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This booklet provides basic information on safe excavation practices in Ohio. It is intended as an educational resource only, so please be advised of the following:

- This booklet is not a legal reference. You should consult your attorney, if necessary, for advice on interpreting the law.
- It does not contain the complete text of the Ohio Revised Code (ORC) 153.64, 3781.25-3781.32 and Chapter 4913. Also, it does not contain reference to OSHA Standard 29 CFR 1926.651. Log onto the Ohio Utilities Protection Service, OHIO811, website for the full-text version of these laws: www.OHIO811.org.

Failure to comply with the enforceable provisions of Ohio’s damage prevention laws could result in fines or penalties regardless of whether or not a damage has occurred. For more information or to register a complaint go to http://www.puco.ohio.gov or by calling (800) 686-7826, Option 4.

- The information in this booklet is subject to change without notice.

Throughout this manual, you will see

Please pay special attention to these tips to help in the process of a safe excavation.

OHIO811 itself does not locate or mark underground facilities. Locating and marking facilities is the responsibility of the utility owners.

There may be other company regulations or policies for you to follow, so you should also double-check with your supervisor.

Revision Date: August 2019
WHAT IS AN EXCAVATION?

ORC 3781.25(I) | “Excavation means the use of hand tools, powered equipment, or explosives to move earth, rock, or other materials in order to penetrate or bore or drill into the earth, or to demolish any structure whether or not it is intended that the demolition will disturb the earth...”

Excavations include, but are not limited to:

- Demolition of buildings or other structures, even if you do not expect to disturb the earth during demolition.
- Coal mining and reclamation operations regulated under Chapter 1513 of the Revised Code and rules adopted under it.
- Government work in excess of 12 inches deep. Farming activity such as installation of drain tiles and tilling to a depth of more than 12 inches.

Other types of excavation include, but are not limited to:

- Grading
- Digging
- Dredging
- Auguring
- Scraping
- Wrecking
- Blasting
- Setting poles/pipes
- Installing sign poles
- Trenching
- Ditching
- Drilling
- Tunneling
- Potholing
- Tree stump removal
- Razing
- Cable or pipe plowing or driving
- Driving survey pins
- Boring holes for percolation tests

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Liquid pipeline companies may have additional guidelines for excavating near their facilities.

ORC 3781.30 | Trenchless Technologies

**When utilizing trenchless excavation methods, the excavator must comply with the following requirements:**

1) Expose and confirm all underground utility facilities at each crossing point by the proposed excavation in a nondestructive manner to the installation depth of the new facility.

2) Expose all parallel underground utility facilities in a nondestructive manner at the beginning and end of each trenchless excavation to the installation depth of the new facility. If the proposed alignment is within the tolerance zone of any parallel underground utility facility, the underground utility facility shall be exposed every one hundred feet.

3) Ensure that the final product installation maintains the proper clearances of existing underground utility facilities.

*Always refer to your HDD Guidelines Book for suggestions when digging within the tolerance zone of the underground facility with this equipment.*

Liquid pipeline companies may have additional guidelines for excavating near their facilities.
An emergency situation can be defined as a “sudden or unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to life, health, property, or essential public services.”

ORC 3781.28(F)(1) | “...In the case of a utility that is making an emergency repair to its own underground utility system or a governmental entity making an underground emergency repair to traffic control devices, as defined in section 4511.01 of the Revised Code, used on any street or highway under the entity’s jurisdiction, the utility or governmental entity shall notify a protection service and each limited basis participant of the excavation site. This notice need not occur before commencing excavation...”

Only actual emergencies should be designated as such when a dig notification is provided to OHIO811. An example of an emergency is a broken water main.

All excavators utilizing a protection service are required to obtain training in the protection of underground utility facilities. An excavator shall be deemed to have obtained that training if the excavator is a member of a protection service or a statewide association representing excavators and the service or association provides that training. An excavator also may obtain the training from such a service or association without becoming a member.
WHY DO I NEED TO CONTACT OHIO811 BEFORE I DIG?

It all begins with planning your work. A careful review of your plans and your work area prior to the actual excavation can help save you and your company from unexpected downtime, loss of revenue, and injury.

A safe excavation can be achieved by following the suggestions and processes outlined in this manual.

Follow these four steps to safe digging:

1. Contact OHIO811 before you dig
2. Wait the required time for marking
3. Respect the marks
4. Dig with care

WHY OHIO811?

Ohio Utilities Protection Service (OHIO811)

ORC 3781.25(A) | OHIO811 is a private, not-for-profit, statewide organization established by law. It has the responsibility to manage the safe digging process for Ohio.

OHIO811 is a communications link between the excavator and the utility owner/operators.

OHIO811 DOES NOT MARK LINES.

The OHIO811 mission is to prevent damage to member facilities and promote public safety by providing an efficient and effective communication and education process.

Anyone who intends to dig in the state of Ohio can contact OHIO811 24 hours a day, 7 days a week, 365 days a year.
THE PROCESS OF SAFE DIGGING

The first step to a safe excavation begins during the planning stages. By planning your work, understanding your work area, and deciding when you plan to start your excavation project, you are on your way to digging safely.

Plan before you contact OHIO811:

- Assess your route or excavation site
- Gather all your information needed to complete the Locate Work Order Form
- Premark the location in white paint, flags, or both

Now the person digging can contact OHIO811

ORC 3781.28(A) | “...at least forty-eight hours but not more than ten working days before commencing excavation, the excavator shall notify a protection service of the location of the excavation site and the date on which the excavation is planned to commence...”

Click, Call or Tap the App

- You can click on www.OHIO811.org to enter your excavation notice through Remote Ticket Entry (RTE) known as idig and edig.
- You can call 800-362-2764 or 811
- You can tap the OHIO811 app which is available on iTunes and Android Marketplace for your mobile devices.

Revision Date: August 2019
## OHIO811 LOCATE WORK ORDER

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
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<tbody>
<tr>
<td>CONTACT PHONE NUMBER</td>
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<tr>
<td>CALLER’S NAME</td>
<td></td>
</tr>
<tr>
<td>COMPANY NAME</td>
<td></td>
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<tr>
<td>FAX NUMBER</td>
<td>EMAIL</td>
</tr>
<tr>
<td>COUNTY</td>
<td>CITY/TOWNSHIP</td>
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<tr>
<td>ADDRESS/LOCATION OF WORK</td>
<td></td>
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<tr>
<td>EXTENT OF WORK: FRONT/SIDES/REAR</td>
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<tr>
<td>FARTHEST DISTANCE/DIRECTION BACK OFF ROAD</td>
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<tr>
<td>LOT#</td>
<td>SUBDIVISION</td>
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<tr>
<td>BUILDER NAME</td>
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<tr>
<td>CROSS/BETWEEN STREETS</td>
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<tr>
<td>DISTANCE AND DIRECTION FROM CROSS STREET</td>
<td></td>
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<tr>
<td>DATE OF EXCAVATION</td>
<td>START TIME OF EXCAVATION</td>
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<tr>
<td>TYPE OF WORK</td>
<td></td>
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<tr>
<td>WORKING FOR COMPANY</td>
<td>WORK DONE BY COMPANY</td>
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<td>MEANS OF EXCAVATION</td>
<td>BLASTING</td>
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<td>MEET</td>
<td>RR RIGHT OF WAY</td>
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<td>MILE MARKER AT/FROM</td>
<td>HIGHWAY</td>
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<td>COMMENTS</td>
<td></td>
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<tr>
<td>OHIO811 TICKET NUMBER</td>
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When you contact OHIO811 you will be asked questions regarding your project. You will need to have the OHIO811 Locate Work Order information ready. See the previous page for a list of the information that will be requested.

After you have given all the appropriate information to the Customer Service Representative (CSR), this is what happens:

- The CSR will read all information back to you.
- You must listen carefully and verify its accuracy.
- You will be given a list of member utility owners that OHIO811 notifies.
- **ORC 3781.26(C)** | You will be given a reference/ticket number that is proof of your call. Record the number and keep it for the duration of your excavation or longer when applicable. This number also allows access to positive response. We recommend each excavator check positive response prior to beginning excavation to determine the status of their locate request. To check positive response call 800-445-3894 or visit www.OHIO811.org.

**ORC 3781.271** | “Beginning July 1, 2013, each protection service shall reasonably modify its one-call notification system so as to permit the reasonable identification of the location of a proposed excavation site in a manner in which the protection service may then notify any potentially affected limited basis participants. Each member of a protection service, including limited basis participants, shall be responsible for providing current contact information to the protection service.”

A point of caution: not all utilities are members with OHIO811.
SO I'VE CONTACTED OHIO811
NOW WHAT DO I DO?

WAIT THE REQUIRED AMOUNT OF TIME:

ORC 3781.28(A)  |  “...at least forty-eight hours but not more than ten  working days before commencing excavation, the excavator shall notify a protection service of the location of the excavation site and the date on which the excavation is planned to commence...”

UNDERGROUND FACILITIES WILL BE MARKED BY THE FACILITY OWNERS

ORC 3781.29(A)  |  Within 48 hours of contacting OHIO811, each utility shall review the status of its facilities within the excavation site, locate and mark its underground utility facilities at the excavation site.

ORC 3781.26(D)  |  “Each utility fully participating in a protection service pursuant to this section shall also participate in its affiliated positive response system. Each utility participating in a protection service on a limited basis shall directly communicate to the excavator the presence or absence of any conflict between the existing underground utility facilities and the proposed excavation site.”

The 48 hour notice for utilities to mark excludes Saturdays, Sundays, and Legal Holidays.
YOU have planned, YOU have made the necessary contacts, YOU are now ready to dig... Now what do you do?

ORC 3781.30 | “Duties of Excavator...”

When making excavations using traditional or trenchless technologies, the excavator shall do all of the following:

(1) | Maintain reasonable clearance between any underground facility and the cutting edge or point of powered equipment;

(2) | Protect and preserve the markings of tolerance zones of underground utility facilities until those markings are no longer required for proper and safe excavations;

(3) | When approaching and excavating within the tolerance zone of underground utility facilities with powered equipment, require an individual other than the equipment operator to visually monitor the excavation activity for any indication of the underground utility facility;

(4) | Conduct the excavation within the tolerance zone of underground utility facilities in a careful, prudent and nondestructive manner, when necessary, in order to prevent damage.

(5) | Excavate up to the total depth of the excavation to either determine the precise location of underground utility facilities or verify that the total depth of excavation is free of such facilities...”
3781.31(B) | “If the markings of underground utility facilities made under section 3781.29 of the Revised Code are destroyed or removed before excavation is completed, the excavator shall notify the utility through the protection service that the markings have been destroyed or removed, and the utility shall remark the facilities in accordance with section 3781.29 of the Revised Code.” **Wait 48 hours for remarks at the excavation site.**

Remember:

3781.25 (E) | “Tolerance Zone” means the site of the underground utility facility including the width of the underground utility facility plus eighteen inches on each side of the facility.”

Methods of excavation within this area include, but are not limited to:

- Hand digging
- Pot holing
- Vacuum excavation
What to Do if a Damage Occurs

For your safety you should walk away immediately and take steps to clear the area to protect yourself and your crew. Do not try to repair or stop a leak yourself or use anything that might create a spark, such as a cell phone.

According to the Federal Pipeline Inspection, Protection and Safety Act—a person who engages in demolition, excavation tunneling, or construction, and who causes damage to a pipeline facility that may endanger life or cause serious bodily harm or damage to property—

(A) may not fail to promptly report the damage to the owner or operator of the facility; and

(B) if the damage results in the escape of any flammable, toxic or corrosive gas or liquid, may not fail to promptly report to other appropriate authorities by calling the 911 emergency telephone number.

Also call OHIO811 so that other utility owners in the area may be notified.

ORC 3781.30(7) | “…take reasonable appropriate actions needed to protect persons and property and to minimize safety hazards until those agencies and departments and the utility arrive at the scene…”

ORC 3781.30(6) | “…As soon as any damage is discovered, including gouges, dents, or breaks to coatings, cable sheathes, and cathodic protection anodes or wiring, report the type and location of the damage to the utility and permit the utility a reasonable amount of time to make necessary repairs;”
RECOMMENDED GOOD PRACTICES

It is recommended that this symbol identify a tie in.

Example:

It is recommended that this symbol identify the intersection of two separate facilities.

Example:

(Continued Next Page)
1. Request markings necessary for your work scope. Don’t request markings outside of your excavation area.

2. Marking size and frequency should be appropriate for the situation or area. Locate what is necessary for the excavator to perform their job safely.

3. It is recommended that the color pink be substituted for white premarkings when snow is on the ground. Indicate the use of this alternate color on your locate request.

4. Provide detailed information about your premarking on your locate request when possible (i.e., number of premarkings).

5. Use markers appropriate for decorative surfaces (i.e., whiskers, chalk, etc.) when appropriate.
A LIST OF "DO’S" DURING EXCAVATION

- Do check positive response prior to arriving at job site.
- Do keep a reasonable clearance between any underground facility and the cutting edge or point of powered equipment.
- Do protect and preserve the color-coded markings until those markings are no longer needed for proper and safe excavation.
- Do contact OHIO811 for a remark if the markings are destroyed or removed before excavation is complete and allow 48 hours to remark the site.
- Do be sure someone other than the equipment operator, i.e. the spotter, is there to look for any sign of the underground facility.
- Do conduct the excavation near the underground facility carefully. Excavate in a careful and prudent manner, by hand, if necessary, to be able to tell the exact location of the underground facility and to prevent damage.
- Do protect and support exposed facilities during excavation and then take care while backfilling to maintain support to prevent damage. Be sure that backfill materials are free of any material that could damage the facility.

Be prepared. Always have an updated list of emergency contact numbers for the excavation area including law enforcement, fire, and utilities. Facility markers in the area display emergency contact information.
If an excavation will cover a large area and will progress from one area to the next over a period of time, the excavator shall provide written notice of excavation with projected timelines for segments of the excavation as the excavation progresses in order to coordinate the marking of facility locations with actual excavation schedules.

Don’t assume that a pipeline or cable runs straight between facility markers.

Don’t assume the depth of a utility. Never assume that an underground facility is the same depth throughout the entire route of the excavation.

Don’t excavate within the tolerance zone with any other equipment except what has been recommended in this guide.

Don’t report emergency locates that are not emergencies.

Don’t refresh the utility locators marks with your own paint. Contact OHIO811 to request a remark.

Don’t work on someone else’s ticket number.

Don’t assume all facility owners have responded to your request. Check positive responses.

OSHA mandates change regularly; please make sure that you are up to date.
The American Public Works Association recommended color code shall be used to mark the location of underground facilities, temporary survey markings, and site of intended excavation. When utility company representatives mark a location, they use colored flags and/or paint to identify the type of underground service:

ORC 3781.29(C) | “A utility shall mark its underground facilities using the following color codes:...”

- **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
- **PINK** Temporary Survey Markings
- **WHITE** Proposed Excavating
WHITE LINING

While it is necessary to be specific about your area of excavation when contacting the Ohio Utilities Protection Service, excavators are required to pre-mark with white paint in order to show the facility owners/locators the specific area where excavation will take place. This will eliminate locating underground facilities that are not involved in the excavation area and reduce unnecessary paint on our streets, roads, and sidewalks.

3781.29(F)(14) | “An excavator is not required to premark the approximate location of an excavation as provided in division (D) of this section in any of the following situations:

(1) The utility can determine the precise location, direction, size, and length of the proposed excavation site by referring to the notification provided by the protection service pursuant to sections 3781.27 and 3781.28 of the Revised Code.

(2) The excavator and the affected utility have had an on-site, preconstruction meeting for the purpose of premarking the excavation site.

(3) The excavation involves replacing a pole that is within five feet of the location of an existing pole.

(4) Premarking by the excavator would clearly interfere with pedestrian or vehicular traffic control.”

For a single point excavation, such as installing poles, pedestals, or planting a tree, mark (with white paint) the area by using dashes to show the owners/locators the area of excavation.
For continuous excavation, such as trenching, boring, etc., mark the center line of excavation with dashes in white paint. Excavation width (in feet) shall be indicated on either side of the center line in legible figures.

White flags or stakes may be used in place of white paint and, in some situations, may be more practical.

Markers used to identify underground facilities should not be excessive or oversized.

Underground facilities shall be marked using paint, flags, whiskers, chalk or other media as appropriate or a combination to identify the facility(s). Marks shall be placed at the beginning and end of the locate and at a minimum interval of two feet but not more than twenty-five feet throughout the locate as needed to clearly identify the route of the underground utility.

It is recommended that when flags are used at the excavation site by the facility owner/locator, the facility owner/operator’s name is on the flag as well as a contact name and phone number. This contact will be able to assist the excavator if additional information is needed about the location of underground facilities.
IDENTIFICATION ABBREVIATIONS

When marks are placed at the excavation site, the owner/operator of a utility line shall be indicated by a letter or letters utilizing the APWA color code. These letters shall be legible and placed at the beginning and end of the locate and at intervals throughout the locate as needed to clearly identify the owner/operator. This may also be achieved by the use of flags that indicate the owner/operator of the facility.

Visit [www.OHIO811.org/markings](http://www.OHIO811.org/markings) to view the facility owner identification codes list.

CABLES

Underground utility lines of the same type in the same trench owned by the same company shall be marked individually.

A. If a single underground facility is present, it shall be marked by placing a single mark over the approximate center of the facility. It is recommended that this mark be a minimum of 1” wide and 12” in length.
CABLES (Continued)

B. If multiple underground facilities are present, they shall be marked by placing a single mark over the approximate center of each underground facility. It is recommended that this mark be a minimum of 1” wide and 12” in length.

[Diagram of cables]

Marks shall be placed at the beginning and the end of the locate and at a minimum interval of two feet but not more than fifty feet throughout the locate as needed to clearly identify the route of the underground utility.

PIPESLINES

A. Pipelines 2 inches and smaller (nominal size): The physical location of a pipeline shall be represented by a single mark.

[Diagram of pipelines]

B. Pipelines larger than 2 inches (nominal size): The physical location of a pipeline shall be represented by a single mark. The nominal size shall be noted.

(Continued Next Page)
For all pipelines:

1. The owner/operator shall be identified. Flags, as well as paint, shall be deemed acceptable as identifying the owner/operator.

2. When known, the material type of the pipeline shall be indicated using the “material type” abbreviation index.

3. When the facility is installed in casing the facility shall be marked as follows: “diameter and material type / casing diameter and material type”. If the casing size or material is unknown it shall be indicated by “UNKN” and, the excavator, designer, or engineer should contact the facility owner. All parties involved shall work jointly to establish accurate information.

4. Marks shall be placed at the beginning and the end of the locate and at a minimum interval of two feet but not more than twenty-five feet (25’) or anytime the facility changes direction, (maximum interval length does not apply to design tickets) throughout the locate as needed to clearly identify the owner/operator, pipeline location, material, and width.

5. All numbers identifying width shall be in inches.

Facilities not marked via electronic equipment should be indicated in this manner, in appropriate facility color code.
CONDUIT/DUCT BANK

The term “conduit” shall be used for a single enclosure containing one or more facilities; the term “duct bank” shall be used for a structure containing two or more conduits.

A. For banks constructed with ducts sized 2 inches or less, the following information will be provided:

1. A single mark is used.
2. A diamond is placed within the mark.
3. The number of small-diameter ducts shall be indicated within the diamond symbol.

B. For duct banks containing ducts larger than 2 inches, the following information will be provided:

1. The duct bank boundary (the “width”) is identified with marks after locating the outermost ducts within the bank.
2. The number of facilities shall be placed within the diamond. This diamond shall be placed within the duct bank boundary marks.

(Continued Next Page)
In situations where multiple conduits/ducts which are owned and/or operated by different companies are placed together in a bundle fashion, a conduit structure or duct bank marking symbol shall be used by the first operator marking the facility. Other operators owning facilities within the bundle shall verify the marks and add their owner/operator letter designation.

C. For all conduits and duct banks:

1. The owner(s)/operator(s) shall be indicated using the facility owner identification code.

2. Marks shall be placed at the beginning and the end of the locate and at a minimum interval of two feet but not more than twenty-five feet (25’) or anytime the facility changes direction, (maximum interval length does not apply to design tickets) throughout the locate as needed to clearly identify the owner/operator, the conduit/duct bank location, and the number of conduits. If known, indicate number of conduits in a duct bank.
**TERMINATION POINTS**

Termination points, stub outs, and dead ends shall be marked as shown. Marking could also be accompanied by adding the letters “TP”.

![Diagram showing termination point](image)

**CHANGE IN DIRECTION**

When deviations in the direction of a facility are known to exist, the deviations shall be marked in a manner which clearly identifies the route of the facility.

![Diagram showing change in direction](image)
OFFSET MARKS

In areas prone to the frequent destruction of marks, offset marks may be used in conjunction with the marks placed at the actual location of a facility. They are intended to be used as a supplemental means of marking.

1. A line is placed in conjunction with an arrow and a measurement (stated in feet), which specifies the distance from the reference line to the actual location of the facility.

2. The arrow indicates the direction from the reference line to the actual location of the facility.

3. The arrow shall be oriented at 90 degrees to the reference line.

4. The distance to the actual location of the facility, from the reference line, shall be placed on one side of the arrow.

5. The locator shall provide all of the necessary information which adequately identifies the specific facility in accordance with the marking standards. This information shall be placed on the side of the arrow which is not utilized for the “distance” information.
BACK TIED/LOOPED SERVICE

When known by records or documentation, the symbol shall be a ½ circle equaling 36” in width and 36” in length unless greater amount is identified.
CORRECTING MARKING ERRORS

Marking errors shall be corrected by the locator/operator and communicated to the excavator as soon as possible after the discovery of such errors. Black paint shall be used to remove, cover up or cancel erroneous markings. In the event of damage, marking errors shall be preserved until such marks are documented.

VALVE PITS/MANHOLES/VAULTS

When known, the perimeter of valve boxes, manholes, and other surface indicators shall be marked using the appropriate APWA color code. The structure should be named as such (vault, pit, manhole...) along with the structure owner’s indicator. If the structure size is unknown it shall be indicated as “UNKN”. If the size of the structure is not indicated, the excavator, designer, or engineer should contact the facility owner. All parties shall work jointly to establish accurate information.

FACILITIES UNDER BODIES OF WATER

Identifying Facilities Located Under Bodies of Commercially Navigable Waterways…

It is recommended that facility owner/operator shall comply with applicable state and federal standards.
Locate Front of Property - 123 Main

**Description** - From the front plane of the primary structure, property line to property line to edge of road or curb.

RED Dotted Line = Property Line / Right of Way

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Locate Front of Property, Both Sides of Road, Plus xx Feet Off Opposite Side of Road 123 Main

**Description** - Front of property, both sides of road - from front plane of primary structure, side property line to side property line, to opposite edge of road or curb plus xx feet.

RED Dotted Line = Property Line / Right of Way
**Locate Rear of Property - 123 Main St**

**Description** - From rear plane of primary structure, side property line to side property line, to rear property line.

RED Dotted Line = Property Line / Right of Way

**Locate Right Side of Property (Facing) - 123 Main St**

**Description** - Facing front of property - from right side plane of primary structure, from edge of road or curb to rear property line.

RED Dotted Line = Property Line / Right of Way

Revision Date: August 2019
Locate Entire Property - 123 Main St

Description - From edge of road or curb to rear property line and from side property line to side property line.

RED Dotted Line = Property Line / Right of Way

Locate Left Side of Property (Facing) - 123 Main St

Description - Facing front of property - from left side plane of primary structure, from edge of road or curb to rear property line.

RED Dotted Line = Property Line / Right of Way
Locate Front of Property & Both Sides of Road - 123 Main St

Description - From front plane of primary structure, side property line to side property line, to opposite edge of road or curb.

RED Dotted Line = Property Line / Right of Way

Locate 123 Main St - Location(s)

Pre-marked Single Point

Description - Locate 25’ Radius Around Pre-marked Location(s).

RED Dotted Line = Property Line / Right of Way

Revision Date: August 2019
Locate 123 Main St - Location Pre-marked Path

Description - Locate 10' on all sides of Pre-marked Path.
RED Dotted Line = Property Line / Right of Way

Locate From Intersection of Oak St to the Intersection of Maple Street

Description -
- Side to Side = Closest Edges of Intersecting Roads.
- Top to Bottom = Edge of Road to Edge of Road.
- RED Dotted Line = Property Line / Right of Way

Revision Date: August 2019
Locate Entire Intersection \( xx \) Feet In All Directions

**Description** - Area bound by closest edges of intersecting roads.
RED Dotted Line = Property Line / Right of Way

Locate From Intersection of Oak St to the Intersection of Maple Street Plus \( xx \) Feet Off the Road

**Description** - Side to Side = Closest Edges of Intersecting Roads.
Top to Bottom = Entire Road Plus Specific Footage.
RED Dotted Line = Property Line / Right of Way
Locate Side (N, S, E, W) of Intersection

Description - Starting Point Shall Be 1/2 of intersection going to closest edge of connecting road.

Example - Locate S Side of Intersection

RED Dotted Line = Property Line / Right of Way

Locate Corner (N, S, E, W) of Intersection

Description - Starting Point Shall Be Where Center of All Intersections Meet. From That Point, go in each direction to.

Example - Locate SE Corner of Intersection

RED Dotted Line = Property Line / Right of Way
DEFINITIONS

**Conduit** – A single enclosure containing one or more facilities.

**Duct Bank** – A structure containing 2 or more conduits.

**Owner** – Any person or entity who owns the means to convey services or materials.

**Operator** – Any person who furnishes or transports materials or services by means of a utility line.

**Pipelines** – Underground utility lines used for the transportation of hazardous liquid, steam, water, sewer, storm, and gaseous materials.

Visit [www.OHIO811.org/markings](http://www.OHIO811.org/markings) to view the definitions list.

Revision Date: August 2019
MATERIAL TYPE ABBREVIATIONS

AC........Asbestos Cement
BRK........Brick Sewer
CI........Cast Iron
CPR........Copper
C/ST........Coated Steel
DI........Ductile Iron
FO........Fiber Optic
FM........Forced Main
GI........Green Infrastructure
PI........Plastic Line Inserted into Steel
PL........Plastic
PVC........Polyvinyl Chloride
RCP........Reinforced Concrete Pipe
SCC........Steel Cylinder Concrete
STL........Steel
TR........Transite
VCP........Vitrified Clay Pipe

Visit www.OHIO811.org/markings to view the material type abbreviations list.

FOR ADDITIONAL INFORMATION ON LOCATING PRACTICES...

This manual outlines the recommended facility marking standards for Ohio. For additional information on locating practices, including the use of facility records, locator training recommendations, and safety guidelines, refer to Common Ground Alliance Best Practices at www.commongroundalliance.com.
THINGS TO REMEMBER

Anyone who intends to dig in the state of Ohio can contact OHIO811 24 hours a day, 7 days a week, 365 days a year.
COLOR CODES
FOR LOCATING UTILITY LINES

**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

**PINK**  Temporary Survey Markings

**WHITE**  Proposed Excavating

*Tolerance Zone:* Width of Underground Facility Plus 18” on Each Side.

1-800-362-2764 or 8-1-1
www.OHIO811.org

www.OHIO811.org Before You Dig