

**Harris County Municipal Utility District No. 361  
Community Water System  
Emergency Response Plan**



# **Harris County Municipal Utility District No. 361**

## **Emergency Response Plan**

## CWS and ERP Information

Please fill in the information below as indicated.

PWSID	1013123
Street Address	3200 Southwest Freeway, Suite 2600 c/o Allen Boone Humphries Robinson LLP (ABHR)
City, State Zip Code	Houston, Texas 77027
Phone number	713-860-6496
Population Served	4,351
Prepared by	Cindy Fields, P.E.
Reviewed by	
Date completed	





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## UTILITY INFORMATION

During an incident, you need to have system information about your water utility readily available for your personnel, first responders, repair contractors/vendors, the media, and other response partner agencies.

### i Utility Overview

Provide basic information about your utility.

Utility Information	
PWSID	1013123
Utility name and address	Harris County Municipal Utility District No. 361 (HCMUD 361) - HCMUD 361 Does Not Own or Operate Water Supply Facilities. The following facility provides water to HCMUD 361:  HCMUD No. 344 Water Plant No. 1 – 14218 Timber Forest Dr., Houston, TX 77044 (WP 1)
Owner	HCMUD No. 361 (the District)
Directions to utility from major roadway, include lat./long. coordinates	The District is located east of the intersection of West Lake Houston Parkway and Deussen Parkway, 29°55'36.56"N, 95°10'2.67"W
Total population served and total service connections	Population of approximately 4,351 with approximately 1,243 service connections.
Name, title, phone number of primary contact (e.g., ERP Lead)	Mark Ivy, District Operator - MMIA, 281-651-1620
Alternate contact	Josh Maas, District Operator - MMIA, 713-302-2429
Location of treatment, distribution, collection schematics and operation manuals	WP 1 and distribution system plans are located at the offices of MMIA, WP 1, and BGE, Inc. 10777 Westheimer Rd, Ste. 400, Houston, Tx 77042  See HCMUD 344 ERP for water supply information.

### ii Personnel Information

Attach your personnel roster here or fill out the table below.

Personnel			
Name and Title	Job Duties and Responsibilities	Contact Information	Emergency Information
MMIA Dispatch	Emergency Control Center	281-651-1618	Immediate notification of emergency.

**Personnel**

Name and Title	Job Duties and Responsibilities	Contact Information	Emergency Information
Mark Ivy	MMIA Regional Manager/HCMUD No. 361 Operator (MMIA)	O: 281-651-1620 C: 712-829-3288	Authority to evacuate plants/On-site Emergency Project Manager
Clayton Galloway	MMIA Regional Environmental, Health and Safety Manager	C: 832-326-3295	Emergency coordination and evaluation with On-Site Project Manager
Josh Maas	HCMUD No. 361 Operator (MMIA)	C: 713-302-2429	On-site Operator
Cindy Fields	HCMUD No. 361 Engineer (BGE, Inc.)	O: 713-488-8343 C: 832-512-7925	Notified
Kevin Odom	HCMUD No. 361 Engineer (BGE, Inc.)	O: 281-579-0340 D: 832-913-4103	Notified (Backup)
Sandra Staine	HCMUD No. 361 Attorney (ABHR)	O: 713-860-6496 C: 713-501-6840	Notified



**iii Primary Utility Components**

HCMUD 361 does not own or operate a water supply facility. HCMUD 344 provides HCMUD 361 with all its water supply needs. The following information reflects the HCMUD 344 facilities serving HCMUD 361.

**HCMUD 344 Wells**

Well Name	Depth/Location	Available Yield	Treatment Requirements/Associated Treatment Plant
Water Well No. 1	1,102 ft/ 14218 Timber Forest Dr., Houston, TX 77044	1,200 gpm	Chloramines and/or Polyphosphate / WP 1
Water Well No. 2	708 ft/ 14218 Timber Forest Dr., Houston, TX 77044	890 gpm	Chloramines and/or Polyphosphate / WP 1

**Intakes**

Intake Name	Depth/Location	Capacity	Treatment Requirements/Associated Treatment Plant
City of Houston	WP 1	10 MG/Month	None (pre-treated)/WP 1

**HCMUD 344 Treatment Plant**

Plant name	Location	Capacity	Treatment Train
WP 1	14218 Timber Forest Dr., Houston, TX 77044	2 - 650k gallon GSTs	Chloramines

**HCMUD 344 Storage and Distribution System – Tanks, Primary Mains and Pumping Stations**

Location	Area Served	Comments
WP 1	HCMUDs 342, 344, 361 (Summerwood Service Area)	2 - 650k Welded Ground Storage Tanks 5 – 1,000 gpm Booster Pumps

**HCMUD 344 Treatment Chemical Storage Facilities**

Location	Chemical(s)	Comments
WP 1 Control Building/On-site Fiberglass Building	Chlorine, Liquid Ammonium Sulfate (LAS) and Polyphosphate	These are in liquid form and there is both an eye wash and shower station at the facility

**Other Key Facilities – HCMUD 344**

Location	Function	Comments
WP 1	Emergency Power	1-350 kW Diesel Generator

**iv Industry Chemical Handling and Storage Facilities**

List surrounding chemical production, handling or storage industries that could impact your utility during incidents such as accidental releases, hurricanes or earthquakes.

**Industry Chemical Handling Facilities – N/A**

Facility Name	Location	Distance	Chemical and Exposure Pathway

**Chemical Storage Tanks**

Facility Name	Location	Distance	Chemical and Exposure Pathway
Shell Gas Station	14106 W. Lake Houston Parkway, Houston, TX 77044	0.6 miles southeast of WP 1	Facility has underground storage tanks (UST) holding gasoline. Explosion and fire hazards are present.
HEB Fuel Station	12680 W. Lake Houston Parkway, Houston, TX 77044	0.87 miles southwest of WP 1	Facility has USTs holding gasoline. Explosion and fire hazards are present.
Kroger Fuel Station	14121 E. Sam Houston Pkwy. N., Houston, TX 77044	1.1 miles southwest of WP 1	Facility has USTs holding gasoline. Explosion and fire hazards are present.
Chevron Gas Station	13955 E. Sam Houston Pkwy. N., Houston, TX 77044	1.1 miles southwest of WP 1	Facility has USTs holding gasoline. Explosion and fire hazards are present.

**v Safety**

List safety materials and important safety information to help protect utility personnel during an incident. You may also reference your utility Health and Safety Plan, if available.

**Safety Materials**

Type	Location
First Aid	Closest hospital/emergency room is Memorial Hermann Convenient Care Center in Summer Creek; 14201 E. Sam Houston Pkwy N., Houston, TX 77044; (281) 436-8800
Emergency food and water supplies	Closest grocery store is HEB; 12680 W. Lake Houston Pkwy., Houston, TX 77044
Protective Equipment	Personal Protective Equipment (PPE) must always be worn and match the work classification (i.e. electrical, chemical).
Fire Extinguishers	Fire extinguishers are located throughout the facility.
Telephones	Form of communication will be located nearby employee’s workstation; either by telephone, cell phone, 2-way radios or messenger in company automobiles.

**Safety Information**

Topic	Description
Material Safety Data Sheet	Plant has MSDS on all chemicals onsite.

**vi Response Resources**

Provide an inventory of available resources (e.g., equipment, supplies) either maintained on site or readily available off site (e.g., neighboring water system) in the table below, or insert an existing inventory sheet.

**MMIA maintains an inventory of supplies and equipment as the operator for several districts in the region. The MMIA response would be coordinated through central dispatch at the Emergency Response Center.**

**Resources – HCMUD 344 Facility**

Kind	Type	Quantity	Location
Generator	350 kW Diesel	1	WP 1
Disinfection	Chlorine LAS	12 - 150 lb cylinders 1 – 175 gal LAS tank	WP 1
Fuel	diesel	1 - 500 gal tank	WP 1

**Contractors**

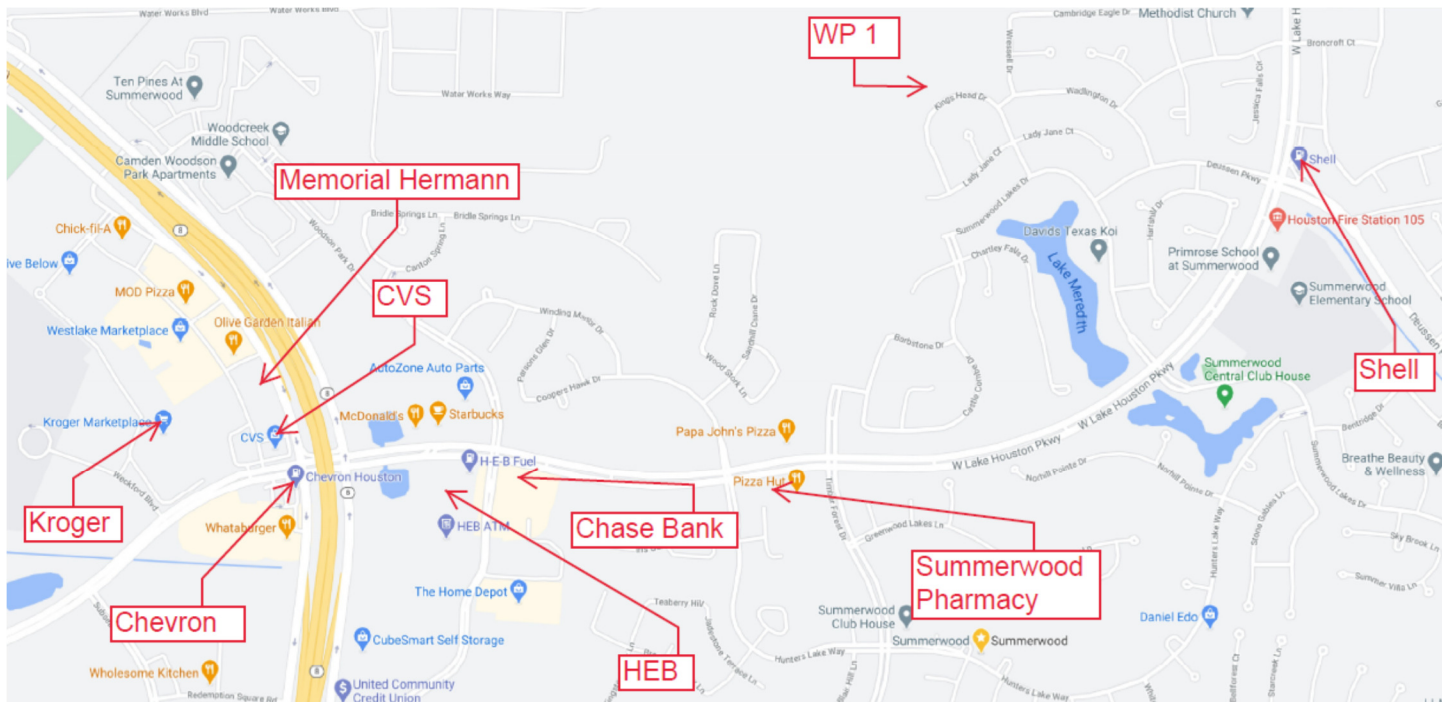
<b>Name</b>	<b>Service</b>	<b>Contact</b>	<b>Contact Information</b>
Hayes Automation	Electrical	Alan Hayes	C: 936-537-5172
Deggs Service Enterprise	General Contractor		P: 281-354-4058 23752 Pine Forest Drive; New Caney, TX 77357
DN Tanks	Ground Storage Tanks	Ryan Wessels	P: 361-799-9566
MMIA	Electrical	Josh Maas	C: 713-302-2429

**vii Key Local Services**

Note the closest locations of key logistical and medical services that you or mutual aid and assistance providers may need during an incident. Include a map if available.

**Essential Services**

<b>Facility</b>	<b>Location/Description</b>
Memorial Hermann Convenient Care Center in Summer Creek	14201 E Sam Houston Pkwy N, Houston, TX 77044
HEB Gas Station/ Pharmacy/Grocery Store	12680 W. Lake Houston Pkwy., Houston, TX 77044
Kroger Gas Station/ Pharmacy/Grocery Store	14221 E. Sam Houston Pkwy., Houston, TX 77044
Chase Bank - ATM	12702 W. Lake Houston Pkwy., Houston, TX 77044
Summerwood Pharmacy	13176 W. Lake Houston Pkwy., Houston, TX 77044
Shell Gas Station/Food Mart	14106 W. Lake Houston Pkwy., Houston, TX 77044
CVS Pharmacy	14115 E. Sam Houston Pkwy., Houston, TX 77044
Chevron Gas Station	13955 E. Sam Houston Pkwy. N., Houston, TX 77044



## 1 RESILIENCE STRATEGIES

This section contains strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system.

### 1.1 Emergency Response Roles

Describe the roles and responsibilities for key utility and external response partner personnel in the table below. You can add, edit or delete rows as necessary.

Water Utility and Partner Roles		
Name/Title	Emergency Response Role	Responsibilities
Mark Ivy/MMIA Client Manager	Emergency Response Lead	Responsible for all incident response activities, including developing strategies and tactics and ordering and releasing resources.
Josh Maas/MMIA Operator	Alternate Emergency Response Lead	Perform duties as assigned by ER Lead; assumes duties listed above when ER Lead is not available.
Rick Barker/SPH Public Affairs Officer	Public Information	Responsible for leading the public information effort based on information supplied by either the ER or Alternate ER Lead.
Harris County/Pct 3 Constable Rep.	Security	Will provide incident security as needed once notified by ER Lead.
MMIA Dispatch	Emergency Operations Center	Responsible for detecting the urgency of incident. They will help guide who can appropriately assist depending on the type and location of the emergency.

**External Response Partner Roles**

<b>Name/Title</b>	<b>Organization</b>	<b>Responsibilities During an Incident</b>
<b>Local Partners</b>		
Harris County	Harris County Emergency Management/EOC	Local coordination of disaster and emergency response in Harris County.
Emergency Operator	911	Directs the call to the appropriate department based on type of incident.
Sheriff's Office	Police	To provide protection to lives, property, and rights of all people.
Constable Pct 3	Police	To provide protection to lives, property, and rights of all people.
Fire Department	Fire/HazMat	To preserve life and property; in case of a fire related matter.
Reliant	Power utility	Supports with any technical power issues.
CenterPoint Gas	Gas Utility	Supports with any gas related issues.
Harris County Health Department	Health department	Protects the health of the common people.
Water Utility Services	Contractor/vendor	Assists with any association to chemical products; Sodium Hypochlorite/Polyphosphate.
DXI Industries	Contractor/vendor	Assists with any association to chemical products; Chlorine Gas.
<b>State Partners</b>		
Texas Department of Emergency Management	State Emergency Management	Ensures the state and local governments respond accordingly to disasters.
Department of State Health Services	Health department	Protects the health of the people
Department of Public Safety	Police	Ensures the safety of the people
TXWARN	WARN	Provides its members with emergency planning, response and recovery information before, during an emergency
TCEQ Water Homeland Security	Other	Assistance to environmental impact concerns
<b>Federal Partners</b>		
Anisa Pjetrovic	EPA regional office	Protects people and environmental health
Christina Garza	FBI field office	To protect civil rights of people

## 1.2 Incident Command System (ICS) Roles

As the HCMUD No. 361 operator of record, MMIA will provide the primary incident command system roles including establishing an offsite Emergency Response Center should it become necessary.

In addition to MMIA, the Harris County Office of Homeland Security and Emergency Management maintains a robust plan for incident command systems. The plan may be found at <https://prepare.readyharris.org/#Prepare>. Below is a list of titles that can be found under the Harris County Emergency Plan.

### Natural Disasters

- Hurricanes
- Floods
- Extreme Heat
- Wildfires
- Tornadoes
- Thunderstorms
- Winter Storms

### Man Made Threats

- Biological
- Chemical
- Explosions
- Nuclear
- Radioactive
- Active Shooter
- Cyber

### Health

- Harris County Public Health
- Center for Disease Control and Prevention

### Business & Industry

- Harris County Local Emergency Planning Committees
- Essential Personnel

### Access Needs

- Deaf and Hard to Hearing
- 2-1-1 Texas/United Way
- Children with Healthcare Needs
- Disabilities and Special Needs
- Disaster Preparedness
- Evacuation Guide: People with Disabilities

### Special Interest

- Over 65
- Harris County Community Services Department
- Pets and Animals



**1.3 Communication**

Communication during an incident is critical to relay information to employees, response partners and critical customers about potential risks to health, infrastructure, and the environment.

**1.3.1 Internal Communication**

List all utility emergency response team members, their response role, title and contact information.

**Contact List**

<b>Name</b>	<b>Role/Title</b>	<b>Phone</b>	<b>Alternate Phone</b>	<b>Email</b>
Mark Ivy	District Operator	281-651-1620	713-829-3288	mivy@mmia.co
Josh Maas	District Operator	281-651-1618	713-302-2429	joshm@mmia.co
MMIA 24-hr Dispatch	District Operator	281-651-1618	N/A	N/A
Cindy Fields, PE	District Engineer	281-558-8700	713-488-8343	cfields@bgeinc.com
Sandra Staine	District Attorney	713-860-6496	713-501-6840	sstaine@abhr.com
Brian Harding	Board President	281-703-1445	N/A	bharding@jbpserv.com

**1.3.2 External Response Partner Communication**

List all external response partners, their response role or position as well as contact information.

**External Response Partner Contact List**

<b>Organization or Department</b>	<b>Point Person Name or Position</b>	<b>Phone</b>	<b>Alternate Phone</b>	<b>Email or Website</b>
<b>Local Partners</b>				
Harris County Homeland Security & Emergency Management	Mark Sloan – Emergency Management Coordinator	713-881-3100	713-884-4500	<a href="https://prepare.readyharris.org/">https://prepare.readyharris.org/</a>
Health department	Main Switchboard	713-439-6000	713-755-5050	<a href="https://publichealth.harriscountytexas.gov/About/Contact-Us">https://publichealth.harriscountytexas.gov/About/Contact-Us</a>

**External Response Partner Contact List**

<b>Organization or Department</b>	<b>Point Person Name or Position</b>	<b>Phone</b>	<b>Alternate Phone</b>	<b>Email or Website</b>
Harris County Constable Pct 3	911/Dispatch	911	281-427-4791	<a href="https://constable3.harriscountytexas.gov/Pages/default.aspx">https://constable3.harriscountytexas.gov/Pages/default.aspx</a>
Harris County Sheriff	Sheriff Ed Gonzales	713-755-5300	N/A	<a href="https://www.harriscountytexas.org/">https://www.harriscountytexas.org/</a>
Fire/HazMat	N/A	911	N/A	N/A
Power utility	Reliant	713-207-2222	N/A	N/A
Gas utility	CenterPoint Gas	713-659-2111	N/A	N/A
Water Utility Services	Steve Grychka	O: 281-290-0704	N/A	<a href="mailto:steve@waterutilityservice.com">steve@waterutilityservice.com</a>

**State Partners**

Texas Department of Emergency Management	Shaun Miller	281-517-1353	N/A	<a href="mailto:Shaun.Miller@tdem.texas.gov">Shaun.Miller@tdem.texas.gov</a> ; Region 2 Chief
Texas Department of Emergency Management	Jennifer Hawes District Coordinator Region 16A	281-517-1317	281-642-0312	N/A
Health department	Department of State Health Services	512-776-7219	N/A	N/A
Police	Department of Public Safety	(512) 424-2000	N/A	N/A
WARN	TXWARN	866-989-9276	N/A	<a href="mailto:infor@txwarn.org">infor@txwarn.org</a>
Other	TCEQ Water Homeland Security	888-777-3186	N/A	N/A

**Federal Partners**

EPA regional office	Anisa Pjetrovic	214-665-6446	N/A	<a href="mailto:Pjetrovic.Anisa@epa.gov">Pjetrovic.Anisa@epa.gov</a>
FBI field office	Christina Garza	713-936-7642	N/A	N/A

**1.3.3 Critical Customer Communication**

List critical customers below who should be given priority notification due to their reliance on the water supply either for medical reasons, based on usage, public health mission or because they may serve customers considered to be sensitive sub-populations.

**Critical Customer Contact List – N/A**

Organization or Department	Point Person Name or Position	Contact Instructions	Phone	Alternate Phone	Email or Website

**1.3.4 Communication Equipment Inventory**

Inventory your utility’s communication equipment below.

**Communication Equipment**

Type	Assigned to	Location	Number/Frequency/Channel
Cellular telephone	Individual employees	Depending on assignment	

**1.4 Media Outreach**

List contact information for all media outlets that your utility may coordinate with during notification efforts. Additionally, include existing risk communication procedures, such as composing and delivering messages (e.g. message mapping), or reference an existing Risk Communication Plan.

**Contact List**

Organization or Department	Point Person Name & Position	Phone	Alternate phone	Email or Website
Designated Water System Spokesperson	Sandra Staine – District’s Attorney	713-860-6496	713-501-6840	sstaine@abhr.com
Newspaper	Houston Chronicle	713-362-7491 (City Desk – main)	N/A	news@chron.com, citydesk@chron.com
Newspaper (Spanish)	La Voz de Houston (an affiliate of the Houston Chronicle)	713-362-7491 (City Desk – main)	N/A	news@chron.com, citydesk@chron.com
Radio	Houston Public Radio (News 88.7)	713-743-8483	N/A	news@houstonpublicmedia.org
Radio	NewsRadio 740 KTRH	Newsroom Line: 713-212-8740	N/A	news@ktrh.com

**Contact List**

<b>Organization or Department</b>	<b>Point Person Name &amp; Position</b>	<b>Phone</b>	<b>Alternate phone</b>	<b>Email or Website</b>
Television	ABC-KTRK-TV 13	713-669-1313	N/A	news@abc13.com, newstips@abc13.com
Television	TV 8 KUHT (Houston Public Media)	713-743-8483	N/A	news@houstonpublicmedia.com
Television	NBC-KPRC 2	713-222-2222	Newsroom (713-778-4910)	desk@kprc.com
Television	Univision 45	713-662-4545	N/A	Univision45@univision.net
Television	CBS-KHOU-TV	713-521-4388	N/A	assignments@khou.com, newstips@khou.com
Television	Telemundo 47 Houston/KTMD	713-974-4848	N/A	N/A

**1.5 Public Notification Templates**

HCMUD 361 must notify the public when a condition exists which according to the Texas Commission on Environmental Quality (TCEQ) constitutes an acute public health threat in accordance with 30 TAC Chapter 290.46 (q).

Templates for a Boil Water Notice and How to Rescind a Boil Water Notice follow:

**Boil Water Notification  
For  
Harris County Municipal Utility District No. 361**

Due to conditions that have occurred recently in the water system which require a Boil Water Notification, the Texas Commission on Environmental Quality (TCEQ) has required our public water system, Harris County Municipal Utility District No. 361, PWS ID 1013123 to notify all customers to boil their water prior to consumption.

To ensure destruction of all harmful bacteria and other microbes, water for drinking, cooking, and for making ice should be boiled and cooled prior to consumption. The water should be brought to a vigorous, rolling boil and then boiled for two minutes. In lieu of boiling, you may purchase bottled water or obtain water from some other suitable source.

When it is no longer necessary to boil the water, the water system officials will notify you that the water is safe for consumption. The rescind notice will be issued in the same manner as this Boil Water Notice.

If you have questions regarding this matter, you may contact:

**Water System Official**

**MMIA**

**Mark Ivy**

**Phone Number**

**281-651-1618 (24-hr Dispatch)**

If a customer wishes to contact TCEQ, they may call 512/239-4691.

**Boil Water Rescind Notice  
for  
Harris County Municipal Utility District No. 361**

On *<insert date>*, the Texas Commission on Environmental Quality (TCEQ) required **Harris County Municipal Utility District No. 361, PWS ID 1013123** to issue a Boil Water Notice (BWN) to inform our customers that due to the presence of contaminants or an interruption in service, water from our system must be boiled prior to consumption.

Our system has taken the necessary corrective actions to restore adequate pressure, disinfectant levels, and/or bacteriological quality and has provided TCEQ with testing results that indicate that the water no longer requires boiling.

We recommend that you run your water from each faucet for a period of approximately five (5) minutes to make certain that any water left in your system has been cleared out before prior to consumption. If you have an icemaker, it is recommended that you empty the contents into a sink and let the icemaker start over with a new batch of ice.

If you have questions regarding this matter, you may contact:

**Water System Official**

**MMIA**

**Mark Ivy**

**Phone Number**

**281-651-1618 (24-hr Dispatch)**

## 2 EMERGENCY PLANS AND PROCEDURES

This section contains plans and procedures that can be implemented in the event of a malevolent act or natural hazard that threatens your utility’s ability to deliver safe drinking water.

### 2.1 Core Response Procedures

Core procedures are the “building blocks” for incident specific response procedures, as they are typically implemented across a broad variety of incidents (e.g., hurricane, earthquake, flood). List all your core procedures here.

#### Access

Item	Description
Debris clearing	MMIA maintains a pool of equipment and heavy machinery including backhoes, chain saws, trailers and heavy-duty pickups that can be used for minor debris clearing. For major debris removal the City of Houston provides a list of certified debris removal contractors on their website at <a href="http://www.houstontx.gov">www.houstontx.gov</a> . The District also contracts with Texas Pride Disposal for trash services.
Identification badges	First Responders are provided an official utility badge to get through police barricades and emergency management checkpoints.
Alternate routes	There are multiple entrances to the Summerwood development; however, there is only a single entry point into the water plant facility. Primary access to the District is to the east off of West Lake Houston Parkway and Deussen Parkway.
Other	

#### Physical Security

Item	Description
Access control procedures	The WP 1 site is secured with secure fencing as required by TCEQ with combination locks which are not disseminated and can be readily changed in the event of a lockdown.
Restricted areas	There are no restricted areas in the facility. Hazardous areas include the chemical feed rooms, electrical switchgear rooms, and booster pump area. Equipment may start automatically at any time and without warning.
Other	

#### Cybersecurity

Item	Description
Disconnect procedure	If possible, disconnect compromised computers from the network to isolate breached components and prevent further damage, such as the spreading of malware.
Notification	In the event of a cyber incident, contact Alan Hayes with Hayes Automation.  For additional resources contact Department of Homeland Security National Cybersecurity and Communications Integration Center (NCCIC) (888-282-0870 or <a href="mailto:NCCIC@hq.dhs.gov">NCCIC@hq.dhs.gov</a> ).
Assess procedure	Assess any damage to utility systems and equipment, along with disruptions to utility operations.

**Cybersecurity**

Item	Description
Implementation processes	Implement actions to restore operations of mission critical processes (e.g., switch to manual operation if necessary) and provide public notification (if required).
Documentation	Document key information on the incident, including any suspicious calls, emails, or messages before or during the incident, damage to utility systems, and steps taken in response to the incident (including dates and times).

**Power Loss – HCMUD 344 WP 1**

Item	Description
Backup power systems	Existing on-site diesel gas generator.
Power utility	Coordinate with your power utility for expected restoration priorities and timing. Power utility contact information should be listed in Section 3.2 above.
Fuel plan	Apache oil, Jaguar Refueling
Maintenance plan	Texas Diesel Maintenance services the units quarterly. Spare set of filters and oil onsite.

**Emergency Alternate Drinking Water Supplies\***

Item	Description
Bottled water	Provider name: Ozarka Bottled Water Phone: 866-889-3567; 713-799-1452 Distribution point (notify public of location): 9351 E Point Dr, Houston, TX 77054
Bottled Water	Provider name: Sparkletts Phone: 800-201-6218 Distribution point (notify public of location): Delivery
Bulk water (check with your state first for licensed water haulers)	Provider name: H2EcO Water Phone: 713-812-8400; 1-888-227-7177 Distribution point (notify public of location): 12922 Hempstead Rd, Houston, TX 77040

\* Interconnections are listed and described in Section 3.1

**Sampling and Analysis**

Item	Description
HCMUD 361 District Operator	MMIA maintains a sampling and analysis regimen that meets all of the TCEQ requirements for drinking water utilities.
Sampling procedures	Sampling procedures are outlined in the TCEQ monitoring plan.
Pre-identified sampling locations	Sampling locations are as designated in the HCMUD 361 monitoring plan.
Sample collection	The MMIA Regional Environmental, Health and Safety Manager (Clayton Galloway) will coordinate sampling with Water Utility Services and field personnel.



**Sampling and Analysis**

Item	Description
Sample transportation	The laboratory provides the key personnel and transportation of samples.
Interpreting results	Work with the appropriate lab, utility and regulatory agency personnel to interpret sample results. The key employees include: Water Utility Services – Steve Grychka MMIA – Clayton Galloway

**Local Contract/State/Federal Laboratory Contact List**

Item	Description
TCEQ Approved Drinking Water Laboratories	See Appendix C

**2.2 Incident-Specific Response Procedures**

MMIA’s Incident Specific Response Procedures are as follows:

**Section I. Fires and Emergencies**

In the event of any fire or other emergency, a report shall be made immediately by calling the supervisor or by reporting directly to the senior member of management present. If the employee discovering the emergency determines that the emergency requires outside assistance, the senior employee present will call 911. The senior employee reporting the incident should:

- Provide the location of the emergency
- Provide their name
- Describe the nature of the problem
- Provide a call back number
- Provide any site-specific characteristics that may impact the response to the emergency

Once the emergency has been reported to local emergency response entities, the senior employee involved in the emergency shall set into motion the internal emergency response plan to deal with the particular emergency which will include notification of his/her supervisor and Emergency Plan/Fire Prevention Coordinator as required.

After reporting the incident, the senior employee at the location will secure the location until emergency response personnel arrive.

Emergency Number for Outside Assistance:

Fire Department:                               911            
 Police:   911            
 Emergency Medical Services:               911

**Section II. Severe Weather Conditions**

If the weather forecast is predicting floods, hurricanes, tornadoes, or severe winter storms, the site manager will maintain a check on weather conditions by the best means available. If the weather forecast is calling for a storm condition, which would precipitate heavy rains, roof drains should be cleaned to allow drainage. In situations where downed trees may present a problem, at least one chain saw should be cleaned, operational, and ready for use. Below are some of the threats:

FLOODS

The site manager will closely observe and stay tuned to local radio stations for updates on changing conditions. If the water level rises high enough to warrant the evacuation of employees, the site manager will evacuate the facility before it is impossible for the employees to safely leave the facility. The facility emergency routes and procedures will be followed. If equipment or vehicles need to be moved to higher locations or to other plant locations, action should be taken as soon as possible. Delay can cause loss of valuable property.

HURRICANES

The site manager will stay abreast of changing weather conditions as in flood conditions, and if necessary for the safety of employees, will evacuate the facility. Hurricanes can produce heavy rains and strong winds. Follow guidelines for floods and be prepared to handle damaged property from winds and fallen trees, power lines, etc.

SEVERE WEATHER STORMS

The site manager will determine when to evacuate the facility by monitoring weather conditions by radio and personal observations. Employees will be sent home while travel conditions are still safe. The facility and equipment will be readied for severe temperature drops and possible power outages. As in hurricanes, the potential for fallen trees from strong winds is possible. During a severe winter storm, heavy snow accumulations may exist, and roofs may be damaged which could result in damage to machinery and equipment inside the facility due to water damage.

**Section III. Hazardous Material Spills**

In the event of a hazardous material spill, the employee detecting the problem should notify his supervisor immediately. When notifying management of a spill, provide the following information:

1. Exact location of spill.
2. What chemical has been spilled?
3. Status of chemical (hazardous, extremely hazardous, carcinogenic, toxic, etc.).
4. Time of spill.
5. If employees exposed to chemical, how many.
6. Status of employees exposed to chemical.

Chemical spills can occur anywhere, any time. But there is no such thing as a harmless chemical spill. Even a leaking drum or other small spill may cause environmental damage by leaking into a drain, endangering the health of workers, or causing a fire or explosion. Therefore, it is important to know exactly what steps to follow if a chemical spill should occur at your workplace.

## **CHEMICAL SPILL ACTION PLAN**

In the event of a chemical spill, the following steps are to be followed:

1. Identify, if possible, the spilled material. If possible, without exposure to the spilled chemical, shut off the source of the flow.
2. If the material is flammable or unknown, shut off all ignition sources.
3. Barricade or isolate the area of the spill.
4. Notify manager on duty immediately.
5. Begin spill containment procedures.
6. If the spill is of an unknown chemical, the manager on duty will notify the appropriate municipal agencies.
7. Once containment is assured, the manager on duty will determine the appropriate level of personal protective equipment based on the material safety data sheet for the chemical spilled and direct cleanup activities. Absorbent material may be placed in drums for off-site disposal by a licensed disposal service. The appropriate city, state and federal agencies will be notified if required.
8. In situations where a water supply (ex. river, lake, bayou, etc.) is contaminated by the spill, the appropriate individual at MMI&A must be notified as stated in the MMI&A emergency notification policy. That individual will notify the proper authority.
9. After the spill has been cleaned up, the site manager will be notified by those in charge of the clean-up when employees may resume their normal work duties if an evacuation occurred.

## **Section IV. Chlorine and Sulfur Dioxide Releases**

Outlined below are the following procedures that are to be followed when there is a Chlorine or Sulfur Dioxide release at your facility.

If a release or emergency situation exists, contact the dispatch office at the number listed in the on call manual or the change-out team for that particular area. The Operator must communicate the location of the facility and the severity of the release. If the release is detectable at the facility's fence line, the operator will contact the appropriate emergency responders. The Operator detecting the release should secure the area and standby in an up-wind position until emergency responders arrive.

## **Section V. Cyber Security**

All MMI&A computers have active Anti-Virus / Firewalls in place and the staff is trained to address cyber threats such as phishing, ransomware, data breach.

In addition to the MMIA’s Incident-Specific Response Procedures, the Environmental Protection Agency’s (the “EPA”) website (<https://www.epa.gov/waterutilityresponse/incident-action-checklists-water-utilities>) provides several incident action checklists (IACs) that can be used to supplement the ISRPs. Below is a table of checklists that are located on the EPA website.

<b>EPA Incident Action Checklists for Water Utilities</b>	
<b>Topic</b>	<b>Description</b>
EPA Checklists	Pandemic Incident
	Power Outage
	Harmful Algal Bloom
	Cybersecurity Incident
	Extreme cold and winter storms
	Earthquake
	Drought
	Extreme Heat
	Flooding
	Hurricane
	Tornado
	Tsunami
	Volcanic activity
	Wildfire

### 3 MITIGATION ACTIONS

This section contains actions, procedures, and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to your community and individuals, including the development of alternative source water options.

#### 3.1 Alternative Source Water Options and Interconnected Utilities

HCMUD 344’s WP 1 is interconnected with the City of Houston’s Northeast Water Purification Plant. The HCMUD 344 water supply consists of two (2) groundwater wells which provide supply redundancy for the service area.

##### Alternative Source Water Options

Type	Location	Comments
Surface Water – Direct Pressure Connection and GST Air Gap Connections	WP 1	HCMUDs 342, 344 and 361 currently have a 10MG/month take or pay contract with the City of Houston

##### Interconnected Utilities – N/A

Utility Name	Location	Contact Information	Comments

#### 3.2 Other Mitigation Actions

List any mitigation procedures or projects implemented at your utility, such as raising facilities and controls or constructing berms to protect against flood damage.

##### Mitigation Actions

Type	Location	Comments
Pumps & Electrical	Entire facility (WP 1)	Property lies entirely above the base flood level and in Zone “X”, FIRM Panel 48201C0520L effective June 18, 2007.

## 4 DETECTION STRATEGIES

This section contains strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system.

See the following EPA website for the referenced checklists: [Incident Action Checklists for Water Utilities | Emergency Response for Drinking Water and Wastewater Utilities | US EPA](#)

Detection Strategies		
Threat	Detection Method	Procedure
Unauthorized entry	<ul style="list-style-type: none"> <li>Visual identification of access doors/locks that had been tampered with</li> </ul>	Call 911
Source water contamination	<ul style="list-style-type: none"> <li>National Response Center notifications</li> <li>Notification from 911 for releases resulting from transportation accidents</li> </ul>	EPA Source Water Contamination Incident Response Plan
Distribution system contamination	<ul style="list-style-type: none"> <li>Customer complaint surveillance</li> <li>Public health surveillance</li> </ul>	EPA Distribution System Contamination Response Procedure
Cyber intrusion	<ul style="list-style-type: none"> <li>Notification from utility staff</li> </ul>	EPA Cyber Incident Action Checklist
Hazardous chemical release	<ul style="list-style-type: none"> <li>Chlorine gas in air monitors</li> </ul>	Call fire department
Hurricane	<ul style="list-style-type: none"> <li>Weather Service alerts</li> </ul>	Hurricane Incident Action Checklist
Flood	<ul style="list-style-type: none"> <li>Notification from Army Corp</li> </ul>	Flood Incident Action Checklist
Power outage	<ul style="list-style-type: none"> <li>Notification from energy provider</li> <li>Alarm from line power sensor</li> </ul>	Generator Start-up Checklist

## LIST OF APPENDICES

**Appendix A: HCMUD 344 WP Facility and Service Area Map**

**Appendix B: HCMUD 361 Water Distribution System Overall Drawings**

**Appendix C: TCEQ Approved Drinking Water Laboratories**

UNION PACIFIC RAILROAD

SAM HOUSTON PARKWAY

WATER PLANT No. 1

HCMUD No. 342  
476.22 ACRES

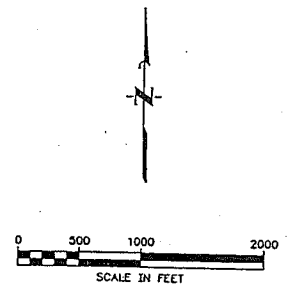
HCMUD No. 344  
688.48 ACRES

HCMUD No. 361  
373.105 ACRES

WEST LAKE HOUSTON PARKWAY

DEUSSEN PARKWAY

EAST BELTWAY 8 NORTH



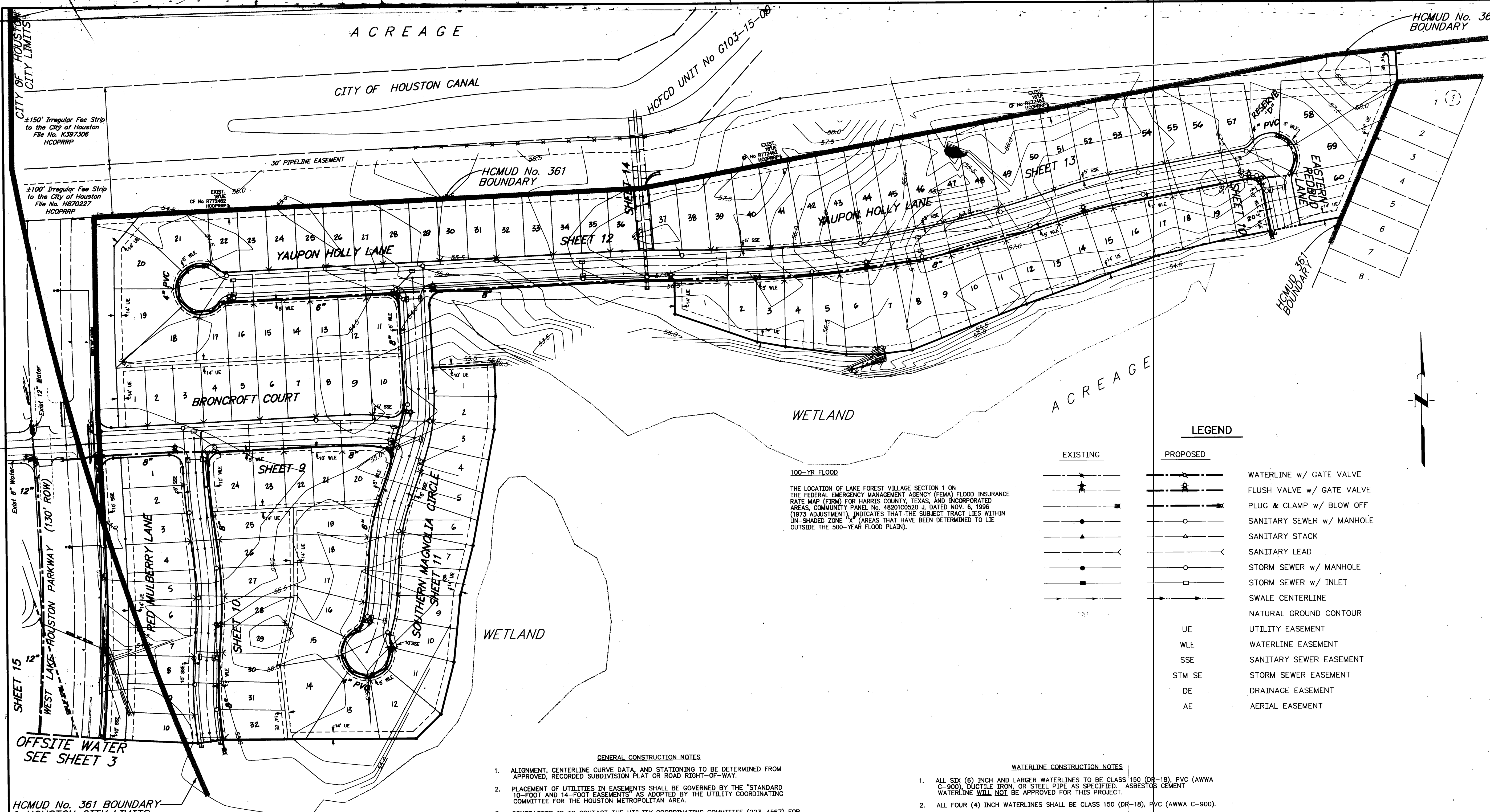
— LIMITS OF SERVICE AREA

EXHIBIT "B"  
 HARRIS COUNTY  
 MUNICIPAL UTILITY DISTRICT No. 342, 344, & 361  
 WATER PLANT No. 1  
 SERVICE AREA MAP

JONES & CARTER, INC.

C:\CAD\INDSGATE\INDREGR01\SRVSAIAP.dwg





ACREAGE

CITY OF HOUSTON CANAL

HCMUD No. 361 BOUNDARY

WETLAND

ACREAGE

WETLAND

LEGEND

EXISTING	PROPOSED	
		WATERLINE w/ GATE VALVE
		FLUSH VALVE w/ GATE VALVE
		PLUG & CLAMP w/ BLOW OFF
		SANITARY SEWER w/ MANHOLE
		SANITARY STACK
		SANITARY LEAD
		STORM SEWER w/ MANHOLE
		STORM SEWER w/ INLET
		SWALE CENTERLINE
		NATURAL GROUND CONTOUR
		UTILITY EASEMENT
		WATERLINE EASEMENT
		SANITARY SEWER EASEMENT
		STORM SEWER EASEMENT
		DRAINAGE EASEMENT
		AERIAL EASEMENT

100-YR FLOOD  
 THE LOCATION OF LAKE FOREST VILLAGE SECTION 1 ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR HARRIS COUNTY, TEXAS, AND INCORPORATED AREAS, COMMUNITY PANEL NO. 4802010020, DATED NOV. 6, 1996 (1973 ADJUSTMENT), INDICATES THAT THE SUBJECT TRACT LIES WITHIN UN-SHADED ZONE "A" (AREAS THAT HAVE BEEN DETERMINED TO LIE OUTSIDE THE 500-YEAR FLOOD PLAIN).

GENERAL CONSTRUCTION NOTES

- ALIGNMENT, CENTERLINE CURVE DATA, AND STATIONING TO BE DETERMINED FROM APPROVED, RECORDED SUBDIVISION PLAT OR ROAD RIGHT-OF-WAY.
- PLACEMENT OF UTILITIES IN EASEMENTS SHALL BE GOVERNED BY THE "STANDARD 10-FOOT AND 14-FOOT EASEMENTS" AS ADOPTED BY THE UTILITY COORDINATING COMMITTEE FOR THE HOUSTON METROPOLITAN AREA.
- CONTRACTOR IS TO CONTACT THE UTILITY COORDINATING COMMITTEE (223-4567) FOR LOCATION OF EXISTING FACILITIES THAT MAY NOT BE SHOWN ON THE PLANS AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- THE APPROXIMATE LOCATION OF EXISTING UTILITIES ARE GIVEN FOR REFERENCE ONLY. BEFORE COMMENCING THE WORK ON THIS CONTRACT, THE CONTRACTOR SHALL VERIFY BY FIELD INVESTIGATION THE ACTUAL LOCATIONS OF ALL UTILITY FACILITIES WITHIN AND ADJACENT TO THE LIMITS OF THE WORK THAT MAY BE AFFECTED BY THE WORK. CONFLICTS WHICH RESULT DUE TO NEGLIGENCE BY THE CONTRACTOR TO LOCATE, HORIZONTALLY AND VERTICALLY, EXISTING UTILITIES WHICH ARE SHOWN ON THE CONSTRUCTION DRAWINGS, OR WHICH THE CONTRACTOR HAS BEEN GIVEN NOTICE OR HAS KNOWLEDGE OF, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF REMEDIAL WORK, REMOVAL OF PORTIONS OF THE WORK OR EXTENSIVE DESIGN CHANGES OCCASIONED BY THE FAILURE OF THE CONTRACTOR TO VERIFY THE LOCATION OF EXISTING UTILITIES AS DESCRIBED ABOVE SHALL BE BORNE BY THE CONTRACTOR.
- CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY REGULATION OF HARRIS COUNTY, TEXAS, FOR FLOOD PLAIN MANAGEMENT PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY HARRIS COUNTY FOR CONSTRUCTION WITHIN HARRIS COUNTY ROAD RIGHT-OF-WAY.
- CONTRACTOR SHALL COMPLY WITH O.S.H.A. REGULATIONS AND TEXAS STATE LAW CONCERNING TRENCH SAFETY SYSTEMS.
- CONTRACTOR TO FOLLOW CONSTRUCTION DETAILS IF DRAWINGS DEVIATE FROM CITY OF HOUSTON STANDARDS.
- THE CONTRACTOR SHALL RETURN ALL EXISTING FACILITIES TO EXISTING OR BETTER CONDITION UNLESS OTHERWISE NOTED AT NO ADDITIONAL COST TO THE OWNER.
- FORMAL "NOTIFICATION" APPROVED BY COMMISSIONERS COURT REQUIRED PRIOR TO CONSTRUCTION OF UTILITIES WITHIN HARRIS COUNTY RIGHT-OF-WAY. CONTACT HARRIS COUNTY PERMIT OFFICE AT (713) 958-3000. CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS DETAILED IN THE APPLICABLE HARRIS COUNTY COMMISSIONERS COURT ORDER.
- WATER LINES, WASTEWATER COLLECTION SYSTEMS, DRAINAGE SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S "STANDARD CONSTRUCTION SPECIFICATIONS" DATED SEPTEMBER 1997, AND "STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE AND STREET PAVING", DATED JULY 1997 UNLESS OTHERWISE NOTED AND APPROVED ON THESE PLANS. THE DESIGN IS CONSISTENT WITH THE MINIMUM STANDARDS ESTABLISHED IN THE "DESIGN MANUAL FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING", DATED SEPTEMBER 1996. CONTRACTOR SHALL OBTAIN A COPY FROM THE CITY OF HOUSTON FILE ROOM, 811 WALKER, BASEMENT.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATER LINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGE SHALL BE REPAIRED IN ACCORDANCE WITH CITY OF HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING "STANDARD CONSTRUCTION SPECIFICATIONS" WITH LATEST ADDENDA AND AMENDMENTS THERE TO, WITH NO COST TO THE PUBLIC.

WATERLINE CONSTRUCTION NOTES

- ALL SIX (6) INCH AND LARGER WATERLINES TO BE CLASS 150 (DR-18), PVC (AWWA C-900), DUCTILE IRON, OR STEEL PIPE AS SPECIFIED. ASBESTOS CEMENT WATERLINE WILL NOT BE APPROVED FOR THIS PROJECT.
- ALL FOUR (4) INCH WATERLINES SHALL BE CLASS 150 (DR-18), PVC (AWWA C-900).
- TWELVE (12) INCH OR SMALLER WATERLINES SHALL HAVE A MINIMUM COVER OF FOUR (4) FEET BELOW TOP OF CURB. VARY ELEVATION UNIFORMLY FROM DEPTH SHOWN IN PLANS.
- WATERLINE FITTINGS SHALL BE CAST OR DUCTILE IRON UNLESS OTHERWISE NOTED.
- ALL FLANGES BELOW GRADE SHALL BE INSULATED.
- WATERLINES SHALL BE CONSTRUCTED SO THAT ALL CROSSES AND TEES WILL NOT BE LOCATED UNDER PROPOSED OR FUTURE PAVING.
- VALVES SHALL BE LOCATED OPPOSITE PROPERTY CORNERS EXCEPT AS SHOWN ON THE PLANS.
- MAINTAIN 12-INCH MINIMUM CLEARANCE BETWEEN ALL WATERLINES, STORM SEWERS, AND CULVERTS UNLESS OTHERWISE NOTED. FOR SPECIAL WATERLINE / SANITARY SEWER CLEARANCES, SEE SANITARY SEWER CONSTRUCTION NOTES.
- IF CLEARANCE BETWEEN WATERLINE AND SANITARY LINE IS BETWEEN SIX (6) INCHES AND TWO (2) FEET, ONE 20-FOOT JOINT OF C-900 PVC, 150 PSI WATERLINE SHALL BE CENTERED AT SANITARY LINE CROSSING.
- WATERLINES SHALL BE SAND-BEDDED IN ACCORDANCE WITH THE LATEST EDITION OF CITY OF HOUSTON SPECIFICATIONS AND DETAILS.
- SANITARY PRECAUTIONS MUST BE TAKEN DURING WATERLINE CONSTRUCTION, AS CALLED FOR BY AWWA STANDARDS. PRECAUTIONS INCLUDE KEEPING PIPE CLEAN AND CAPPING, OR OTHERWISE EFFECTIVELY COVERING OPEN PIPE ENDS TO EXCLUDE INSECTS, ANIMALS, OR OTHER SOURCES OF CONTAMINATION FROM UNFINISHED PIPE LINES AT TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.
- ALL NEWLY INSTALLED PIPES, COATINGS, AND RELATED PRODUCTS SHALL CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE / NATIONAL SANITATION FOUNDATION (ANSI / NSF) STANDARDS AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
- DO NOT INCLUDE SERVICE CONNECTIONS IN THIS CONTRACT. HOWEVER, WHEN CONSTRUCTED, THEY WILL BE IN ACCORDANCE WITH THE LATEST EDITION OF CITY OF HOUSTON SPECIFICATIONS (SEE NOTE 1).
- ALL FLUSHING VALVES AND VALVE BOXES SHALL BE ADJUSTED TO FINISH GRADE AFTER PAVING IS COMPLETE. FLUSHING VALVES SHALL BE TURNED TO FACE STREET.

**BENCH MARK**  
 N.G.S. Monument - U 1020, Located at the Union Pacific Railroad Tracks and Lockwood Road.  
 Elevation = 54.50 (1988 Adjustment)

**TBM**  
 Star Drill "X" Cut at Centerline Intersection of Deussen Parkway and Wadlington.  
 Elevation = 53.94

**SOUTHWESTERN BELL TELEPHONE CO.**  
**SOUTHWESTERN BELL FACILITIES**  
 The location of Southwestern Bell Telephone Company utilities are no longer provided by S.W.B.T. and are NOT shown on these drawings. The contractor shall determine the exact location of these utilities prior to beginning any work and agrees to be fully responsible for any and all damages caused by its failure to exactly locate and preserve these underground facilities. To have these facilities located call the Utility Coordinating Committee at (713) 223-4567, or toll free at 1-(800) 669-8344 at least 48 hours prior to any construction.

*Reliant Energy* 10-8-99  
 S. W. B. T. Co. (Valid at Time of Review Only)

**RELIANT ENERGY ENTEX**  
**UNDERGROUND GAS FACILITIES**  
 Location of Reliant Energy Entex main lines (to include Unit Gas Transmission and/or Industrial Gas Supply Corporation where applicable) are shown in an approximate location only. Service lines are usually not shown. The contractor shall contact the Utility Coordinating Committee at (713) 223-4567, or 1-(800) 669-8344 a minimum of 48 hours prior to construction to have main and service lines field located.  
 -When Reliant Energy Entex line markings are not visible, call (713) 967-8037 (7:00am to 4:30pm) for status of line location request before excavation begins.  
 -When excavating within eighteen (18") of the indicated location of Reliant Energy Entex facilities, all excavation must be accomplished using non-mechanized excavation procedures.  
 -When Reliant Energy Entex facilities are exposed, sufficient support must be provided to the facilities to prevent excessive stress on the piping.  
 The contractor is fully responsible for any damages caused by his failure to exactly locate and preserve these underground facilities.

*Reliant Energy* 10/7/99  
 Reliant Energy Entex (Valid at Time of Review Only)

**RELIANT ENERGY H.L. & P.**  
**OVERHEAD POWER LINES**  
 Overhead lines may exist on the property. We have not attempted to mark those lines since they are clearly visible, but you should locate them prior to beginning any construction. Texas law, Section 752, Health & Safety Code, forbids all activities in which persons or things may come within six (6) feet of live overhead high voltage lines. Parties responsible for the work, including contractors, are legally responsible for the safety of construction workers under this law. This law carries both criminal and civil liability. To arrange for lines to be turned off or removed call Reliant Energy H.L. & P. (713) 207-7777.

**UNDERGROUND ELECTRICAL FACILITIES**  
 Underground electrical facilities exist in the area of this project. Do NOT begin construction until these facilities have been located and staked. To have these underground facilities staked call the Utility Coordinating Committee at (713) 223-4567, or toll free at 1-(800) 669-8344, at least 48 hours prior to any construction.

*Reliant Energy H.L. & P.* 10/7/99  
 (Approval only for underground duct lines unless otherwise noted)  
 VALID AT TIME OF REVIEW ONLY.

**CITY OF HOUSTON**  
**DEPARTMENT OF PUBLIC WORKS AND ENGINEERING**

REVIEWED BY	CITY FUNDED PUBLIC WORKS
<i>Michael...</i>	PROJECT MANAGER
<i>Walter...</i>	CONSTRUCTION
<i>9-3-99</i>	CHIEF ENGINEER
<i>9/1/99</i>	OTHER APPROVAL
<i>Nayem...</i>	SPONSOR DEPARTMENT

CITY ENGINEER: *Michael...* DATE: 9-22-99  
 DIRECTOR OF PUBLIC WORKS AND ENGINEERING: *...* DATE: *...*

9/2/99 Added Lot Numbers JMB  
 NO. DATE REVISIONS APP.

H.C.M.U.D. No. 361  
 HARRIS COUNTY, TEXAS

LAKE FOREST VILLAGE SECTION 1  
 GENERAL CONSTRUCTION LAYOUT

**JONES & CARTER, INC.**  
 Consulting Engineers  
 6806 Gullman Dr., Suite 200 Houston, Texas 77061 (713) 777-0887

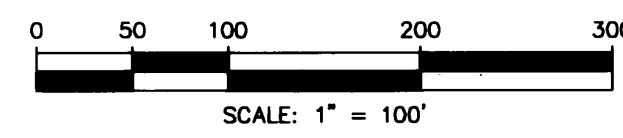
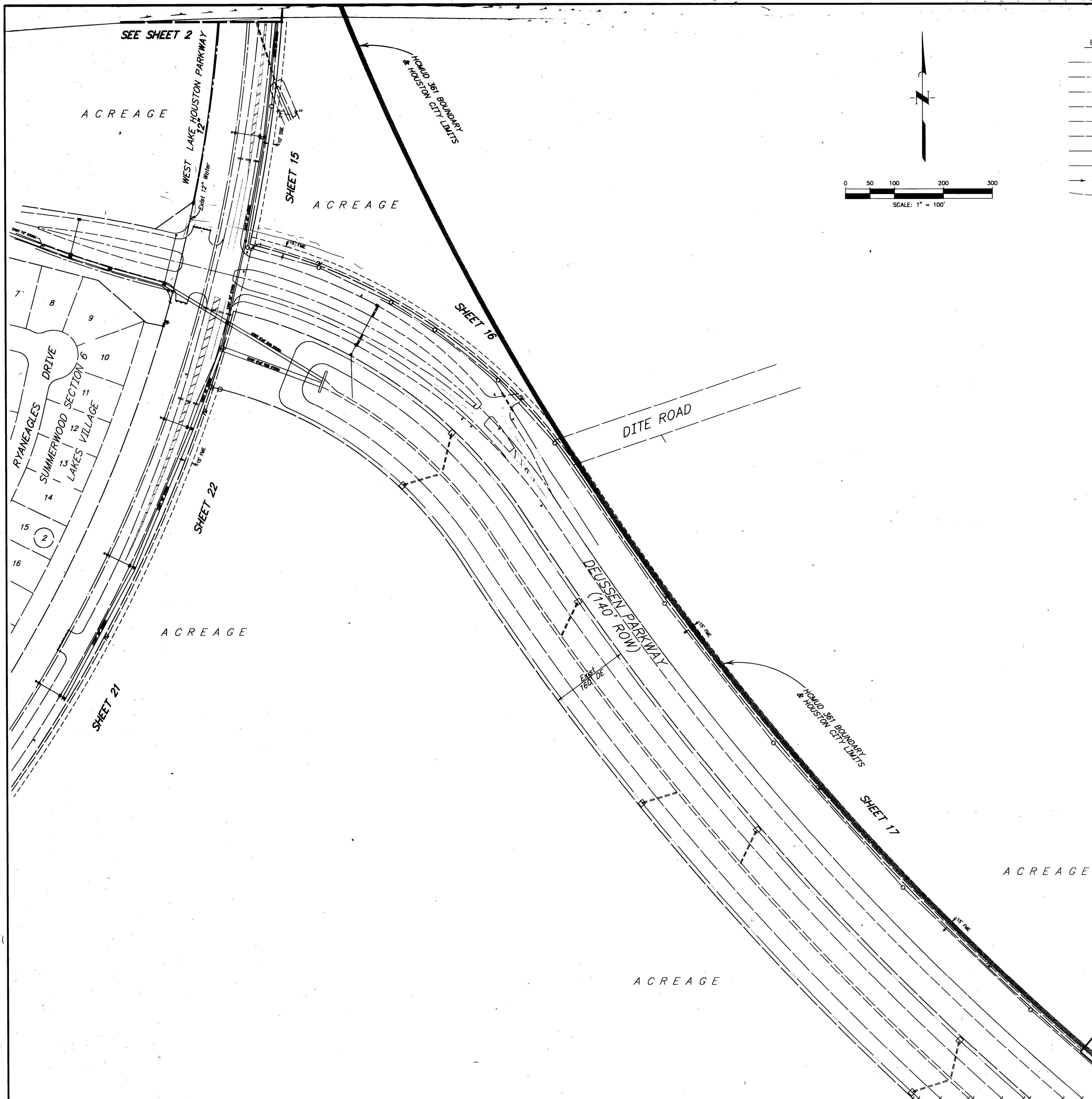
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 JOB NO. 0477-003 DWG. NO. 0477-9035  
 SUBMITTED:

**RECORD DRAWING**  
 8-24-00 JEG

STATE OF TEXAS  
 BOBBY B. JONES  
 48459  
 REGISTERED PROFESSIONAL ENGINEER

SHEET NO. 2 OF 29





**LEGEND**

EXISTING	PROPOSED	
		WATERLINE w/ GATE VALVE
		FLUSH VALVE w/ GATE VALVE
		PLUG & CLAMP w/ BLOW OFF
		SANITARY SEWER w/ MANHOLE
		SANITARY STACK
		SANITARY LEAD
		STORM SEWER w/ MANHOLE
		STORM SEWER w/ INLET
		SWALE CENTERLINE
		NATURAL GROUND CONTOUR
		UTILITY EASEMENT
		WATERLINE EASEMENT
		SANITARY SEWER EASEMENT
		STORM SEWER EASEMENT
		DRAINAGE EASEMENT
		AERIAL EASEMENT
		FORCE MAIN EASEMENT

**BENCH MARK**  
 N.G.S. Monument - U 1020, Located at the Union Pacific Railroad Tracks and Lockwood Road.  
 Elevation = 54.50 (1988 Adjustment)

**TBM**  
 Star Drill "X" Cut at Centerline Intersection of Deussen Parkway and Wadlington.  
 Elevation = 53.94

**SOUTHWESTERN BELL TELEPHONE Co.**  
**SOUTHWESTERN BELL FACILITIES**  
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*[Signature]* 10-8-99  
 S.W.B.T. Co. (Valid at Time of Review Only)

**RELIANT ENERGY ENTEX**  
**UNDERGROUND GAS FACILITIES**  
 Location of Reliant Energy Entex main lines (to include Unit Gas Transmission and/or Industrial Gas Supply Corporation where applicable) are shown in an approximate location only. Service lines are usually not shown. The contractor shall contact the Utility Coordinating Committee at (713) 223-4567 or 1-(800) 669-8344 a minimum of 48 hours prior to construction to have main and service lines field located.  
 -When Reliant Energy Entex pipe line markings are not visible, call (713) 967-8037 (7:00am to 4:30pm) for status of line location request before excavation begins.  
 -When excavating within eighteen inches (18") of the indicated location of Reliant Energy Entex facilities, all excavation must be accomplished using non-mechanized excavation procedures.  
 -When Reliant Energy Entex facilities are exposed, sufficient support must be provided to the facilities to prevent excessive stress on the piping.  
 The contractor is fully responsible for any damages caused by his failure to exactly locate and preserve these underground facilities.  
*[Signature]* 10/7/99  
 Reliant Energy Entex (Valid at Time of Review Only)

**RELIANT ENERGY H.L. & P.**  
**OVERHEAD POWER LINES**  
 Overhead lines may exist on the property. We have not attempted to mark those lines since they are clearly visible, but you should locate them prior to beginning any construction. Texas law, Section 752, Health & Safety Code, forbids all activities in which persons or things may come within six (6) feet of live overhead high voltage lines. Parties responsible for the work, including contractors, are legally responsible for the safety of construction workers under this law. This law carries both criminal and civil liability. To arrange for lines to be turned off or removed call Reliant Energy H.L. & P. (713) 207-7777.  
**UNDERGROUND ELECTRICAL FACILITIES**  
 Underground electrical facilities exist in the area of this project. Do NOT begin construction until these facilities have been located and staked. To have these underground facilities staked call the Utility Coordinating Committee at (713) 223-4567, or toll free at 1-(800) 669-8344, at least 48 hours prior to any construction.  
*[Signature]* 10/7/99  
 Reliant Energy H.L. & P. (Approval only for underground duct lines unless otherwise noted) VALID AT TIME OF REVIEW ONLY.

**CITY OF HOUSTON**  
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

REVIEWED BY	CITY FINANCED PUBLIC WORKS
<i>[Signature]</i> 9/3/99	PROJECT MANAGER
<i>[Signature]</i> 9/3/99	CONSTRUCTION
<i>[Signature]</i> 9/3/99	CHIEF ENGINEER
1999 OTHER APPROVAL	
<i>[Signature]</i>	SPONSOR DEPARTMENT

CITY ENGINEER	DATE
<i>[Signature]</i>	9-22-99
DIRECTOR OF PUBLIC WORKS AND ENGINEERING	DATE

NO.	DATE	REVISIONS	APP.

H.C.M.U.D. No. 361  
 HARRIS COUNTY, TEXAS

LAKE FOREST VILLAGE SECTION 1  
 GENERAL CONSTRUCTION LAYOUT

OFFSITE WATER

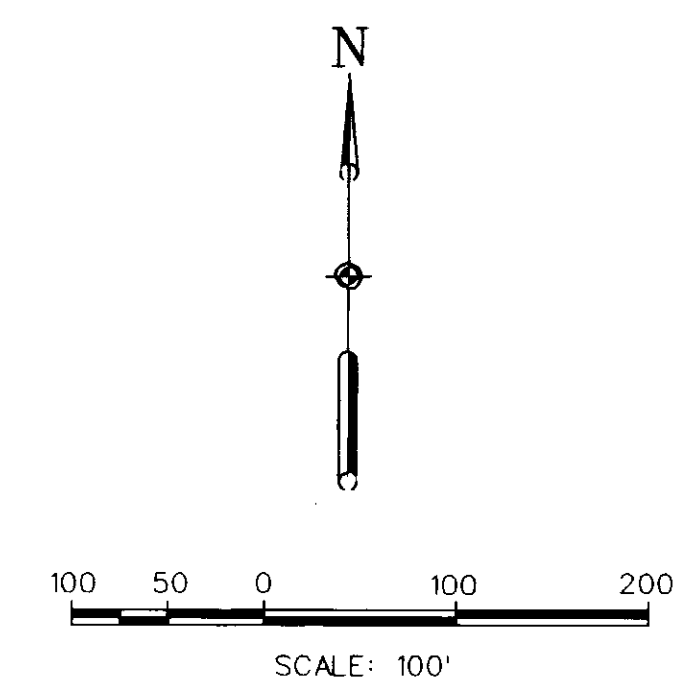
**JC JONES & CARTER, INC.**  
 Consulting Engineers  
 8236 Gullman Dr., Suite 200 Houston, Texas 77061 (713) 777-5287

SCALE: 1"=100' DGN. BY: JMB  
 DATE: MAY 1999 DWN. BY: DFG/JMB  
 JOB NO: 0477-003 DWG. NO: 0477-9035  
 SUBMITTED:

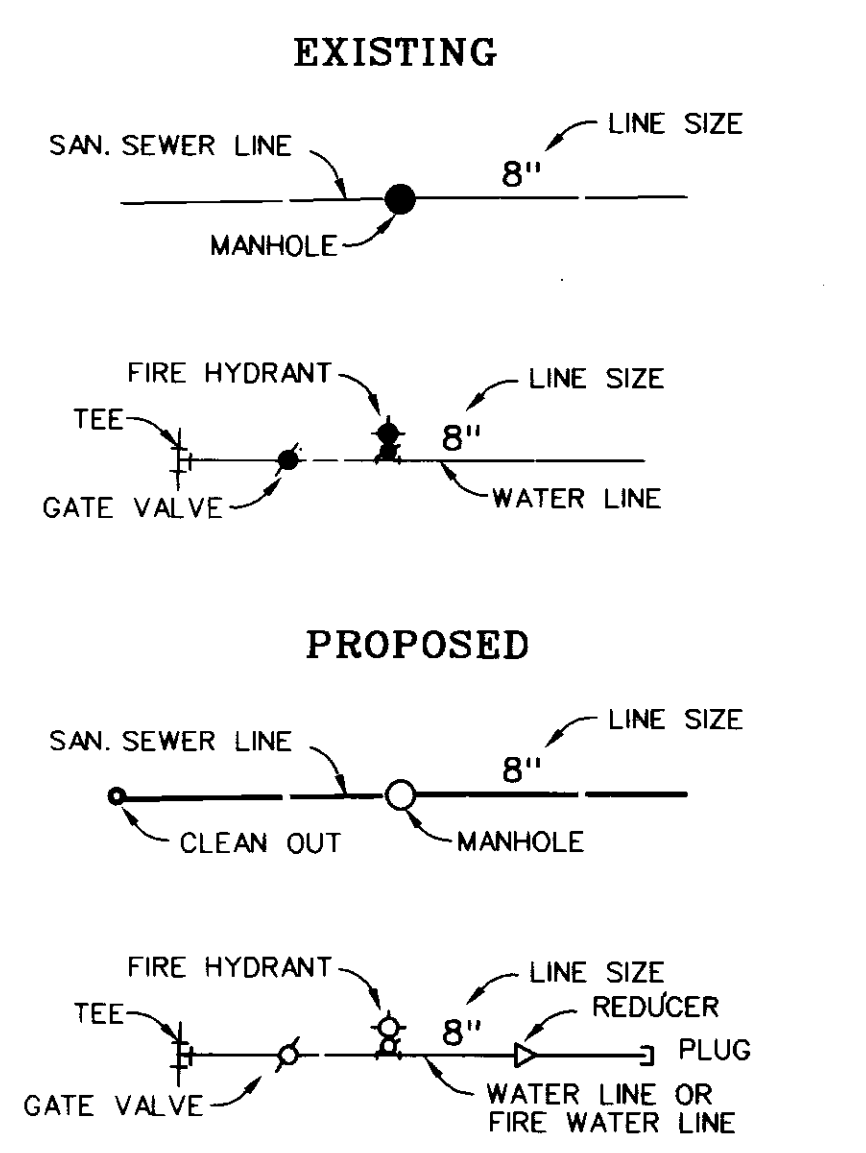
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 8-04-00 JEG

SHEET NO. 3 OF 29

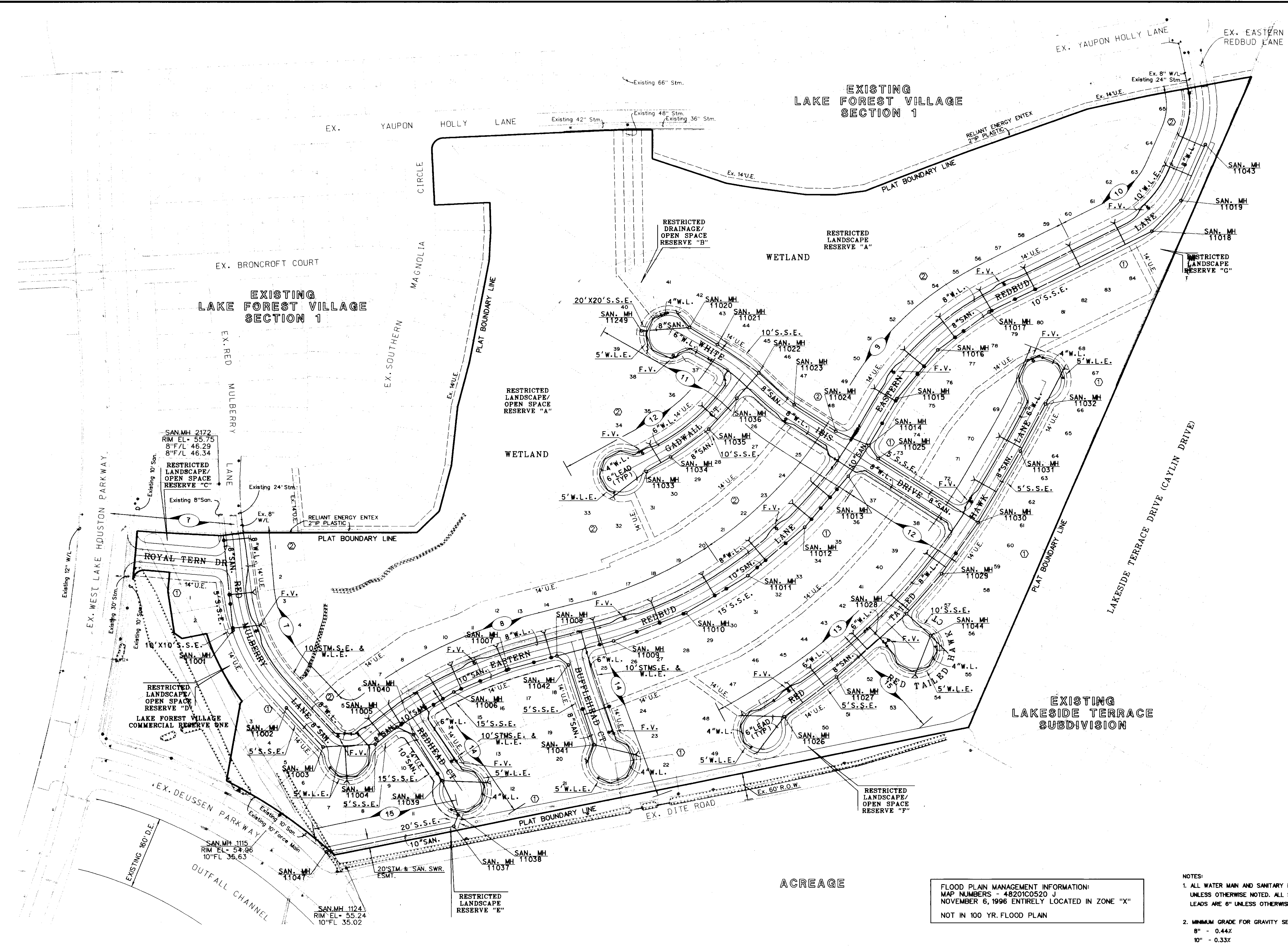
**BENCHMARK**  
 TBM "□" CUT MEDIAN NOSE, SOUTH SIDE DUESSEN  
 PARKWAY, @ INTERSECTION WESTLAKE HOUSTON  
 PARKWAY  
 ELEVATION = 56.71 1988 ADJUSTMENT



**LEGEND**



**EXISTING  
LAKE FOREST VILLAGE  
SECTION 1**



**EXISTING  
LAKESIDE TERRACE  
SUBDIVISION**

**PRIVATE UTILITY LINE APPROVALS**

*R. Young* 2/20/01  
 Reliant Energy HL&P/Entex  
 VALID AT TIME OF REVIEW ONLY

*J.L. 02-21-01*  
 SOUTHWESTERN BELL TELEPHONE CO.  
 Valid for One Year. Approved only for  
 underground conduit facilities unless noted.

**CITY OF HOUSTON**  
 DEPARTMENT OF PUBLIC WORKS & ENGINEERING

REVIEWED BY: CITY FUNDED PUBLIC WORKS

*Mark...* PROJECT MANAGER

*...* CONSTRUCTION

*...* CHIEF ENGINEER

OTHER APPROVAL:

*...* SPONSOR DEPARTMENT

*...* 3-19-2001 DATE

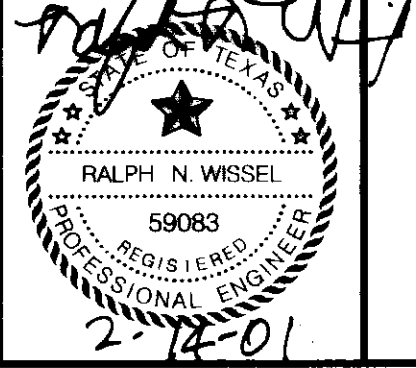
*...* 5-2-2001 DATE

**FLOOD PLAIN MANAGEMENT INFORMATION:**  
 MAP NUMBER 48201C0520 J  
 NOVEMBER 6, 1996 ENTIRELY LOCATED IN ZONE "X"  
 NOT IN 100 YR. FLOOD PLAN

- NOTES:**
- ALL WATER MAIN AND SANITARY LINES ARE 8" UNLESS OTHERWISE NOTED. ALL SANITARY SEWER LEADS ARE 6" UNLESS OTHERWISE NOTED.
  - MINIMUM GRADE FOR GRAVITY SEWER LINES:  
 8" - 0.44%  
 10" - 0.33%

NO.	REVISION	DATE	BY

DESIGNED BY: D.S./J.A.H.  
 DRAWN BY: J.A.H.  
 CHECKED BY:  
 APPROVED BY: R.W.  
 JOB NO.: 99070-04.05



**Costello, Inc.**  
 Engineering and Surveying  
 9990 Richmond Avenue, Suite 450  
 North Building  
 Houston, Texas 77042  
 (713) 783-7788 (713) 783-3580, Fax

**HARRIS COUNTY M.U.D. No. 361**  
**LAKE FOREST VILLAGE SECTION 2**

**WATER AND  
SANITARY SEWER LAYOUT**

SUBMITTED: 3-19-2001  
 SCALE: 1" = 100'  
 DATE: JANUARY 2001  
 SURVEY BY:  
 F.B. NO.:

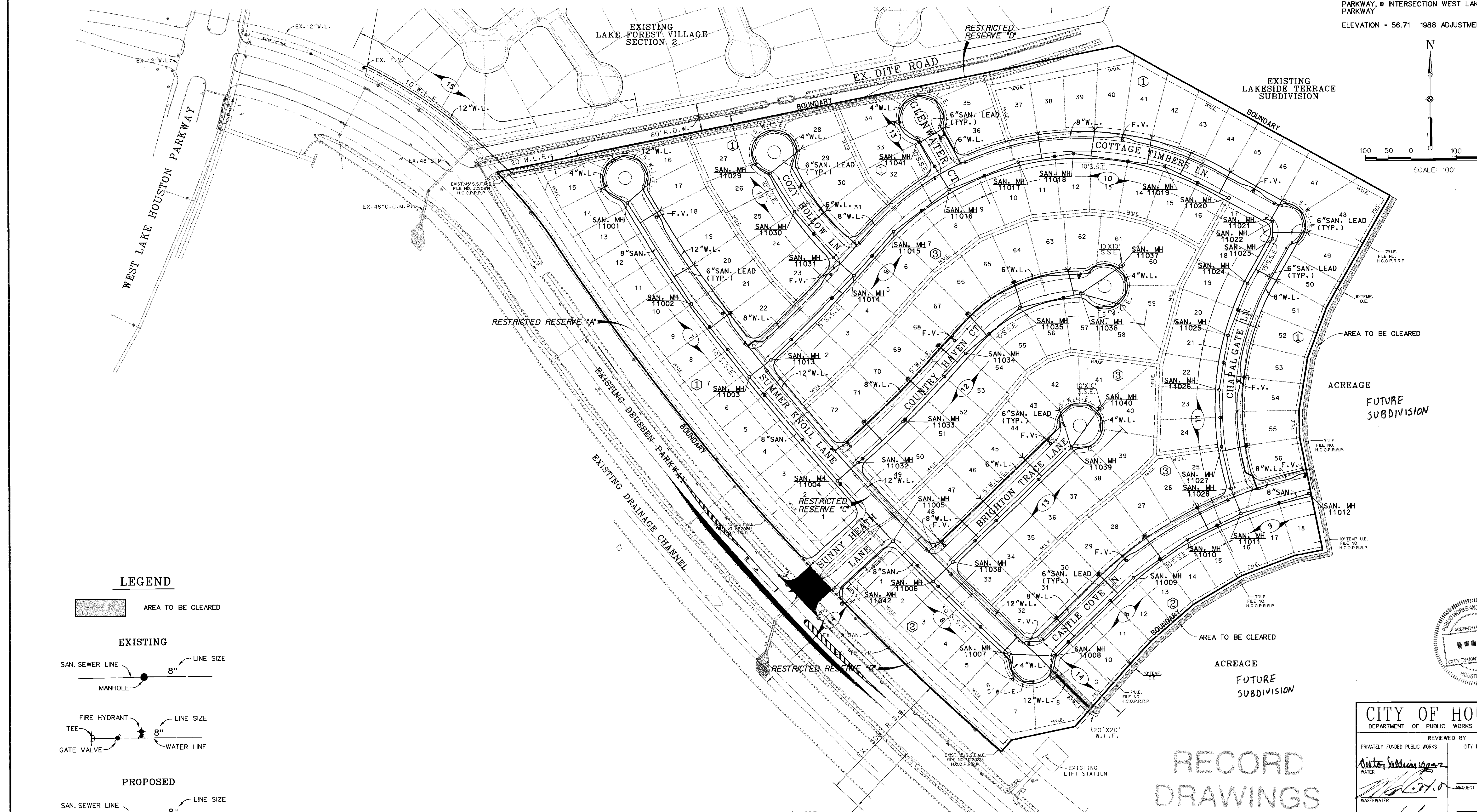
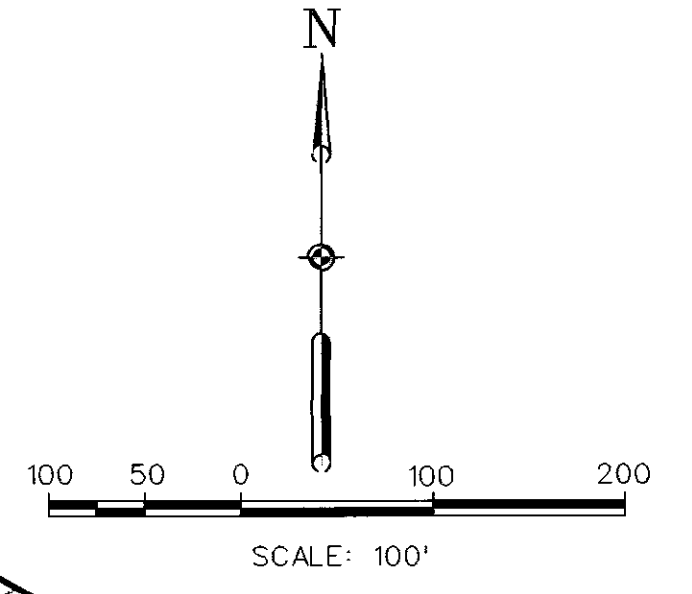
SHEET NO. 5 of 27  
 CITY DWG. NO.: 37419

14 FEB 2001 10:00 AM

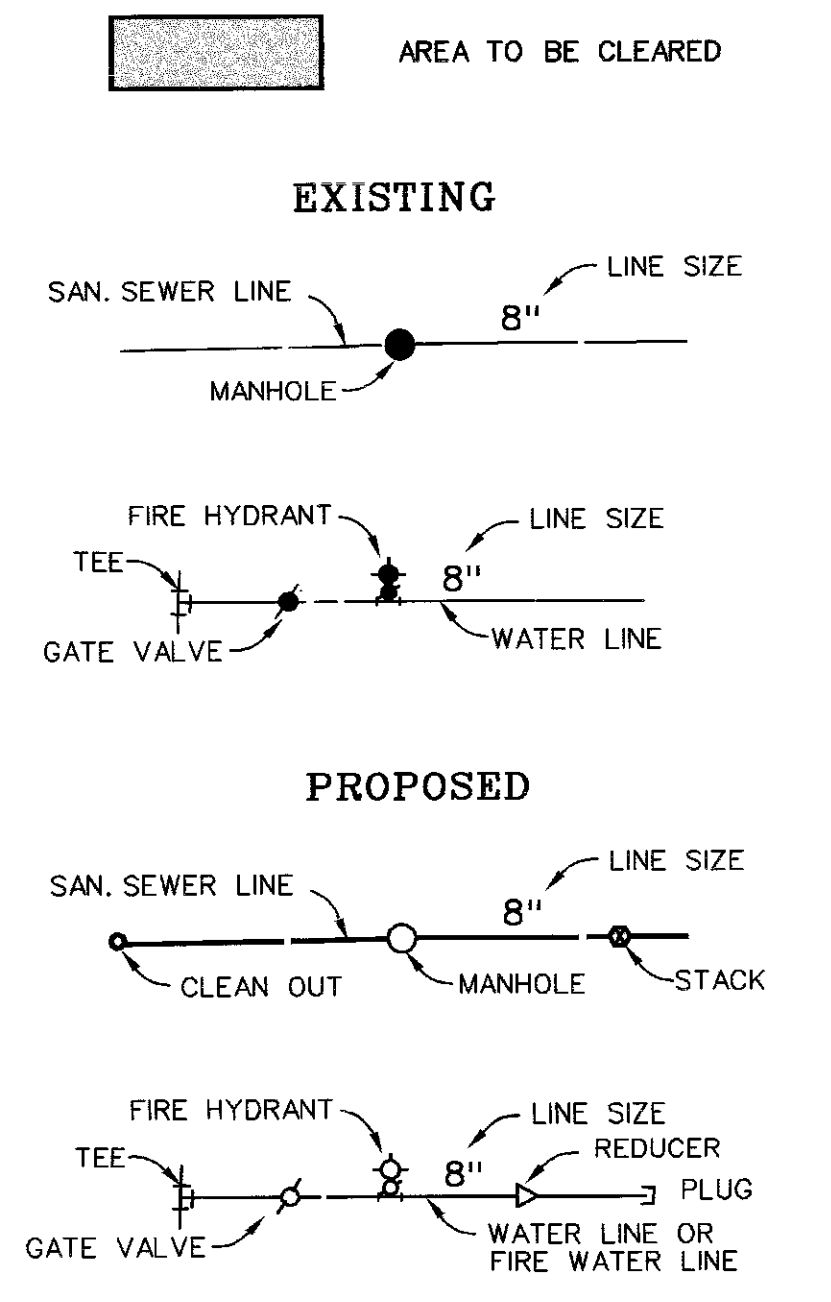
JOB NO. 99070-04.05



BENCHMARK  
 TBM "1" CUT MEDIAN NOSE, SOUTH SIDE DUESSEN PARKWAY, @ INTERSECTION WEST LAKE HOUSTON PARKWAY  
 ELEVATION = 56.71 1988 ADJUSTMENT



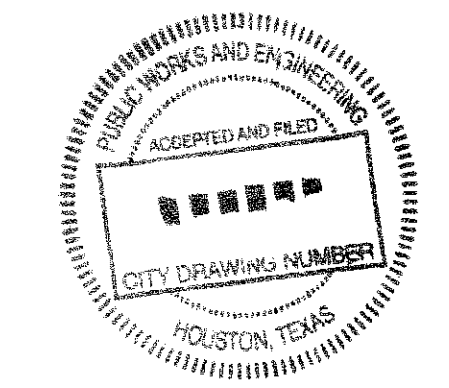
**LEGEND**



FLOOD PLAIN MANAGEMENT INFORMATION:  
 MAP NUMBERS - 4821C0520 J  
 NOVEMBER 6, 1996 ENTIRELY LOCATED IN ZONE "X"  
 NOT IN 100 YR. FLOOD PLAIN

**RECORD DRAWINGS**

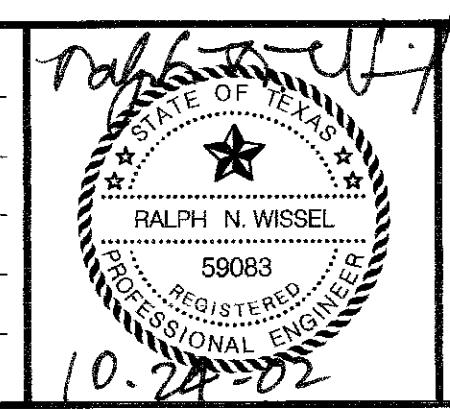
- NOTES:
1. ALL WATER MAIN AND SANITARY LINES ARE 8" UNLESS OTHERWISE NOTED. ALL SANITARY SEWER LEADS ARE 6" UNLESS OTHERWISE NOTED.
  2. MINIMUM GRADE FOR GRAVITY SEWER LINES:  
 8" - 0.44%  
 10" - 0.33%



<b>CITY OF HOUSTON</b>	
DEPARTMENT OF PUBLIC WORKS & ENGINEERING	
REVIEWED BY	CITY FUNDED PUBLIC WORKS
PRIVATELY FUNDED PUBLIC WORKS	CITY FUNDED PUBLIC WORKS
WATER	PROJECT MANAGER
WASTEWATER	CONSTRUCTION
STORM WATER	CHIEF ENGINEER
STREET & BRIDGE	OTHER APPROVAL
TRAFFIC AND TRANSPORTATION	SPONSOR DEPARTMENT
CITY ENGINEER	DATE
DIRECTOR OF PUBLIC WORKS AND ENGINEERING	DATE
SUBMITTED:	SHEET NO. SHEETS
SCALE: 1" = 100'	5 of 27
DATE: AUGUST 2002	CITY DWG. NO.:
SURVEY BY:	
F.B. NO.:	

NO.	REVISION	DATE	BY

DESIGNED BY: D.P.S./J.A.H.  
 DRAWN BY: J.A.H.  
 CHECKED BY: D.P.S.  
 APPROVED BY: R.W.  
 JOB NO.: 2001.65-04.05



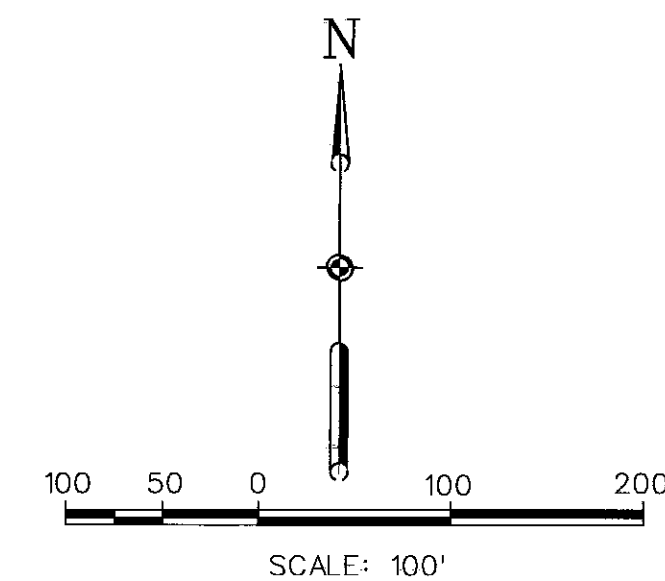
**Costello, Inc.**  
 Engineering and Surveying  
 9990 Richmond Avenue, Suite 450  
 North Building  
 Houston, Texas 77042  
 (713) 783-7788 (713) 783-3580, Fax

HARRIS COUNTY M.U.D. No. 361  
 LAKE FOREST VILLAGE SECTION 3  
**WATER AND SANITARY SEWER LAYOUT**

JOB NO. 2001.65-04.05

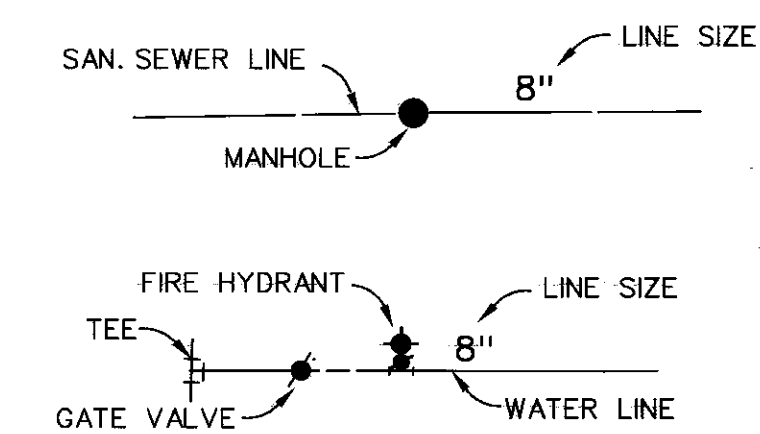


**BENCHMARK**  
 N.G.S. Monument - u 1020, located at the Union Pacific Railroad Tracks and Lockwood Road  
 Elevation - 54.50 (NAVD 88)  
 TBM " " CUT MEDIAN NOSE, SOUTH SIDE DUESSEN PARKWAY, @ INTERSECTION WEST LAKE HOUSTON PARKWAY  
 ELEVATION - 56.71 1988 ADJUSTMENT

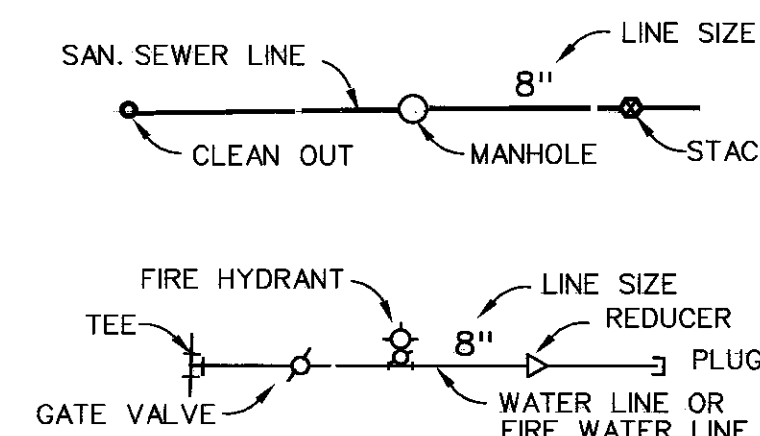


**LEGEND**

**EXISTING**



**PROPOSED**



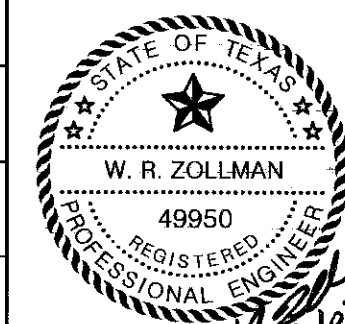
- NOTES:**
1. ALL WATER MAIN AND SANITARY LINES ARE 8" UNLESS OTHERWISE NOTED. ALL SANITARY SEWER LEADS ARE 6" UNLESS OTHERWISE NOTED.
  2. MINIMUM GRADE FOR GRAVITY SEWER LINES:  
 8" - 0.44%  
 10" - 0.33%

**RECORD DRAWINGS**

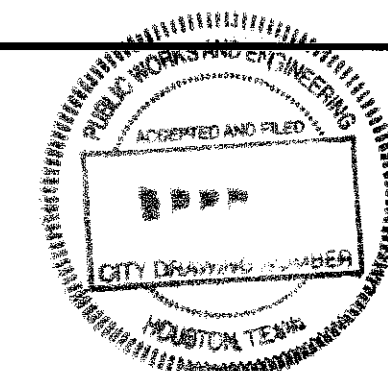
HARRIS COUNTY M.U.D. No. 361  
 SUMMERWOOD SECTION 21  
 WATER AND  
 SANITARY SEWER LAYOUT

WATER	WASTEWATER	TRAFFIC
ST. & BRIDGE	STORM WATER	SWO
	9-7-03	

FILE NO. :  
 DRAWING SCALE: 1" = 100'  
 VERT: N/A HORIZ: N/A  
 SHEET NO. 5 OF 37



DESIGNED BY: H.L./J.A.H.  
 DRAWN BY: J.A.H./J.J.  
 CHECKED BY: H.L.  
 APPROVED BY: W.R.Z.  
 JOB NO. : 22039-03



Engineering and Surveying  
 9990 Richmond Avenue, Suite 450  
 North Building  
 Houston, Texas 77042  
 (713) 783-7788 (713) 783-3580, Fax

**Costello, Inc.**

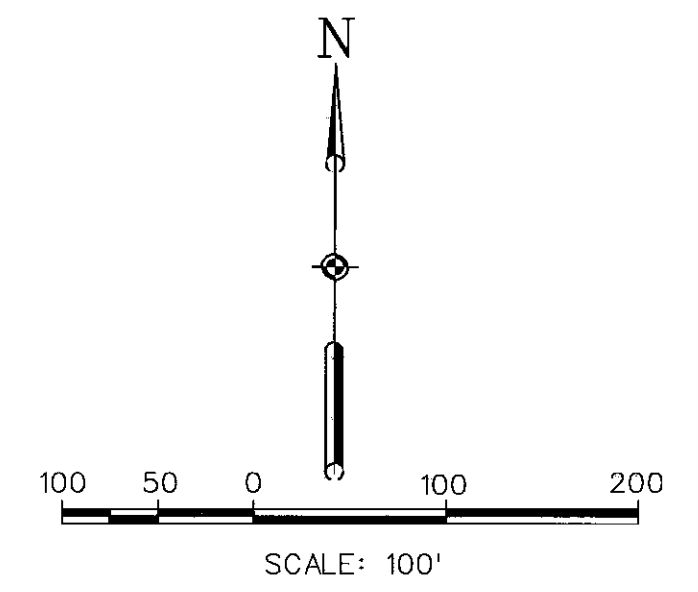


NO.	REVISION	DATE	BY

03/20/2003  
 C:\DATA\SUMMERWOOD\SECTION 21\44-46

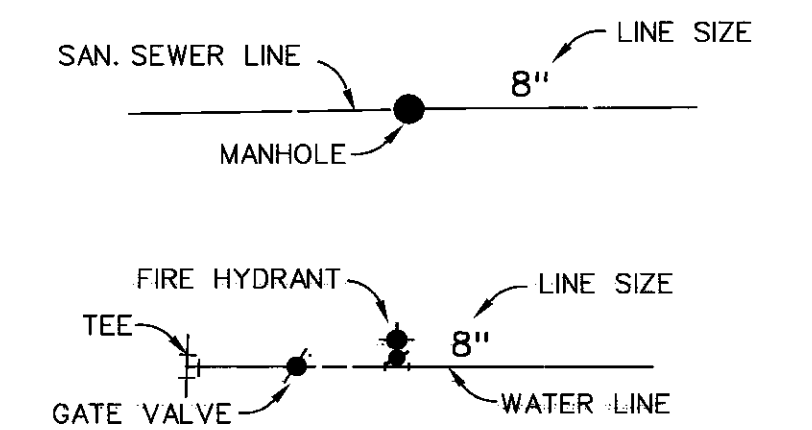
JOB NO. 22039-03

**BENCHMARK**  
 N.G.S. Monument - u 1020, located at the Union Pacific Railroad Tracks and Lockwood Road  
 Elevation = 54.50 (NAVD 88)  
 TBM " □ CUT MEDIAN NOSE, SOUTH SIDE DUESSEN PARKWAY, @ INTERSECTION WEST LAKE HOUSTON PARKWAY  
 ELEVATION - 56.71 1988 ADJUSTMENT

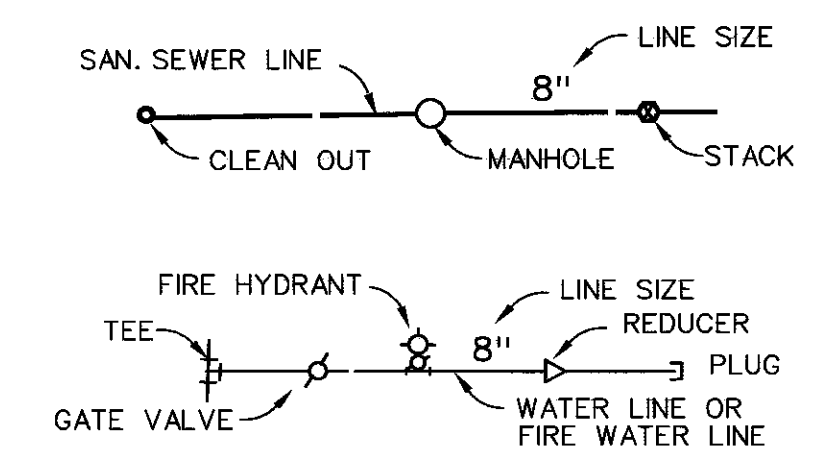


**LEGEND**

**EXISTING**



**PROPOSED**

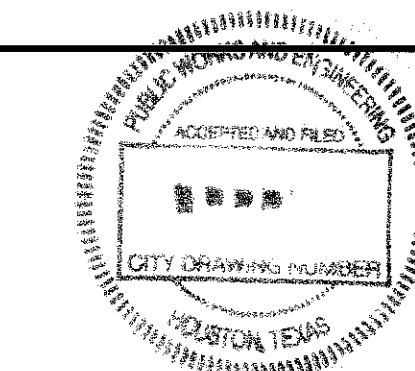


- NOTES:**
1. ALL WATER MAIN AND SANITARY LINES ARE 8" UNLESS OTHERWISE NOTED. ALL SANITARY SEWER LEADS ARE 6" UNLESS OTHERWISE NOTED.
  2. MINIMUM GRADE FOR GRAVITY SEWER LINES:  
 8" - 0.44%  
 10" - 0.33%

**RECORD DRAWINGS**

HARRIS COUNTY M.U.D. No. 361  
 SUMMERWOOD SECTION 21  
 OFFSITE WATER AND  
 SANITARY SEWER LAYOUT

WATER	WASTEWATER	TRAFFIC
ST. & BRIDGE	STORMWATER	SW
DESIGNED BY: H.L./J.A.H. DRAWN BY: J.A.H./J.J. CHECKED BY: H.L. APPROVED BY: W.R.Z. JOB NO.: 22039-03		FILE NO.: DRAWING SCALE: 1" = 100' VERT: N/A HORIZ: N/A SHEET NO. 6 OF 37



Engineering and Surveying  
 9990 Richmond Avenue, Suite 450  
 North Building  
 Houston, Texas 77042  
 (713) 783-7788 (713) 783-3580, Fax

**Costello, Inc.**



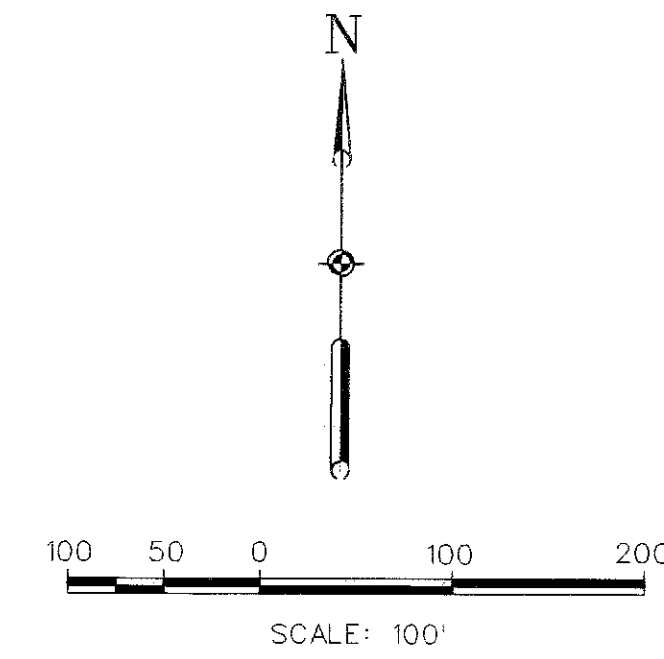
NO.	REVISION	DATE	BY

© 2003 SUMMERWOOD SECTION 21 M.U.D. No. 361  
 03/07/03

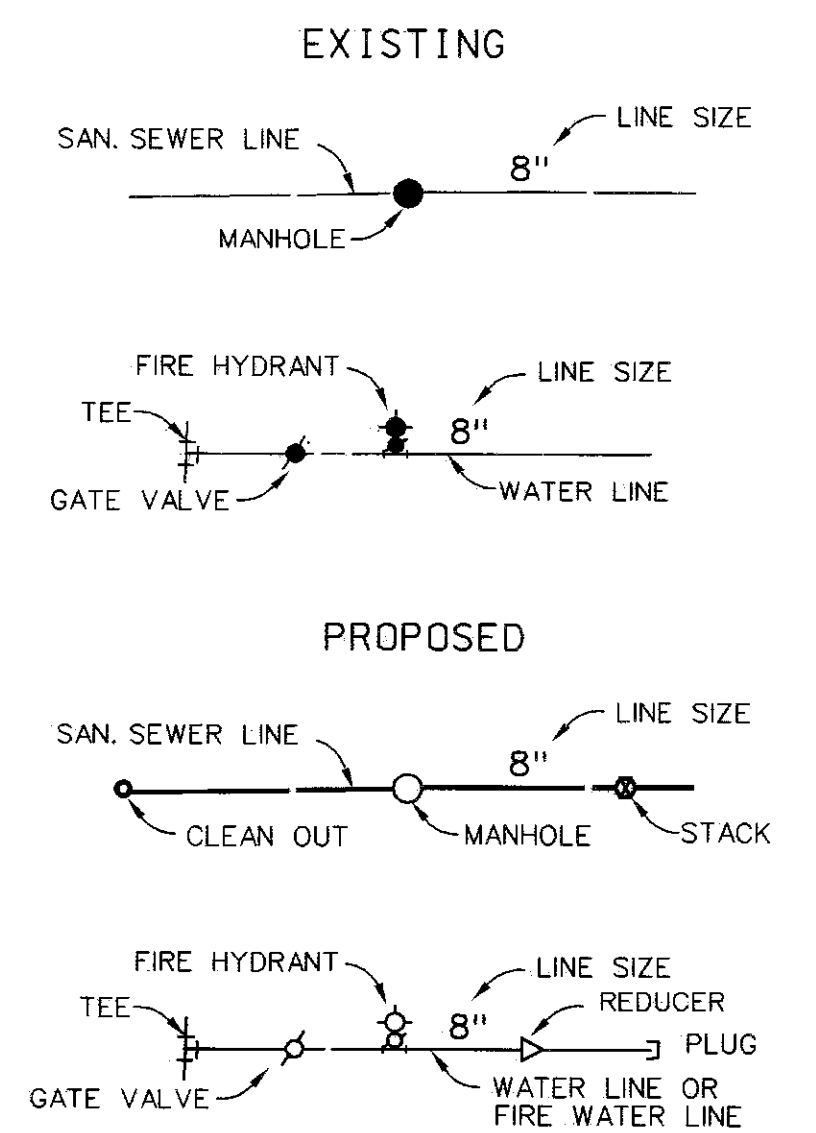
JOB NO. 22039-03



**BENCHMARK**  
 N.G.S. Monument - u 1020, located at the Union Pacific  
 Railroad Tracks and Lockwood Road  
 Elevation - 54.50 (NAVD 88)  
 TBM " " CUT MEDIAN NOSE, SOUTH SIDE DUESSEN  
 PARKWAY, @ INTERSECTION WEST LAKE HOUSTON  
 PARKWAY  
 ELEVATION - 56.71 1988 ADJUSTMENT

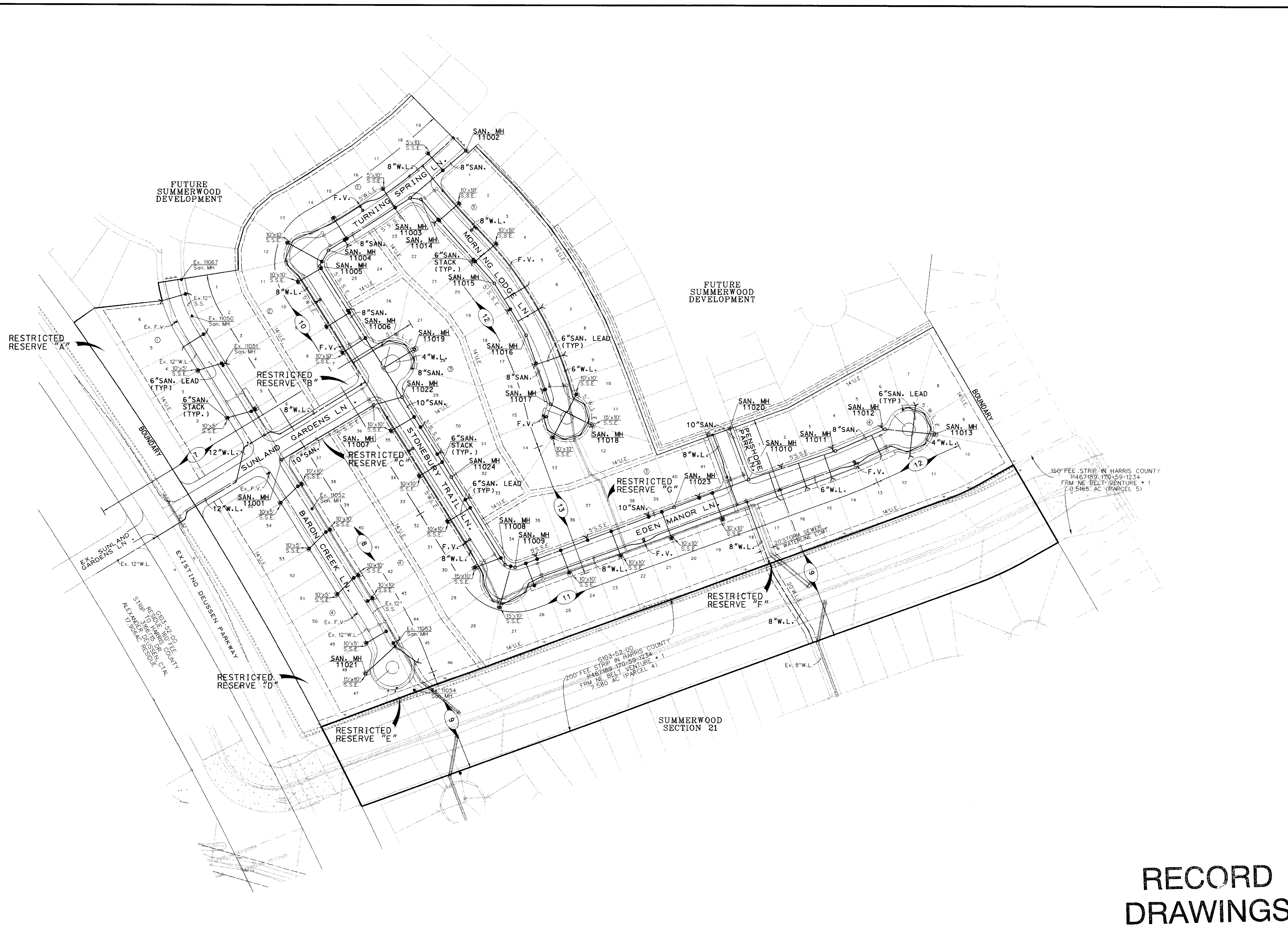


**LEGEND**



**NOTES:**

1. ALL WATER MAIN AND SANITARY LINES ARE 8" UNLESS OTHERWISE NOTED. ALL SANITARY SEWER LEADS ARE 6" UNLESS OTHERWISE NOTED.
2. MINIMUM GRADE FOR GRAVITY SEWER LINES:  
 8" - 0.44%  
 10" - 0.33%



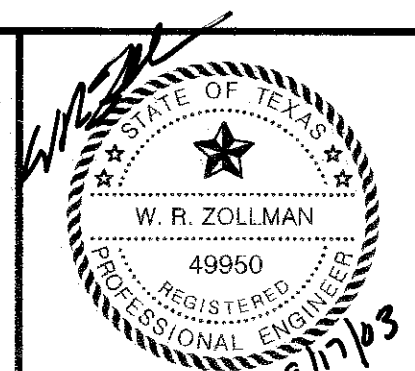
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NO.	REVISION	DATE	BY



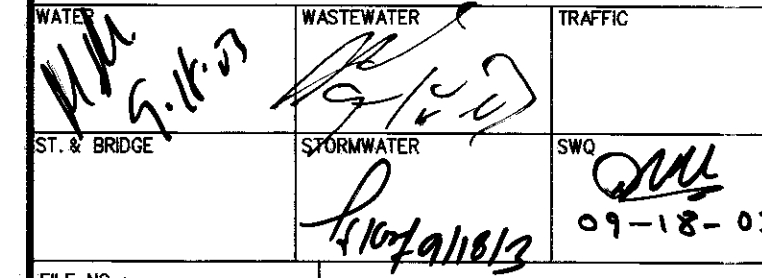
Engineering and Surveying  
 9990 Richmond Avenue, Suite 450  
 North Building  
 Houston, Texas 77042  
 (713) 783-7788 (713) 783-3580, Fax

DESIGNED BY: J. A. H. / S. B. H.  
 DRAWN BY: J. A. H.  
 CHECKED BY:  
 APPROVED BY: W. R. Z.  
 JOB NO.: 2003.009-03.04



HARRIS COUNTY M.U.D. No. 361  
 SUMMERWOOD SECTION 22  
 WATER AND  
 SANITARY SEWER LAYOUT

CITY OF HOUSTON  
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING



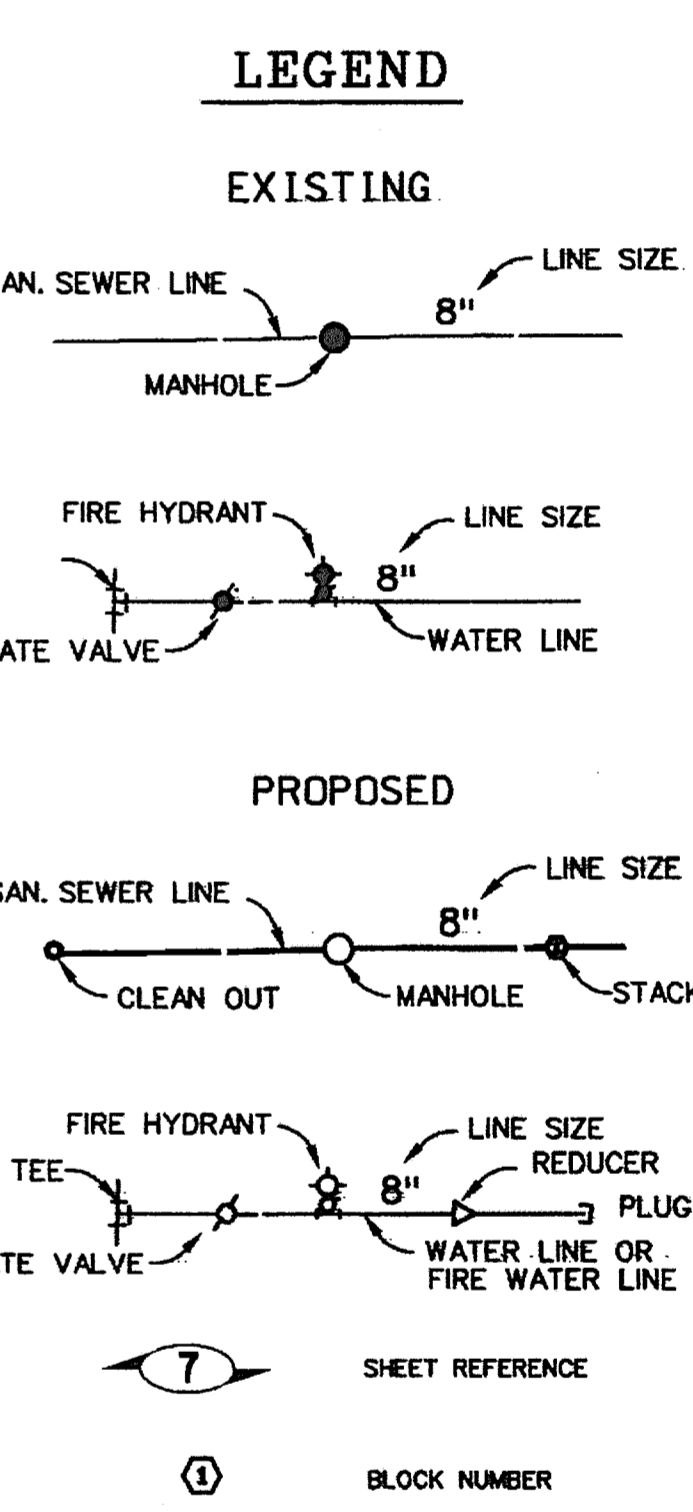
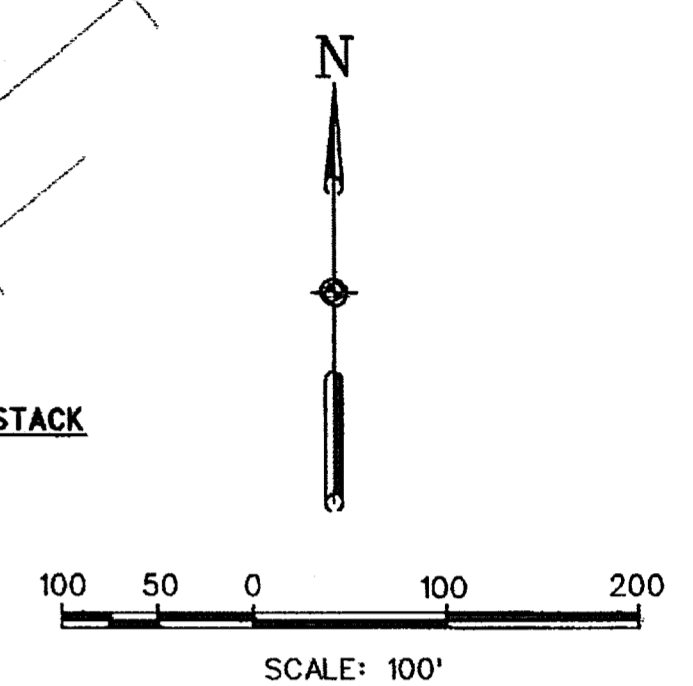
FILE NO.:  
 DRAWING SCALE:  
 1" = 100'  
 VERT: N/A  
 HORIZ: N/A  
 SHEET NO. 5 OF 27

**RECORD  
 DRAWINGS**

JOB NO. 2003.009-03.04



**BENCHMARK**  
 N.G.S. Monument - u 1020, located at the Union Pacific Railroad Tracks and Lockwood Road  
 Elevation - 54.50 (NAVD 88)  
 TBM "C" CUT MEDIAN NOSE SOUTH SIDE DUESSEN PARKWAY @ INTERSECTION WEST LAKE HOUSTON PARKWAY  
 ELEVATION - 56.71 1988 ADJUSTMENT



- NOTES:**
- ALL WATER MAIN AND SANITARY LINES ARE 8" UNLESS OTHERWISE NOTED. ALL SANITARY SEWER LEADS ARE 6" UNLESS OTHERWISE NOTED.
  - MINIMUM GRADE FOR GRAVITY SEWER LINES:  
 8" - 0.44%  
 10" - 0.33%  
 12" - 0.26%

- ⓐ RESTRICTED RESERVE "A"
- ⓑ RESTRICTED RESERVE "B"
- ⓒ RESTRICTED RESERVE "C"
- ⓓ RESTRICTED RESERVE "D"
- ⓔ RESTRICTED RESERVE "E"

**FEMA Information:**  
 Firm Map # 48201C0520J,  
 Panel # 520; November 6, 1996;  
 Unshaded Zone X and Shaded Zone X

**FLOOD PLAN MANAGEMENT INFORMATION:**  
 MAP NUMBERS - 48201C0520 J  
 NOVEMBER 6, 1996 ENTIRELY LOCATED IN ZONE "X"  
 NOT IN 100 YR. FLOOD PLAN

GAS AND ELECTRICAL FACILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS BEFORE EXCAVATING. CONTRACTORS ARE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO GAS AND ELECTRICAL FACILITIES RESULTING FROM THEIR EXCAVATIONS. APPROVED FOR UTILITY INSTALLATION ONLY

HARRIS COUNTY M.U.D. No. 361  
 SUMMERWOOD SECTION 24

WATER AND  
 SANITARY SEWER LAYOUT

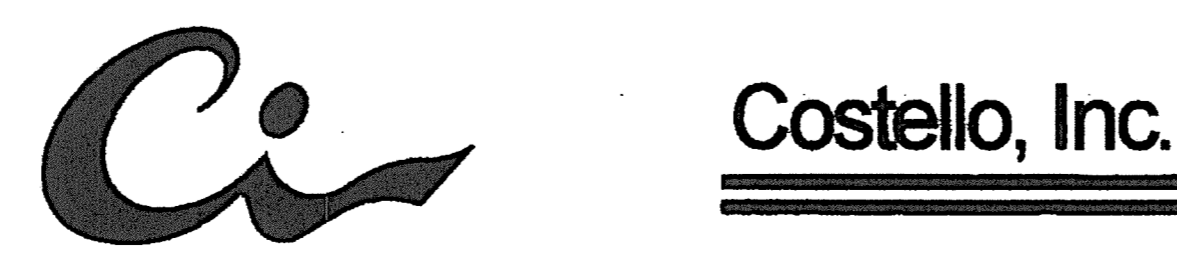
CITY OF HOUSTON  
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WATER: [Signature]  
 ST. W. BRIDGE: [Signature]  
 STORMWATER: [Signature]  
 TRAFFIC: [Signature]  
 SW: [Signature]

FILE NO.:  
 DRAWING SCALE: 1"=100'  
 VERT: N/A  
 HORIZ: N/A  
 SHEET NO. 5 OF 33

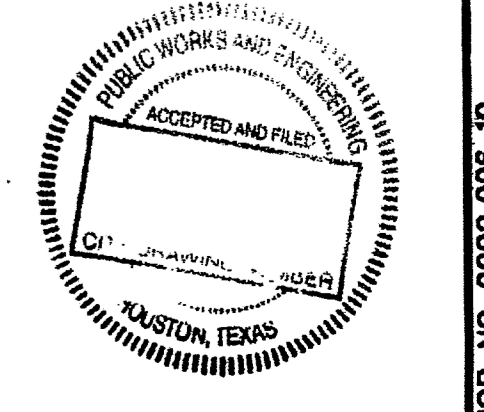
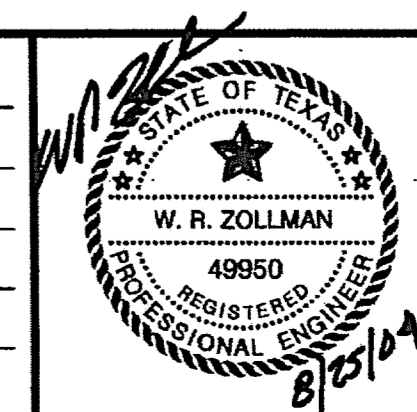
RECORD  
 DRAWINGS

NO.	REVISION	DATE	BY



Engineering and Surveying  
 9990 Richmond Avenue, Suite 450  
 North Building  
 Houston, Texas 77042  
 (713) 783-7788 (713) 783-3580, Fax

DESIGNED BY: J.A.H./H.L.  
 DRAWN BY: J.A.H./J.L.M.  
 CHECKED BY: A.H./S.B.H.  
 APPROVED BY: W.R.Z.  
 JOB NO.: 2002.096-10



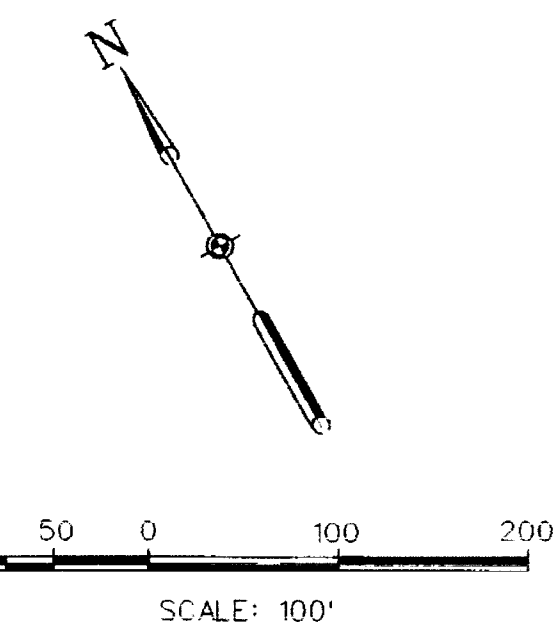
C:\P\SUMMERWOOD\SECTION 24\PLAN 520.DWG

JOB NO. 2002.096-10



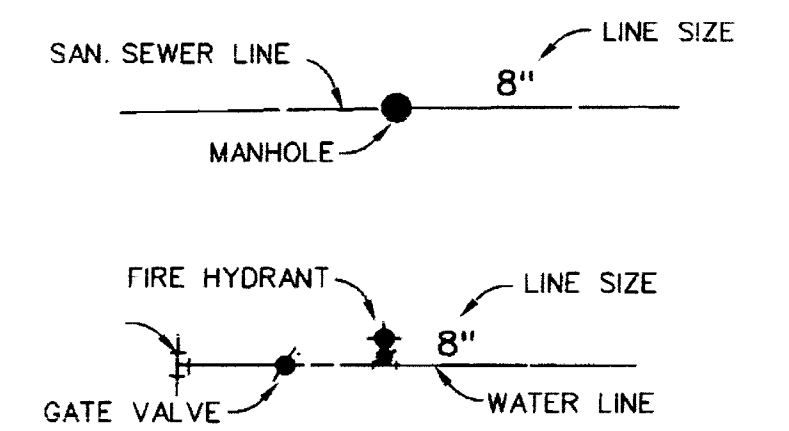
EXISTING LAKESIDE TERRACE SUBDIVISION

**BENCHMARK**  
 N.G.S. Monument - u 1020, located at the Union Pacific Railroad Tracks and Lockwood Road  
 Elevation - 54.50 (NAVD 88)  
 TBM "□" CUT MEDIAN NOSE, SOUTH SIDE DUESSEN PARKWAY, @ INTERSECTION WEST LAKE HOUSTON PARKWAY  
 ELEVATION - 56.71 1988 ADJUSTMENT

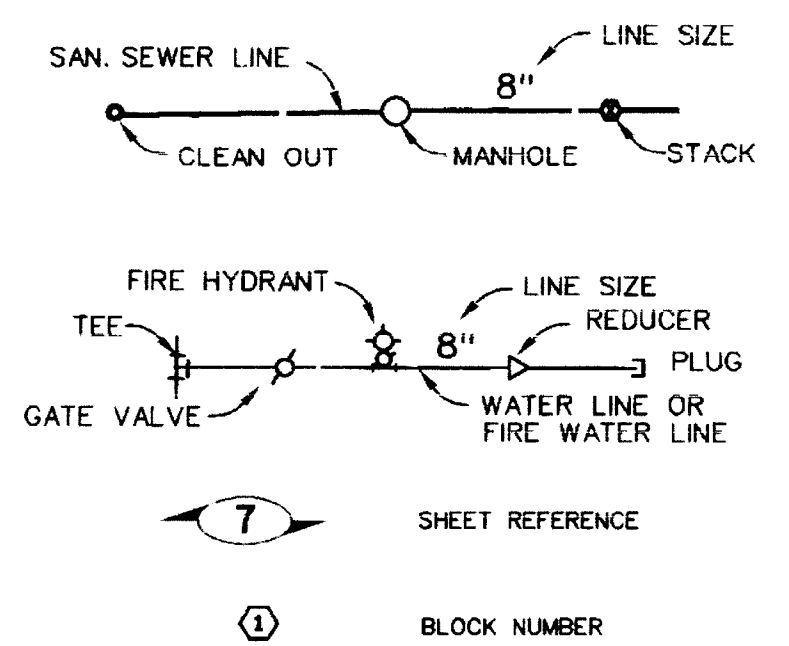


**LEGEND**

**EXISTING**



**PROPOSED**



- NOTES:**
1. ALL WATER MAIN AND SANITARY LINES ARE 8" UNLESS OTHERWISE NOTED. ALL SANITARY SEWER LEADS ARE 6" UNLESS OTHERWISE NOTED.
  2. MINIMUM GRADE FOR GRAVITY SEWER LINES:  
 8" - 0.44%  
 10" - 0.33%  
 12" - 0.26%

**RECORD DRAWINGS**

TSARP 100-YEAR FLOOD ELEVATION FOR LAKE HOUSTON: 49 FT

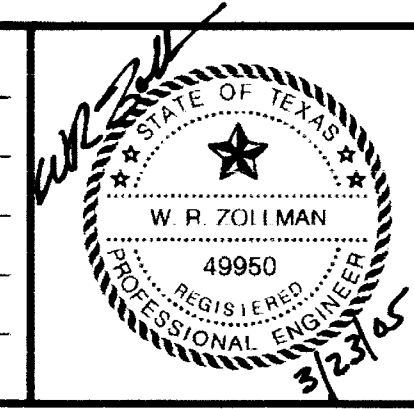
HARRIS COUNTY M.U.D. No. 361  
 SUMMERWOOD SECTION 26

WATER AND  
 SANITARY SEWER LAYOUT

CITY OF HOUSTON  
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WATER	WASTEWATER	TRAFFIC
STAL. BRIDGE	STORMWATER	SWO

FILE NO.:	FACILITY:
DRAWING SCALE: 1"=100'	
VERT: N/A	
HORIZ: N/A	
SHEET NO. 5 OF 23	



DESIGNED BY: J.A.H./S.B.H.  
 DRAWN BY: J.A.H./A.D.H.  
 CHECKED BY: J.C.S.  
 APPROVED BY: W.R.Z.  
 JOB NO.: 2004.060-003.004

Engineering and Surveying  
 9990 Richmond Avenue, Suite 450  
 North Building  
 Houston, Texas 77042  
 (713) 783-7788 (713) 783-3580, Fax

**Costello, Inc.**



G103-52-00  
 RESIDUE 150' FEE  
 STRIP TO HARRIS COUNTY  
 3166/15 DR  
 ALEXANDER DUESSEN, CTAL  
 17.906AC RESIDUE

NO.	REVISION	DATE	BY

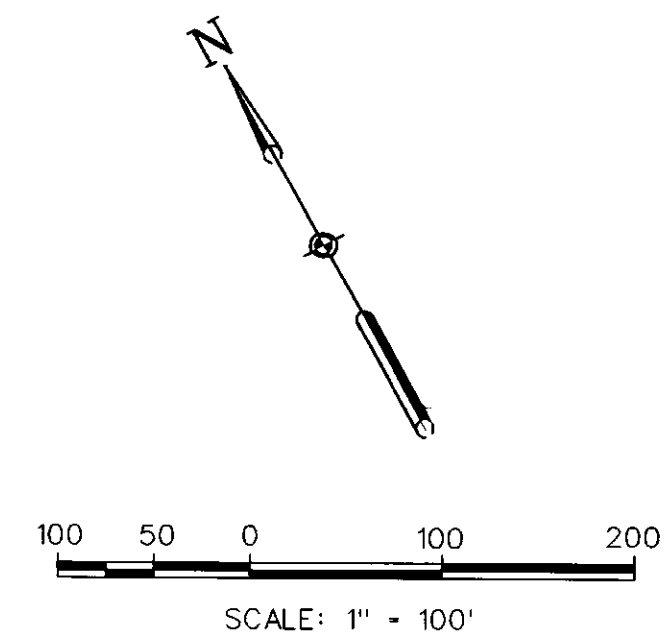
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JOB NO. 2004.060-003.004



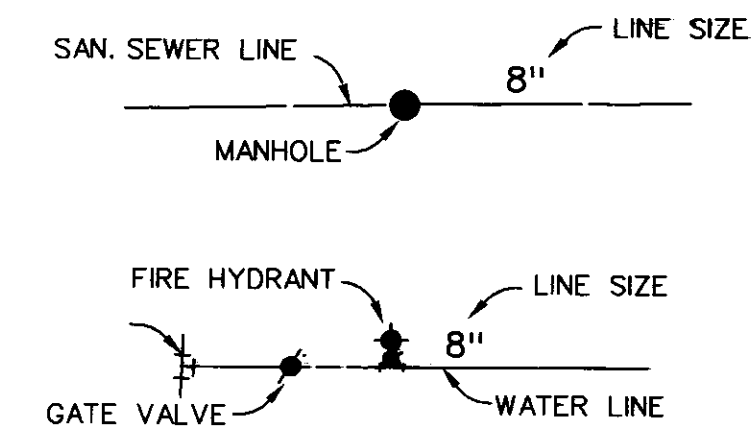
EXISTING  
LAKESIDE TERRACE  
SUBDIVISION

**BENCHMARK**  
N.G.S. Monument - u 1020, located at the Union Pacific Railroad Tracks and Lockwood Road  
Elevation = 54.50 (NAVD 88)  
TBM "□" CUT MEDIAN NOSE, SOUTH SIDE DUESSEN PARKWAY, @ INTERSECTION WEST LAKE HOUSTON PARKWAY  
ELEVATION = 56.71 1988 ADJUSTMENT

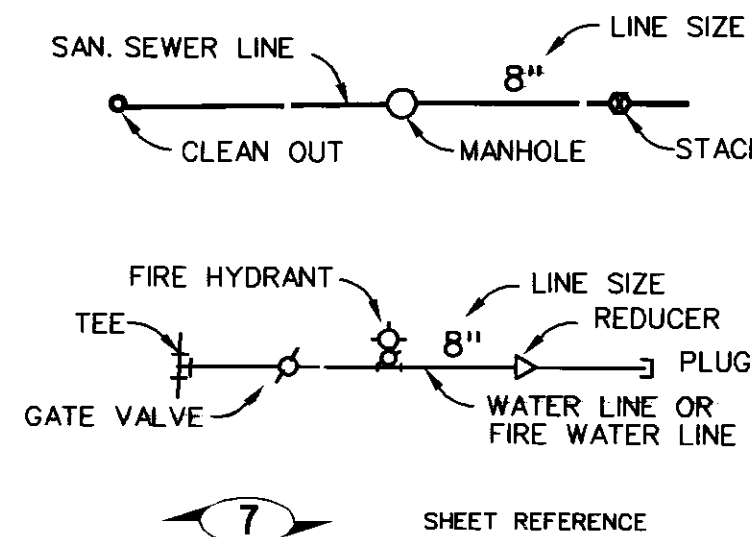


**LEGEND**

**EXISTING**

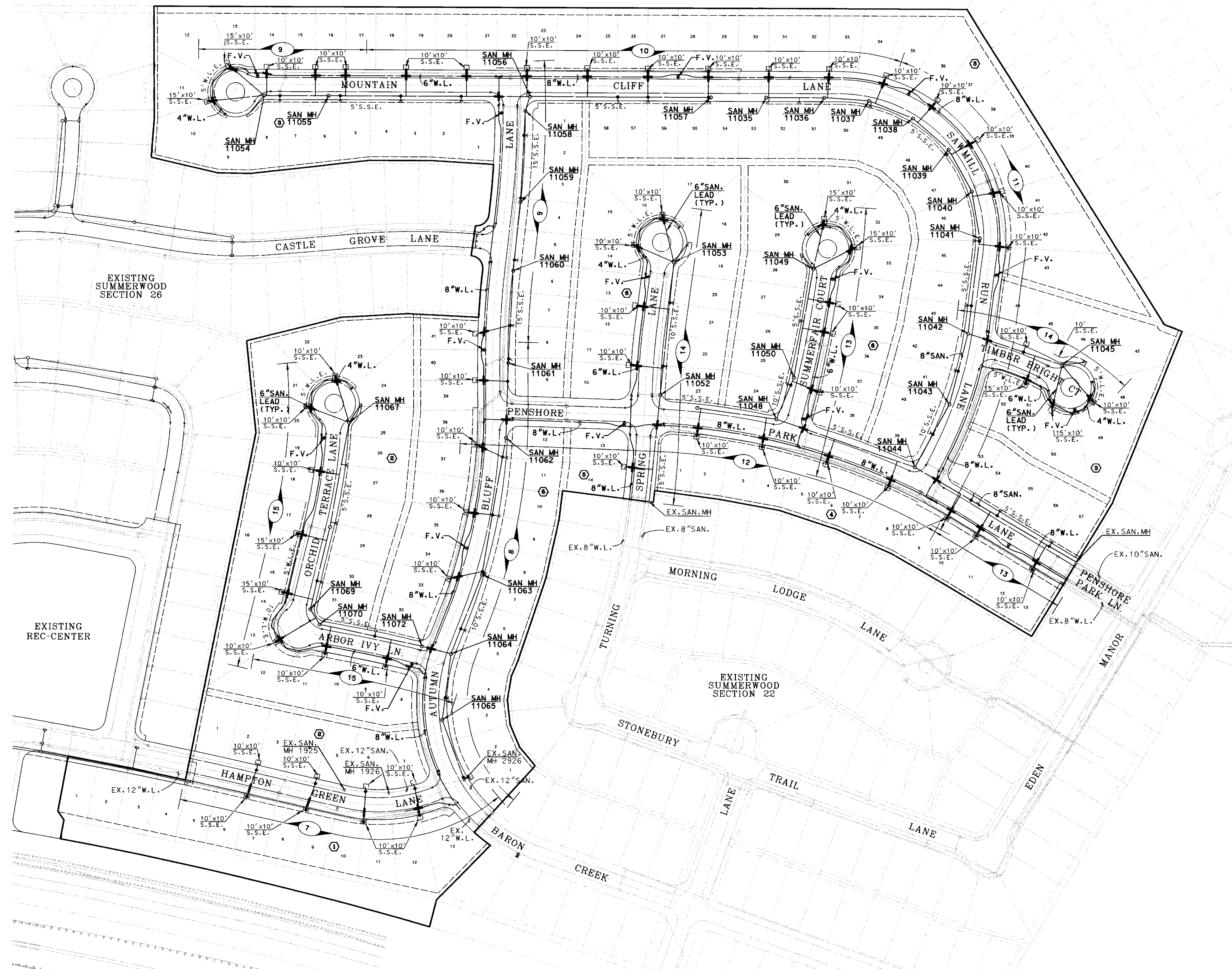


**PROPOSED**



7 SHEET REFERENCE  
BLOCK NUMBER

- NOTES:**
1. ALL WATER MAIN AND SANITARY LINES ARE 8" UNLESS OTHERWISE NOTED. ALL SANITARY SEWER LEADS ARE 6" UNLESS OTHERWISE NOTED.
  2. MINIMUM GRADE FOR GRAVITY SEWER LINES:  
8" - 0.44%  
10" - 0.33%  
12" - 0.26%



HARRIS COUNTY M.U.D. No. 361  
SUMMERWOOD SECTION 27  
WATER AND  
SANITARY SEWER LAYOUT

CITY OF HOUSTON  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WATER	WASTEWATER	TRAFFIC
ST. & BRIDGE	STORMWATER	SPR.
FILE NO. 1	FACILITY	

DRAWING SCALE: 1"=100'	
VERT: N/A HORIZ: N/A	
SHEET NO. 5 OF 26	

NO.	REVISION	DATE	BY



Engineering and Surveying  
9990 Richmond Avenue, Suite 450  
North Building  
Houston, Texas 77042  
(713) 783-7788 (713) 783-3580, Fax

DESIGNED BY: J.A.H./S.B.H./A.H.  
DRAWN BY: J.A.H./J.A./A.H.  
CHECKED BY: J.C.S.  
APPROVED BY: W.R.Z.  
JOB NO.: 2004.076-003.004

JOB NO. 2004.076-003.004

## Approved Drinking Water Laboratories

The following list of laboratories are approved by the TCEQ's Drinking Water Standards Division. The list indicates each approved drinking water analyte and method for each laboratory listed. For questions related to individual laboratory approval please call (512) 239-4691.

<b>A &amp; B Environmental Services, Inc</b>		Lab ID: <b>TX275</b>	Approval Date: <b>7/9/2020</b>
Mark Johnston 10100 East Freeway, Suite 100 Houston, TX 77029		Accreditation ID: T104704213	Phone Number: (713) 453-6060 Fax Number: (713) 453-6091
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Calcium	200.7	12/31/2020	
Conductivity	2510B	12/31/2020	
Free Chlorine	4500CL-G	12/31/2020	
Hardness	2340B	12/31/2020	
Orthophosphate	300.0	12/31/2020	
Orthophosphate	4500P-E	12/31/2020	
pH	4500H-B	12/31/2020	
pH	150.1	12/31/2020	
Silica	200.7	12/31/2020	
Silica	4500SI02 D	12/31/2020	
TOC	5310B	12/31/2020	
Total Chlorine	4500CL-G	12/31/2020	
Turbidity	180.1	12/31/2020	
Turbidity	2130B	12/31/2020	
UV254	5910B	12/31/2020	

<b>Ana-Lab Corporation</b>		Lab ID: <b>TX219</b>	Approval Date: <b>6/1/2020</b>
Tracey Varvel 2600 Dudley Rd Kilgore, TX 75662		Accreditation ID: T104704201	Phone Number: (903) 984-0551 Fax Number: (903) 984-5914
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Calcium	200.7	12/31/2020	
Chlorite	300.1	12/31/2020	
Conductivity	2510B	12/31/2020	
Free Chlorine	4500CL-G	12/31/2020	
Hardness	2340B	12/31/2020	
pH	4500H-B	12/31/2020	
Phosphate	300.0	12/31/2020	
Phosphate	4500P-E	12/31/2020	
Silica	200.7	12/31/2020	
Temperature	2550	12/31/2020	
TOC	5310C	12/31/2020	
Total Chlorine	4500CL-G	12/31/2020	
Turbidity	2130B	12/31/2020	
UV254	5910B	12/31/2020	

# Approved Drinking Water Laboratories

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<b>Aqua WSC Laboratory</b>			
Steve Dunn 293 Industrial Boulevard Bastrop, TX 78602	Lab ID: <b>TX285</b>		Approval Date: <b>7/6/2020</b>
	Accreditation ID: T104704309		Phone Number: (512) 581-0705
			Fax Number:
	Analyte	Method	Valid Until
	Alkalinity	2320B	12/31/2020
	Calcium	3500-CA B	12/31/2020
	Conductivity	2510B	12/31/2020
	Phosphate	300.0	12/31/2020
<b>Aqua-Tech Laboratories, Inc.</b>			
Marianne Guzman 635 Phil Gramm Blvd Bryan, TX 77807	Lab ID: <b>TX239</b>		Approval Date: <b>5/29/2020</b>
	Accreditation ID: T104704371		Phone Number: (979) 778-3707
			Fax Number: (979) 778-3193
	Analyte	Method	Valid Until
	Alkalinity	2320B	12/31/2020
	Calcium	200.7	12/31/2020
	Conductivity	2510B	12/31/2020
	Free Chlorine	4500CL-F	12/31/2020
	pH	4500H-B	12/31/2020
	Phosphate	4500P-E	12/31/2020
	Silica	200.7	12/31/2020
	Temperature	2550	12/31/2020
	TOC	5310B	12/31/2020
	Total Chlorine	4500CL-F	12/31/2020
<b>B Environmental, LLC</b>			
Kevin Baros 1606 E Brazos Suite D Victoria, TX 77901	Lab ID: <b>T104704328</b>		Approval Date: <b>6/12/2020</b>
	Accreditation ID: T104704328		Phone Number: (361) 572-8224
			Fax Number: (361) 572-4115
	Analyte	Method	Valid Until
Alkalinity	2320B	12/31/2020	
TOC	5310B	12/31/2020	
<b>BAT Laboratories, LLC</b>			
Rebecca Gowdy 5935 Glenoak Ln Amarillo, TX 79109-6831	Lab ID: <b>T104704346</b>		Approval Date: <b>3/9/2020</b>
	Accreditation ID: T104704346		Phone Number: (806) 353-4425
			Fax Number: (806) 352-6454
	Analyte	Method	Valid Until
	Alkalinity	2320B	12/31/2020
Conductivity	2510B	12/31/2020	
PH	4500H-B	12/31/2020	
Temperature	2550	12/31/2020	

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<b>Brownsville PUB - Analytical Laboratory</b>			
Jose Ramon Saenz 1385 PUB Dr. Brownsville, TX 78520	Lab ID: <b>48116</b>		Approval Date: <b>6/2/2020</b>
	Accreditation ID: T104704357		Phone Number: (956) 983-6356
			Fax Number: (956) 983-6359
	Analyte	Method	Valid Until
	Alkalinity	2320B	12/31/2020
	Calcium	3500-CA B	12/31/2020
	Chlorine Dioxide	4500CLO2-E	12/31/2020
	Chlorite	4500CLO2-E	12/31/2020
	Conductivity	2510B	12/31/2020
	Free Chlorine	4500CL-G	12/31/2020
	pH	4500H-B	12/31/2020
	Temperature	2550	12/31/2020
	TOC	5310B	12/31/2020
Total Chlorine	4500CL-G	12/31/2020	
Turbidity	2130B	12/31/2020	
UV254	5910B	12/31/2020	
<b>Chaparral Laboratories, Inc.</b>			
David Veinotte P.O. Box 1622, 861 Hwy 19 Huntsville, TX 77320-1111	Lab ID: <b>T104704204</b>		Approval Date: <b>6/2/2020</b>
	Accreditation ID: T104704204		Phone Number: (936) 291-1881
			Fax Number: (936) 295-1731
	Analyte	Method	Valid Until
	Alkalinity	2320B	12/31/2020
	Calcium	3111B	12/31/2020
	Conductivity	2510B	12/31/2020
	pH	4500H-B	12/31/2020
Phosphate	300.0	12/31/2020	
Temperature	2550	12/31/2020	

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<b>City of Abilene Environmental Laboratory</b>		Lab ID: <b>T104704320</b>	Approval Date: <b>6/16/2020</b>
Mike Michaud 4209 East Lake Rd Abilene, Texas 79601		Accreditation ID: T104704320	Phone Number: (325) 676-6041 Fax Number: (325) 676-6044
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Calcium	200.7	12/31/2020	
Chlorine Dioxide	4500CLO2-E	12/31/2020	
Chlorine Dioxide	CHLORDIOX PLUS	12/31/2020	
Chlorite	300.0	12/31/2020	
Conductivity	2510B	12/31/2020	
Hardness	2340B	12/31/2020	
pH	4500H-B	12/31/2020	
Phosphate	4500P-E	12/31/2020	
Phosphate	300.0	12/31/2020	
Phosphate	4500P-F	12/31/2020	
Silica	200.7	12/31/2020	
Temperature	2550	12/31/2020	
TOC	5310B	12/31/2020	
Total Chlorine	4500CL-F	12/31/2020	
Turbidity	2130B	12/31/2020	
UV254	5910B	12/31/2020	

<b>City of Corpus Christi Water Lab</b>		Lab ID: <b>TX290</b>	Approval Date: <b>6/30/2020</b>
Marisa Juarez 13101 Leopard St. Corpus Christi, TX 78410-4524		Accreditation ID: T104704386	Phone Number: (361) 826-1201 Fax Number: (361) 242-9131
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Calcium	3500CA-B	12/31/2020	
Chlorine Dioxide	CHLORDIOX PLUS	12/31/2020	
Chlorite	300.0	12/31/2020	
Conductivity	2510B	12/31/2020	
Orthophosphate	300.0	12/31/2020	
pH	4500H-B	12/31/2020	
TOC	5310C	12/31/2020	
Turbidity	2130B	12/31/2020	
UV254	5910B	12/31/2020	



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City of Fort Worth Central Laboratory		Lab ID: <b>48135</b>	Approval Date: <b>7/23/2020</b>
David Nelson 2600 SE Loop 820 Fort Worth, Texas 76140		Accreditation ID: T104704200	Phone Number: (817) 392-5900 Fax Number: (817) 392-5920
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Calcium	3500CA-B	12/31/2020	
Conductivity	2510B	12/31/2020	
Free Chlorine	4500CL-F	12/31/2020	
pH	4500H-B	12/31/2020	
Temperature	2550	12/31/2020	
TOC	5310B	12/31/2020	
Total Chlorine	4500CL-F	12/31/2020	
Turbidity	2130B	12/31/2020	
UV254	5910B	12/31/2020	
City of Odessa Laboratory Services		Lab ID: <b>48156</b>	Approval Date: <b>5/26/2020</b>
Jason Wells 817 W. 42nd St. Odessa, TX 79764		Accreditation ID: T104704363	Phone Number: (432) 368-3536 Fax Number:
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Free Chlorine	HACH 10260	12/31/2020	
PH	4500H-B	12/31/2020	
Temperature	2550	12/31/2020	
TOC	5310B	12/31/2020	
Total Chlorine	HACH 10260	12/31/2020	
UV254	5910B	12/31/2020	
Eastex Environmental Lab, Inc.		Lab ID: <b>TX203</b>	Approval Date: <b>7/1/2020</b>
Tiffany Guerrero PO Box 1089 Coldspring, TX 77331		Accreditation ID: T104704275	Phone Number: (936) 653-3249 Fax Number: (936) 653-3172
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Calcium	200.7	12/31/2020	
Chlorite	300.0	12/31/2020	
Conductivity	2510B	12/31/2020	
Free Chlorine	4500CL-F	12/31/2020	
pH	4500H-B	12/31/2020	
Phosphate	4500P-E	12/31/2020	
Silica	200.7	12/31/2020	
Temperature	2550	12/31/2020	
TOC	5310C	12/31/2020	
Total Chlorine	4500CL-F	12/31/2020	
Turbidity	2130B	12/31/2020	
UV254	5910B	12/31/2020	

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<b>Eastex Environmental Lab, Inc. - Nacogdoches</b>			
	Lab ID: <b>TX00962</b>	Approval Date: <b>7/31/2020</b>	
	Accreditation ID: T104704316	Phone Number: (936) 569-8879	
		Fax Number: (936) 569-8951	
Trenda Wood 1119 South University Drive Nacogdoches, TX 75961			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	12/31/2020
	Conductivity	2510B	12/31/2020
	pH	4500H-B	12/31/2020
	Phosphate	4500P-E	12/31/2020
	Temperature	2550	12/31/2020
	Turbidity	2130B	12/31/2020
<b>Envirodyne Laboratories, Inc.</b>			
	Lab ID: <b>TX288</b>	Approval Date: <b>7/1/2020</b>	
	Accreditation ID: T104704265	Phone Number: (281) 568-7880	
		Fax Number: (281) 568-8004	
Laura Bonjonia 11011 Brooklet Drive, Suite 230 Houston, TX 77099			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	12/31/2020
	Calcium	200.7	12/31/2020
	Conductivity	2510B	12/31/2020
	Free Chlorine	4500CL-G	12/31/2020
	pH	4500H-B	12/31/2020
	Phosphate	4500P-E	12/31/2020
	Silica	200.5	12/31/2020
	Temperature	2550	12/31/2020
	Total Chlorine	4500CL-G	12/31/2020
	Turbidity	2130B	12/31/2020
<b>Environmental Monitoring Laboratory, LLC</b>			
	Lab ID: <b>TX01547</b>	Approval Date: <b>5/12/2020</b>	
	Accreditation ID: T104704247	Phone Number: 254-582-2622	
		Fax Number:	
Serissa Beck PO Box 477 Hillsboro, TX 76645			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Free Chlorine	4500CL-G	12/31/2020
	Total Chlorine	4500CL-G	12/31/2020

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<b>Eurofins Eaton Analytical, LLC - South Bend</b>		Lab ID: <b>TX207</b>	Approval Date: <b>10/8/2019</b>
Dale Piechocki 110 South Hill Street South Bend, IN 46617		Accreditation ID: T104704187	Phone Number: (574) 472-5523 Fax Number: (574) 233-8207
Analyte	Method	Valid Until	
Alkalinity	2320B	9/16/2020	
Calcium	200.7	9/16/2020	
Chlorine Dioxide	4500CLO2-D	9/16/2020	
Chlorite	300.0	9/16/2020	
Conductivity	2510B	9/16/2020	
Free Chlorine	4500CL-G	9/16/2020	
Hardness	2340B	9/16/2020	
Orthophosphate	4500P-E	9/16/2020	
pH	150.1	9/16/2020	
Silica	200.7	9/16/2020	
TOC	5310C	9/16/2020	
Total Chlorine	4500CL-G	9/16/2020	
Turbidity	180.1	9/16/2020	
UV254	5910B	9/16/2020	
<b>GBRA Regional Laboratory</b>		Lab ID: <b>48136</b>	Approval Date: <b>6/5/2020</b>
Kylie Gudgell 933 East Court Street Seguin, TX 78155		Accreditation ID: T104704269	Phone Number: (830) 379-5822 Fax Number: (830) 379-9718
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Chlorite	300.0	12/31/2020	
Phosphate	300.0	12/31/2020	
TOC	5310C	12/31/2020	
Turbidity	2130B	12/31/2020	
<b>International Water Quality Laboratory</b>		Lab ID: <b>48134</b>	Approval Date: <b>2/25/2020</b>
Richard Wilcox 4100-L Delta Drive El Paso, Texas 79905-4306		Accreditation ID: T104704365	Phone Number: (915) 594-5444 Fax Number:
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Calcium	200.7	12/31/2020	
Chlorite	300.1	12/31/2020	
Conductivity	2510B	12/31/2020	
Free Chlorine	4500CL-G	12/31/2020	
pH	4500H-B	12/31/2020	
Phosphate	300.1	12/31/2020	
Silica	4500SI-F	12/31/2020	
Temperature	2550	12/31/2020	
TOC	5310B	12/31/2020	
Turbidity	2130B	12/31/2020	
UV254	5910B	12/31/2020	



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<b>LCRA - Environmental Laboratory Services</b>			
Dale Jurecka 3505 Montopolis Dr Austin, TX 78744		Lab ID: <b>T104704218</b>	Approval Date: <b>6/15/2020</b>
		Accreditation ID: T104704218	Phone Number: (512) 356-6022 Fax Number: (512) 356-6021
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Calcium	200.7	12/31/2020	
Chlorite	300.0	12/31/2020	
pH	4500H-B	12/31/2020	
Phosphate	300.0	12/31/2020	
Silica	4500SIO2-C	12/31/2020	
Temperature	2550	12/31/2020	
TOC	5310C	12/31/2020	
Total Chlorine	4500CL-G	12/31/2020	
UV254	5910B	12/31/2020	
<b>North Water District Laboratory Services, Inc.</b>			
Monica Martin 8725 Fawn Trail The Woodlands, TX 77385		Lab ID: <b>TX204</b>	Approval Date: <b>6/25/2020</b>
		Accreditation ID: T104704238	Phone Number: (936) 321-6060 Fax Number: (936) 321-6061
Analyte	Method	Valid Until	
Alkalinity	2320B	12/31/2020	
Calcium	200.7	12/31/2020	
Conductivity	2510B	12/31/2020	
Free Chlorine	4500CL-G	12/31/2020	
Hardness	2340B	12/31/2020	
Orthophosphate	4500P-E	12/31/2020	
Orthophosphate	300.0	12/31/2020	
pH	4500H-B	12/31/2020	
Silica	200.7	12/31/2020	
Temperature	2550	12/31/2020	
TOC	5310B	12/31/2020	
Total Chlorine	4500CL-G	12/31/2020	
Turbidity	180.1	12/31/2020	

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<b>Pace Analytical Services, LLC - Ormond Beach FL</b>		Lab ID: <b>TX246</b>	Approval Date: <b>7/28/2020</b>
Lynn Baylor 8 E Tower Circle Ormond Beach, FL 32174		Accreditation ID: T104704184	Phone Number: (386) 676-4803 Fax Number: (386) 673-4001
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	6/30/2021
	Calcium	200.7	6/30/2021
	Chlorine Dioxide	4500CLO2-D	6/30/2021
	Chlorite	300.1	6/30/2021
	Conductivity	2510B	6/30/2021
	Free Chlorine	4500CL-D	6/30/2021
	Hardness (CaCO3)	2340B	6/30/2021
	pH	4500H-B	6/30/2021
	Phosphate	300.0	6/30/2021
	Phosphate	365.1	6/30/2021
	Silica	200.7	6/30/2021
	TOC	5310B	6/30/2021
	Total Chlorine	4500CL-D	6/30/2021
	Turbidity	180.1	6/30/2021
	UV254	5910B	6/30/2021
<b>R&amp;C Joy, Inc</b>		Lab ID: <b>TX01572</b>	Approval Date: <b>7/9/2020</b>
Rhonda Scrogin 19020 W Little York Road Katy, TX 77449-7243		Accreditation ID: T104704372	Phone Number: (281) 858-5988 Fax Number:
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Free Chlorine	4500CL-G	6/30/2021
	pH	4500H-B	6/30/2021
	Temperature	2550	6/30/2021
	Total Chlorine	4500CL-G	6/30/2021
<b>Red River Authority of Texas Environmental Laboratory</b>		Lab ID: <b>48160</b>	Approval Date: <b>5/20/2020</b>
Jill Simpson 3000 Hammon Rd Wichita Falls, TX 76310		Accreditation ID: T104704274	Phone Number: (940) 723-1717 Fax Number: (940) 723-6529
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	pH	150.1	12/31/2020
	Temperature	2550	12/31/2020

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<b>Sabine River Authority of Texas</b>			
		Lab ID: <b>48155</b>	Approval Date: <b>2/25/2020</b>
		Accreditation ID: T104704266	Phone Number: (409) 746-3284
			Fax Number: (409) 746-3780
Pollie Holtham 1895 I-P Way Orange, Texas 77632			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	12/31/2020
	Conductivity	2510B	12/31/2020
	Free Chlorine	4500CL-F	12/31/2020
	pH	4500H-B	12/31/2020
	Phosphate	300.0	12/31/2020
	Temperature	2550	12/31/2020
	TOC	5310C	12/31/2020
	Total Chlorine	4500CL-F	12/31/2020
	Turbidity	2130B	12/31/2020
<b>San Antonio Testing Laboratory, LLC</b>			
		Lab ID: <b>TX274</b>	Approval Date: <b>6/8/2020</b>
		Accreditation ID: T104704360	Phone Number: (210) 229-9920
			Fax Number: (210) 229-9920
Marcela Hawk 1610 S Laredo Street San Antonio, TX 78207-7029			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	12/31/2020
	Calcium	200.7	12/31/2020
	Conductivity	2510B	12/31/2020
	Hardness	2340B	12/31/2020
	pH	4500H-B	12/31/2020
	Phosphate	300.0	12/31/2020
	Silica	200.7	12/31/2020
	Temperature	2550	12/31/2020
<b>SGS North America Inc. - Wheat Ridge</b>			
		Lab ID: <b>T104704511</b>	Approval Date: <b>3/12/2020</b>
		Accreditation ID: T104704511	Phone Number: (303) 425-6021
			Fax Number: (303) 425-6854
Kaprie Surprenant 4036 Youngfield St Wheat Ridge, Colorado 80033			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	1/31/2021
	Calcium	200.7	1/31/2021
	Conductivity	2510B	1/31/2021
	Hardness	2340B	1/31/2021
	pH	150.1	1/31/2021
	Phosphate	300.0	1/31/2021
	TOC	5310C	1/31/2021
	Turbidity	2130B	1/31/2021
	UV254	5910B	1/31/2021

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<b>TestAmerica Laboratories, Inc - Savannah</b>			
		Lab ID: <b>T104704185</b>	Approval Date: <b>7/7/2020</b>
		Accreditation ID: T104704185	Phone Number: 912-250-0288
Andrea Teal		Fax Number: (912) 352-0165	
5102 LaRoche Avenue			
Savannah, GA 31404			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	6/30/2021
	Calcium	200.7	6/30/2021
	Chlorite	300.1	6/30/2021
	Conductivity	2510B	6/30/2021
	Hardness	2340B	6/30/2021
	Orthophosphate	365.1	6/30/2021
	pH	4500H-B	6/30/2021
	Silica	200.7	6/30/2021
	TOC	5310B	6/30/2021
	Turbidity	2130B	6/30/2021
	UV254	5910B	6/30/2021
<b>Texas Department of State Health Services</b>			
		Lab ID: <b>T104704297</b>	Approval Date: <b>6/29/2020</b>
		Accreditation ID: T104704297	Phone Number: (512) 776-3368
Carl Hogberg		Fax Number: (512) 776-7294	
1100 W 49 St, MC 1947, PO Box 149347			
Austin, Texas 78714-9347			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	12/31/2020
	Calcium	200.7	12/31/2020
	Conductivity	2510B	12/31/2020
	Phosphate	300.0	12/31/2020
	Silica	4500SI02-E	12/31/2020
<b>Trinity River Authority Central Regional Lab</b>			
		Lab ID: <b>48140</b>	Approval Date: <b>7/7/2020</b>
		Accreditation ID: T104704287	Phone Number: (972) 263-2251
Craig Harvey		Fax Number:	
6500 Singleton Boulevard			
Dallas, TX 75212			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	12/31/2020
	Conductivity	2510B	12/31/2020
	TOC	5310C	12/31/2020
	UV254	5910B	12/31/2020
<b>Upper Guadalupe River Authority</b>			
		Lab ID: <b>48145</b>	Approval Date: <b>4/1/2020</b>
		Accreditation ID: T104704283	Phone Number: (830) 896-5445
Nicole Shepherd		Fax Number: (830) 257-2621	
125 Lehmann Suite 100			
Kerrville, TX 78028			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Conductivity	2510B	12/31/2020
	Phosphate	300.0	12/31/2020

## Approved Drinking Water Laboratories

The following list of laboratories are approved by the TCEQ's Drinking Water Standards Division. The list indicates each approved drinking water analyte and method for each laboratory listed. For questions related to individual laboratory approval please call (512) 239-4691.

<b>Waco Regional Water Quality Laboratory</b>			
		Lab ID: <b>48170</b>	Approval Date: <b>5/26/2020</b>
		Accreditation ID: T104704415	Phone Number: (254) 750-1664
			Fax Number: (254) 750-1651
Steve Junot P.O. Box 2570 Waco, TX 76702-2570			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	12/31/2020
	Calcium	D6919-09	12/31/2020
	Free Chlorine	4500CL-G	12/31/2020
	pH	4500H-B	12/31/2020
	Phosphate	300.0	12/31/2020
	Temperature	2550	12/31/2020
	TOC	5310C	12/31/2020
	Total Chlorine	4500CL-G	12/31/2020
	Turbidity	2130B	12/31/2020
	UV254	5910B	12/31/2020
<b>Wallgren Environmental Services Inc. dba Pollution Control Services</b>			
		Lab ID: <b>TX256</b>	Approval Date: <b>7/1/2020</b>
		Accreditation ID: T104704361	Phone Number: (210) 340-0343
			Fax Number: (210) 658-7903
Chuck Wallgren 1532 Universal City Blvd., Ste 100 Universal City, TX 78148			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Alkalinity	2320B	12/31/2020
	Calcium	200.7	12/31/2020
	Chlorite	300.0	12/31/2020
	Conductivity	2510B	12/31/2020
	Hardness	2340B	12/31/2020
	pH	4500H-B	12/31/2020
	Phosphate	300.0	12/31/2020
	Phosphate	4500P-E	12/31/2020
	Silica	200.7	12/31/2020
	Temperature	2550	12/31/2020
	TOC	5310C	12/31/2020
	Turbidity	180.1	12/31/2020
	UV254	5910B	12/31/2020
<b>Water Utility Services, Inc.</b>			
		Lab ID: <b>TX02604</b>	Approval Date: <b>6/9/2020</b>
		Accreditation ID: T104704311	Phone Number: (281) 290-0704
			Fax Number:
Steve Grychka 21615 Rhodes Road Spring, TX 77388-3026			
	<b>Analyte</b>	<b>Method</b>	<b>Valid Until</b>
	Free Chlorine	4500CL-G	12/31/2020
	pH	150.1	12/31/2020
	Temperature	2550	12/31/2020
	Total Chlorine	4500CL-G	12/31/2020

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### Xenco Laboratories

Lab ID: **T104704215**  
Accreditation ID: T104704215

Approval Date: **7/6/2020**  
Phone Number: (281) 240-4200  
Fax Number: (281) 240-4280

Tanya Harrington  
4147 Green Briar Drive  
Stafford, TX 77477

Analyte	Method	Valid Until
Alkalinity	2320B	12/31/2020
Calcium	200.7	12/31/2020
Chlorite	300.0	12/31/2020
Conductivity	2510B	12/31/2020
Hardness	2340B	12/31/2020
Orthophosphate	300.0	12/31/2020
Orthophosphate	365.1	12/31/2020
Silica	200.7	12/31/2020
Turbidity	2130B	12/31/2020