



Georgia Underground Marking Standards

PSC RULE 515-9-4.14



AGENDA

- **GUFPA**
- **PSC Rules**
- **UPC Policies and Procedures**
- **Marking Standards**
- **Sufficient Particularity**
- **Educational Materials**

GUFPA Law and PSC Rule

- **GUFPA- “Dig Law”**
 - Passed by the State Legislature
 - Enforced by the PSC
 - Maximum \$10,000 fine per violation
 - Fines can be mitigated by PSC Certified GUFPA training classes
- **PSC Rules**
 - Rules created by PSC
 - Enforced by PSC
 - Maximum \$15,000 fine per violation

UPC Policies and Procedures

- **GUFPA directs the UPC to create policies and procedures for specific requirements of the law**
- **Examples**
 - PRIS
 - Ticket Size Policy
 - Sufficient Particularity

UPC Procedures & GUFPA Violation

- Once UPC has developed these procedures failure to comply can result in a probable violation of GUFPA
- Violations of GUFPA can carry a fine of \$10,000.00 per violation

UPC Policies and Procedures

- Certain parts of the PSC Rule requires UPC to create policies and procedures
- Example
 - White Lining

UPC Policy and PSC Rule Violation

- Once UPC has developed these procedures, failure to comply can result in a probable violation of PSC Rule
- Violations of PSC Rule can carry a fine of \$15,000.00 per violation

Marking Standards

- **PSC rule requiring all utilities in Georgia be marked in a standardized format**
- **Will go into effect January 1, 2008**
- **Failure to comply is a violation of PSC Rule**



Facility Owner/Operator Responsibilities



Utility Markings

Indicate utility facilities by placing

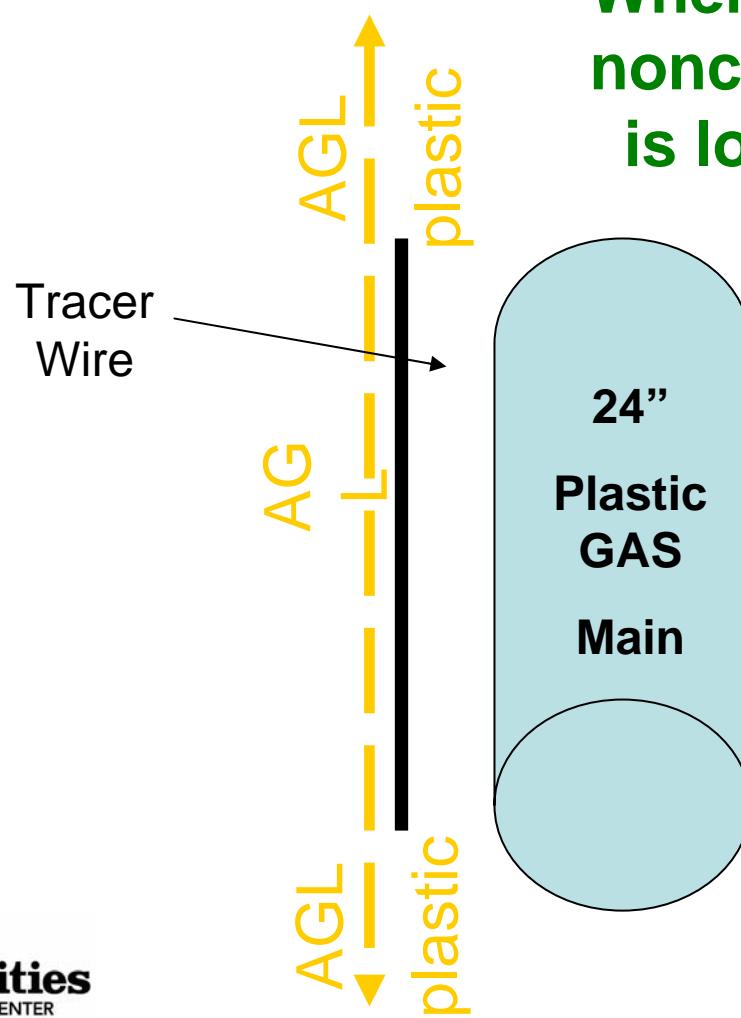
- UPC alpha code (AGL)**
- Type material the facility consists of, if known, at the beginning & end of locates.**
- Arrows should be placed at the ends of markings to indicate that the underground facility continues.**



Utility Markings Cont.

- To avoid confusion on long runs, the marks shall be frequent enough to identify the owner.
- The marks shall indicate the approximate center-line of the underground lines. For example, the middle of the cable, line or pipe shall be at the center of the dashed marks.

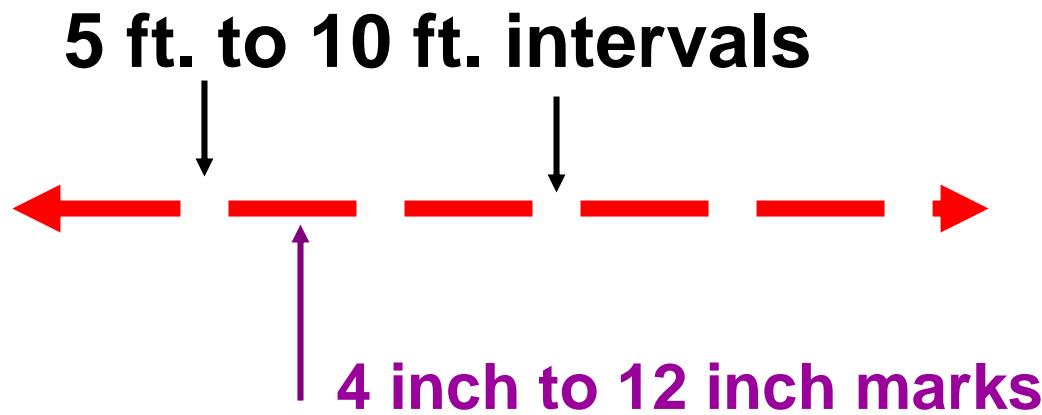
Locating Nonconductive Lines



When locating lines that are nonconductive a tracer wire is located NOT the facility

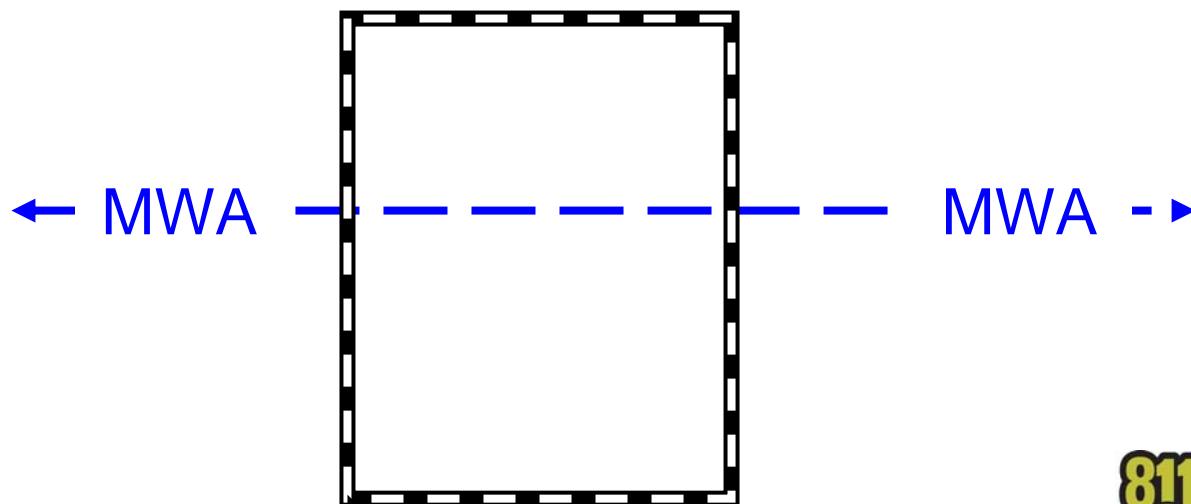
Utility Markings cont.

- **Location marks shall be 4 to 12 inches in length & at intervals of 5 to 10 feet.**



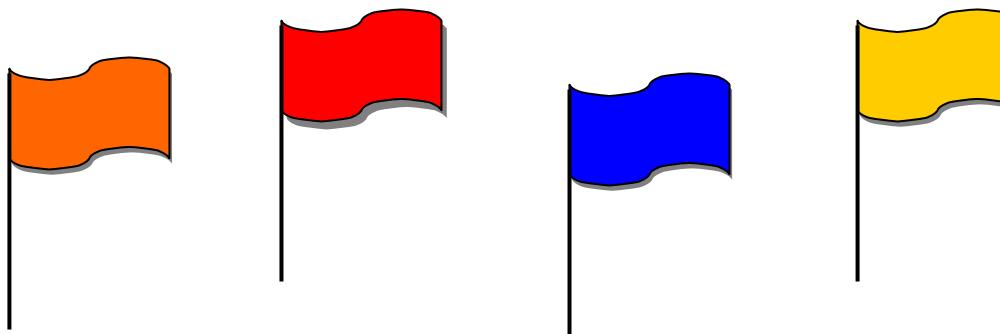
Locator Marks and White Lining

- The Locator shall extend marks outside the proposed work area by 20 to 30 feet *if those facilities extend outside the proposed excavation area.*



When to use Flags

- In areas such as flower beds, rock gardens, etc., flags or stakes may be an alternative to paint.



- For instance, flags or stakes in wet areas, offsets in dirt construction zones that have a high volume of traffic crossing their line location marks.

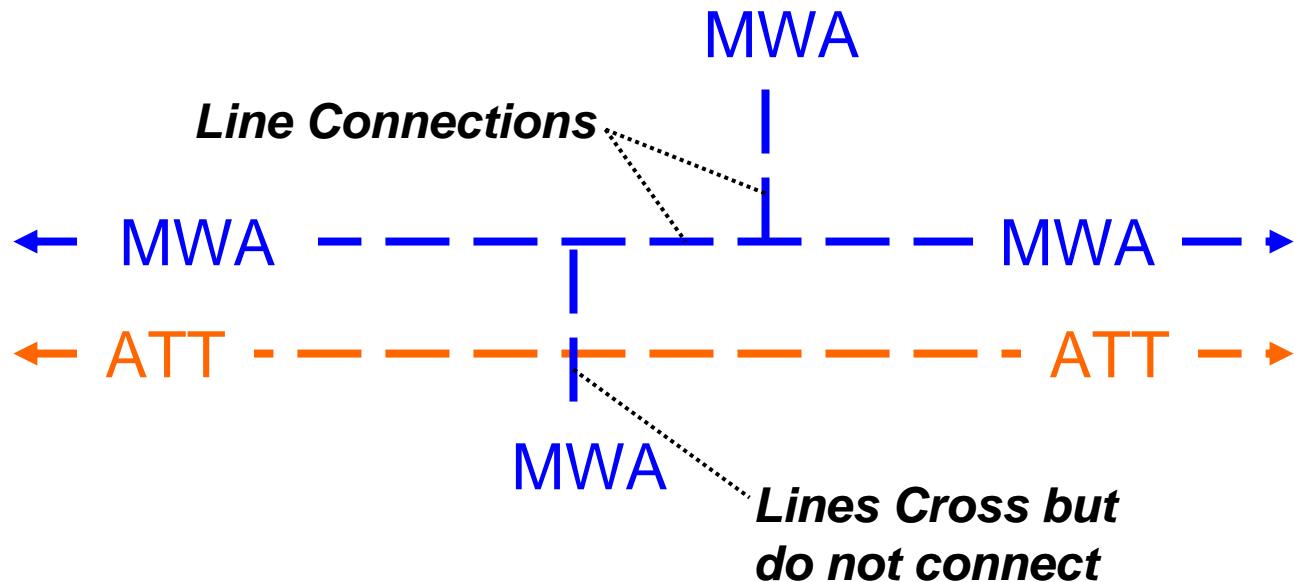
Other Marks

- **Dead ends, stub-outs, termination points, etc., shall be marked as follows**



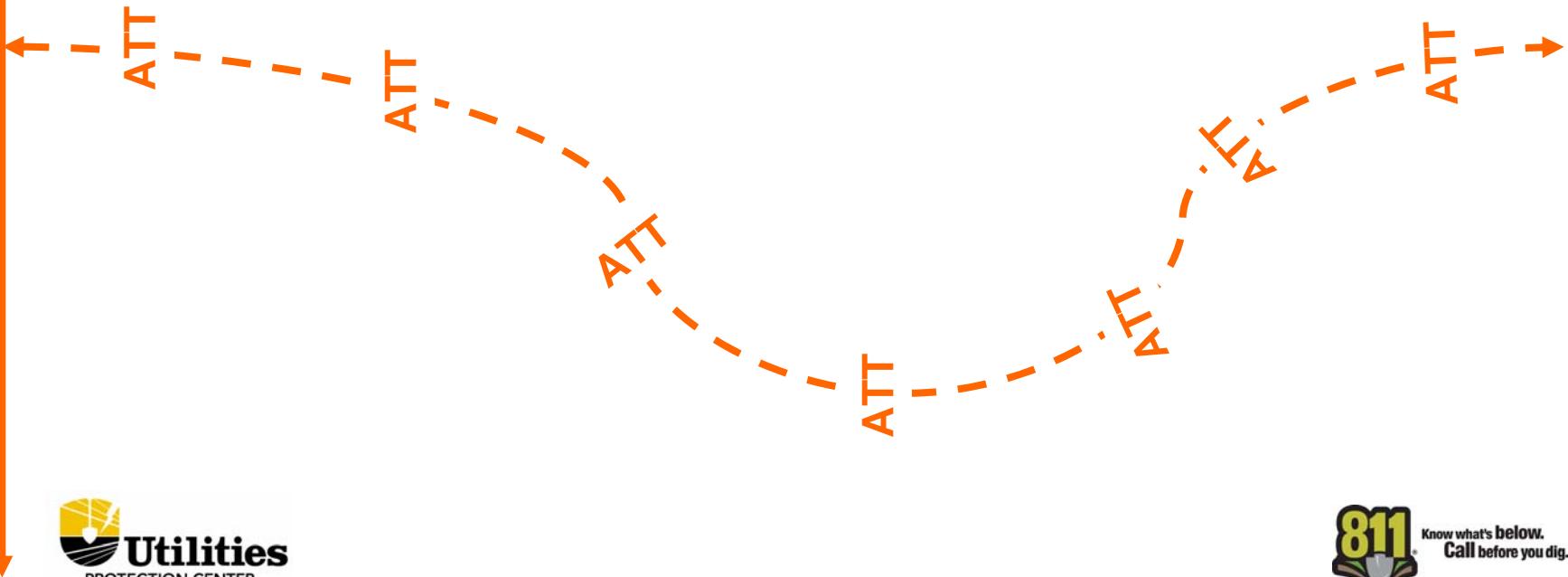
Connecting Lines & Lines that Change Direction

- Lines that have connections (e.g., T's or Y's) or changes in directions shall be clearly indicated.



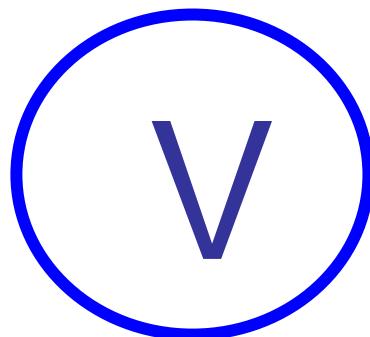
Change in Direction

- Marks that show changes in direction shall be placed closer together for more clarity and accuracy.



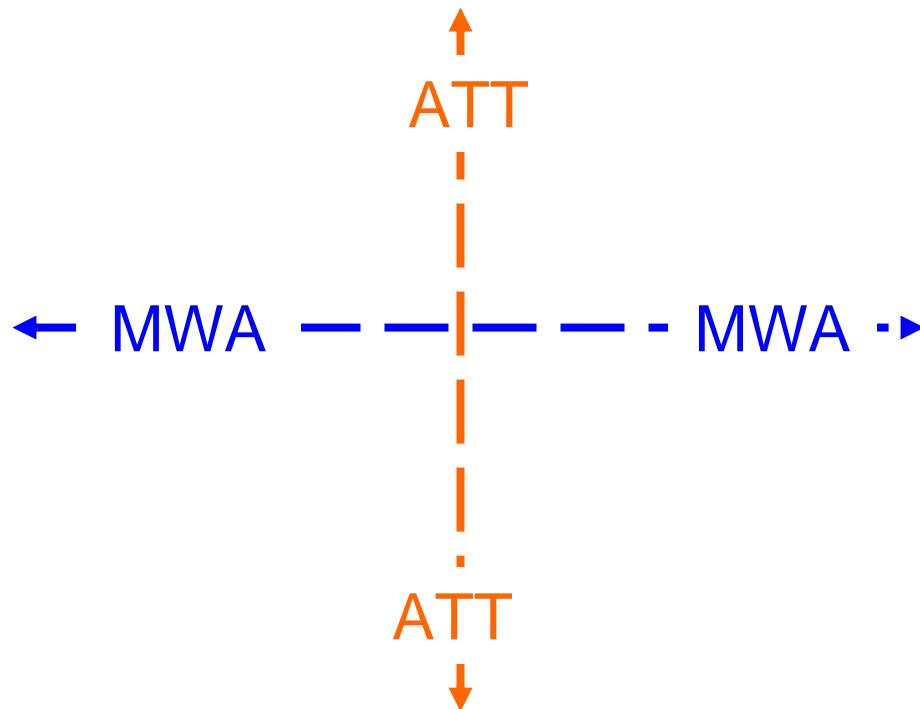
Manholes and Valves

- **Manholes and valves shall be identified by using a circle and letters if they are not visible (dirt covering valve boxes or pavement covering manhole cover).**



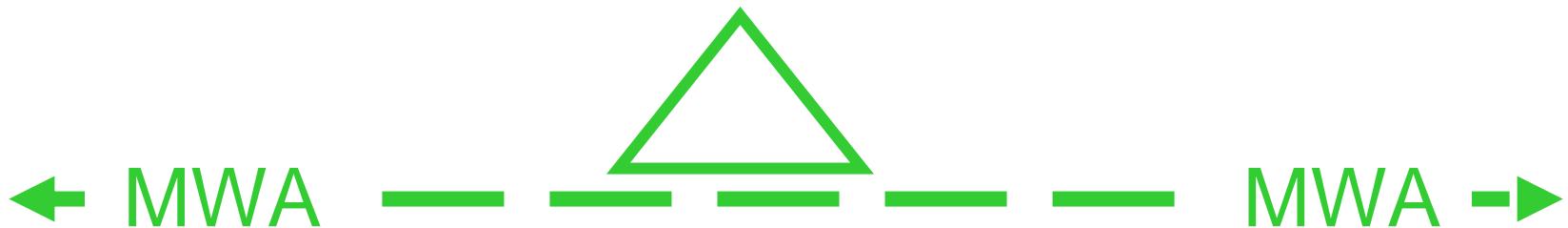
Crossing Facilities

- Facilities that cross but do not intersect shall be marked as described to indicate such installation manner.



Unlocatable Sewer Laterals

- **Unlocateable sewer laterals shall be marked by placing a green triangle, on the sewer main, toward the address(es) in question.**



These locate marks represent ONE unlocatable sewer lateral. If there are 3 unlocateable laterals there should be 3 green triangles.

Joint Trenching

- When facilities share the same trench, they shall be heavily identified and separated enough so that they can be readily identified.

← CCAST - - - - CCAST - - - - CCAST →
← AGL - - - - AGL - - - - AGL →

- This would apply to lines that use the same color code.

← ATT : = = = ATT : = = = ATT = >

Known Diameters Greater than 12"

- If the facility to be marked has a diameter greater than 12", the size of the facility shall be indicated if known.

AGL - 16" AGL - 16"

Unknown Diameters Greater than 12"

- If the size of the facility is not known, then the mark shall indicate greater than 12 inches.

AGL +12" AGL +12"

What is the Tolerance Zone?

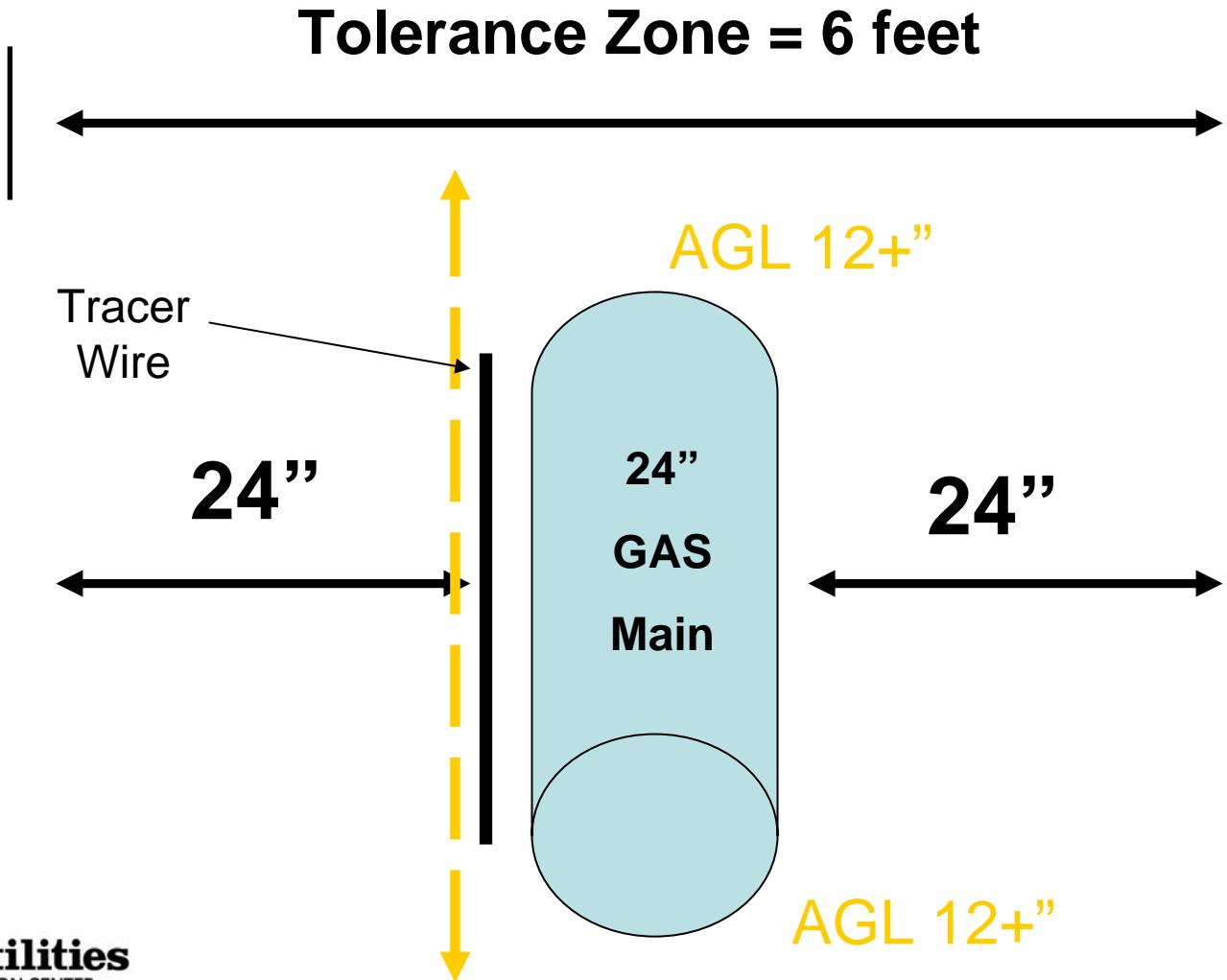
Select from the following:

- A. 12 Inches from either side of the locate mark**
- B. 24 Inches from either side of the locate mark**
- C. 24 inches from either side of the outside edge of the utility**
- D. None of the above**

Tolerance Zone defined

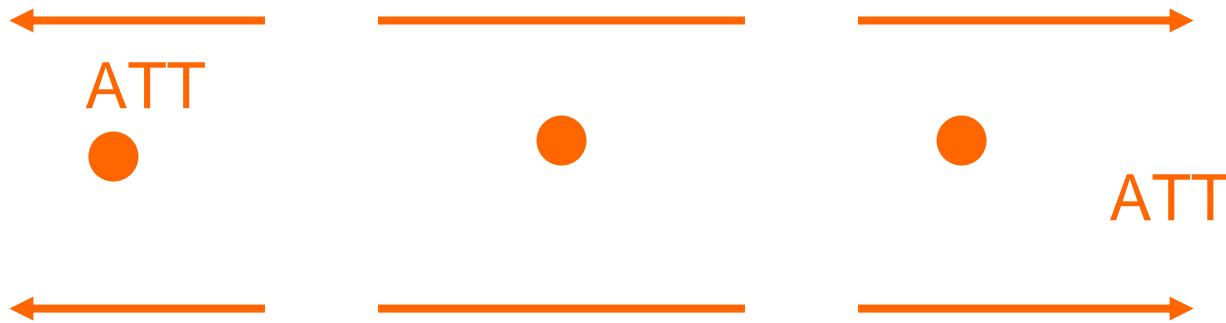
- **Answer - C**
- **The Tolerance Zone is the width of the utility facility plus 24 inches on either side of the outside edge of the utility facility on a horizontal plane.**

Understanding Tolerance Zone



Marking Duct Structures

- Ducts structures shall be marked by using a dot with parallel boundary on each side of the dot.



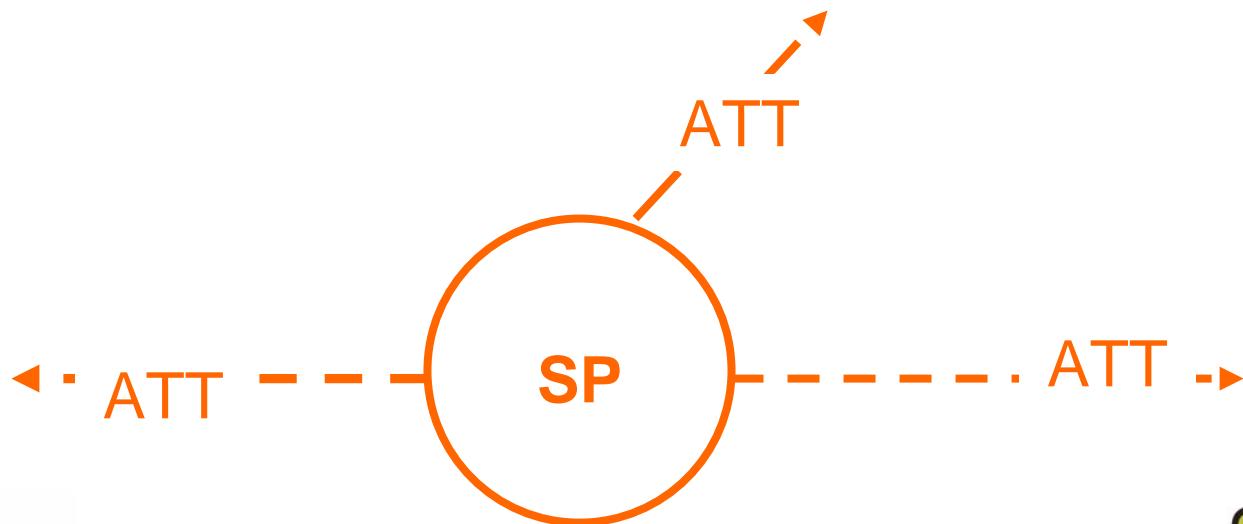
Offsets

- In areas of high construction traffic, offsets shall be placed on a permanent surface, spaced every third or fourth mark. Use only in conjunction with marks placed above a facility.



Splice Pits

- In areas where cables are spliced, the facilities should be located individually as far as possible on both sides of the splice. When the signal is distorted due to the near proximity to the splice, use a circle with “SP”.





Sufficient Particularity



Sufficient Particularity

- From GUFPA 25-9-6 (a)(1)

“Describe the tract or parcel of land upon which the blasting or excavation is to take place with sufficient particularity, as defined by policies developed and promulgated by the UPC, to enable the facility owner or operator to ascertain the precise tract or parcel of land involved;”

Sufficient Particularity

- **Currently until Jan. 1, 2008, UPC Policy allows an excavator to request the entire property of a specific address. This is considered Sufficient Particularity.**

PSC Marking Standards Rule

- 515-9-4-.14 (d)
- Directive to UPC. Pursuant to O.C.G.A. §§ 25-9-4 (a) (1), 25-9-6 (a) (1) and (b), 25-9-7 (a) (2), and 25-9-13 (f) and pursuant to Commission Utility Rule 515-9-6-.01, the Utilities Protection Center, Inc. (“UPC” or “One-Call Center”) is hereby directed to establish policies and procedures which identify when white lining is required.

What Changes Jan. 1, 2008?

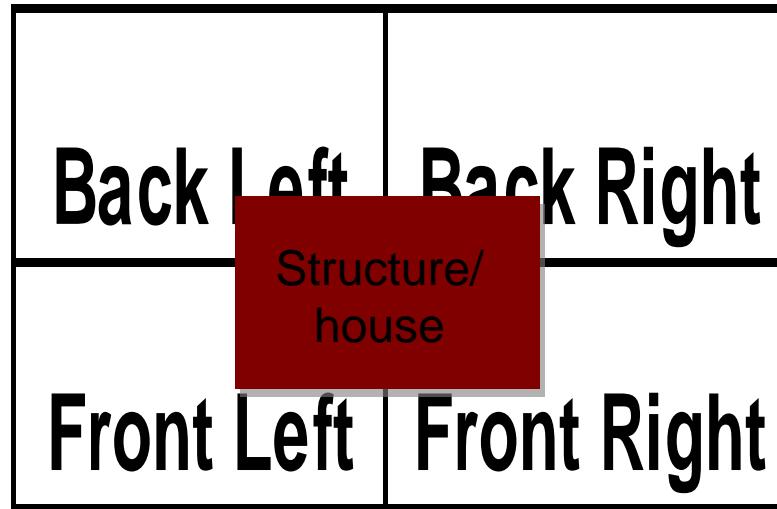
- **PSC rule requiring the UPC to identify when white lining will be required**
- **The new requirements begin January 1, 2008**
- **UPC's new Sufficient Particularity Document explains the changes**

Sufficient Particularity

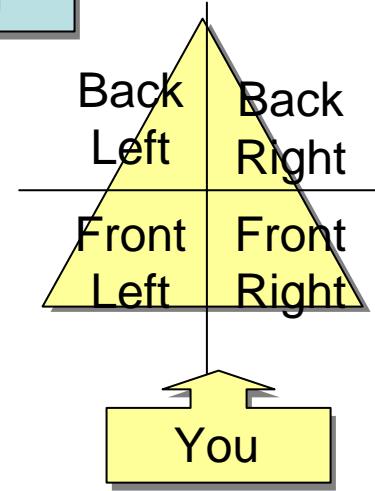
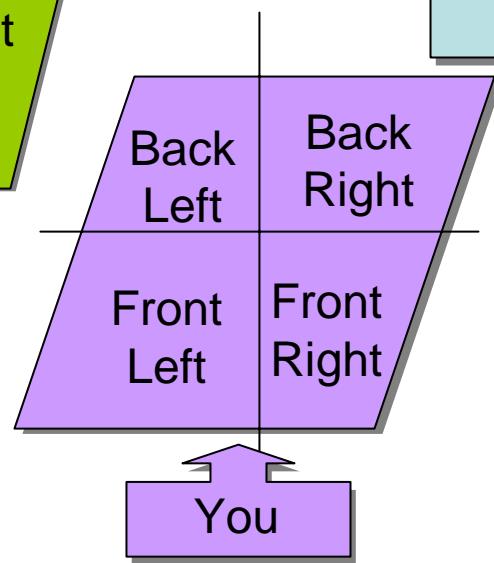
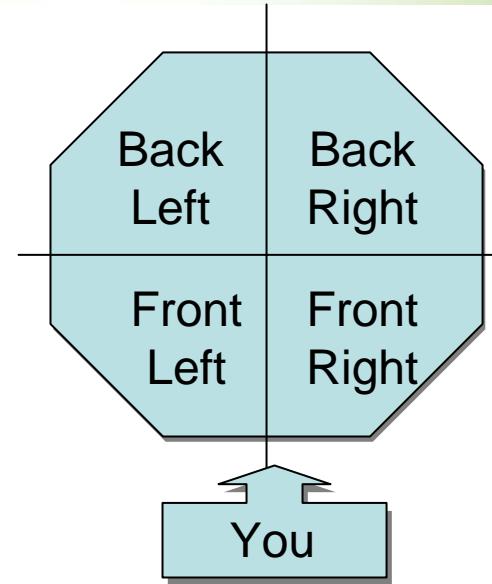
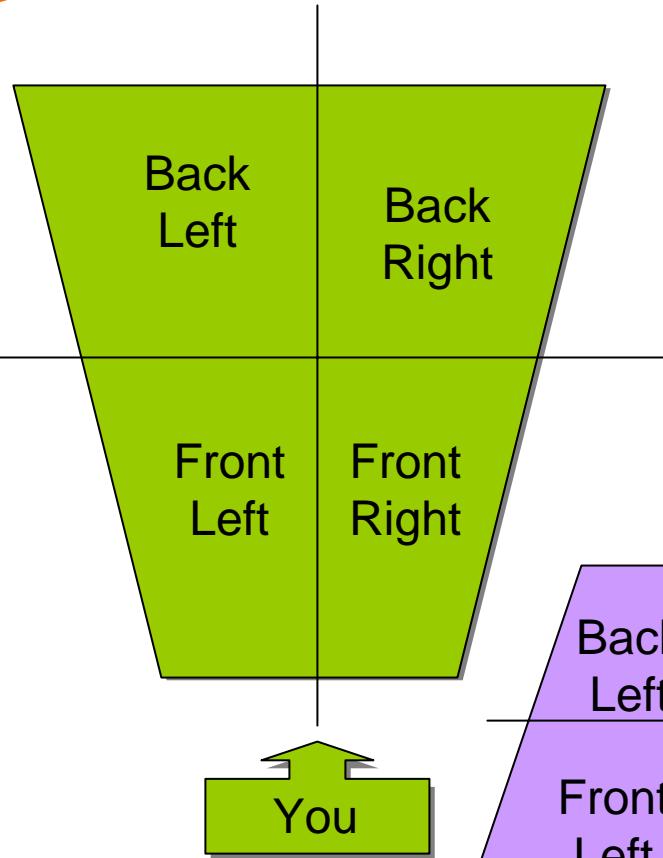
- **Sufficient Particularity is achieved when the area of excavation is described in such a way that there is no question where the digging will take place.**
- **AKA: Verbal White Lining**

Use Quadrants for Verbal White Lining

- Lots will be divided into four quadrants identified as if standing in the street at the curb in the middle of the property facing the lot.



Additional Quad. Examples



Verbal White Lining Examples

- **Installing a gas service line**
 - Locate both sides of the house and the front of the property to the street
 - Locate front left and right quadrants, both sides of the house and both sides of the road

Verbal White Lining Examples

- **Setting a pole and anchors**
 - Locate front left quadrant
 - Locate area left of the driveway for 20 feet around existing pole
- **Installing guard rails**
 - Locate front of property
 - Locate from the bridge for 50 feet eastbound along both sides of road

White Lining

- **Physical White Lining is to be used when Sufficient Particularity is not descriptive enough to clearly lead a locator to the excavation area.**
- **The purpose of White Lining is to provide a physical outline of the dig site, illustrating the exact location of the proposed excavation site.**

Examples of areas that may need white lining

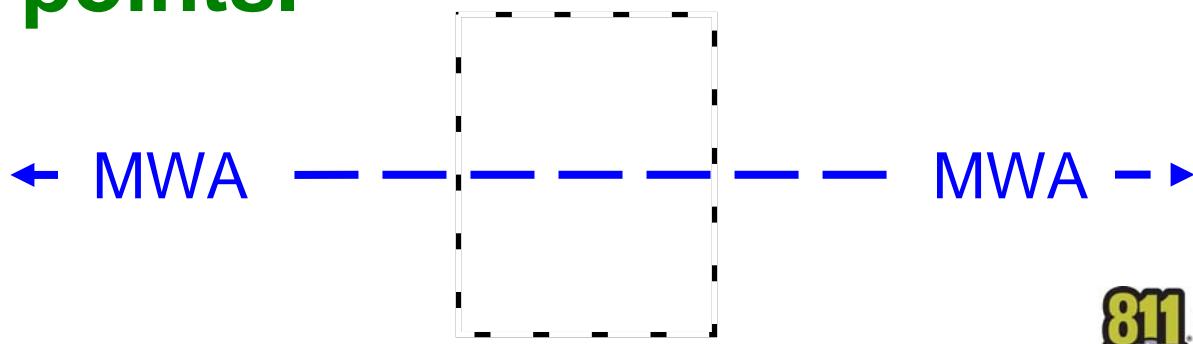
- **smaller or linear excavations**
- **telecommunication drops**
- **service lines, such as water, gas and sewer,**
- **utility pits, cuts and repairs, curb repairs, bore holes**
- **pole and signage placement**
- **etc.**

Exceptions to White Lining

- Any large project so designated in accordance with GPSC Rule 515-9-4.13
- Any jobsite that can be described with Sufficient Particularity as defined by UPC and required by GUFPA
- Emergency Locate requests, “Extraordinary Circumstances”

White Lining Symbols

- White lining proposed dig sites that will follow a single path or trench shall be marked using white lines &/or arrows and located for twenty (20) feet on either side of the white line. It is important to identify the starting & ending points.



Identification of White Lining Excavator

- **Each excavator, when white lining, shall be identified by labeling the white line area with the excavator's name or the applicable locate ticket number or both.**

White Lining Linear Areas

06157-500-001

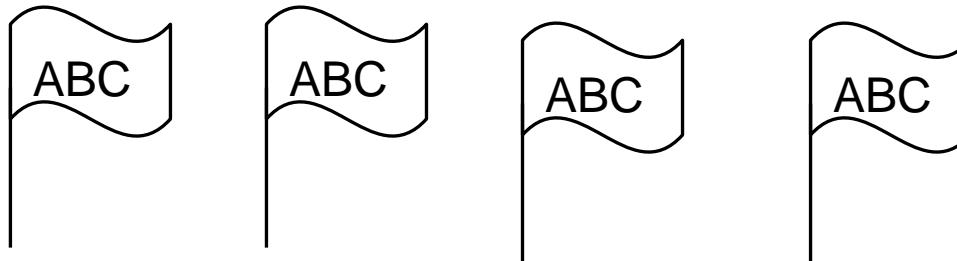
A horizontal number line with arrows at both ends. It has 10 tick marks. The first tick mark is labeled "Start" and the last tick mark is labeled "END".

ABC Excavator

```
graph LR; Start((Start)) --> S1[ ]; S1 --> S2[ ]; S2 --> S3[ ]; S3 --> S4[ ]; S4 --> S5[ ]; S5 --> S6[ ]; S6 --> S7[ ]; S7 --> END((END))
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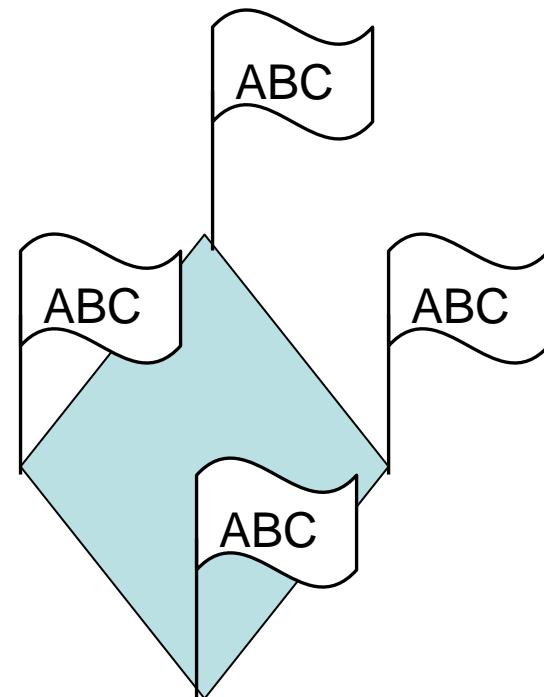
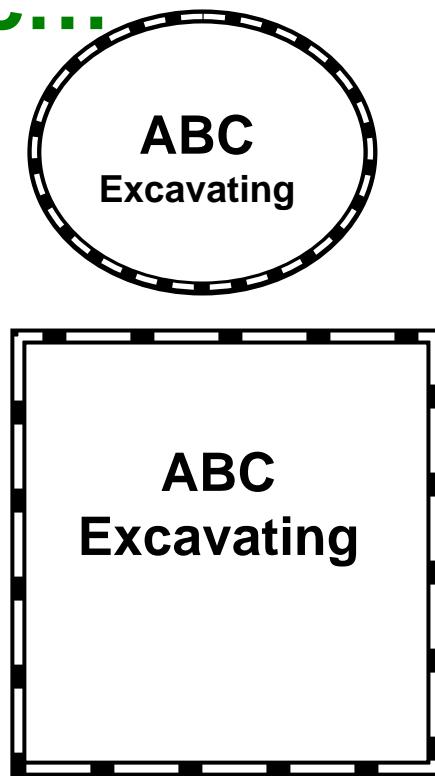
Start → S1 → S2 → S3 → S4 → S5 → S6 → S7 → END

A diagram showing a rectangular trench. The top horizontal segment has a black arrow pointing left and a black bar with three segments. The bottom horizontal segment has a black arrow pointing right and a black bar with three segments. The left and right vertical segments have black bars with one segment. The word "Start" is at the top left, and "END" is at the bottom right. The text "ABC Excavator" is positioned in the center of the trench.



White Lining – nonlinear areas

- Pits, manholes, poles, signs, trenches etc...



Restakes

- If the original request described the area of excavation with sufficient particularity, then on a restake or remark there is no additional requirement to white line.

REMEMBER!!

- White lining does not guarantee your locate request will be marked prior to the 48 hours required by law
- You still must check PRIS and if all utilities have responded with “marked” or “clear no facilities” then excavation can begin prior to the 48 hours



Educational Materials

- Can be found on the UPC web site
- www.gaupc.com
- Select “Marking Standards” link on home page
- UPC Sufficient Particularity
- PSC Rule
- Frequently Asked Questions (FAQ’s)
- View Marking Standards Presentation

Contact your UPC Liaison for more info.

- Region 1 & 2
 - Becky Creech: 404-757-6467
- Region 3 & 4
 - Holly Files: 404-538-6648
- Region 2 & 5
 - Mike Joyner: 404-245-5813
- Region 6 & 3
 - Terry McLaurin: 770-476-6023
- Region 7
 - Fiona Bowen: 404-444-3606
- Region 7 & Digger Dog
 - Eren Chapel: 770-757-6467

