One		Choose One
N/A	Choose One		Choose One
N/A	Choose One		Choose One
N/A	Choose One		Choose One

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

## F. Utility Data Comment Section

Provide additional comments about utility data below.

## Section II: System Data

### A. Retail Connections

1. List the active retail connections by major water use category.

Water Use Category*	Active Retail Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Residential – Single Family	2,750		2,750	90%
Residential – Multi-family (units)	64		64	2%
Industrial	2		2	0%
Commercial	238		238	8%
Institutional	4		4	0%
Agricultural	0		0	0%
<b>TOTAL</b>	<b>3,058</b>	<b>0</b>	<b>3,058</b>	

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

2. List the net number of new retail connections by water use category for the previous five years.

Water Use Category*	Net Number of New Retail Connections				
	2019	2020	2021	2022	2023
Residential – Single Family	2,736	2,748	2,754	2,755	2,750
Residential – Multi-family (units)	67	66	66	64	64
Industrial	2	2	2	2	2
Commercial	228	236	236	237	238
Institutional	4	4	4	4	4
Agricultural	0	0	0	0	0
<b>TOTAL</b>	<b>3,037</b>	<b>3,056</b>	<b>3,062</b>	<b>3,062</b>	<b>3,058</b>

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).



## B. Accounting Data

For the previous five years, enter the number of gallons of RETAIL water provided in each major water use category.

Water Use Category*	Total Gallons of Retail Water				
	2019	2020	2021	2022	2023
Residential - Single Family	135,408,900	143,587,300	147,132,300	156,746,670	175,004,200
Residential – Multi-family	19,967,800	19,859,400	18,958,300	21,352,200	23,249,600
Industrial	142,000	424,100	10,395,000	610,000	1,850,200
Commercial	51,422,300	46,136,100	44,408,000	46,333,800	47,607,000
Institutional	3,975,400	3,524,400	1,412,200	1,822,900	1,408,400
Agricultural	0	0	0	0	0
<b>TOTAL</b>	<b>210,916,400</b>	<b>213,531,300</b>	<b>222,305,800</b>	<b>226,865,570</b>	<b>249,119,400</b>

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

## C. Residential Water Use

For the previous five years, enter the residential GPCD for single family and multi-family units.

Water Use Category*	Residential GPCD				
	2019	2020	2021	2022	2023
Residential - Single Family	38	40	41	44	50
Residential – Multi-family	233	235	224	261	284

## D. Annual and Seasonal Water Use

- For the previous five years, enter the gallons of treated water provided to RETAIL customers.

Month	Total Gallons of Treated Retail Water				
	2019	2020	2021	2022	2023
January	19,056,100	17,754,400	25,751,700	16,219,000	17,452,400
February	15,497,500	17,545,500	12,445,400	18,077,700	18,065,000
March	17,250,200	16,786,400	20,289,000	14,335,900	15,219,700
April	16,972,100	19,730,900	19,424,600	34,192,100	17,056,800
May	15,370,800	16,161,300	17,146,200	16,289,000	16,600,700
June	20,196,700	17,137,600	18,874,300	19,316,070	38,139,500
July	17,401,700	17,999,300	18,772,000	19,514,400	19,021,700
August	16,663,900	19,177,800	17,115,300	17,551,200	17,023,600
September	19,720,100	15,586,900	20,573,100	17,108,800	34,047,400
October	17,321,300	18,692,000	18,250,500	16,550,200	18,781,400
November	16,983,500	18,264,000	16,835,300	18,733,900	18,733,900
December	18,482,500	18,695,200	17,028,400	18,977,300	18,977,300
<b>TOTAL</b>	<b>210,916,400</b>	<b>213,531,300</b>	<b>222,505,800</b>	<b>226,865,570</b>	<b>249,119,400</b>

2. For the previous five years, enter the gallons of raw water provided to RETAIL customers.

Month	Total Gallons of Raw Retail Water				
	2019	2020	2021	2022	2023
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
<b>TOTAL</b>	0	0	0	0	0

3. Summary of seasonal and annual water use.

Water Use	Seasonal and Annual Water Use					Average in Gallons
	2019	2020	2021	2022	2023	
Summer Retail (Treated + Raw)	54,262,300	54,314,700	54,761,600	56,381,670	74,184,800	58,781,014 5yr Average
TOTAL Retail (Treated + Raw)	210,916,400	213,531,300	222,505,800	226,865,570	249,119,400	224,587,694 5yr Average

## E. Water Loss

Provide Water Loss data for the previous five years.

Water Loss GPCD = [Total Water Loss in Gallons ÷ Permanent Population Served] ÷ 365

Water Loss Percentage = [Total Water Loss ÷ Total System Input] x 100

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2019	37,559,600	10	18%
2020	31,333,700	8	15%
2021	40,004,200	10	18%
2022	17,715,430	5	8%
2023	3,866,600	1	2%
<b>5-year average</b>	26,095,906	7	13%

## F. Peak Water Use

Provide the Average Daily Water Use and Peak Day Water Use for the previous five years.

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2019	680,756	1,286,000	1.89
2020	670,863	1,489,000	2.22
2021	718,657	1,726,000	2.40
2022	670,084	1,346,000	2.01
2023	693,112	1,305,000	1.88

## G. Summary of Historic Water Use

Water Use Category	Historic 5-year Average	Percent of Connections	Percent of Water Use
Residential SF	151,575,874	90%	0%
Residential MF	20,677,460	2%	0%
Industrial	2,684,260	0%	0%
Commercial	47,181,440	8%	0%
Institutional	2,428,660	0%	0%
Agricultural	0	0%	0%

## H. System Data Comment Section

Provide additional comments about system data below.



## Section III: Wastewater System Data

If you do not provide wastewater system services then you have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the [Water Conservation Plan Checklist](#) to complete your Water Conservation Plan.

### A. Wastewater System Data (Attach a description of your wastewater system.)

- Design capacity of wastewater treatment plant(s): 1,600,000  
gallons per day.
- List the active wastewater connections by major water use category.

Water Use Category*	Active Wastewater Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal	3,008		3,008	92%
Industrial	6		6	0%
Commercial	13		13	0%
Institutional	230		230	7%
Agricultural	0		0	0%
<b>TOTAL</b>	3,257	0	3,257	

- What percent of water is serviced by the wastewater system? 100%
- For the previous five years, enter the number of gallons of wastewater that was treated by the utility.

Month	Total Gallons of Treated Wastewater				
	2019	2020	2021	2022	2023
January	33,415,000	31,195,000	31,617,000	33,024,000	43,354,000
February	29,321,000	25,419,000	32,603,000	23,707,000	26,699,000
March	22,158,000	24,367,000	26,267,000	23,574,000	28,830,000
April	21,840,000	23,835,000	25,958,000	22,836,000	31,047,000
May	31,664,000	27,476,000	46,904,000	26,807,000	39,968,000
June	29,393,000	30,837,000	39,104,000	23,581,000	26,955,000
July	29,387,000	31,997,000	39,887,000	25,311,000	25,536,000
August	30,104,000	27,330,000	32,380,000	26,670,000	28,615,000
September	40,210,000	34,453,000	30,775,000	22,684,000	36,982,000
October	32,606,000	23,855,000	31,424,000	23,511,000	27,022,000
November	23,412,000	26,391,000	33,561,000	35,480,000	30,746,000
December	20,750,000	35,611,000	36,251,000	29,018,000	27,941,000
<b>TOTAL</b>	344,260,000	342,766,000	406,731,000	316,203,000	373,695,000

4. Can treated wastewater be substituted for potable water?

☐

Yes

☒

No

**B. Reuse Data**

1. Provide data on the types of recycling and reuse activities implemented during the current reporting period.

Type of Reuse	Total Annual Volume (in gallons)
On-site irrigation	0
Plant wash down	5,000,000
Chlorination/de-chlorination	365,000,000
Industrial	0
Landscape irrigation (parks, golf courses)	0
Agricultural	0
Discharge to surface water	0
Evaporation pond	0
Other	0
<b>TOTAL</b>	<b>370,000,000</b>

**C. Wastewater System Data Comment**

Provide additional comments about wastewater system data below.

You have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the [Water Conservation Plan Checklist](#) to complete your Water Conservation Plan.

# **APPENDIX A**

## **Definitions of Utility Profile Terms**



## Appendix A

### Definitions of Utility Profile Terms

1. **Residential** sales should include water sold to residential (Single and Multi-Family) class customers only.  
**Industrial** sales should include water sold to manufacturing and other heavy industry.  
**Commercial** sales should include water sold to all retail businesses, offices, hospitals, etc. **Wholesale** sales should include water sold to another utility for a resale to the public for human consumption.
2. **Water Loss** is the difference between water a utility purchases or produces and the amount of water that it can account for in sales and other known uses for a given period. Water loss can result from:
  1. inaccurate or incomplete record keeping;
  2. meter error;
  3. unmetered uses such as firefighting, line flushing, and water for public buildings and water treatment plants;
  4. leaks; and
  5. water theft and unauthorized use.
3. The **peak-day to average-day ratio** is calculated by dividing the maximum daily pumpage (in million gallons per day) by the average daily pumpage. Average daily pumpage is the total pumpage for the year (as reported in Section IIA1, p. 4) divided by 365 and expressed in million gallons per day.
4. **Total use in gallons per capita per day** is defined as total average daily amount of water diverted or pumped for "treatment for potable use by a public water supply system. The calculation is made by dividing the water diverted or pumped for treatment for potable use by population served then divide by 365. Indirect reuse volumes shall be credited against total diversion volumes for the purpose of calculation gallons per capita per day for targets and goals developed for the water conservation plan. Total water use is calculated by subtracting the wholesale sales from the total water diverted or treated (as reported in Section IIA1).
5. **Seasonal water use** is the difference between base (winter) daily per capita use and summer daily per capita use. To calculate **the base daily per capita use**, average the monthly diversions for December, January, and February, and divide this average by 30. Then divide this figure by the population. To calculate the **summer daily per capita use**, use the months of June, July, and August.

## **APPENDIX B**

### **Definitions of Commonly Used Terms**

## **Appendix B**

### **Definitions of Commonly Used Terms**

**Agricultural or Agriculture** - Any of the following activities:

- (A) cultivating the soil to produce crops for human food, animal feed, or planting seed or for the production of fibers;
- (B) the practice of floriculture, viticulture, silviculture, and horticulture, including the cultivation of plants in containers or non-soil media by a nursery grower;
- (C) raising, feeding, or keeping animals for breeding purposes or for the production of food or fiber, leather, pelts, or other tangible products having a commercial value;
- (D) raising or keeping equine animals;
- (E) wildlife management; and
- (F) planting cover crops, including cover crops cultivated for transplantation, or leaving land idle for the purpose of participating in any governmental program or normal crop or livestock rotation procedure.

**Agricultural use** - Any use or activity involving agriculture, including irrigation.

**Best management practices** - Voluntary efficiency measures that save a quantifiable amount of water, either directly or indirectly, and that can be implemented within a specific time frame.

**Conservation** - Those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses.

**gpcd** - gallons per capita per day.

**Industrial use** - The use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, commercial fish production, and the development of power by means other than hydroelectric, but does not include agricultural use.

**Institutional sector** - The use of water by an establishment dedicated to public service such as a school, university, church, hospital, nursing home, prison, or government facility. All facilities dedicated to public service are considered institutional regardless of ownership. Such facilities are included in the North American Industrial Classification System categories for educational services, health care, recreation, and public administration. See Appendix for coded activities

**Irrigation** - The agricultural use of water for the irrigation of crops, trees, and pastureland including, but not limited to, golf courses and parks which do not receive water through a municipal distribution system.

**Irrigation water use efficiency** - The percentage of that amount of irrigation water which is beneficially used by agriculture crops or other vegetation relative to the amount of water diverted from the source(s) of supply. Beneficial uses of water for irrigation purposes include, but are not limited to, evapotranspiration needs for vegetative maintenance and growth, salinity management, and leaching requirements associated with irrigation.



**Mining use** - The use of water for mining processes including: hydraulic use, drilling, washing sand and gravel, and oil field re-pressuring.

**Municipal per capita water use** – The sum total of water diverted into a water supply system for residential, commercial, and public and institutional uses divided by actual population served.

**Municipal use** – The use of potable water within or outside a municipality and its environs whether supplied by a person, privately owned utility, political subdivision, or other entity as well as the use of sewage effluent for certain purposes, including the use of treated water for domestic purposes, fighting fires, sprinkling streets, flushing sewers and drains, watering parks and parkways, and recreational purposes, including public and private swimming pools, the use of potable water in industrial and commercial enterprises supplied by a municipal distribution system without special construction to meet its demands, and for the watering of lawns and family gardens.

**Municipal use in gallons per capita per day** – The total average daily amount of water diverted or pumped for treatment for potable use by a public water supply system. The calculation is made by dividing the water diverted or pumped for treatment for potable use by population served. Indirect reuse volumes shall be credited against total diversion volumes for the purpose of calculating gallons per capita per day for targets and goals.

**Pollution** – The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

**Public water supplier** – An individual or entity that supplies water to the public for human consumption.

**Residential use** - The use of water that is billed to single and multi-family residences, which applies to indoor and outdoor uses.

**Residential gallons per capita per day** - The total gallons sold for residential use by a public water supplier divided by the residential population served and then divided by the number of days in the year.

**Regional water planning group** – A group established by the Texas Water Development Board to prepare a regional water plan under Texas Water Code, §16.053.

**Retail public water supplier** – An individual or entity that for compensation supplies water to the public for human consumption. The term does not include an individual or entity that supplies water to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants when that water is not resold to or used by others.

**Reuse** – The authorized use for one or more beneficial purposes of use of water that remains unconsumed after the water is used for the original purpose of use and before that water is either disposed of or discharged or otherwise allowed to flow into a watercourse, lake, or other

body of state-owned water.

**Single-family** - A classification of housing where a single detached dwelling or separate house is a free-standing residential building, including duplexes.

**Total use** - The volume of raw or potable water provided by a public water supplier to billed customer sectors or nonrevenue uses and the volume lost during conveyance, treatment or transmission of that water.

**Total gallons per capita per day** - The total amount of water diverted and/or pumped for potable use divided by the total permanent population divided by the days of the year. Diversion volumes of reuse as defined in this chapter shall be credited against total diversion volumes for the purposes of calculating gallons per capita per day for targets and goals.

**Water conservation plan** – A strategy, or combination of strategies, for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water. A water conservation plan may be a separate document identified as such or may be contained within another water management document(s).

**Water loss** – The difference between water diverted or treated and water delivered (sold). Water loss can result from:

1. inaccurate or in complete record keeping;
2. meter error;
3. unmetered uses such as fire fighting, line flushing, and water for public buildings and water treatment plants;
4. leaks; and
5. water theft and unauthorized use.

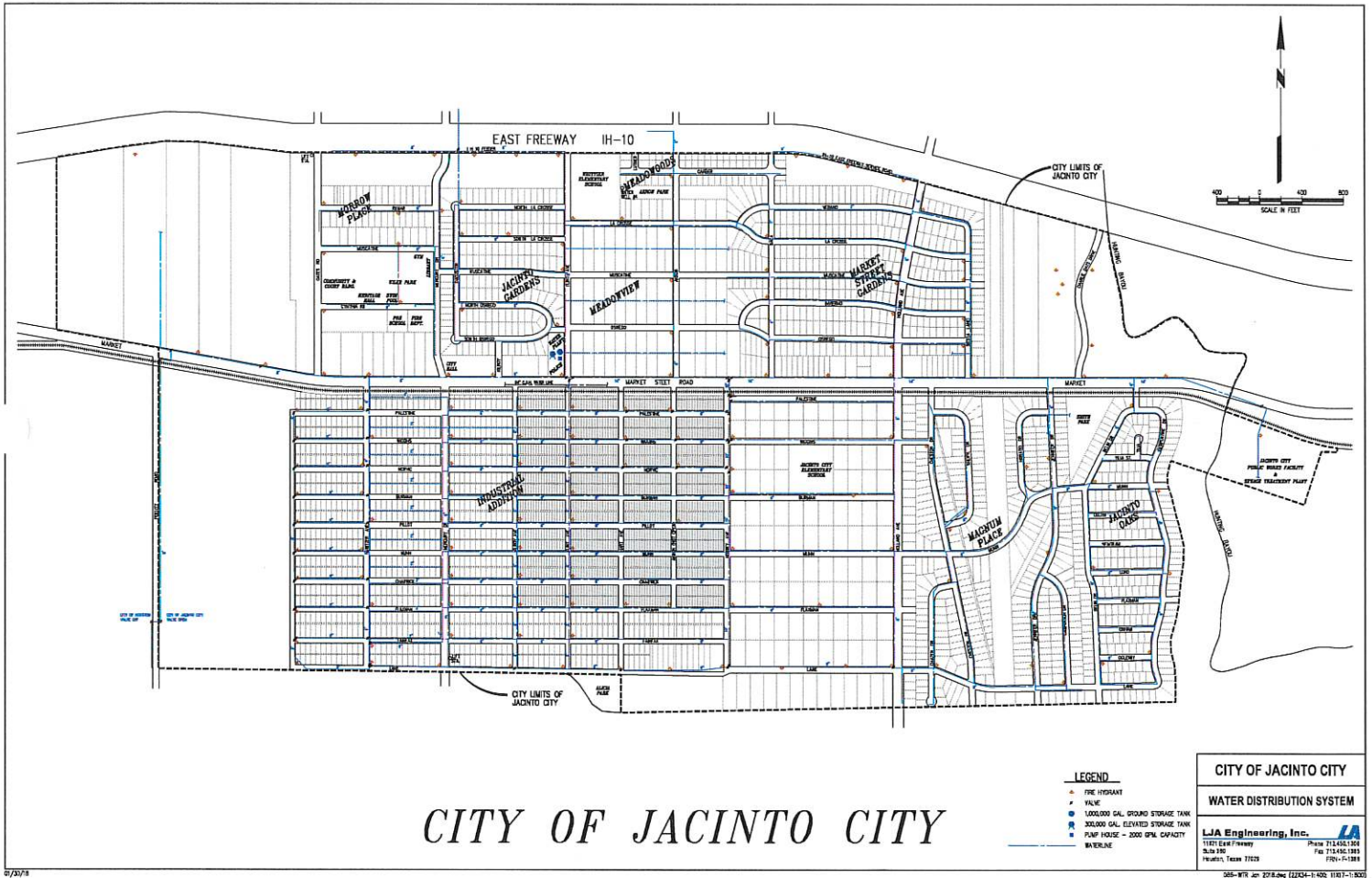
**Wholesale public water supplier** – An individual or entity that for compensation supplies water to another for resale to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants as an incident of that employee service or tenancy when that water is not resold to or used by others, or an individual or entity that conveys water to another individual or entity, but does not own the right to the water which is conveyed, whether or not for a delivery fee.

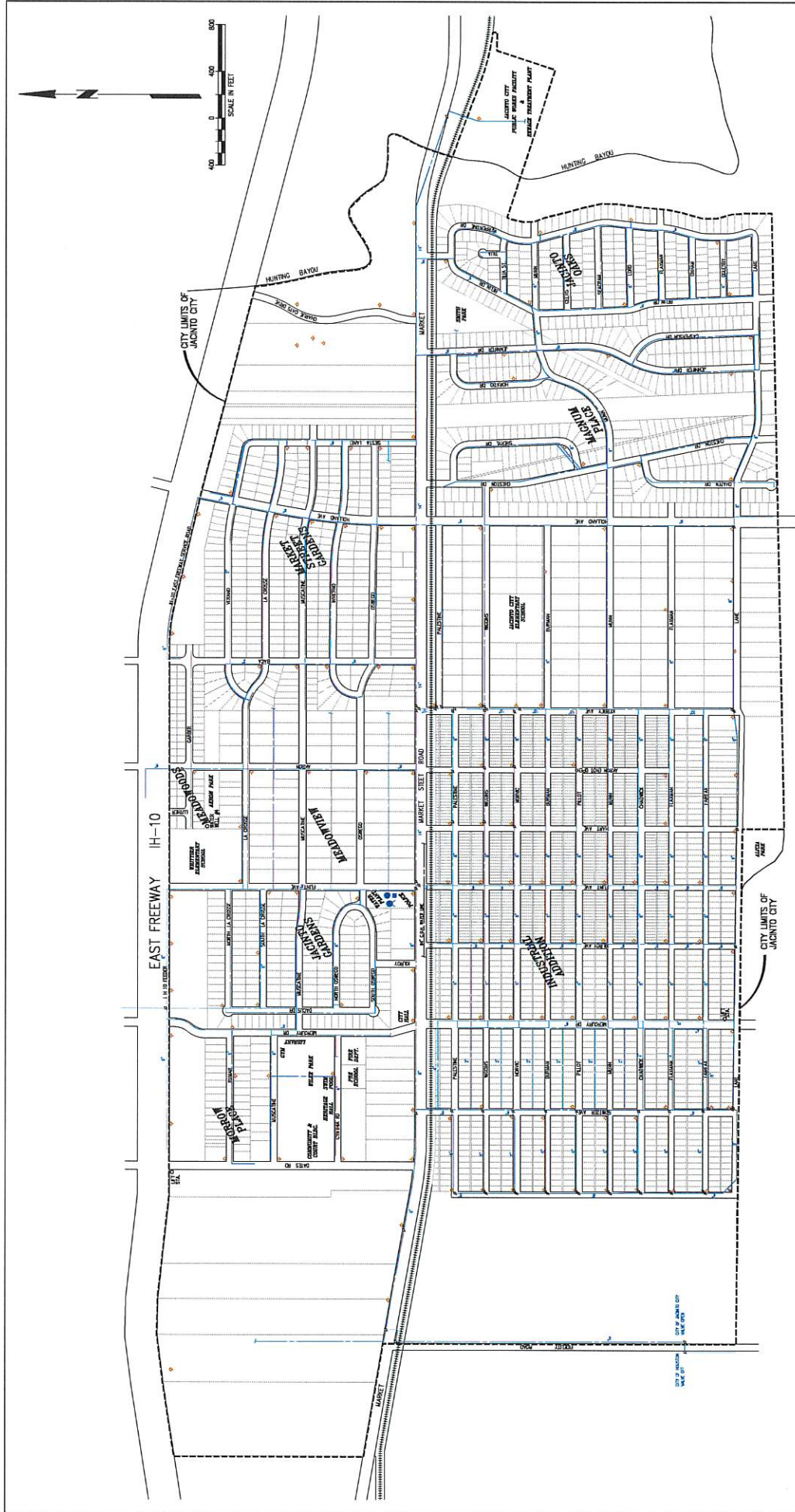
**Wholesale use** - Water sold from one entity or public water supplier to other retail water purveyors for resale to individual customers.

# **APPENDIX C**

## **Water System Map**







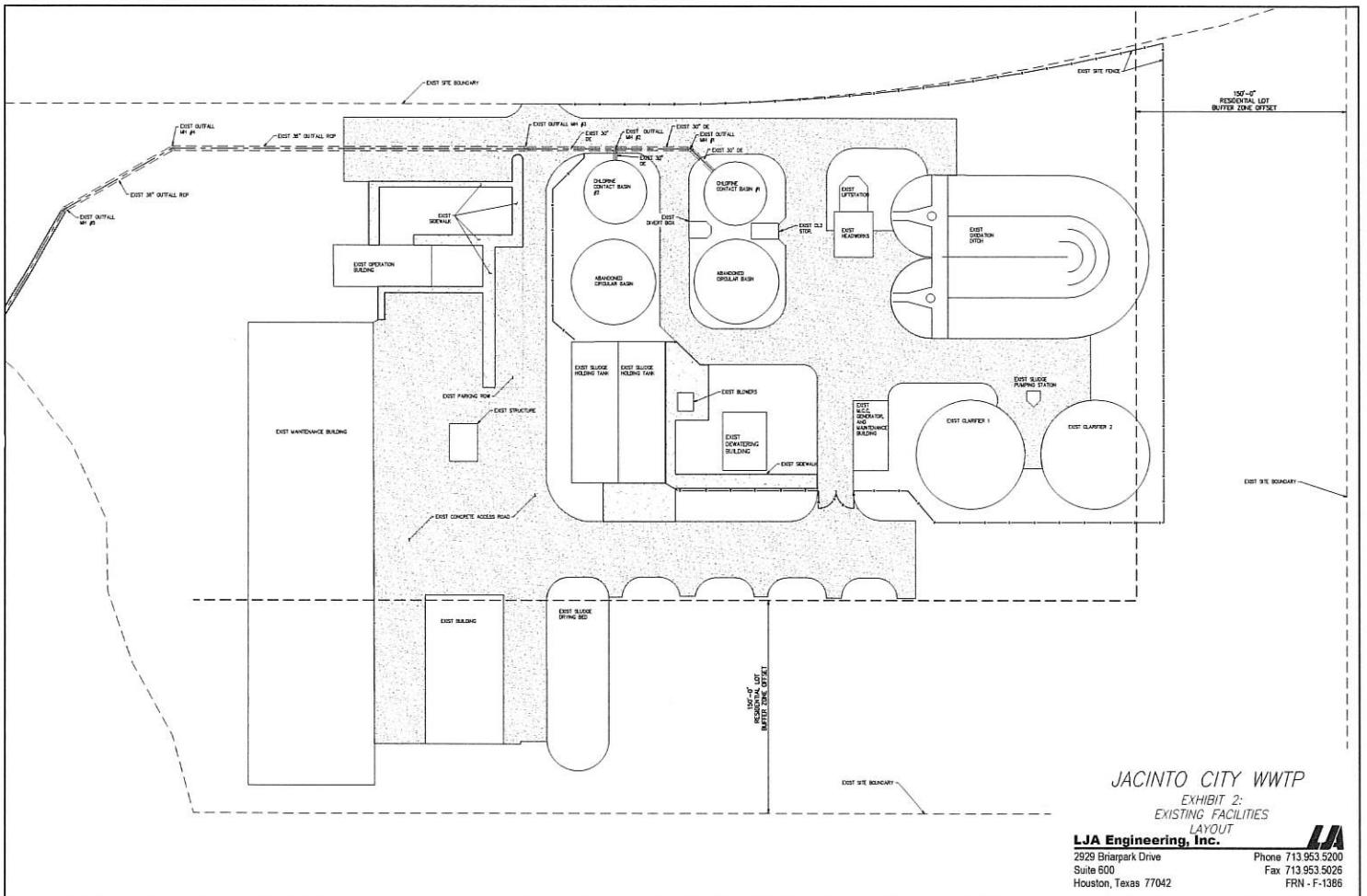
# CITY OF JACINTO CITY

## **APPENDIX D**

### **Sketch of Wastewater Plant and Discharge**



Date/Time : Thu, 14 Apr 2016 - 4:52pm User Name : techsunder  
 Path Name : I:\Projects\1510\EXHIBITS\EXIST SITE PLAN.dwg



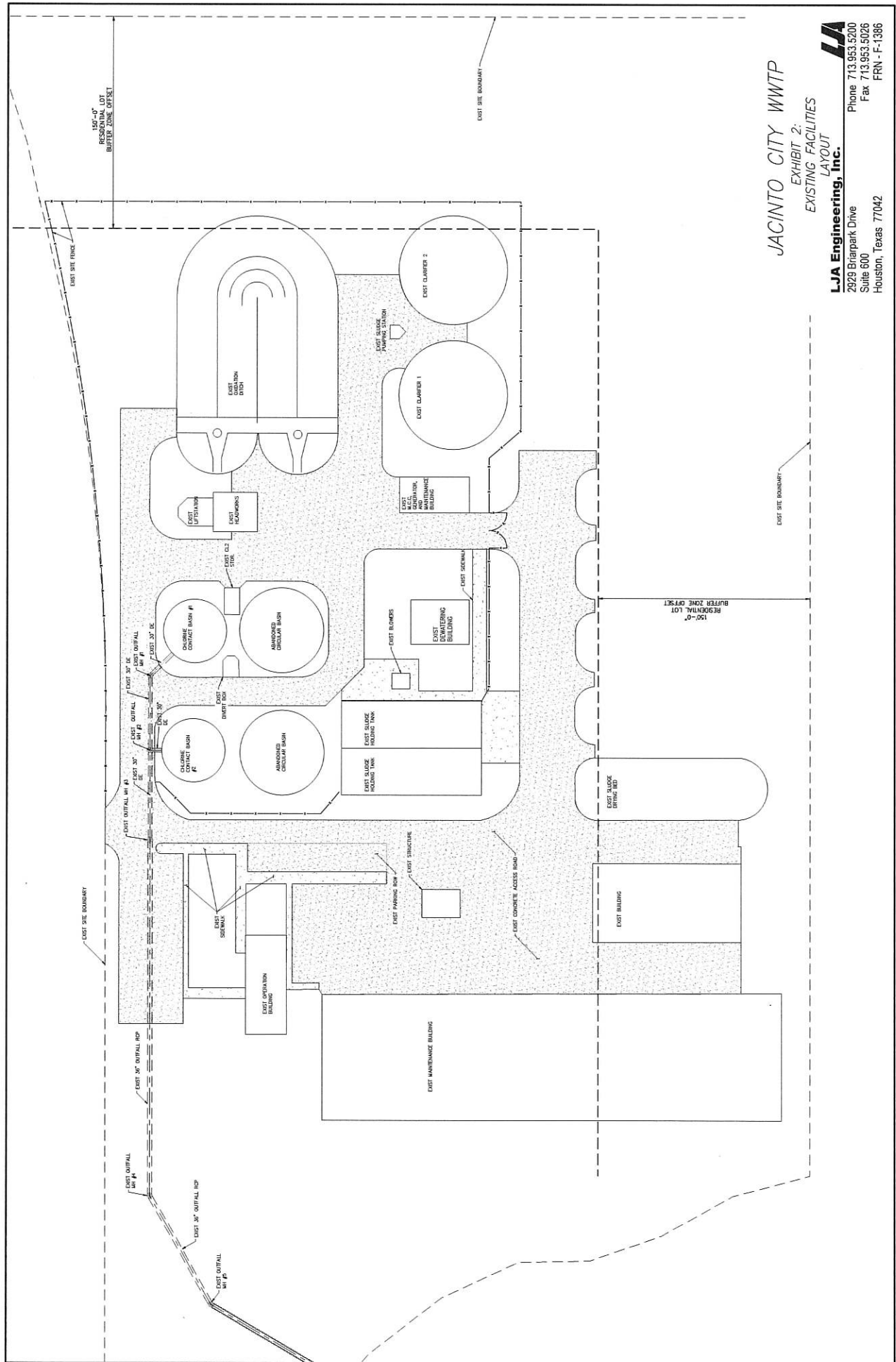
# JACINTO CITY WWTP

EXHIBIT 2:  
 EXISTING FACILITIES  
 LAYOUT

**LJA Engineering, Inc.**

2829 Briarpark Drive  
 Suite 600  
 Houston, Texas 77042

Phone 713 953 5200  
 Fax 713 953 5026  
 FRN - F-1386



JACINTO CITY WWT  
 EXHIBIT 2:  
 EXISTING FACILITIES  
 LAYOUT

**LJA Engineering, Inc.**  
 2929 Briarpark Drive  
 Suite 600  
 Houston, Texas 77042  
 Phone 713.953.5200  
 Fax 713.953.5026  
 FRN - F-1386

## **INFORMATION ABOUT YOUR RESIDENTIAL WATER BILL**

1. The water deposit is \$150.00 for residents and \$150.00 for business. This deposit is held until you close your account. This deposit is deducted from your final bill. At the time of making your deposit, you will be charged a non-refundable processing fee of \$3.00.

2. The city must have access to the meters at all times. If you have dogs in the yard and you do not restrain them, your bill will be estimated based on the prior billing history until such time that the city is able to read your meter. You may read your meter, providing you call in your reading to city hall during the first five (5) days of the month during regular business hours. The city must gain access to validate the meter reading at least once per quarter.

3. You will receive a water bill each month. The bills are mailed the last working day of each month. Depending on the postal service you should receive your bill no later than (4) days after the first of the month. If you do not receive your bill please call 713-674-8424 and you will be given the amount due.

**Failure to receive your bill does not waive the penalty.**

4. The bills are due by the 10<sup>th</sup> of each month without penalty. If the bill is not paid by the 10<sup>th</sup> penalty will be automatically applied. If the payment is not received by the **17<sup>th</sup> of the month** the service will be disconnected without further notice, **THE CITY DOES NOT SEND SECOND NOTICES.** You may pay your bill at the city hall during regular business hours (lobby or drive thru), or in the night deposit box (located in the drive thru window area), by mail, online or at Sellers Bros. Grocery store until the 17<sup>th</sup>.

5. If your water is disconnected for non-payment, a reconnect fee of \$30.00 will be added to your account and must be paid before your service is restored.

6. To transfer water service to another location within the City of Jacinto City a fee of \$30.00 is charged and must be paid prior to service being connected at the new address.

7. Temporary turn off service is offered as a free service to customers. The city has necessary tools to turn off water meter. **The cut off at the meter is for city use only.** The home owner should have a cut off at the faucet near the house. If you break the city's cut off, a fee of \$40.00 will be charged to your next bill.

## **GARBAGE PICK-UP DAYS - WEDNESDAYS AND SATURDAY**

## **HEAVY TRASH PICK-UP IS EVERY SATURDAY**

## **FEES**

### **WATER**

The minimum water fee for residential customers is \$ 19.50 for 2000 gallons of water. Thereafter, each additional 1000 gallons is charges at a rate of \$ 5.25.

### **SEWER**

The minimum sewer fee is \$10.30 for 2000 gallons. Thereafter, each 1000 gallons is charged at a rate of \$ 2.10.

### **GARBAGE**

Garbage fees are included on the water bill for residential service at a rate of \$ 11.04 plus \$ 0.91 state sales tax for a total of \$ 11.95 per month.

#### **BUSINESS GARBAGE**

**\$30.46 PLUS TAX 2 DAY PICK-UP**

**\$87.76 PLUS TAX 6 DAY PICK-UP**

### **EMS**

There is a \$ 2.00 per month fee to support EMS service to our residents.





MAYOR  
CHRISTOPHER DIAZ

## City of Jacinto City

1301 MERCURY DRIVE • PHONE (713) 674-8424 • FAX (713) 675-8525  
JACINTO CITY, TEXAS 77029

### COUNCIL MEMBERS:

DAMUS A. GAREY  
RACHEL C. NUNEZ  
LISA SHUPTRINE  
CHRISTOPHER OCHOA  
MARIO GONZALES

CITY MANAGER  
JACK D. MANER

CITY SECRETARY  
JOYCE RAINES

CITY ATTORNEY  
JIM DEFOYD

September 18, 2009

Michael S. Marcotte  
Director, City of Houston  
Public Works & Engineering Dept.  
Contract Water Accounting  
P.O. Box 1560  
Houston, Texas 77251

Mr. Marcotte:

In accordance with the provisions contained in Article III, Section 3.02 of the Water Supply Contract Between the City of Houston, Texas and the City of Jacinto City, the City of Jacinto City hereby gives notice that it revises its minimum monthly quantity from 30 million gallons to 25 million gallons, effective October 1, 2009.

Thank you for your attention to this matter. Please contact me if there are any questions.

Sincerely yours,

Jack D. Maner  
City Manager

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY		Postal Service <sup>TM</sup> CERTIFIED MAIL <sup>TM</sup> RECEIPT (Certified Mail Only; No Insurance Coverage Provided) For more information, visit our website at <a href="http://www.usps.com">www.usps.com</a>	
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits.		A. Signature <b>X</b> <i>[Signature]</i>		<input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
Article Addressed to: <b>MICHAEL S. MARCOTTE DIRECTOR, CITY OF HOUSTON PUBLIC WORKS &amp; ENG. DEPT. CONTRACT WATER ACCOUNTING P.O. BOX 1560 HOUSTON, TX 77251</b>		B. Received by (Printed Name) <b>SEP 23 2009</b>		C. Date of Delivery <b>SEP 23 2009</b>	
		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No		Postage \$	
		3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.		Certified Fee \$	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes		Receipt Fee (if Required) \$	
Article Number (Transfer from service label) <b>7007 0220 0003 0529 1404</b>				Delivery Fee (if Required) \$	
Form 3811, February 2004 Domestic Return Receipt				Postmark Here	
				MICHAEL S. MARCOTTE PUBLIC WORKS DIRECTOR CONTRACT WATER ACCOUNTING P.O. BOX 1560 HOUSTON, TX 77251	



# CITY OF HOUSTON

Department of Public Works and Engineering

**Bill White**

Mayor

Michael S. Marcotte, P.E., D.WRE, BCEE  
Director  
P.O. Box 1562  
Houston, Texas 77251-1562

T. 713 837-0037  
F. 713 837-0040  
[www.houstontx.gov](http://www.houstontx.gov)

September 26, 2009

City of Jacinto City  
Attn: Jack D. Maner  
1301 Mercury Drive  
Jacinto City, Texas 77029

RE: Treated Surface Water Supply Contract between the City of Houston, and City of Jacinto City

Dear Mr. Maner:

We have received your request to decrease your minimum monthly quantity for City of Jacinto City from 30,000,000 gallons per month to 25,000,000 gallons per month. The City has approved your request with an effective date of October 1, 2009.

If you have any questions, please call Ann Sheridan at 713-837-9142

Sincerely,

Ann Marie Stone Sheridan, P.E.  
Supervising Engineer  
Planning & Development Services Division  
Department of Public Works and Engineering

AMS:SN:sn

Cc: Jun Chang, P.E.  
Karen Leback  
Dannelle Belhateche  
Lorenzo Williams  
Sophia Chang  
Simon Tung  
Tom Nguyen  
Nick Garefalos  
Howard Smith  
Jerrold Geisler  
Maria Carrillo  
Patrick Walters

WATER SUPPLY CONTRACT BETWEEN  
THE CITY OF HOUSTON, TEXAS AND  
THE CITY OF JACINTO CITY

33521  
93-716

THIS WATER SUPPLY CONTRACT ("Contract") is made by and between the CITY OF HOUSTON, TEXAS, ("Houston") and the CITY OF JACINTO CITY, TEXAS ("Jacinto City").

**RECITALS**

Houston is a municipal corporation and home-rule city, principally located in Harris County, Texas. Houston owns a water distribution system and desires to sell surface water to the Jacinto City.

Jacinto City is a municipal corporation organized under Texas law.

Jacinto City operates a water distribution system and desires to purchase water from Houston for distribution and use for domestic and commercial purposes.

The parties to this Contract have determined that all obligations to expend money arising out of this Contract can be fully satisfied out of moneys now on hand and available for expenditure for the purposes herein stated. In the case of periodic charges for water service, the parties contemplate that Jacinto City will pay such charges as an operating expense of its water system out of funds on hand at the time such charges are incurred.

NOW, THEREFORE, for and in consideration of the covenants and agreements herein contained, the parties hereto do mutually agree as follows:

**ARTICLE I.**

**Definitions**

Unless the context requires otherwise, the following terms as used in this Contract shall have meanings as follows:

"Ordinances" shall mean the Code of Ordinances of the City of Houston, Texas, as amended from time to time.

"Point of Delivery" shall mean the output flange of the meter that is installed to serve the Jacinto City under the provisions of this Contract.

"Utility Official" shall mean the Director of the Department of Public Works and Engineering of the City of Houston, Texas, or any other person who may hereafter exercise the functions of the said Director under the applicable Ordinances of City.

"Water" shall mean treated surface water from Houston's domestic waterworks system serving its own inhabitants.



## ARTICLE II.

### Construction of Facilities

#### 2.01-- Construction by City.

Houston has constructed and is constructing sufficient water facilities to enable it to deliver Water to Jacinto City.

#### 2.02--Construction by Jacinto City of Certain Facilities.

Jacinto City agrees to construct, or cause to be constructed, all facilities necessary to enable it to receive water from Houston's water distribution system, including without limitation, inter-connection lines, meter vaults, casings, airgap and other backflow prevention controls, valves and flow control devices as may be necessary and required by the Utility Official.

#### 2.03--Time of Completion.

Jacinto City and Houston agree to proceed with due diligence to construct the facilities described in Section 2.01, 2.02 and 2.05 as appropriate.

#### ~~2.04--Point of Delivery.~~

---

The Point of Delivery for Water sold under this Contract shall be located at the physical point of connection to Houston's water system at the intersection of Market Street and Flint Avenue in Jacinto City.

#### 2.05--Tap and Meter.

Jacinto City shall, at its sole cost, construct a tap and set the water meter under the approval and inspection of the Utility Official. The water meter shall be located at the Point of Delivery. Jacinto City's water distribution system shall be chlorinated in accordance with requirements specified by the Utility Official before the connection is made.

## ARTICLE III.

### Sale and Delivery of Water

#### 3.01--Delivery of Water.

Subject to the terms and conditions of this Contract, Houston agrees to sell and deliver (or cause to be delivered) Water at the Point of Delivery established under the provisions of Article Two, and Jacinto City agrees to purchase Water at such Point of Delivery during the term of this Contract.

#### 3.02--Billing and Payment.

All Water delivered to the Jacinto City shall be metered, and Houston shall read the meters and bill the Jacinto City on a monthly basis. The charge for Water shall be computed in accordance with the rates for contract treated water customers (surface) established by Section 47-61 of the Ordinances. Billing shall not begin until the commencement of delivery of Water.

Monthly payments shall be calculated in accordance with the formula given in subsection 47-61(f) of the Ordinances for contract treated water customers receiving surface water. Jacinto City's initial minimum monthly quantity is 30,000,000 gallons. Jacinto City is authorized to revise its minimum monthly quantity no more than once each calendar year by providing notice thereof to the Utility Official. At the end of each billing period, Houston shall send a statement of charges to Jacinto City showing the quantity of Water measured by meter and the appropriate monthly charges.

During any month period in which Houston is unable to deliver to Jacinto City the minimum specified, whether as a result of curtailments or suspensions under Section 5.03 or of a Force Majeure as provided in Sections 5.01 and 5.02 hereof, Jacinto City shall be obligated to pay Houston only for the quantity of Water delivered to Jacinto City under this Contract during such month.

Payment of such statements shall be due and payable at P.O. Box 1562, Houston, Harris County, Texas 77251, on or before the 30th day after receipt of such statement. If Houston changes the location at which payment is to be made, Houston shall notify Jacinto City in writing at the address shown in Section 7.08 hereof.

---

Although Houston intends that contracts for the sale of Water for out-of-city usage for domestic and commercial purposes should provide for stable prices, the parties acknowledge that Houston retains the right to change rates or increase rates to all customers by amending or superseding the rates set out in Section 47-61 of the Ordinances. It is agreed, however, that such rates shall not be increased as to Jacinto City during the term of this Contract unless such increase is also made applicable to other similar customers taking treated surface water from Houston. Jacinto City agrees to assess user charges to its customers that will produce revenues sufficient to discharge its obligations under this Contract.

#### 3.03--Failure to Pay when Due.

Should Jacinto City fail to tender payment of any amount when due, interest thereon shall accrue at the rate of ten percent (10%) per annum from the date when due until paid. In the event Jacinto City fails to timely tender payment of any amount within the 30 day period established in Section 3.02 hereof, and such failure continues for 30 days after the Utility Official's written notice to Jacinto City of such default, the Utility Official may suspend delivery of Water, but the exercise of such right shall be in addition to any other remedy available to Houston.

#### 3.04--Title to and Responsibility for Water.

Title to, possession, and control of Water shall remain in Houston until it passes through the Point of Delivery, where title to, possession, and control of the Water shall pass from Houston to Jacinto City.

#### ARTICLE IV.

##### Term

This Contract shall be in force and effect from and after the countersignature hereof by Houston's Controller and shall expire at noon on the 40th anniversary of the date of countersignature unless sooner terminated pursuant to the terms of this Contract. Either party may terminate this Contract for convenience by sending thirty (30) days' notice to the other party. To be effective such termination must be authorized by the governing body of the terminating party.

#### ARTICLE V.

##### Performance by the Parties

##### 5.01--Force Majeure.

In the event either party is rendered unable, wholly or in part, by Force Majeure, to carry out any of its obligations under this Contract, it is agreed that upon such party's giving notice and full particulars of such Force Majeure in writing to the other party as soon as possible after the occurrence of the Force Majeure, the obligations of the party giving such notice, to the extent it is affected by Force Majeure and to the extent that due diligence is being used to resume performance, shall be suspended for the duration of the Force Majeure. Such cause shall, as far as possible, be remedied with all reasonable dispatch.

##### 5.02--Force Majeure Defined.

The term "Force Majeure", as used herein, shall include, but not be limited to, acts of God, strikes, lockouts or other industrial disturbances, acts of the public enemy, war, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, droughts, tornadoes, hurricanes, arrests and restraints of government and people, explosions, breakage or damage to machinery, pipelines or canals, and any other incapacities of either party, whether similar to those enumerated or otherwise, and not within the control of the party claiming such inability, which by the exercise of due diligence and care such party could not have avoided.

##### 5.03--Delivery Limitations; Suspension of Services.

Jacinto City shall not be guaranteed any specific quantity or pressure of Water whenever Houston's water supply is limited or when Houston's equipment may become inoperative due to unforeseen breakdown or scheduled maintenance and repairs.

If the Houston City Council finds that public health, safety and welfare of Houston requires suspension in whole or part of the delivery of Water under this Contract, such suspension will be effective upon such determination made by the Houston City Council and will continue until such time as determined by the Houston City Council. Provided, however, Houston may reduce the supply of



Water only in accordance with the laws of the State of Texas, particularly Section 11.039(a) of the Texas Water Code.

Houston is in no case to be held to any liability for failure to furnish any specific amount or pressure of Water. The District agrees to restrict its peak usage to no more than N/A million gallons of Water per day unless a higher rate is authorized by the Director.

#### **ARTICLE VI.**

##### **Measuring Equipment**

###### **6.01--In General.**

At Jacinto City's own cost and expense, Jacinto City shall provide, for installation at the Point of Delivery, measuring equipment, properly equipped with meters and devices of standard type for measuring accurately the quantity of Water delivered under this Contract, with a capacity to measure the quantity of Water delivered within the accuracy tolerance of 2%. Such measuring equipment shall be approved by Jacinto City and the Utility Official, but shall become the property of Houston after installation.

---

###### **6.02--Access.**

During any reasonable hours, Houston and Jacinto City shall have access to such measuring equipment so installed. Jacinto City shall have access to all records pertinent to determining the measurement and quantity of Water actually delivered, but the reading of the meters for purposes of billing shall be done by Houston.

###### **6.03--Routine Tests.**

Houston shall maintain the measuring equipment so installed within the accuracy tolerance of 2% by periodic tests conducted at least once every twelve (12) months and shall notify Jacinto City at least forty-eight (48) hours in advance of the time and location at which tests are to be made. Houston agrees to properly test said measuring equipment when requested to do so by Jacinto City. In addition, Jacinto City shall have the right to independently check said measuring equipment at any time upon notification to the Utility Official.

###### **6.04--Results of Tests.**

Should the test of the meter in question show that the meter registers either more than one hundred two percent (102%) or less than ninety-five percent (95%) of the Water delivered at the American Water Works Association (AWWA) specified test flow rates for that size and type meter, the water bills of Jacinto City shall be corrected to the average daily consumption of the meter when in working order and the meter shall be calibrated to AWWA specifications or replaced by an accurate meter that is tested before it is placed in service. This adjustment shall be for a period extending back to the time when the inaccuracy began, if such time is ascertainable; and if such time is not

ascertainable, for a period extending back to the last meter test or one hundred twenty (120) days, whichever is shorter.

**6.05--Disputes as to Testing.**

In the event of dispute between Houston and Jacinto City as to the accuracy of the testing equipment used by the Houston to conduct the test of accuracy upon the meter being used, an independent check shall be mutually agreed upon between Jacinto City and Houston to be conducted by an independent measuring equipment company suitable to both Jacinto City and the Utility Official. The cost of such test will be at Jacinto City's sole expense.

**ARTICLE VII.**

**Miscellaneous Provisions**

**7.01--Quality of Water.**

Houston shall provide treated surface water meeting all applicable Texas and Federal regulations regarding water quality, including the Clean Drinking Water Act.

---

~~EXCEPT AS PROVIDED IN THIS SECTION 7.01, HOUSTON MAKES NO WARRANTY~~  
EXPRESSED OR IMPLIED, REGARDING THE QUALITY OR DELIVERY PRESSURE OF THE WATER, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

JACINTO CITY HEREBY RELEASES AND DISCHARGES HOUSTON FROM ANY AND ALL FINES, DEMANDS, JUDGEMENTS, LIABILITIES OR CLAIMS ARISING BY REASON OF OR IN CONNECTION WITH THE DELIVERY OF WATER WHICH MEETS THE REQUIREMENTS OF THIS SECTION 7.01.

**7.02--Ingress and Egress.**

During the terms of this Contract, Houston shall have the right of ingress and egress in, upon under and over any and all land, easements and rights-of-way of Jacinto City on which Houston, with Jacinto City's consent, constructs facilities to deliver Water to Jacinto City.

**7.03--Assignments.**

This Contract shall bind and benefit the respective parties and their legal successors, but shall not otherwise be assignable at law or otherwise, in whole or in part, by either party without first obtaining written consent of the other.

**7.04--Subject to Law, etc.**

This Contract shall be subject to all present and futures valid laws, orders, rules and regulations of the United States of America, the State of Texas, any regulatory body having jurisdiction, and the Charter and Ordinances of the City of Houston, and those of the City of Jacinto City, Texas.

7.05--No Additional Waiver Implied.

The failure of either party hereto to insist, in any or more instances upon performance of any of the terms, covenants or conditions of this Contract, shall not be construed as a waiver or relinquishment of the future performance of any such term, covenant or condition by the other party hereto, but the obligation of such other party with respect to such future performance shall continue in full force and effect.

7.06--Inspections of Jacinto City's Distribution System.

Jacinto City agrees that Houston may conduct inspections from time to time to determine that no conditions exist in the Jacinto City's water distribution system and connections to its customers' premises which would or might adversely affect Houston's Water distribution system. In order to protect the Houston's Water distribution system it is specifically agreed that Jacinto City's water distribution system shall be constructed and operated to comply with the rules promulgated by the Texas Water Commission regarding backflow prevention and cross connections. Should such a condition be discovered, Jacinto City shall promptly cure same.

---

7.07--Merger.

This instrument contains all the agreements made between the parties.

7.08--Notices.

Until Jacinto City is otherwise notified in writing by Houston, the address of Houston is and shall remain as follows:

City of Houston  
Public Utilities Department  
Contract Water Accounting  
P.O. Box 1560  
Houston, Texas 77251

Until Houston is otherwise notified in writing by Jacinto City, the address of Jacinto City is and shall remain as follows:

City of Jacinto City  
Attn: City Manager  
10301 Market Street  
Jacinto City, Texas 77029

All written notices, statements and payments required or permitted to be given under this Contract from one party to the other shall be deemed given by the deposit in a United States Postal Service mailbox or receptacle of certified or registered mail, with property postage affixed thereto, addressed to the respective other party at the address set forth above or at such other address as the parties respectively shall designate by written notice.

7.09--Authorship.

The parties agree that this Contract shall not be construed in favor of or against either party on the basis that the party did or did not author this Contract.

7.10--Parties in Interest.

This Contract shall be for the sole and exclusive benefit of the parties hereto and shall not be construed to confer any rights upon any third party. Houston shall never be subject to any liability in damages to any customer of Jacinto City for any failure to perform under this Contract.

7.11--Sale of Water Outside Municipal Boundaries.

In entering into this Contract the parties contemplate that Jacinto City will sell the Water to its own inhabitants. Therefore, the parties agree that Jacinto City may sell Water purchased hereunder outside its municipal boundaries, only if such sale is approved in writing by the Utility Official. The Utility Official shall grant any such request if he or she determines that Houston has a sufficient supply of Water to comply with such request.

7.12--Captions.

The captions appearing at the first of each numbered section in this Contract are inserted and included solely for convenience and shall never be considered or given any effect in construing this Contract, or any provisions hereof, or in connection with the duties, obligations, or liabilities of the respective parties hereto or in ascertaining intent, if any questions of intent should arise.

7.13--Approvals.

Unless otherwise provided for herein, any consent or approval of the parties shall be made by the governing body of each party.

7.14--Default and Remedies.

Default shall occur only in the event either party fails to adhere to its respective obligations hereunder. In such event, the non-defaulting party shall give the defaulting party written notice describing such default and the proposed date of termination. Such date may not be sooner than the 30th day following receipt of the notice. The non-defaulting party, at its sole option, may extend the proposed date of termination to a later date. If prior to the proposed date of termination, the defaulting party cures such default, then the proposed termination shall not occur. If the defaulting party fails to cure such default prior to the proposed date of termination, then the non-defaulting party may terminate its performance under this Contract as of such date. This Contract shall not be considered as specifying the exclusive remedy for any default but all remedies existing at law and in equity may be availed of by either party and shall be cumulative.

**IN WITNESS WHEREOF**, the parties hereto have executed this Contract in multiple copies, each of which shall be deemed to be an original, effective on the date of countersignature indicated below.



"HOUSTON"

CITY OF HOUSTON, TEXAS

By: Jayce Lindsey

Mayor

Executed for and on behalf of City  
pursuant to authority granted by  
the City Council Ordinance No.  
No. 93-716, passed  
June 16, 1993, a  
copy of which is attached hereto  
for reference.

ATTEST:

Christa Russell  
City Secretary

(SEAL)

APPROVED:

James H. Anderson  
Director, Department of Public  
Works & Engineering

APPROVED AS TO FORM:

W. Beene  
Sr. Assistant City Attorney

COUNTERSIGNATURE:

Q. Anderson  
City Controller

DATE OF COUNTERSIGNATURE: 7/9/93

"JACINTO CITY"

CITY OF JACINTO CITY, TEXAS

By: David Lopez

Mayor

Executed for and on behalf of Jacinto  
City pursuant to the provisions of  
the City Charter Section 15, passed  
May 6, 1993, a copy of  
said section which is attached hereto  
for reference.

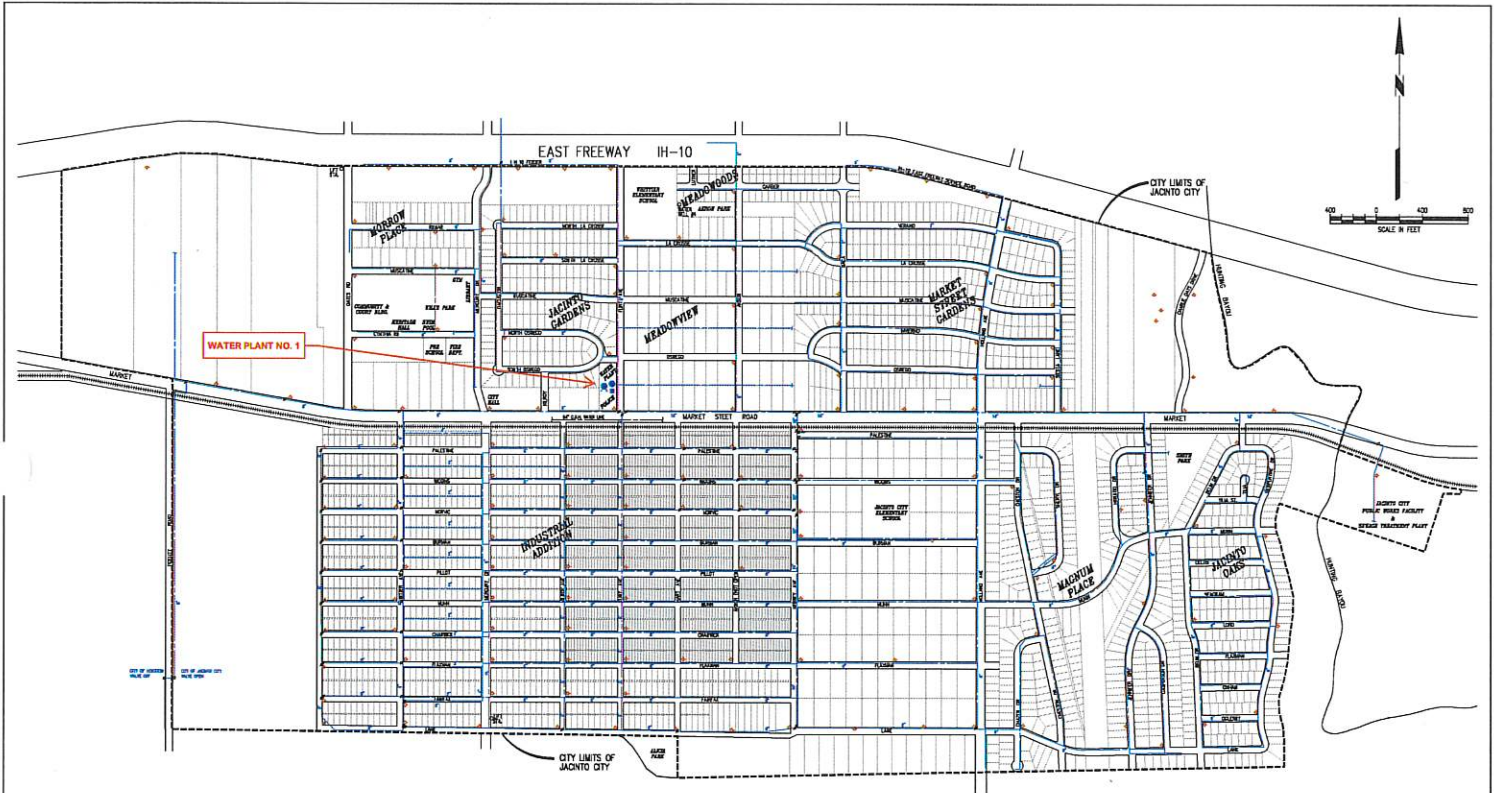
ATTEST:

Jayce Lindsey  
City Secretary

(SEAL)

# **APPENDIX F**

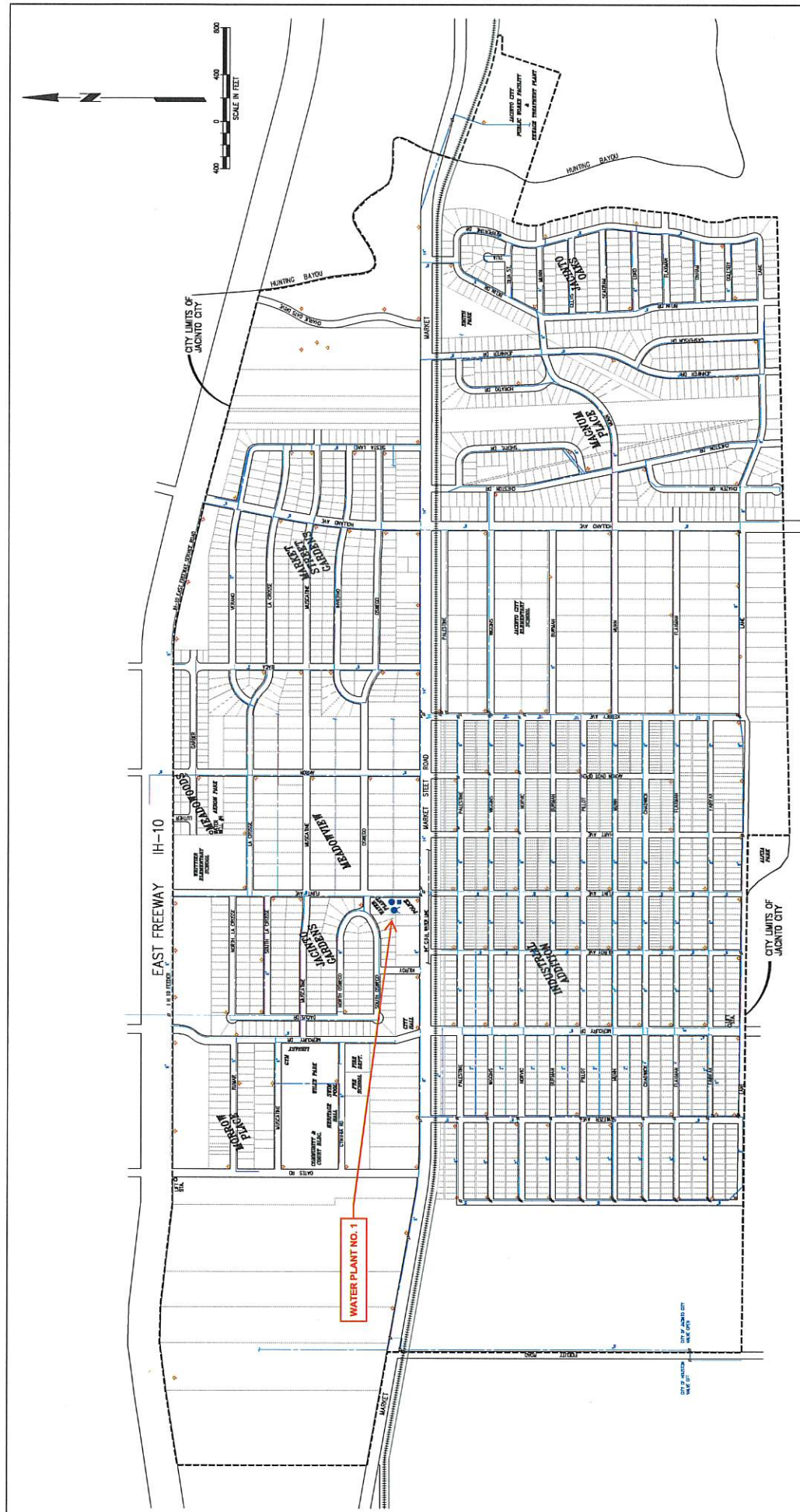
## **Map of Water Plants**



# CITY OF JACINTO CITY

- LEGEND**
- FIRE HYDRANT
  - ▲ VALVE
  - 100,000 GAL. GROUND STORAGE TANK
  - 300,000 GAL. ELEVATED STORAGE TANK
  - PUMP HOUSE - 2000 GPM CAPACITY
  - MAINLINE

CITY OF JACINTO CITY	
WATER DISTRIBUTION SYSTEM	
<b>LJA Engineering, Inc.</b> 1101 East Parkway Houston, Texas 77059 Phone 713.616.1500 Fax 713.616.1801 TDD 713.616.1804	
000-WTR-jac 2018.dwg (22241-1-002, 1101-1-002)	



# CITY OF JACINTO CITY

**CITY OF JACINTO CITY**

**WATER DISTRIBUTION SYSTEM**

**LJA Engineering, Inc.**  
 10000 Cal. Elevated Storage Tank  
 300000 Gals. Elevated Storage Tank  
 Pump House - 2000 GPM Capacity  
 10000 Cal. Elevated Storage Tank  
 300000 Gals. Elevated Storage Tank  
 Houston, Texas 77029  
 Phone 713.450.1385  
 Fax 713.450.1386  
 E-mail lja@ljaeng.com  
 FRN-1-1386

**LEGEND**

- FIRE HYDRANT
- VALVE
- 100,000 GAL. ELEVATED STORAGE TANK
- 300,000 GAL. ELEVATED STORAGE TANK
- PUMP HOUSE - 2000 GPM CAPACITY
- WATERLINE



## **APPENDIX G**

### **Resolution for Adoption of a Water Conservation Plan**

A RESOLUTION OF THE BOARD OF DIRECTORS OF  
CITY OF JACINTO CITY ADOPTING A WATER  
CONSERVATION PLAN

WHEREAS, the Council Members (the "Council") recognizes that the amount of water available to City of Jacinto City (the "City") and its water utility customers is limited and subject to depletion during periods of extended drought;

WHEREAS, the Council recognizes that natural limitations due to drought conditions and other acts of God cannot guarantee an uninterrupted water supply for all purposes;

WHEREAS, Section 11.1272 of the Texas Water Code and applicable rules of the Texas Commission on Environmental Quality require all public water supply systems in Texas to prepare water conservation; and

WHEREAS, as authorized under law, and in the best interests of the customers of the City, the Council deems it expedient and necessary to amend and/or establish certain rules and policies for the orderly and efficient management of limited water supplies during drought and other water supply emergencies;

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF JACINTO CITY:

SECTION 1. That the Water Conservation Plan is attached hereto as Exhibit "A" made a part hereof for all purposes, be, and the same is hereby, adopted as the official policy of the City.

SECTION 2. That the City Manager of the City is hereby directed to implement, administer, and enforce the Water Conservation Plan.

SECTION 3. That this resolution shall take effect immediately upon its passage.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

DULY PASSED BY THE COUNCIL OF THE CITY OF JACINTO CITY, ON THIS  
\_\_ day of \_\_\_\_\_ 2024.

---

Ana Diaz, Mayor

ATTEST:

---

Christal Rodriguez, City Secretary

RESOLUTION 2024-6R

A RESOLUTION OF THE BOARD OF DIRECTORS OF  
CITY OF JACINTO CITY ADOPTING A WATER  
CONSERVATION PLAN

WHEREAS, the Council Members (the "Council") recognizes that the amount of water available to City of Jacinto City (the "City") and its water utility customers is limited and subject to depletion during periods of extended drought;

WHEREAS, the Council recognizes that natural limitations due to drought conditions and other acts of God cannot guarantee an uninterrupted water supply for all purposes;

WHEREAS, Section 11.1272 of the Texas Water Code and applicable rules of the Texas Commission on Environmental Quality require all public water supply systems in Texas to prepare water conservation; and

WHEREAS, as authorized under law, and in the best interests of the customers of the City, the Council deems it expedient and necessary to amend and/or establish certain rules and policies for the orderly and efficient management of limited water supplies during drought and other water supply emergencies;

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF JACINTO CITY:

SECTION 1. That the Water Conservation Plan is attached hereto as Exhibit "A" made a part hereof for all purposes, be, and the same is hereby, adopted as the official policy of the City.

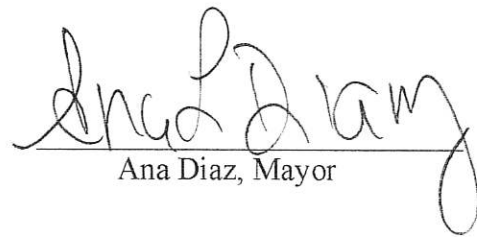
SECTION 2. That the City Manager of the City is hereby directed to implement, administer, and enforce the Water Conservation Plan.

SECTION 3. That this resolution shall take effect immediately upon its passage.


[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]



DULY PASSED BY THE COUNCIL OF THE CITY OF JACINTO CITY, ON THIS  
8<sup>th</sup> day of August 2024.

  
Ana Diaz, Mayor

ATTEST:

  
Christal Rodriguez, City Secretary



## **APPENDIX H**

### **Regional Water Planning Group Acceptance Water Conservation Plan**