

Municipal Setting Designations



MSDs: Another tool for Houston

Jedediah Greenfield
Program Manager

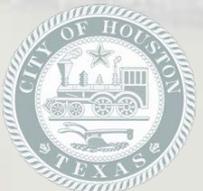


Municipal Setting Designations (MSDs)



Agenda

- City of Houston - Programmatic
 - What the MSD is
 - Who the MSD impacts
 - Steps in the MSD process
 - **Questions / Comments**
- MSD Applicant - Technical
 - Specific information on the site
8600 Commerce Park Dr.
 - **Questions / Comments**



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

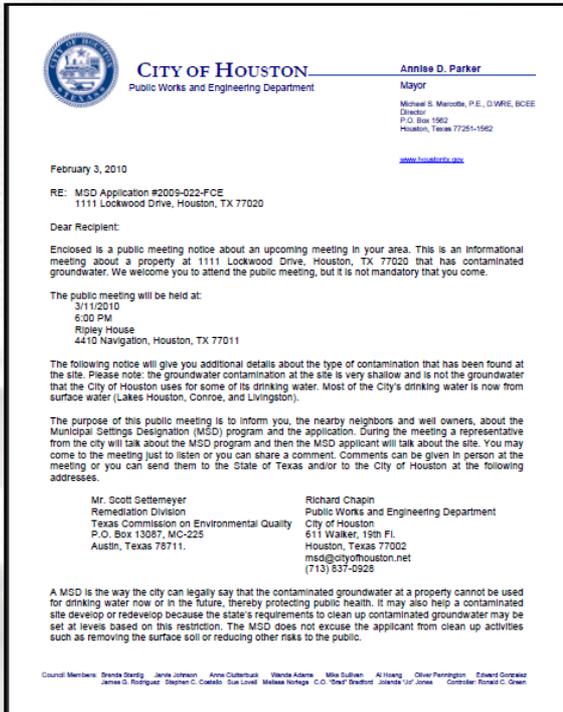
- Online: http://webintake.houstontx.gov/web_intake/Controller



Municipal Setting Designations (MSDs)

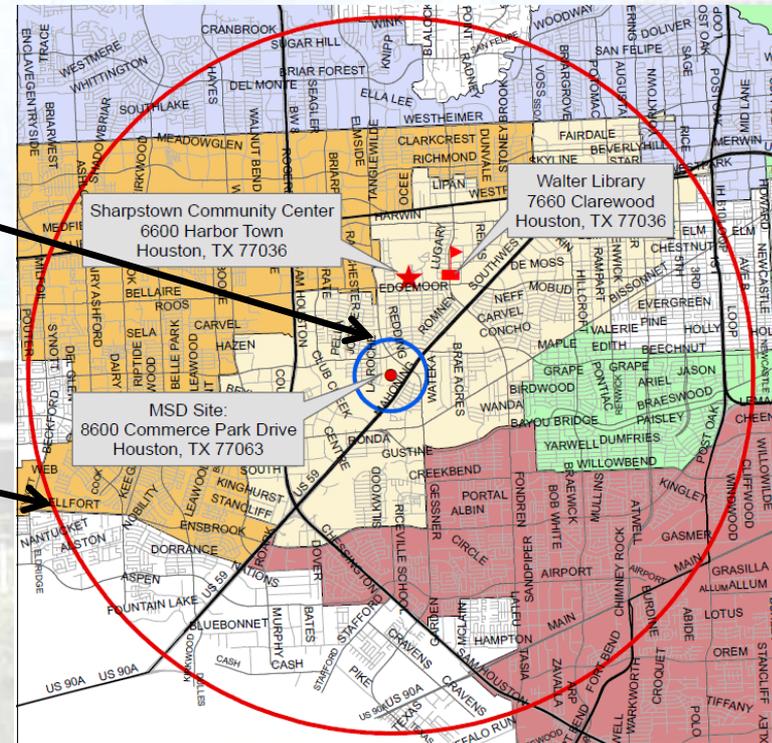


MSD Notice Letters



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)

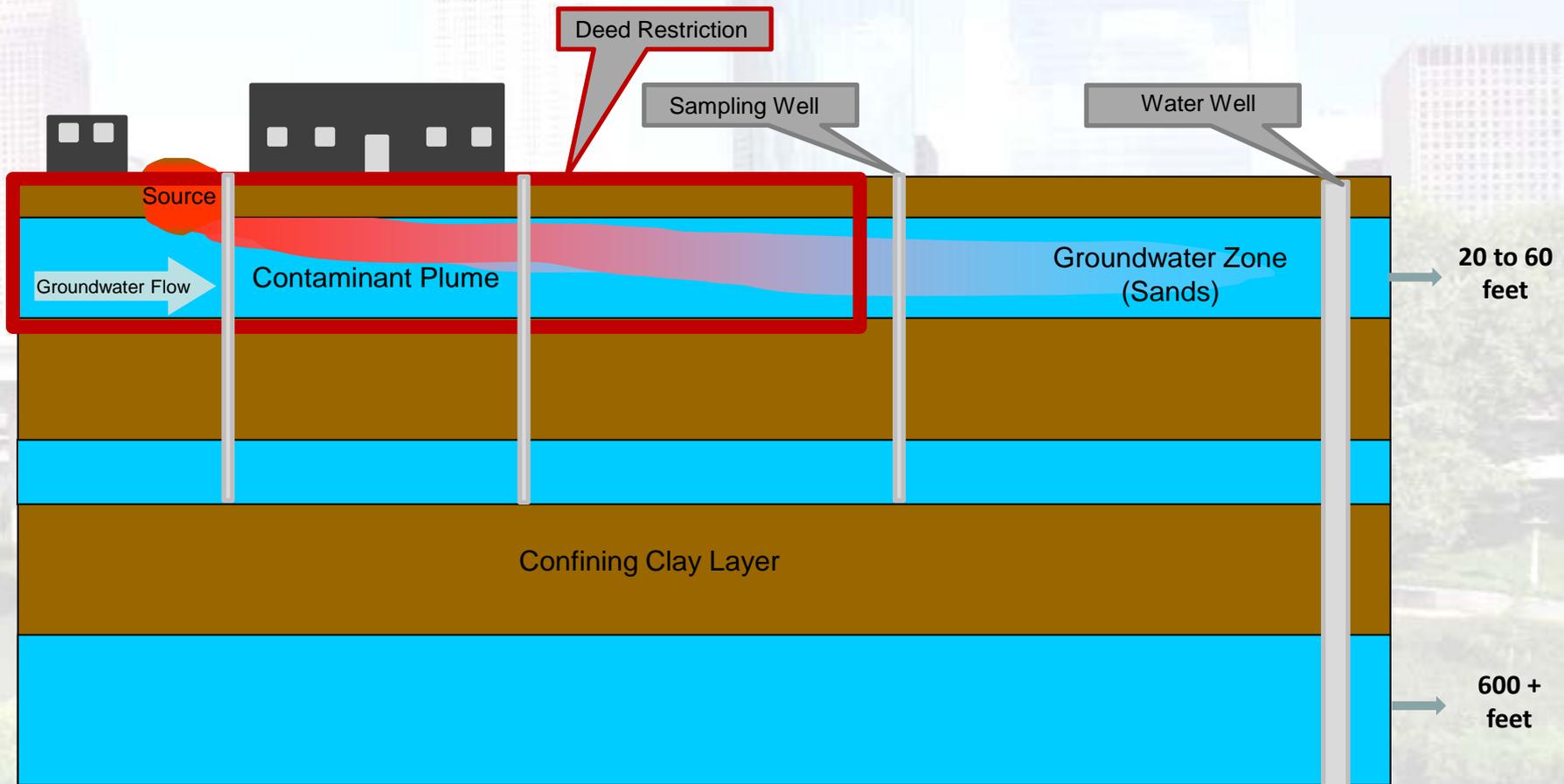


What an MSD is

- **Voluntary** deed restriction to prevent the use of contaminated groundwater
 - No water wells on the subject property for drinking water purposes
 - A legally binding way to ensure the public is not exposed to contaminants



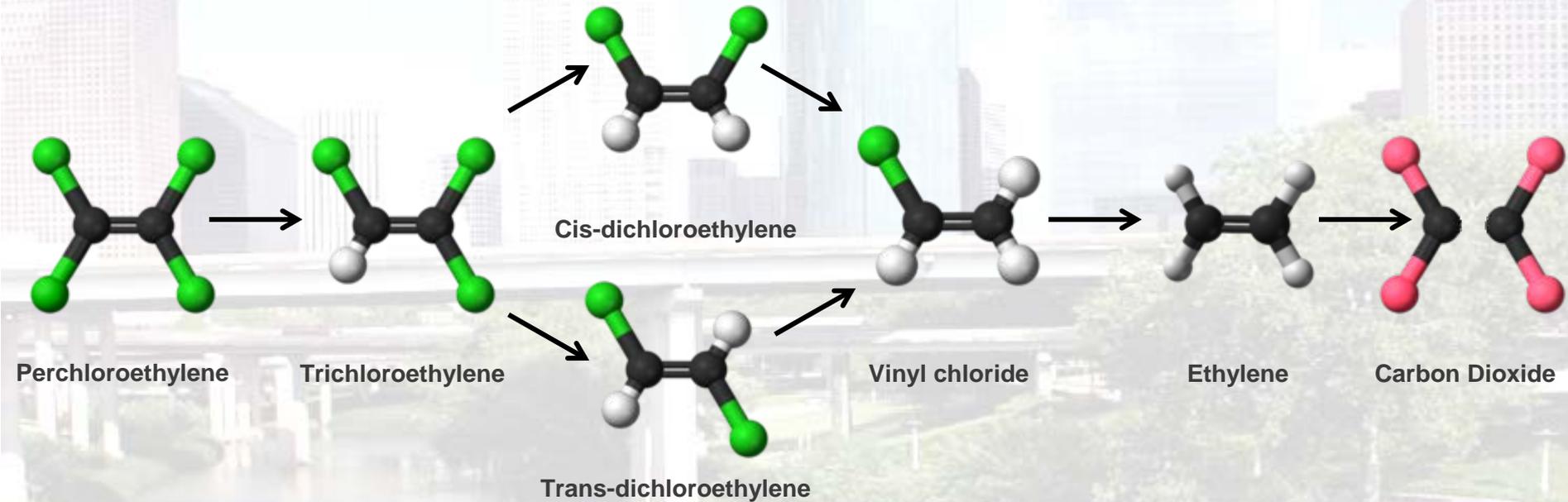
Groundwater Contamination



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



Chemical Degradation



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

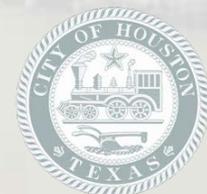
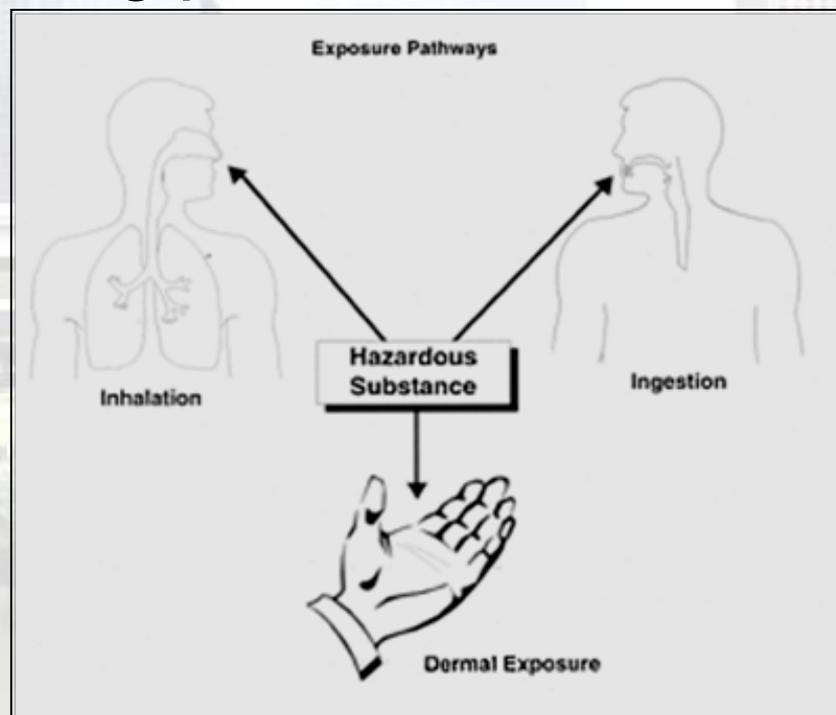


Municipal Setting Designations (MSDs)



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



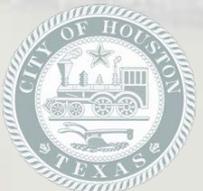
Environmental Cleanup

- 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



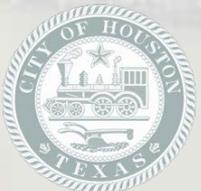
Who the MSD Impacts

- An MSD does not affect you!
 - 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

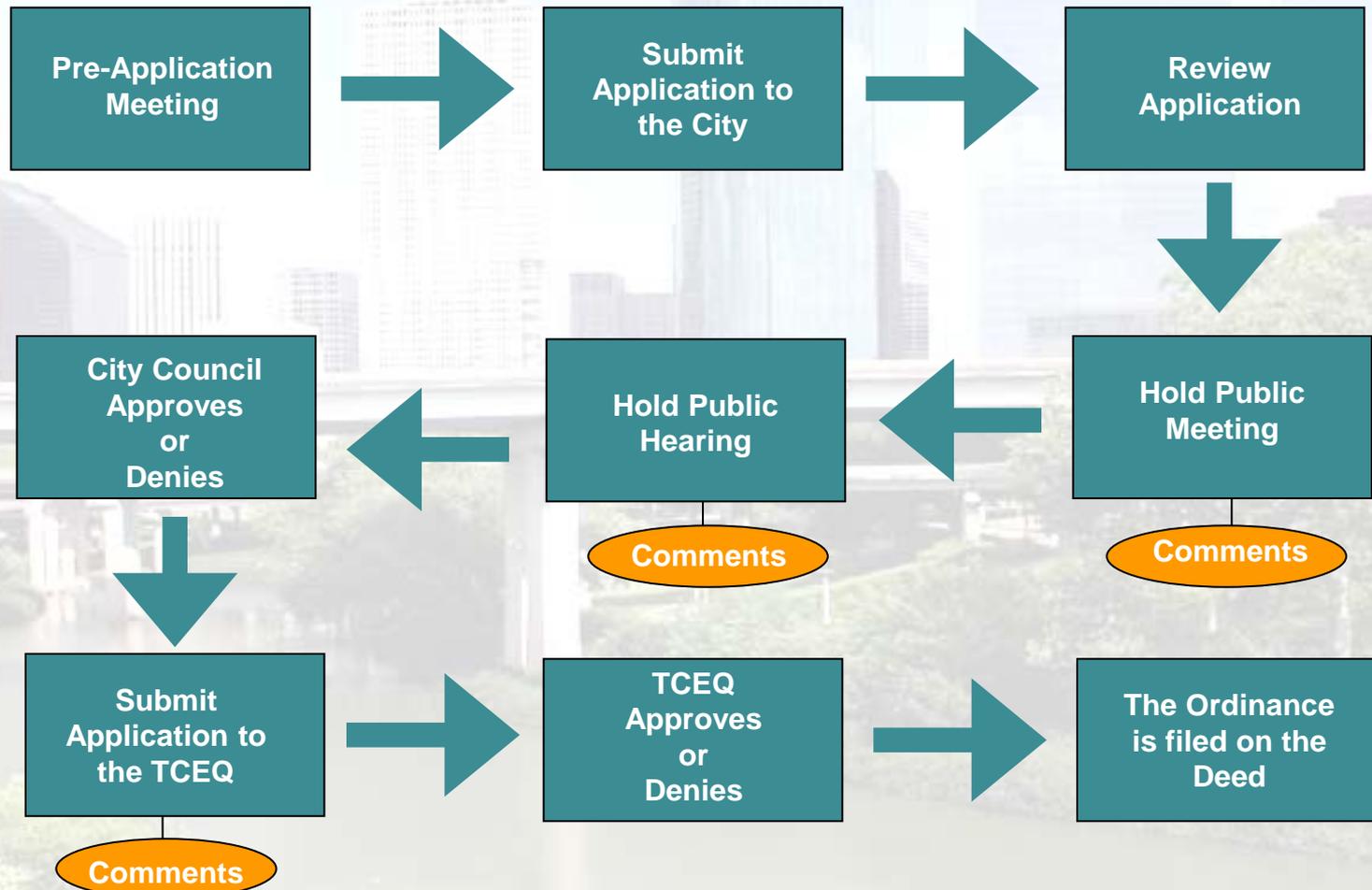


City's Requirements of the Applicant

- 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

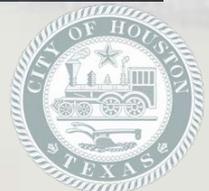


Steps in the Process

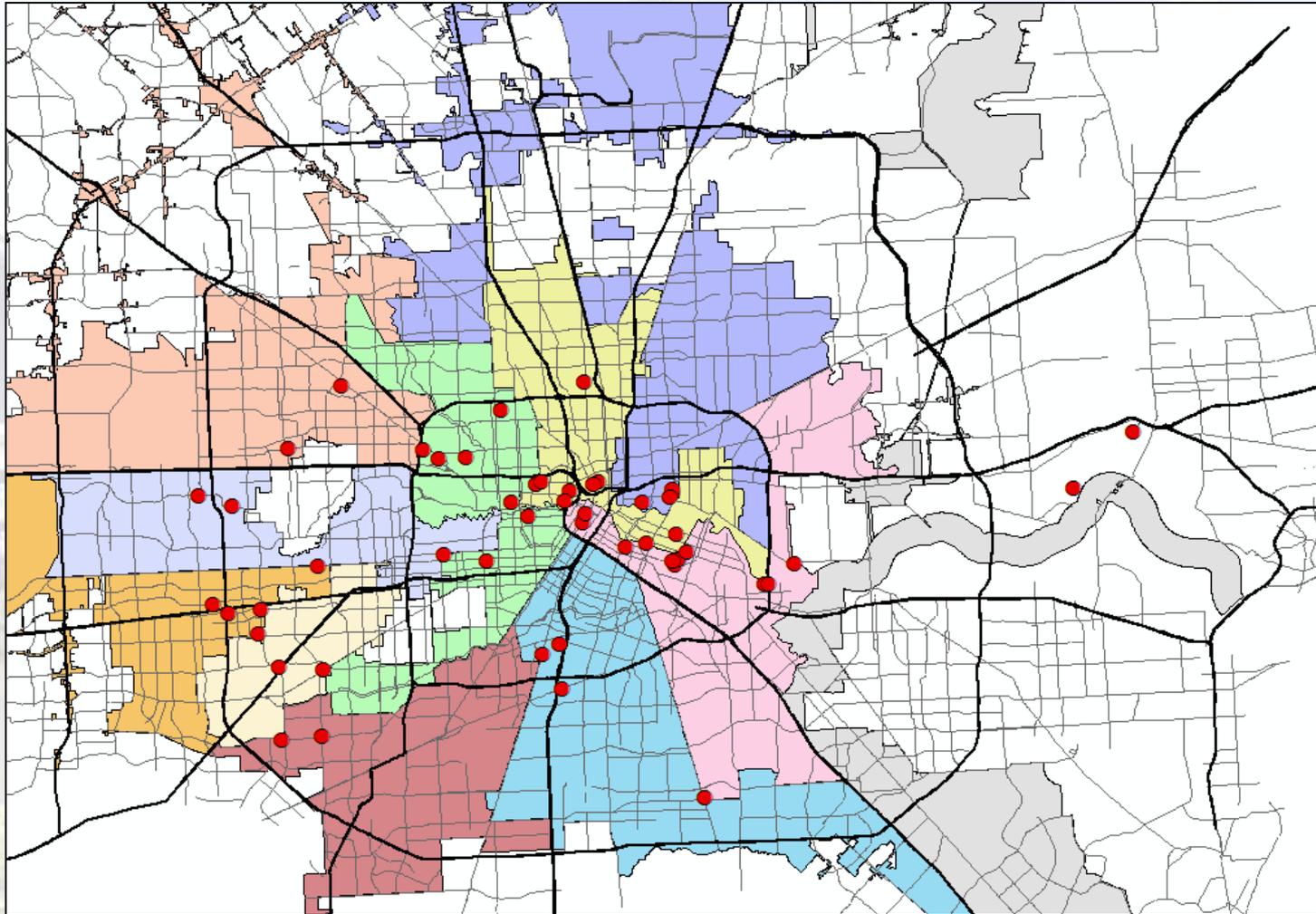


Why Support An MSD?

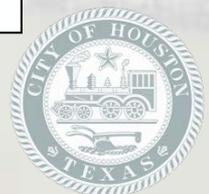
- Protects the public from consumption of contaminated groundwater
- Encourages clean-up of contaminated sites
- Promotes redevelopment of under-utilized properties



MSD Sites in Houston



Municipal Setting Designations (MSDs)



MSD Application Availability

- Walter Library
 - 7660 Clarewood
 - Reference Desk
- Also available online at:
www.houstonmsd.org
 - MSD in Review Page



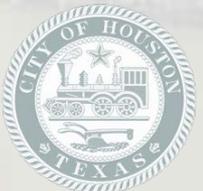
Public Hearing

- **Date:** Thursday, March 21, 2013
- **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.



Municipal Setting Designations (MSDs)



Contact Information

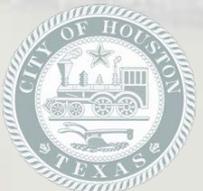
Jedediah Greenfield
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(832) 394-9005



Municipal Setting Designations (MSDs)



WEST FLEX 20, L.P.

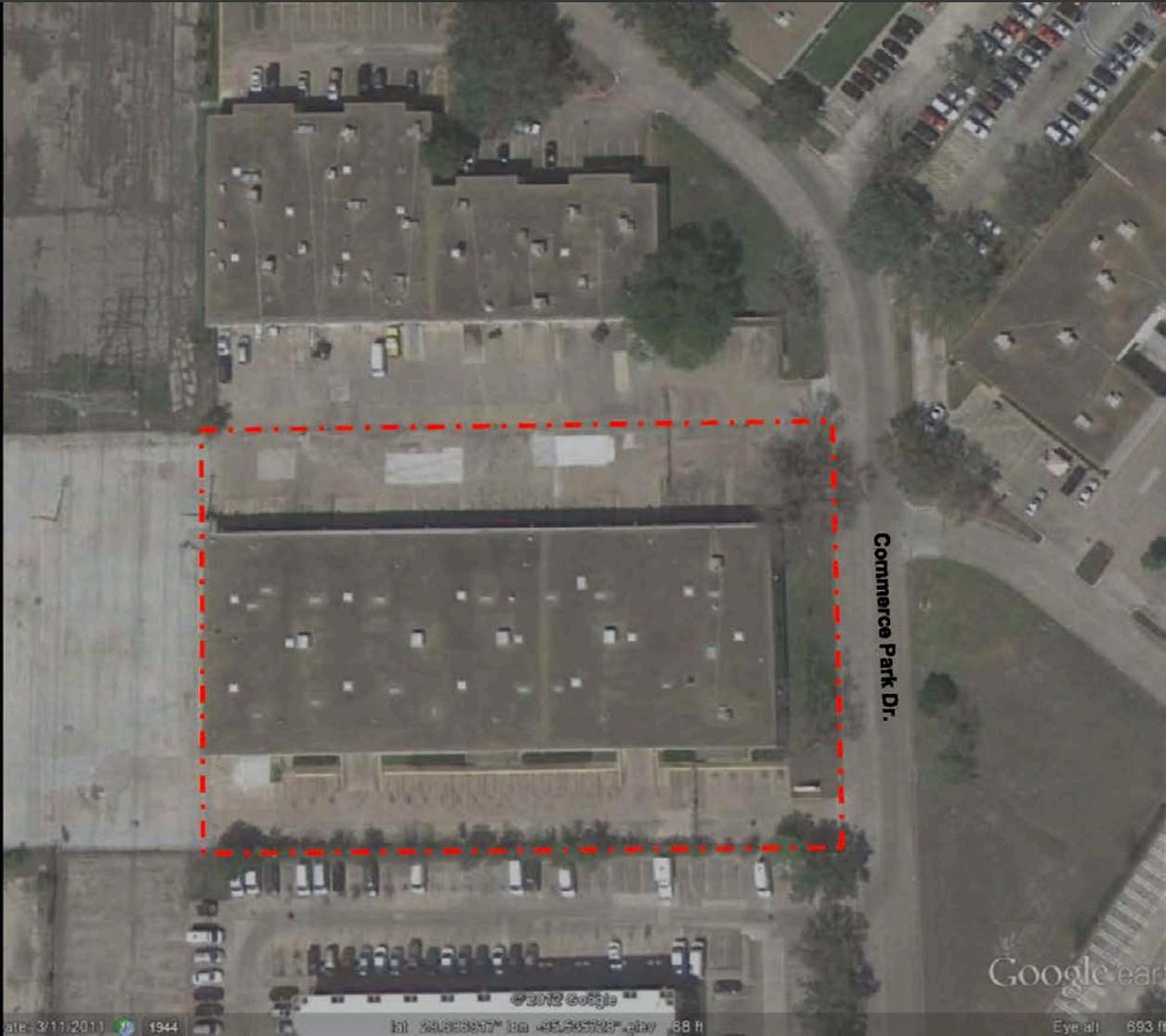
**8600 COMMERCE PARK DR
MSD #2012-052-COM**

FEBRUARY 26, 2013

Presented By:

Michael F. Marcon, P.G.
InControl Technologies, Inc.
3845 Cypress Creek Pkwy; Suite 195
Houston, Texas 77068
(281) 580-8892





Location of 8600 Commerce Park MSD Boundary



Site History

- Historic property uses include
 - Undeveloped Land prior to 1980s
 - A semi-conductor manufacturing (Texas Instruments)
 - A truck maintenance facility (Federal Express).
- Currently the property is vacant.



Environmental Setting

- During a pending property transfer, low concentrations of one chlorinated solvent was identified in one groundwater sample.
- No detections were found in the soil.
- Only one groundwater bearing unit is believed to be impacted:
 - The first groundwater bearing zone is approximately 15- to 30- feet below surface.
- This groundwater bearing zone is underlain by a thick clay unit limiting further vertical migration.
- Groundwater flow is to the southwest.
- Brays Bayou is located approximately 0.43-miles down-gradient of proposed MSD boundary.

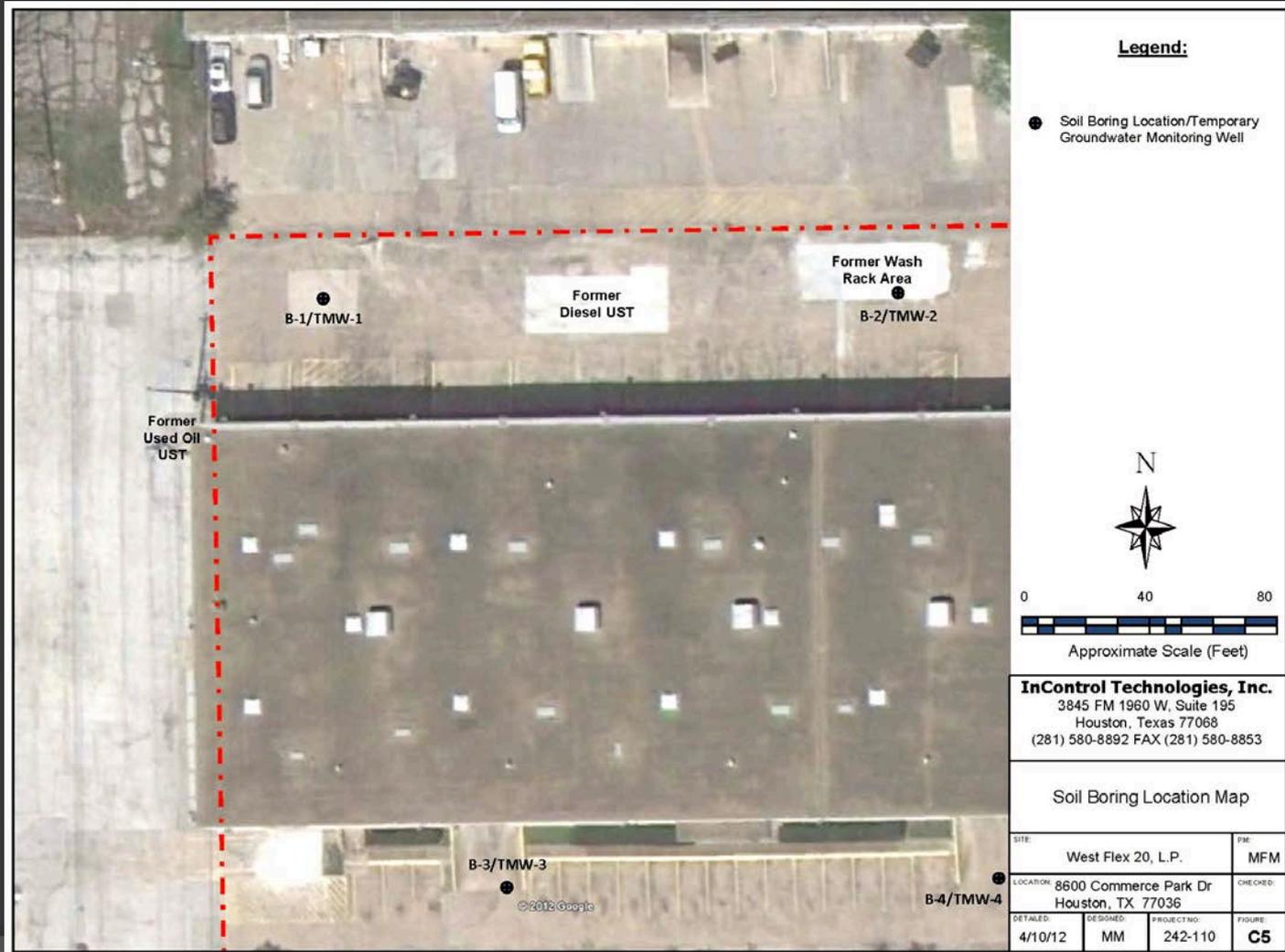


8600 Commerce Park

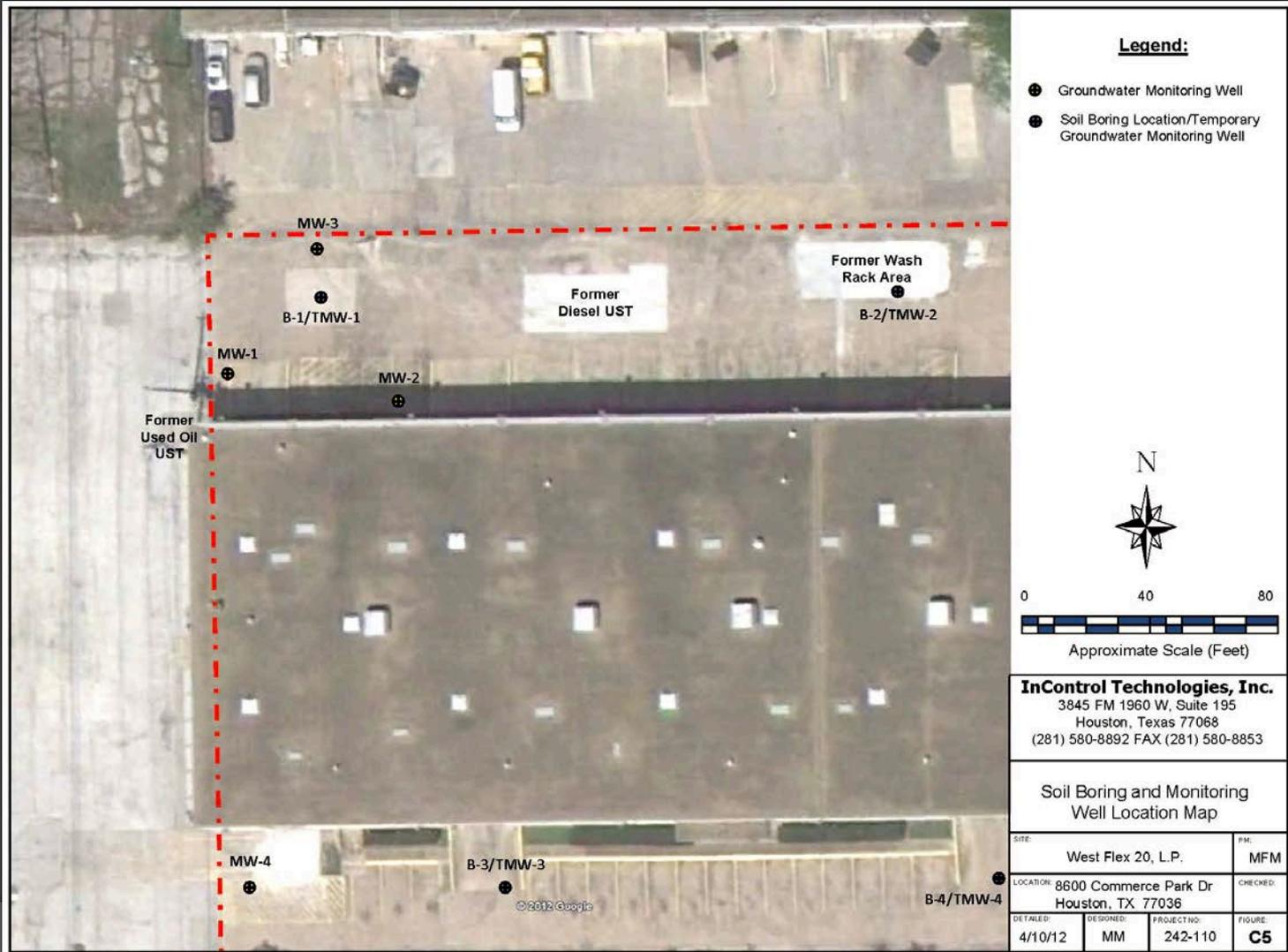
- As part of environmental due diligence, a Phase I ESA was conducted which identified the previous discussed two operators.
- Phase II ESAs were conducted based on conditions reported in the Phase I ESA.
- The investigation was conducted to assess impacts from historic operations.
- Soil and groundwater samples were collected as part of this investigation. Two chlorinated solvent was found in groundwater above a Protective Concentration Limit.
- The property was enrolled in the Texas Voluntary Cleanup Program and assigned VCP No. 2532.



Soil Sample Locations



Groundwater Sample Locations

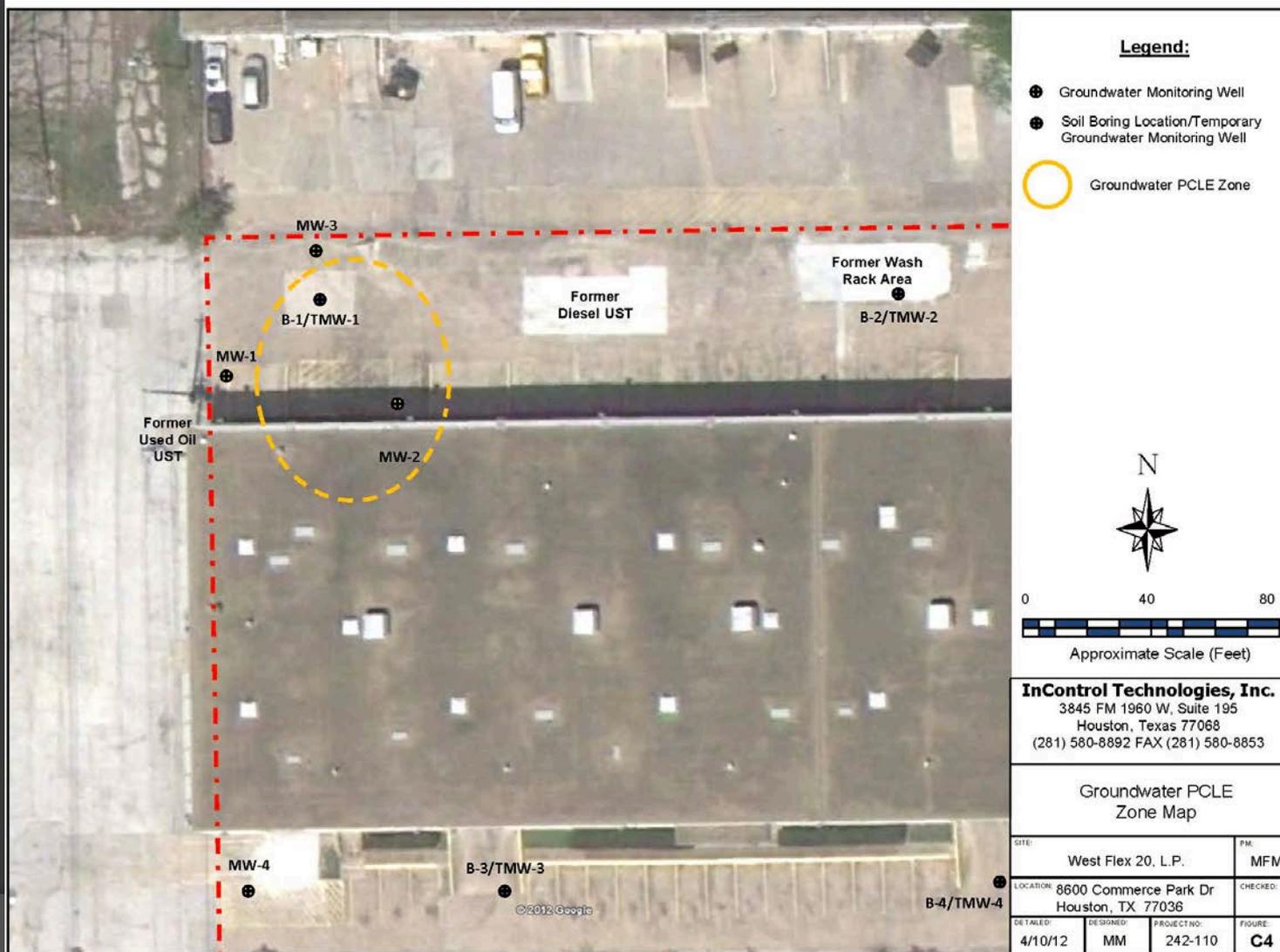


Investigation Results - VOCs

- There are no areas of affected soil.
- Groundwater samples collected from monitoring wells reported VOCs (1,1-DCE and vinyl chloride) at concentrations above regulatory levels.
- The VOC plume is delineated and within the property boundary. There are no offsite impacts. The proposed MSD Boundary includes the subject property only.



VOCs in Groundwater

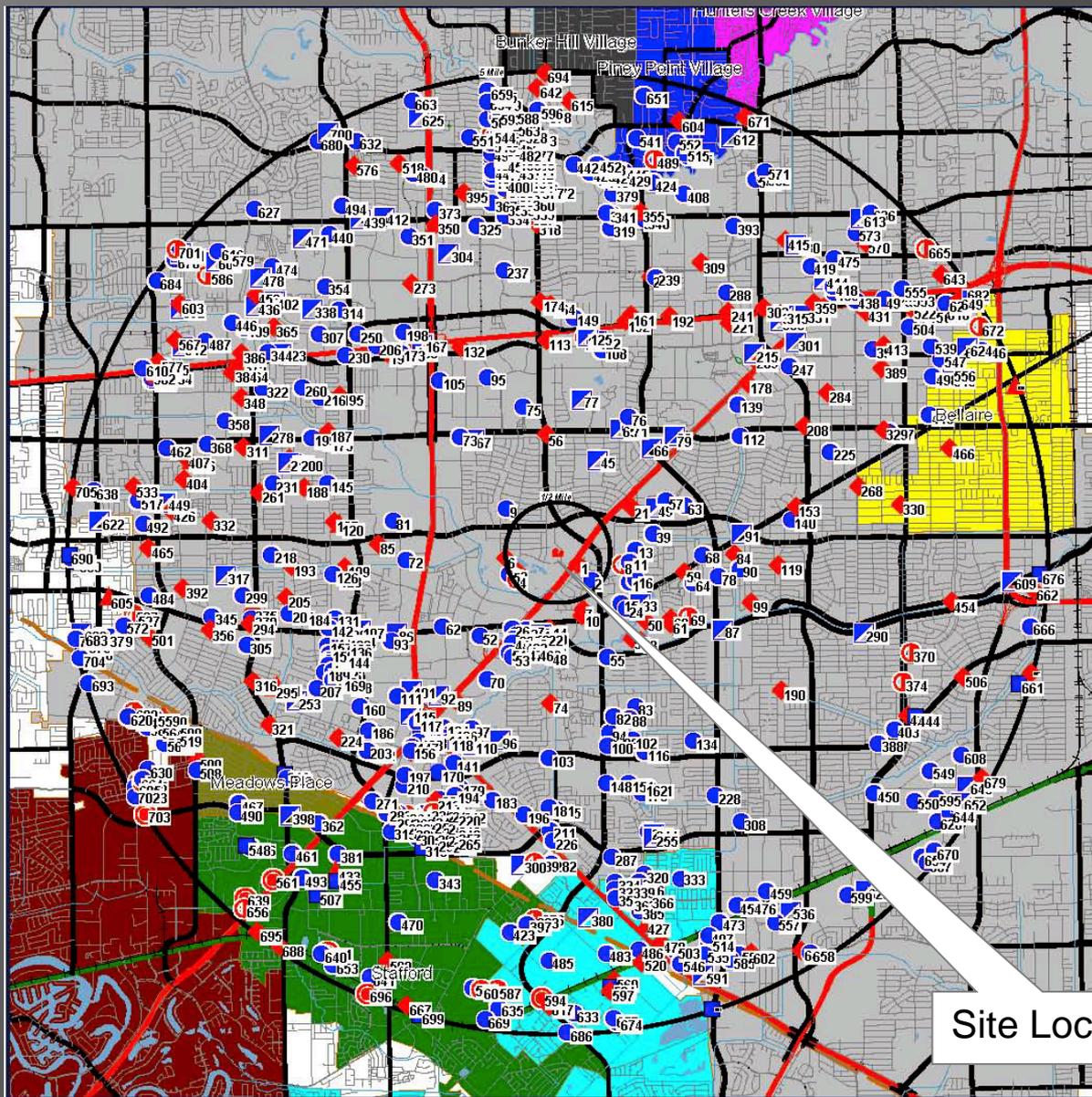


Are You Exposed? – No

Why?

- First and foremost - Groundwater is not accessible and is not a source of potable or drinking water.
- There are no downgradient users drinking the groundwater.
- Located in a primarily commercial area of Houston. In addition, 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.





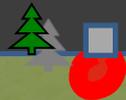
The nearest domestic water well is located 0.42-miles north (cross gradient) and completed at depth of 232-ft below ground surface.

The nearest public water supply well is located approximately 0.62-miles southeast (cross gradient) Owned by City of Houston and completed at depth of 756-ft below ground surface.

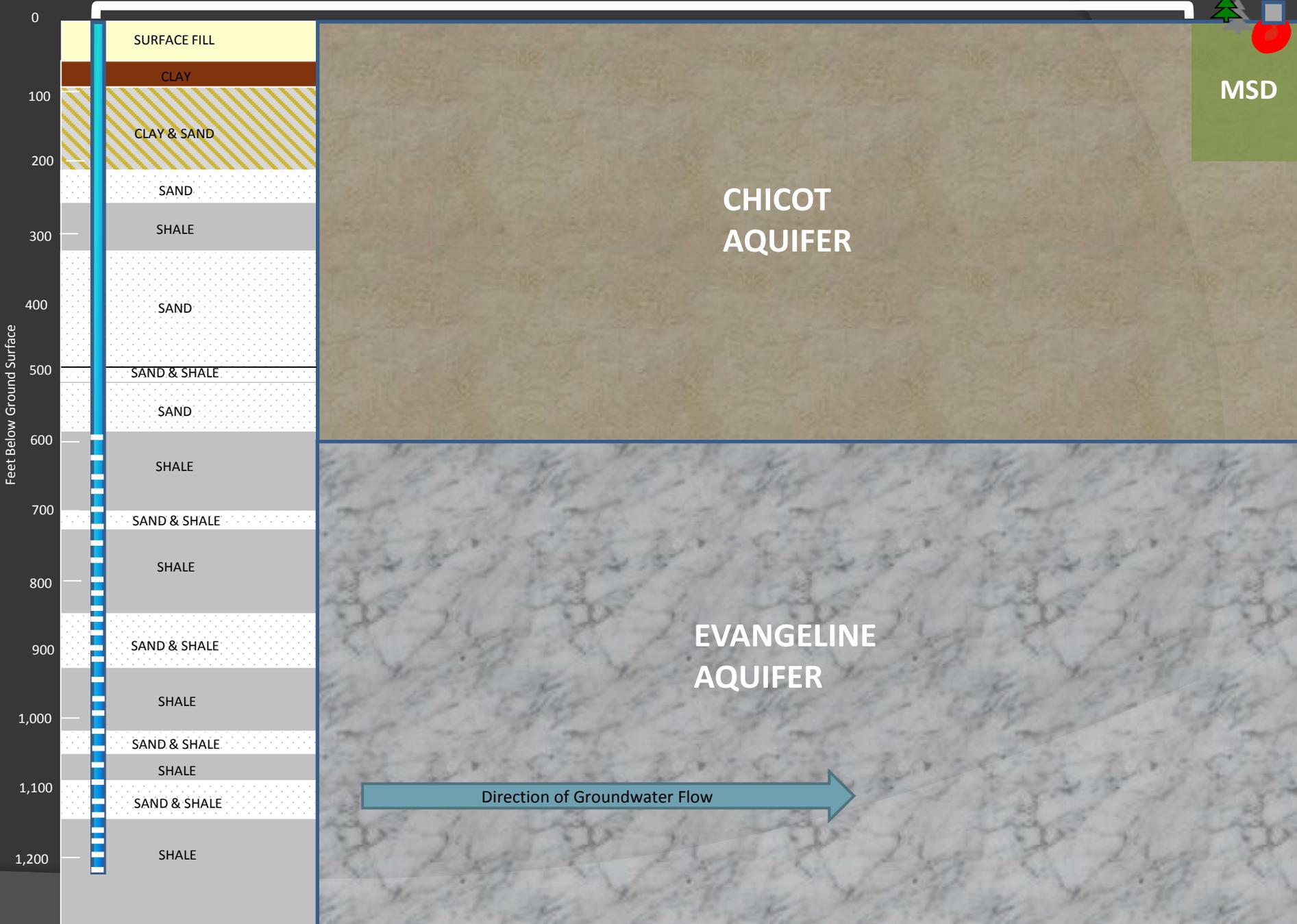
Site Location



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 2600-feet away from the subject property in a down-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.

