



Excavation Safety Training

Underground Facility Damage Prevention & Safety



Biggest Take Away

- **Effective Communication to:**
 - Protect Crews and the Public
 - Protect the Underground Assets



What will be Covered

Texas Excavation Laws

Best Practices

Texas811 & the One Call Process

Documentation & Photos

Damage Investigation



Reference Documents

- **Texas Utilities Code Title 5 Chapter 251**

- Underground Facility Damage Prevention & Safety
- Effective 1999
- Establishes the One call system and addresses all Utilities and Pipelines

- **Texas Administrative Code Title 16 Chapter 18**

- Underground Pipeline Damage Prevention
- Effective 2007
- Specific to Gas Distribution and Gas & Hazardous Liquids Pipelines

- **Common Ground Alliance**

- Best Practices
- Established 1999

- **OSHA Title 29 CFR**

- 1926.651 (b) Specific Excavation Requirements

Texas811

Our Purpose:

To protect billions of dollars in underground infrastructure and keep the public safe.

- EVERY 'one call' locate ticket submitted in Texas originates with Texas811.
- Texas811 is the link between your plans to dig and our member utility companies.
- All Class A Facilities are required by laws to be registered with one call (Class B is voluntary)
- Texas811 averages 24k-30k locate tickets submitted per day. Over 4,000,000 tickets per year.
- There is no cost for making the call to Texas811.
 - 48 Hour waiting period required
 - Time Starts: Ticket Number Generated
 - Ticket Life Working 14-Days (Chapter 18)
- Texas811 also provides excavation education to excavators, emergency responders and the general public.



Excavation: Defined By The Law



Excavate: Movement of earth by any means

Excavator: A person that engages in or is preparing to engage in the movement of earth



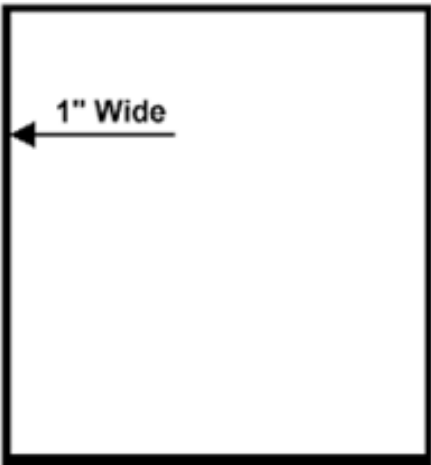
Before Excavation Begins – Standard Operating Procedures

- Plan Ahead
- Do a Worksite Assessment
- Gather Worksite Information:
 - Location
 - Driving Instruction
 - Marking Instructions
 - Type of Work
 - Onsite Employee Contact Information
- Communicate:
 - Office Personnel- SOP
 - Field Crews - SOP
 - Hold Pre-Construction Meetings
- White-line Proposed Worksite

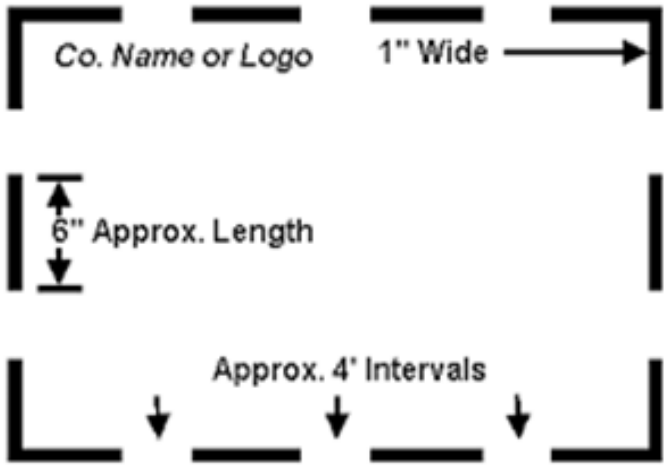


White Lining

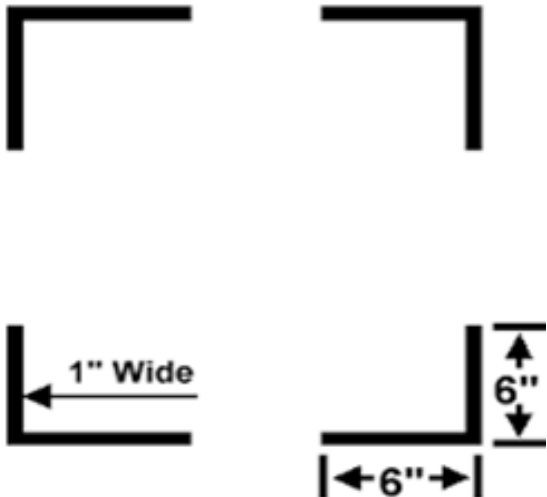
Excavator's designation of area to be excavated using white paint, white flags, white stakes, or any combination of these.



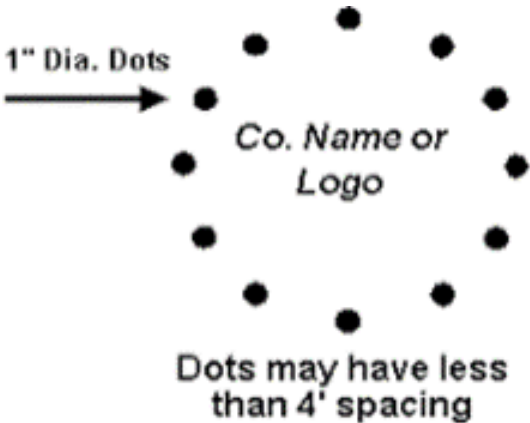
Full Line Marking



Dash Line Marking



Four Corner Marking



Radius or Arc Marking



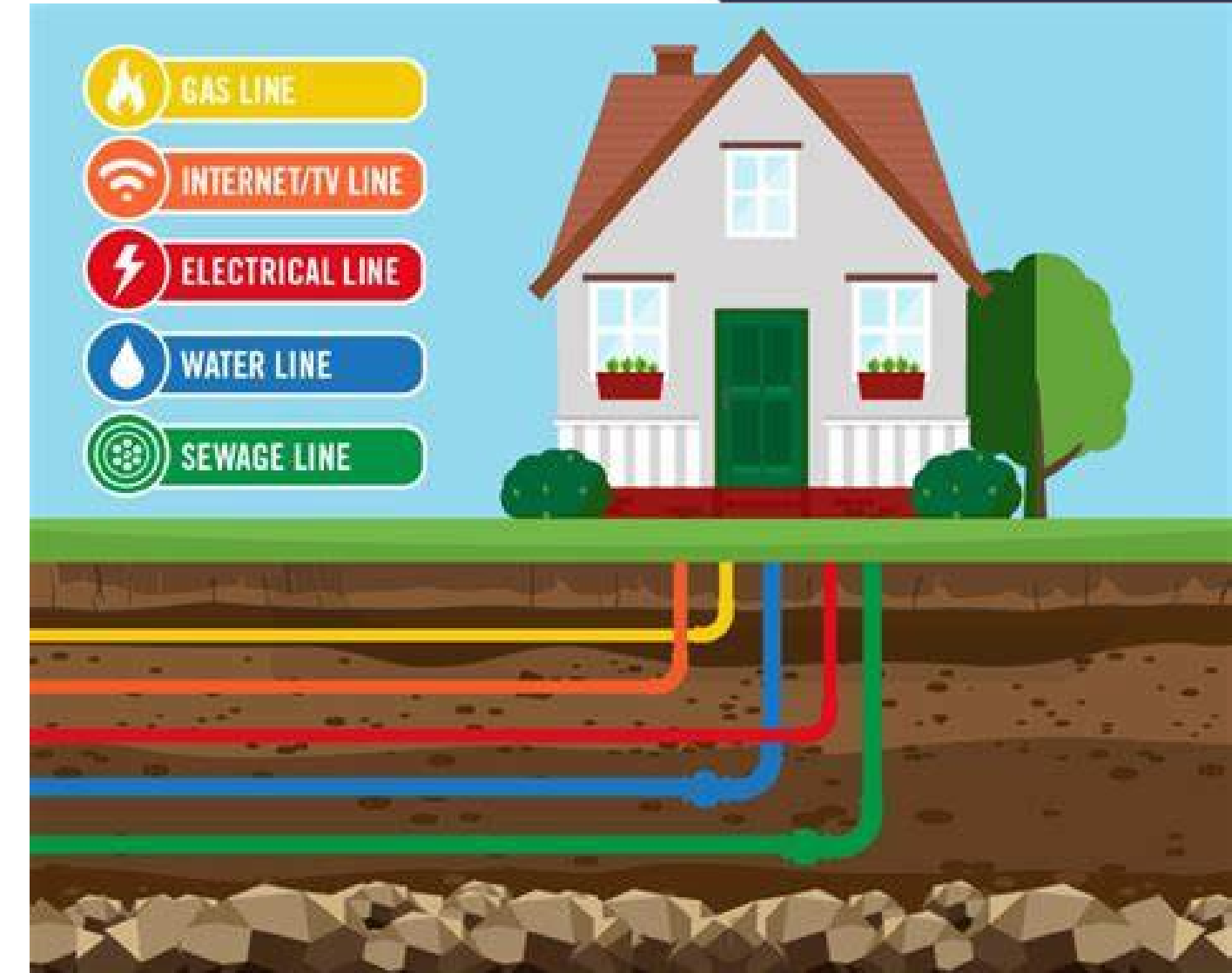
What Constitutes A Customer Owned Line

Most properties have unmarked private utility lines, but they present a real danger for anyone digging. It's important to have all lines located and marked. These are just a few examples of underground utilities that might be hidden on your property.

- Electricity for exterior lighting
- Propane lines
- Septic pipes
- Sprinkler systems
- Gas for heated pools
- Power for a detached garage
- Storm drains

How could this affect a project?

- Added cost of hiring a Private Locate Company
- Added cost of hiring an Internal Locator



Notification Center Updates



CALL 811 OR
800-344-8377



CLICK THE PORTAL
WWW.TEXAS811.ORG

Link to the new Texas Portal: <https://txgc.texas811.org/ui> and you will log in using your existing Portal credentials.

Please review the information below as it will aid in providing the best user experience possible.

- Any tickets submitted through the new Portal are **LIVE** production tickets and will be transmitted to facility operators notified on the ticket.
- Take a tour of the new Portal with the following informational video: [Portal Informational Video](#)
- Now Mobile Optimized: Create, Update, Respond, and search for tickets anywhere, anytime, from any device! Take a tour! [Mobile Quick Tour](#)
- Advanced Ticket Search date range: data is available for 4 full calendar years (2020-2023) and the current year (2024 YTD).



Ticket Types

Survey/Design (May be used months prior to excavation to set up Pre-Construction meetings)

Use for determining which facilities are within the scope of work area to reach out and setup a pre-con meeting.

Normal

Wait 48 hours prior to digging (Excludes Saturdays, Sundays, and Legal Holidays)

Update or Update and Remark

Updates can be requested for two different reasons: To extend the life of the ticket to stay in compliance with Texas Administrative Code Chapter 18, which regulates Oil & Gas members (Update), or, because the locators’ marks are no longer visible and need to be remarked (Update and Remark).

No Response

When one or more utilities have failed to respond after the 48 hours required wait time (Excludes Saturdays, Sundays, and Legal Holidays)

Emergency

A situation that endangers life, health, or property or a situation in which the public need for uninterrupted service and immediate re-establishment of service if services are interrupted compels immediate action.

RULE §18.6 (b) – Pipeline Operator markings are valid until the emergency condition has ceased to exist

Dig Up

Notice of damage

RULE §18.11 (b) requires a Dig Up ticket



Once the Locate Ticket is Submitted...What to Expect Next

What to expect once you have submitted a locate ticket

A confirmation ticket number by phone and by email (48 hrs. Starts)

- Verify the information on the ticket matches the information for your job
 - All contact information
 - Driving Directions
 - Marking instructions
- Communicate to all excavators working at the site:
 - Have access to the complete one call ticket
 - Are clear on the scope of work
 - Can produce the one call locate ticket within 1 hr. if asked

You should be notified by the utility operator or the locator within 48 hours:

Use All Tools Available to Excavators (i.e. the site markings, email, portal and DigCheck Pro)

- Clear it; or
- Mark it; or
- Arrange for a meeting or communicate any special instructions



Take a Moment to Verify All Information

After 2 Working Days

- **Preform a Second Site Assessment After the 48 hrs.**
- **Look for:**
 - Inconsistencies (White-Lines/Ticket Verbiage)
 - Additional Signage:
 - Call back into Texas811 to force add any utilities not listed but there is evidence of other underground facilities
- **Locate markings**
 - Confirm all utilities have responded
 - Paint/Flags
 - Clear/No Conflict
 - If one or more facilities have failed to respond:
 - Submit a No Response
- **Remember Paint and Flags are Approximations**



White	PROPOSED EXCAVATION
Fluorescent Pink	TEMPORARY SURVEY MARKINGS
Red	ELECTRIC POWER LINES, CABLES, CONDUIT AND LIGHTING CABLES
Yellow	GAS, OIL, STEAM, PETROLEUM OR GASEOUS MATERIALS
Orange	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES OR CONDUIT
Blue	POTABLE WATER
Purple	RECLAIMED WATER, IRRIGATION AND SLURRY LINES
Green	SEWERS AND DRAIN LINES



Documentation and Photos

- **Documentation**

- Use a Pre-Excavation Check List

- **Photos and Video**

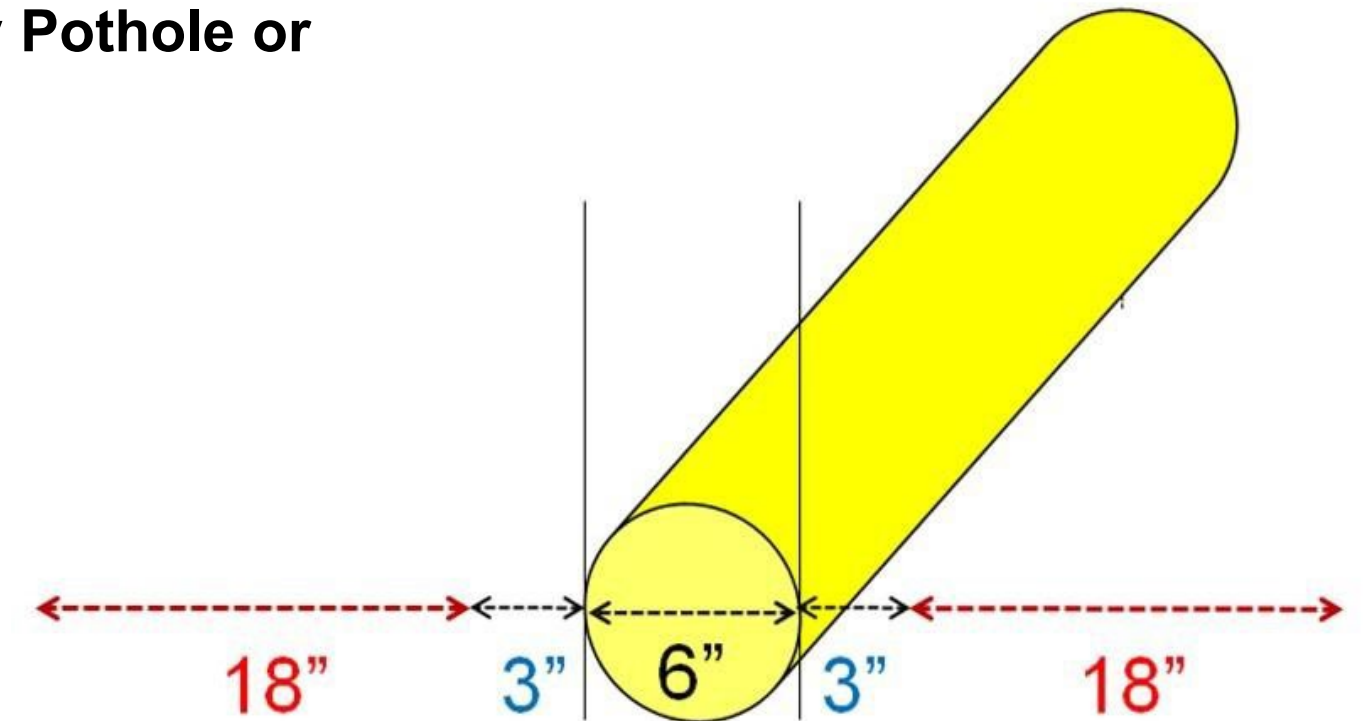
- Hit Kits for Pre-Dig Photos
- Take from different directions
 - N,NE,SE, S, SW, NW
 - 12 o'clock, 3 o'clock, 6 o'clock and 9 o'clock
 - 50'/20'/10'/5'
- Include stationary items
- Include the flags and marks
- Show the locate marks in reference to the white-lined proposed excavation site
- Time/Date Stamp
- If possible, include GPS coordinates on photos



Tolerance Zone: Minimum Standard in Texas

Half the nominal diameter of the underground pipeline plus a minimum of 18 inches on either side of the outside edge of the underground pipeline on a horizontal plane. Utility Pothole or Daylight to expose underground facilities.

- **Apply Tolerance Zone Twice: Best Practice**
 - At flags or Paint: Prior to potholing
 - Once the lines are exposed: After Potholing
- Tolerance Zone is to the depth of your own excavation
- RRC suggests potholing an additional 12-18" beyond proposed worksite depth



Pothole or Daylighting Examples

See Texas Administrative Code 18.10 for all approved soft dig methods.



In Case of a Damage

- Contact the facility owner directly (if known)
- Call 811 to report the "Dig Up" within 1 hour
- Do not attempt to repair any pipeline or cable
- Do not backfill the area around the damaged line



If Gas or Hazardous Liquids are Released...

Do This:

- Stop Work Immediately and Abandon Equipment in Place
- Stay Upwind/Uphill
- Keep Others Away from Area
- Eliminate Potential Ignition Sources
- Call 911 Immediately
- Contact the Facility Operator (if known)
- Call 811 within 1 hr. to Submit a DigUp Ticket
- File a Railroad Commission TDRF Report online within 30 Working Days

Do Not:

- Attempt to Stop the Leak
- Drive into any Release of Product
- Operate any Pipeline Valves or Mechanisms
- Extinguish Any Fires
- Come into Contact with Escaping Product

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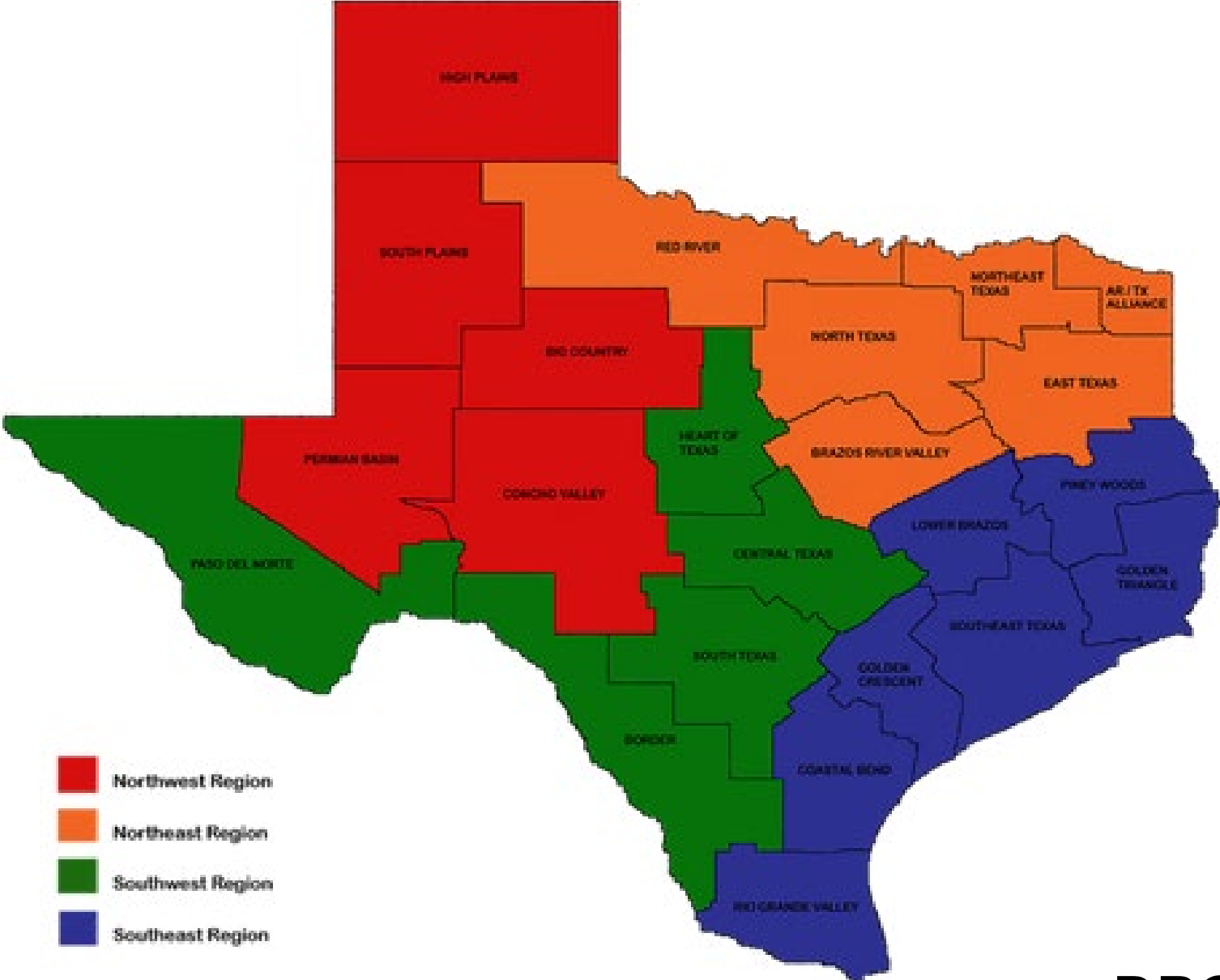
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Damage Investigation

Damage Prevention Council of Texas



www.DPCofTexas.org



Frequently Asked Questions

- **Question:** When does the 48th hour timeframe begin?
- **Question:** If all utilities on my one call locate ticket have responded prior to the 48th hour, may I begin to dig?
- **Question:** Examples of Class A & Class B
- **Question:** Will water and sewer lines be located and marked?
- **Question:** Do the marks and flags on the ground identify the exact location of the underground facility?
- **Question:** How long is my one call ticket valid?
- **Question:** What are the reporting requirements when an underground facility is damaged?

