

Municipal Setting Designations

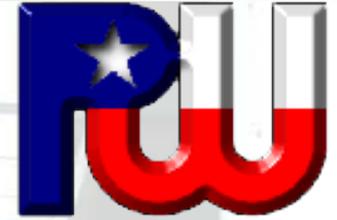


MSDs: Another tool for Houston

Jedediah Greenfield
Program Manager

Municipal Setting Designations (MSDs)

Agenda



■ City of Houston - Programmatic

- What an MSD is
- Who the MSD impacts
- Steps in the MSD process
- Questions / Comments**

■ MSD Applicant - Technical

- Specific information on the site
6601 Harrisburg
- Questions / Comments**



Why Are We Here



- Inform you about an MSD application
 - METRO
- Explain what an MSD is and what it does for the applicant, the local community, and the City
 - Protection of Public Health
- Receive public comments



MSD Notice Letters



CITY OF HOUSTON
Public Works and Engineering Department

Annie D. Parker
Mayor

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

www.houstontx.gov

February 3, 2010

RE: MSD Application #2009-022-FCE
1111 Lockwood Drive, Houston, TX 77020

Dear Recipient:

Enclosed is a public meeting notice about an upcoming meeting in your area. This is an informational meeting about a property at 1111 Lockwood Drive, Houston, TX 77020 that has contaminated groundwater. We welcome you to attend the public meeting, but it is not mandatory that you come.

The public meeting will be held at:
3/11/2010
6:00 PM
Ripley House
4410 Navigation, Houston, TX 77011

The following notice will give you additional details about the type of contamination that has been found at the site. Please note: the groundwater contamination at the site is very shallow and is not the groundwater that the City of Houston uses for some of its drinking water. Most of the City's drinking water is now from surface water (Lakes Houston, Conroe, and Livingston).

The purpose of this public meeting is to inform you, the nearby neighbors and well owners, about the Municipal Settings Designation (MSD) program and the application. During the meeting a representative from the city will talk about the MSD program and then the MSD applicant will talk about the site. You may come to the meeting just to listen or you can share a comment. Comments can be given in person at the meeting or you can send them to the State of Texas and/or to the City of Houston at the following addresses.

Mr. Scott Settemeyer
Remediation Division
Texas Commission on Environmental Quality
P.O. Box 13087, MC-225
Austin, Texas 78711.

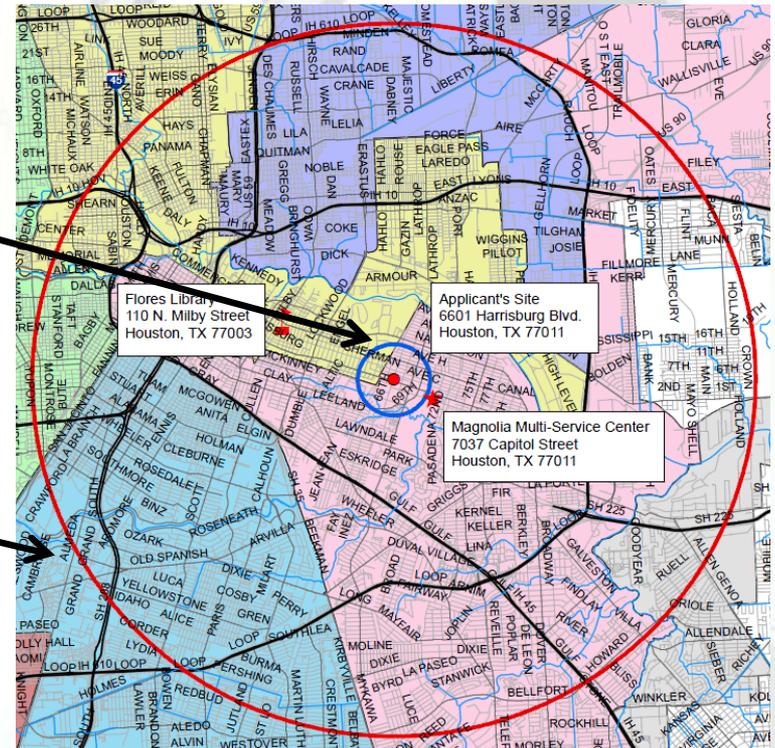
Richard Chapin
Public Works and Engineering Department
City of Houston
611 Walker, 19th Fl.
Houston, Texas 77002
msd@cityofhouston.net
(713) 837-0928

A MSD is the way the city can legally say that the contaminated groundwater at a property cannot be used for drinking water now or in the future, thereby protecting public health. It may also help a contaminated site develop or redevelop because the state's requirements to clean up contaminated groundwater may be set at levels based on this restriction. The MSD does not excuse the applicant from clean up activities such as removing the surface soil or reducing other risks to the public.

Council Members: Brenda Stapp, Jeni Johnson, Anna Cullenbird, Wanda Adams, Mike Sullivan, Al Hoang, Oliver Pennington, Edward Gonzalez, James D. Rodriguez, Stephen C. Canale, Sue Lovell, Melissa Rodriguez, C.O. "Red" Bradford, Amanda de Jesus, Constanza Gonzalez, Green

Property Owners
First-Class Mail
½-Mile Radius
City Requirement

Water Well Owners
Certified Mail
5-Mile Radius
State Requirement



If you received a notice through certified mail that means you have a water well according to the State's records

Municipal Setting Designations (MSDs)

Water Well Information



- The State of Texas maintains the database for water well information
 - Texas Water Development Board
 - **(512) 463-7847**
- State Law requires notices to water well owners within 5-miles of the site
- The City cannot remove or correct information regarding water wells



Who the MSD Impacts



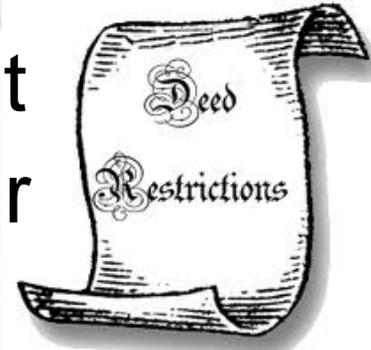
- Property Owners on the MSD Application
 - Unless you are the applicant:
 - An MSD **DOES NOT AFFECT** your property
 - An MSD **DOES NOT AFFECT** your water well
 - There are **NO REQUIREMENTS** on you
- Drinking water supplied by the City is not affected



What an MSD is



- **Voluntary** deed restriction to prevent the use of contaminated groundwater
- An MSD is the way a property owner can **legally** say that the contaminated groundwater at the property cannot be used now or in the future
- Another tool to address groundwater contamination



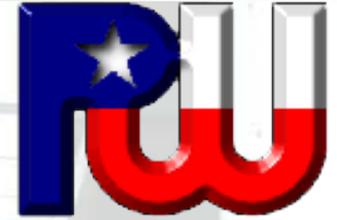
City Water Supply



- Houston's drinking water comes from either deep aquifers (20%) or surface water (80%)
 - Surface water supply
 - Lake Houston
 - Lake Conroe
 - Lake Livingston



Environmental Protection in Texas



- The State of Texas has jurisdiction for environmental protection
 - Texas Commission on Environmental Quality (TCEQ)

- Environmental Complaints



- By Phone: 1-888-777-3186
- Online: <http://www5.tceq.texas.gov/oce/complaints/>



- By Phone: 311
- Online: http://webintake.houstontx.gov/web_intake/Controller

MSD Program



- **State Program
Created in 2003**

- Texas Commission on Environment Quality (TCEQ)



- **City Program
Created in 2007**

- Public Works & Engineering



Environmental Cleanup



- The MSD is only one step in the cleanup process
- An MSD does NOT excuse the applicant from reducing risks to the public
- Responsible Parties are always responsible



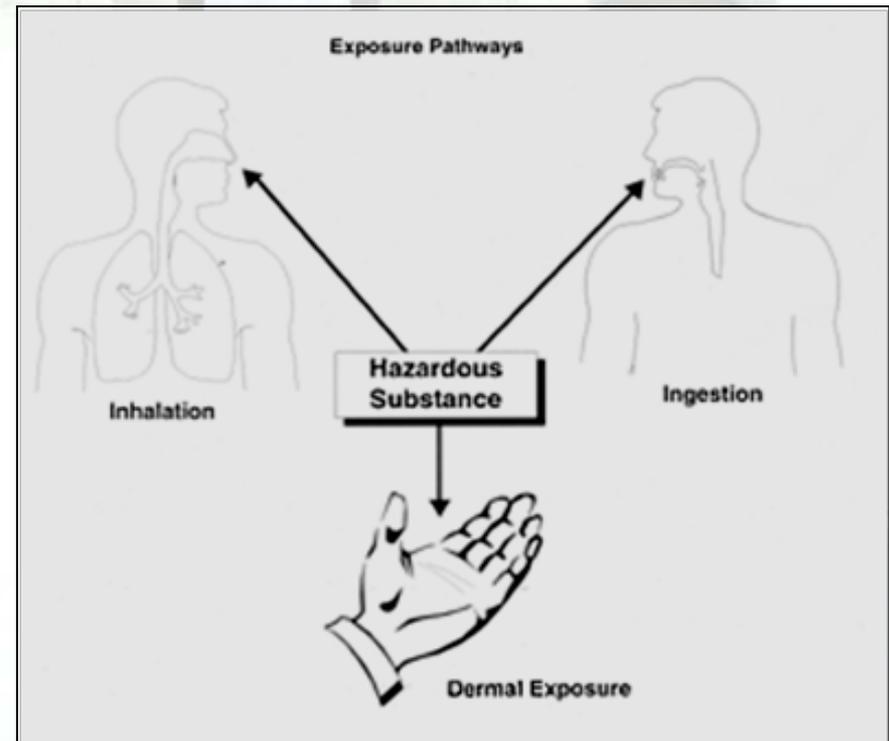


Exposure Pathways

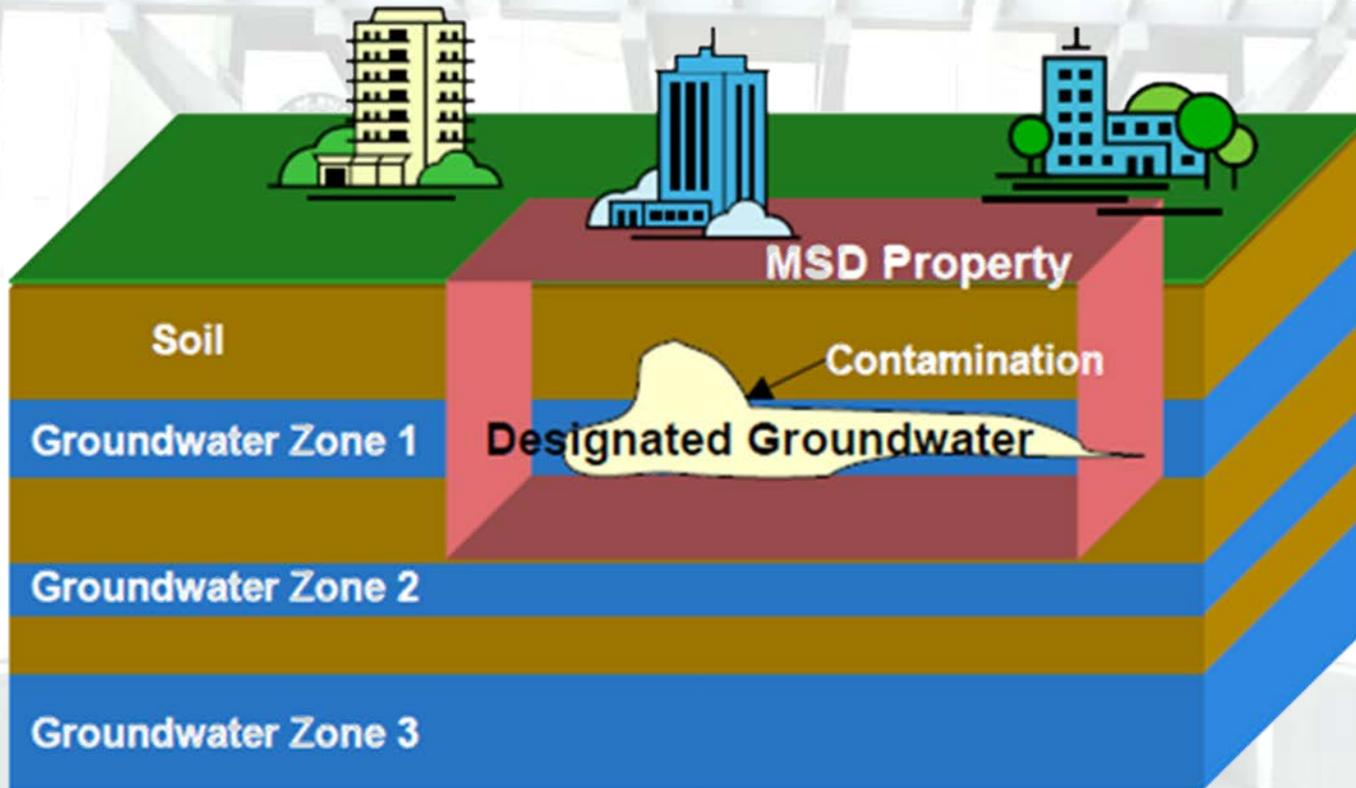
- Cleanup Programs are based on public exposure to contaminants and reducing public health risks

- Exposure Pathways

- ~~Ingestion~~
- Inhalation
- Contact (dermal)
- Soil
- Groundwater to surface water
- Ecological



Shallow Contamination

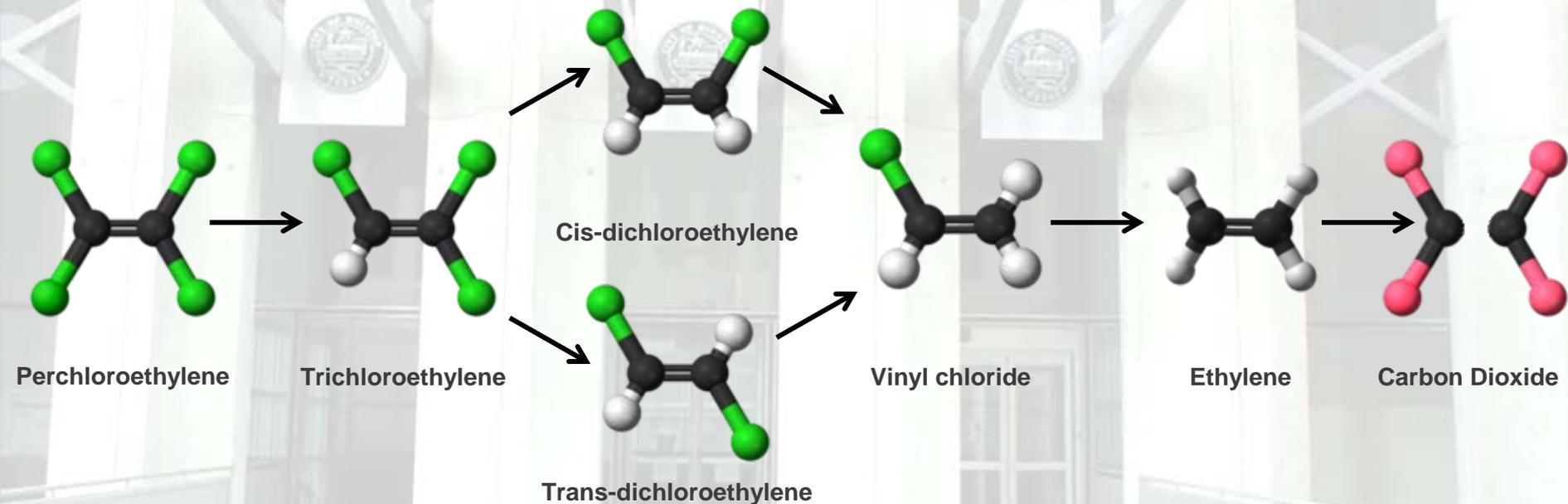


Impacted groundwater is typically between 20 and 60 feet below the surface.

Drinking Water Supply Wells typically get water from 600 feet or deeper below the surface.

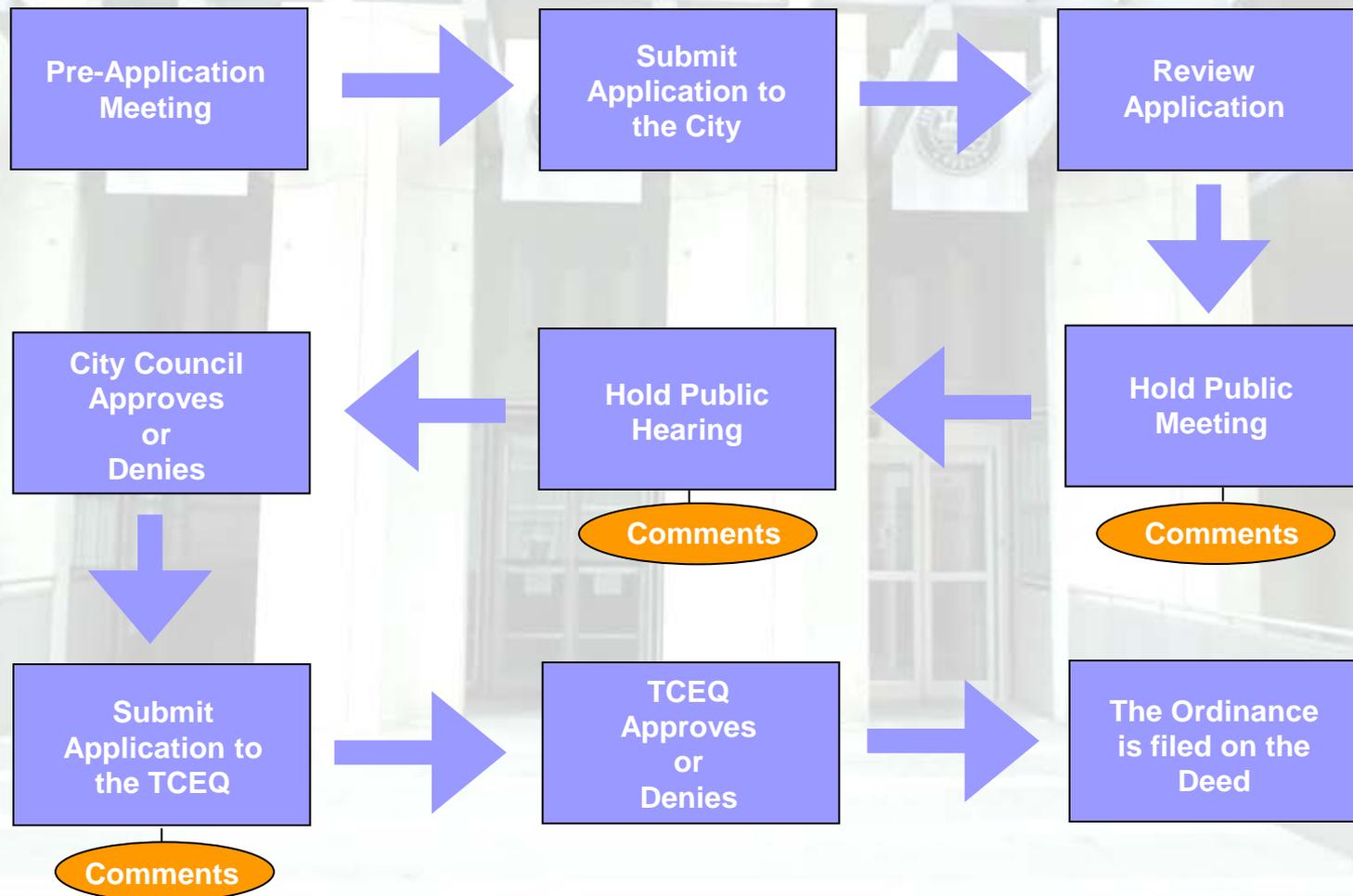
- *Please Note: Houston has shallow contaminated groundwater scattered across the City*

Natural Attenuation



This process takes decades, but is found to be the most efficient strategy.

Steps in the Process



City's Requirements of the Applicant



- Enrollment in a State or Federal cleanup program
- Thorough investigation
 - Data must show that the groundwater plume is stable or decreasing, and delineated.
- A **third party** Engineer (P.E.) or Geologist (P.G.) must certify application



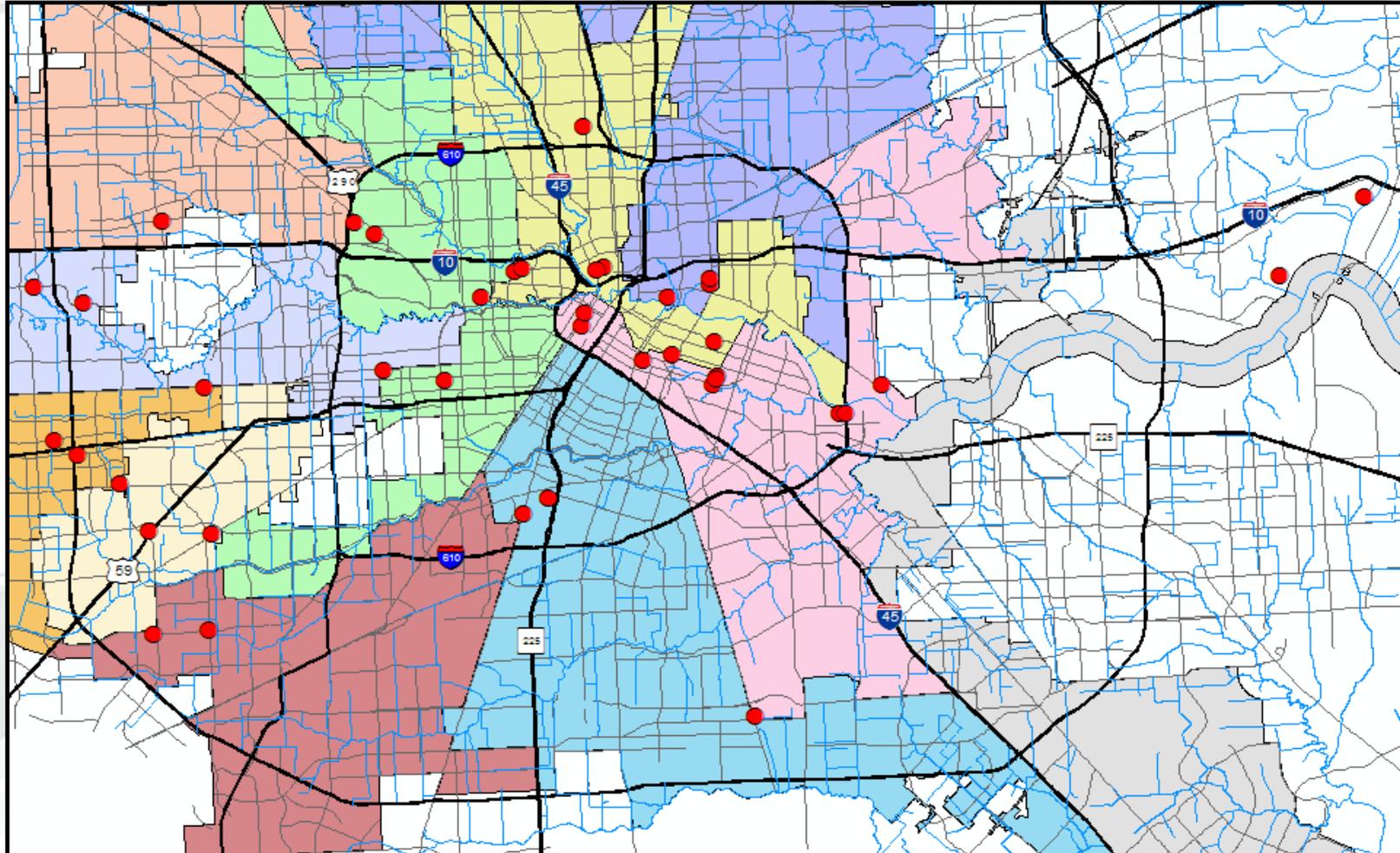
Why Support An MSD?



- Protects the public from consumption of contaminated groundwater
- Encourages clean-up of contaminated sites
- Promotes redevelopment of under-utilized properties



MSD Sites in Houston



Municipal Setting Designations (MSDs)

MSD Application



- Flores Library
reference desk
- 110 North Milby
Houston, TX 77003

The MSD Website



City of Houston
Home | I Want To... | Government | Benefits | Business | Departments | Visitors | En Español

Home > Planning > Municipal Settings Designation

Public Works and Engineering

Department Links

- PISE Home
- Engineering and Construction
- Planning and Development
- Public Utilities
- Resource Management
- Street and Drainage
- Traffic Operations
- Question Office
- PISE Programs
 - Green Building
 - Houston Business
 - Curial the Oasis
 - Small Business Development Group
 - Water Education
 - Waterworks Education Center

Municipal Settings Designation

Jedediah Greenfield, Program Manager

City of Houston MSD Application - Updated 1/10/12

Application Form

MSD Calendar | MSDs Completed | MSDs in Review

History:

In 2003, the Texas Legislature authorized the creation of MSDs, which would designate an area in which the use of contaminated groundwater is prohibited from use as potable water. The law is administered by TCEQ. The intent of the legislation is to encourage redevelopment of vacant or abandoned properties while protecting the public health.

On August 22, 2007, City Council approved an Ordinance amending Chapter 47 of the Code of Ordinances by adding Article 4.021 relating to groundwater, which will provide a process for assessing or not supporting a Municipal Setting Designation (MSD) application to the State. The City's program becomes effective November 1, 2007.

General Information:

- The sites that could apply for a MSD are already contaminated.
- The process requires that an applicant must participate in one of the cleanup programs administered by Texas Commission on Environmental Quality (TCEQ) or EPA.
- A MSD only alleviates the requirement that property owners address the risk of consuming groundwater. Assessment would still be required for other means of exposure such as:
 - Installation of seeps
 - Contact with contamination during construction projects
 - Ecological impacts, such as, seepage into nearby waterways
- Establishing a MSD does not remove any liability from the property owner, nor does it shift any liability to the City.
- MSDs will not be approved within a Well Head Protection area and no MSD may be approved unless the site is already served by City water or is capable of being served by City water, at the applicant's expense.
- MSDs prohibit the use of groundwater as potable water. In the City's ordinance, potable water is defined as water that is used for ingestion, production of food or drink products intended for human consumption, drinking, bathing, laundry or cooling purposes.

Forms and Information

- Public Water Supply Serviceability Policy Statement
- Application Form
- Fee Schedule
- Certified Mail Spreadsheet Template
- Regular Mail Spreadsheet Template
- City Ordinance
- Ordinance Amendment

FAQ:

- Frequently Asked Questions for Application Process
- Frequently Asked Questions for MSD's (English)
- Frequently Asked Questions for MSD's (Spanish)

Other Websites of Interest:

TCEQ - Application Form

TCEQ - A Guide for Cities

You can request an electronic copy of the full application by e-mail to: msd@houstonix.gov

For more information concerning the application or process of an MSD in Houston, call:

Jedediah Greenfield
Program Manager
PISE/Planning & Development Services Division
PH 832.384.9000
FH 832.385.2734

Home | 211 City Helpline | En Español | Contact Us | FAQs | Privacy Policy | Accessibility

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Municipal Settings Designation

Jedediah Greenfield, Program Manager

City of Houston MSD Application - Updated 1/10/12

Application Form

MSD Calendar | MSDs Completed | MSDs in Review

www.houstonmsd.org

Municipal Setting Designations (MSDs)

The MSD Website



MSD in Review

Carol Ellinger Haddock , Assistant Director, P.E.

MSD in Review

Differential Development – 1994, Ltd. #2008-012-DD (Lantern Lane Shopping Center Site)	
Executive Summary	
Full Application	
Hoerbiger Corp. of America Inc. and Morgan Advanced Materials and Tech. Inc. # 2009-016-Milby (Milby Street Site)	
Executive Summary	
Full Application	
Estate of Isadore and Esther Robinson # 2009-020-GMI (Former Gulf Metals Industries Landfill Site)	
Executive Summary	
Full Application	
Public Meeting Notice	
Public Meeting Presentation	
Silver Bishop Holdings, LP #2010-025-NOR (Navigation-Norwood Site)	
Executive Summary	
Full Application	
Public Meeting Notice	
Public Meeting Presentation	

MSD Calendar

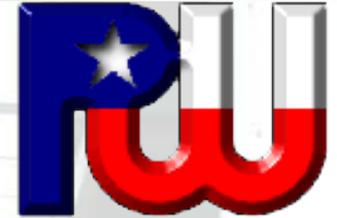
Carol Ellinger Haddock , Assistant Director, P.E.

Municipal Settings Designations Calendar

Information on the latest meetings, conferences, and events.

Date	Time	Event
07/14/2010	9:00 AM	Public Hearing: FPA/PinPoint Mykawa, LLC. (MSD # 2009-020-GMI) City Hall Council Chambers, 2nd Floor, 901 Bagby, Houston, TX 77002
07/20/2010	6:00 PM	Public Meeting: Schlumberger Technology Corporation (MSD #2010-027-STC) Judson Robinson Jr. Community Center, 2020 Hermann Dr., Houston, TX 77004
08/03/2010	6:00 PM	Public Meeting: Differential Development - 1994, Ltd. (MSD #2008-012-DD) Tracey Gee Community Center, 3599 Westchase Dr., Houston, TX 77042
08/04/2010	9:00 AM	Public Hearing: BAE Systems Resolutions Corporation, Inc. (MSD #2010-026-FSS) City Hall Council Chambers, 2nd Floor, 901 Bagby, Houston, TX 77002
08/24/2010	6:00 PM	Public Meeting: Board of Regents of the University of Texas System (MSD #2010-028-ACD) Judson Robinson Jr. Community Center, 2020 Hermann Dr., Houston, TX 77004

Public Hearing



- Date: June 12, 2012
- Time: 10:00 AM
- Place: City Council Chamber (Committee Meeting)
Transportation, Technology, & Infrastructure
- Address: 901 Bagby, Second Floor
Houston, Texas 77002

Any person wishing to speak on this issue must arrive at least 15 min early and sign the speakers list located on the front desk.

Contact Information



Jedediah Greenfield
Program Manager

Public Works & Engineering
City of Houston,
1002 Washington, 2nd Floor
Houston, Texas 77002



msd@houstontx.gov
(832) 394-9005

Municipal Setting Designations (MSDs)

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY (METRO)

EAST END CORRIDOR MSD #2012-041-EEC

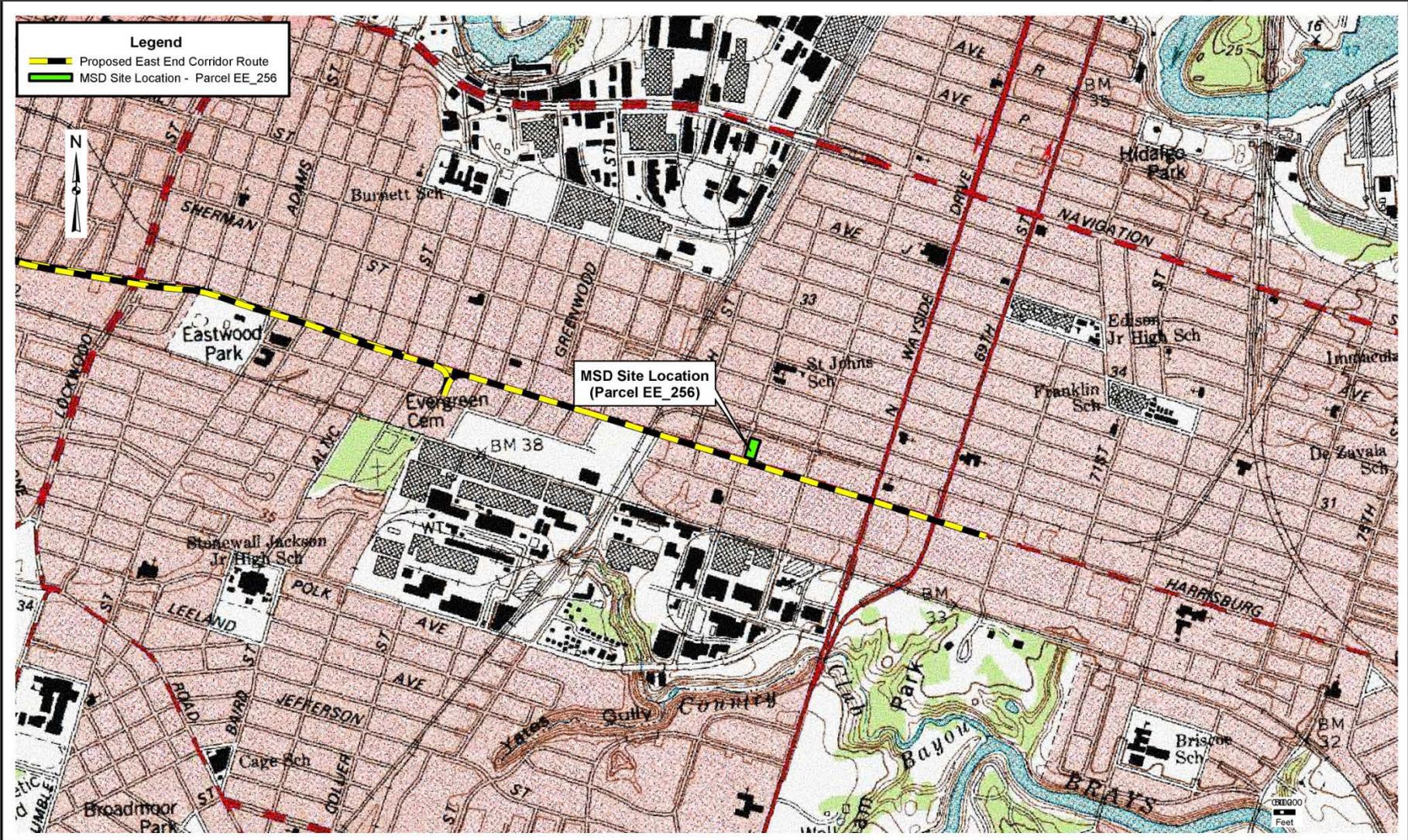
MAY 21, 2012



Presented By:

Michael F. Marcon, P.G.
InControl Technologies, Inc.
3845 FM 1960 West; Suite 195
Houston, Texas 77068
(281) 580-8892





Location of East End Corridor MSD Boundary

Site History

- Historic property uses include laundry, auto dealership, motor and engine repair, machining and grinding operations, tire and battery.
- Most recently, property was occupied by Web Devices which manufacture fall protection, fall arrest systems, and fall protection training.
- Currently the property is vacant and is under redevelopment as part of the METRO East End Transit Corridor.



Environmental Setting

- There are two groundwater bearing units:
 - First shallow groundwater bearing zone is approximately 10- to 22- feet below surface.
 - Second shallow groundwater bearing zone is approximately 38- to 58-ft bgs.
- These groundwater bearing zones are underlain by a thick clay unit limiting further vertical migration.
- Groundwater flow is to the southwest, toward Brays Bayou.
- Brays Bayou is located approximately 0.75-miles down-gradient of proposed MSD boundary.

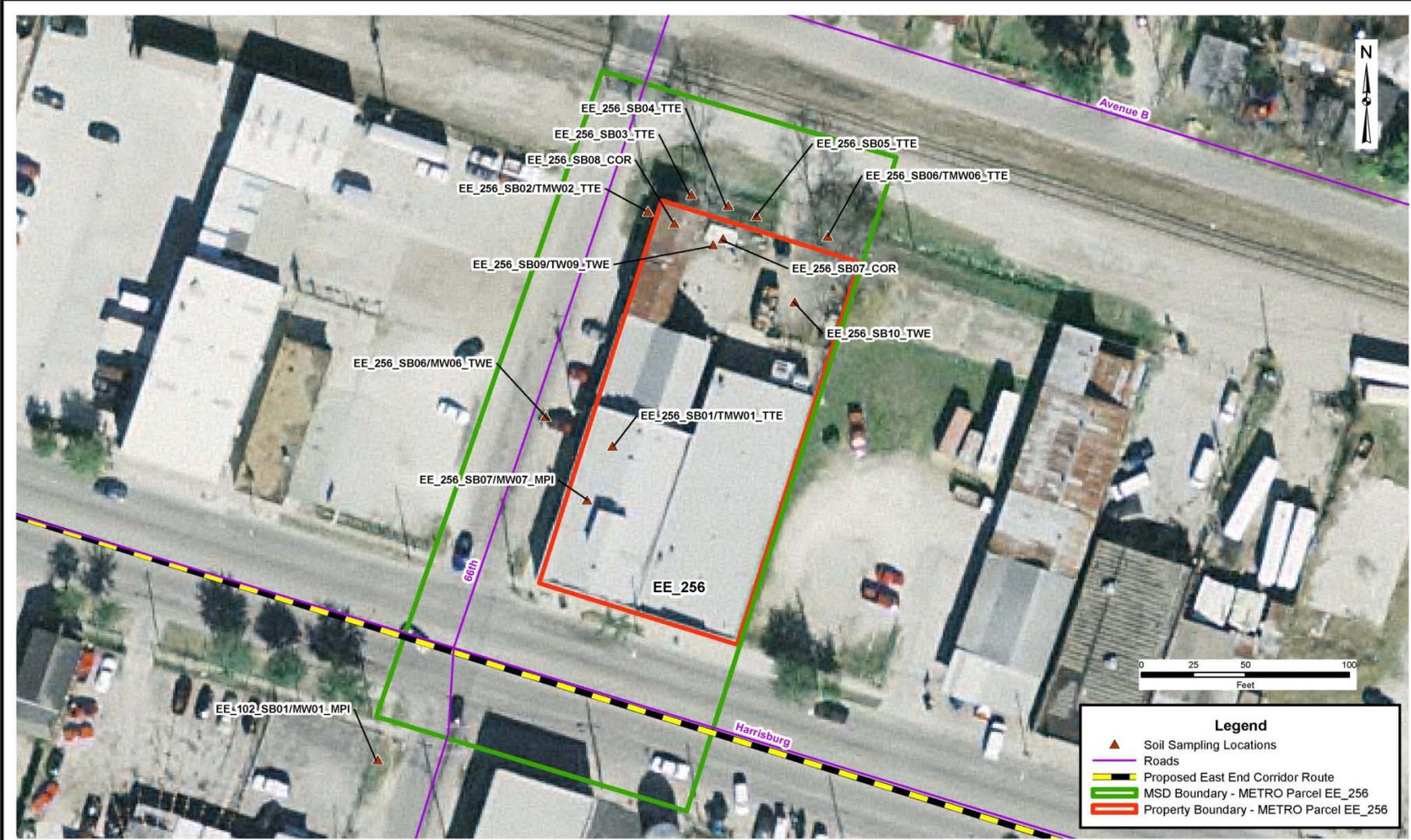


East End Corridor

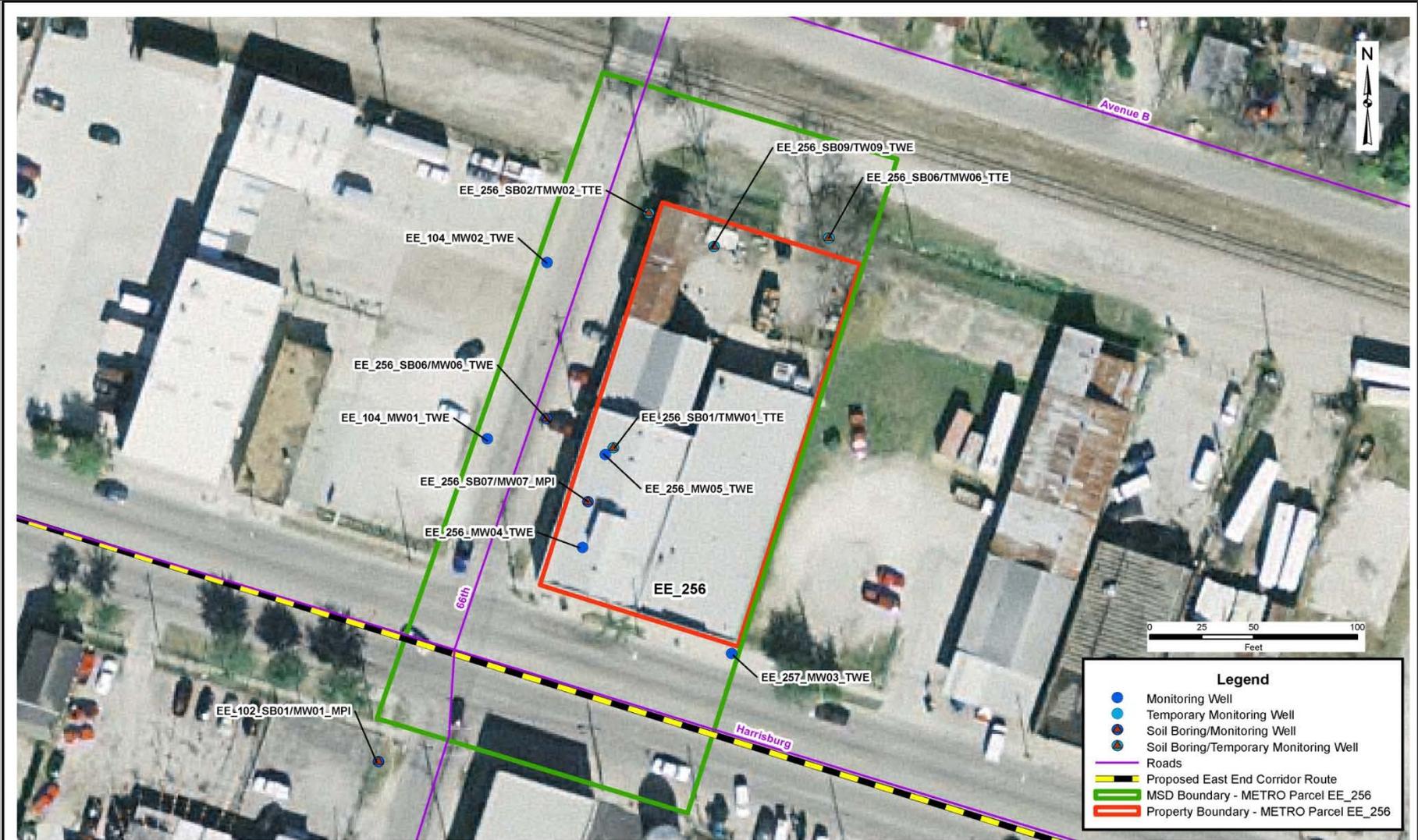
- As part of environmental due diligence, a Phase I ESA was conducted..
- Phase II ESAs were conducted based on conditions reported in the Phase I ESA.
- These investigations have been conducted to assess impacts from historic operations.
- Soil and groundwater samples have been collected as part of these investigations.
- The property was enrolled in the Texas Voluntary Cleanup Program and assigned VCP No. 2354.



Soil Sample Locations



Groundwater Sample Locations



Investigation Results - VOCs

- Areas of affected soil have been fully delineated.
- Groundwater samples collected from monitoring wells had VOCs (PCE, TCE, cis-1,2-DCE, 1,1-DCE and vinyl chloride) at concentrations above regulatory levels.
- The VOC plume is within the proposed MSD Boundary.



VOCs in Groundwater



Are You Exposed? – No

Why?

- First and foremost - Groundwater is not accessible and is not a source of potable or drinking water.
- There are no downgradient users of groundwater.
- Located in a primarily commercial area of Houston. While this area of Houston is currently under redevelopment, the most likely land use will remain commercial.
- Key benefit of MSD process is the MSD is placed in the City's utility database to notify workers when working on property to use proper protective equipment.
- The property owner within the MSD Boundary will not be allowed to install a water well for potable use.





The nearest domestic water well is located almost 1-mile north (up gradient) and completed at depth of 450-ft below ground surface.

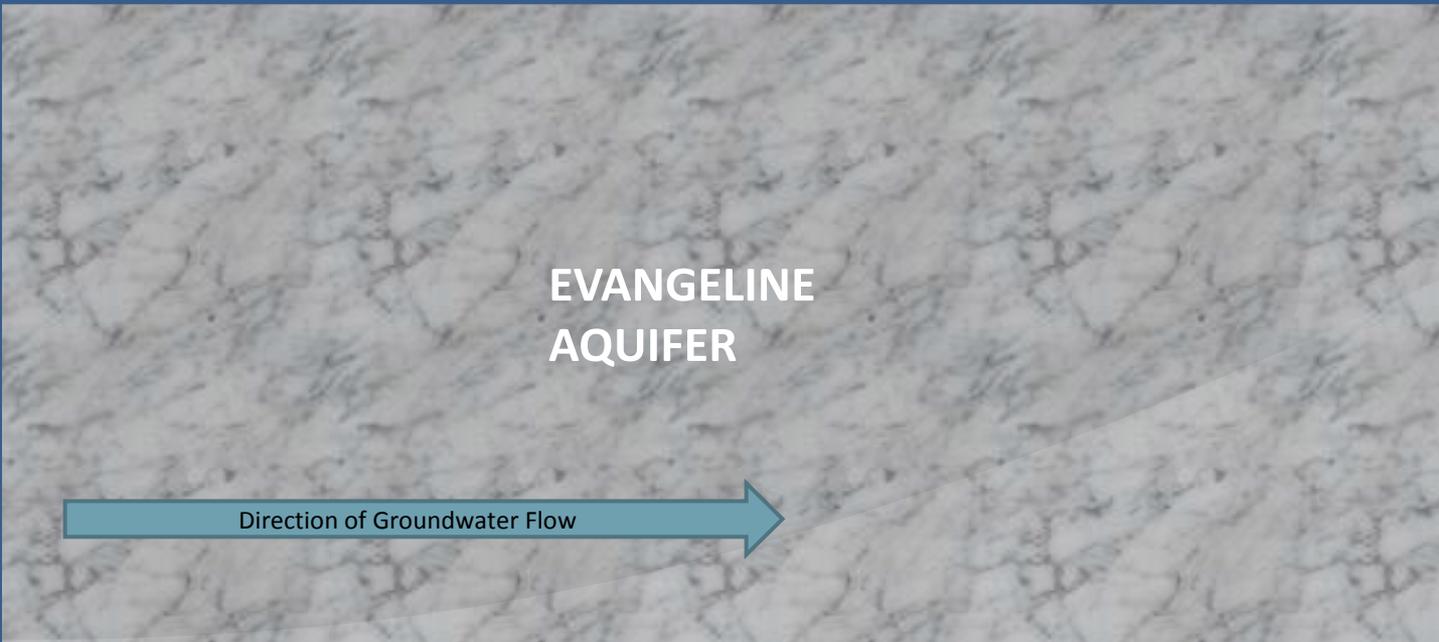
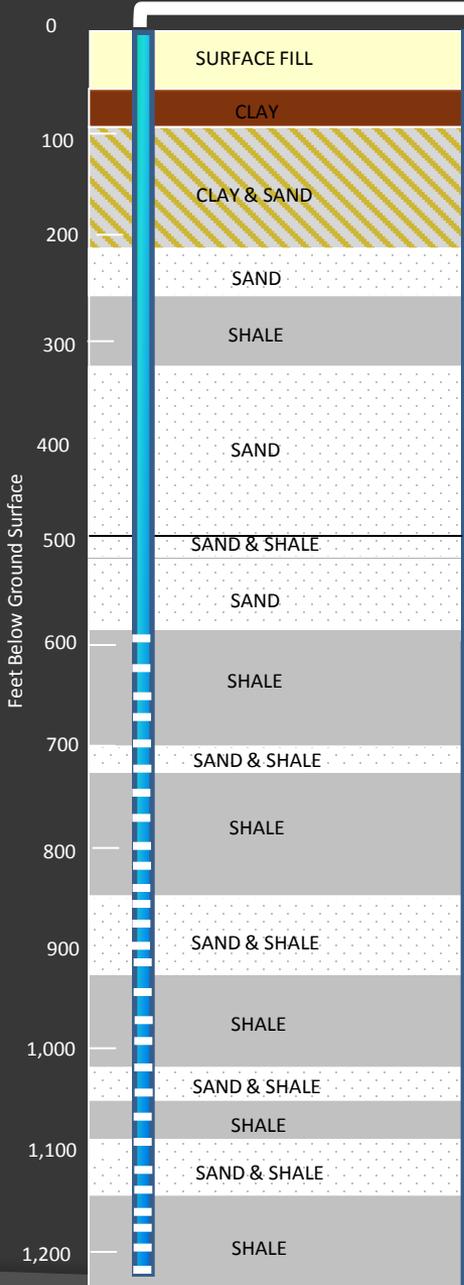
The nearest public water supply well is located approximately 1.02-miles southwest (cross gradient). Owned by City of Houston and completed at depth of greater than 2,000-ft below ground surface.



More than 5,000 feet Separation



MSD



Summary

- Affected groundwater has been vertically and horizontally delineated and is stable.
- The closest active public water supply well is greater than 1-mile away from the subject property.
- The closest domestic well is located almost 1-mile away from the subject property in an up-gradient direction.
- No current exposure to the chemicals present in groundwater. The MSD will prevent the installation of potable water wells on the MSD properties.

