

ALABAMA

Know what's below.



Call before you dig.

ALABAMA DAMAGE PREVENTION
EDUCATION TRAINING COURSE

Chatham county residents frustrated with water outages from fiber optic cable drilling

Tags: [Google Fiber](#), [construction](#), [5 On Your Side](#)

Posted June 8, 2021 5:35 p.m. EDT

Updated June 9, 2021 1:14 p.m. EDT



Construction Worker Suffers Burns and Amputation in Digging Accident

CUT FIBER OPTIC CABLE CAUSES WIDESPREAD OUTAGE IN ALABAMA

Last week, a utility contractor accidentally cut a main fiber optic cable belonging to AT&T, resulting in a widespread outage for much of Northern Alabama. The cut resulted in the loss of both voice and Ethernet data services for AT&T's customers in the area west of Huntsville, Alabama including Athens, Florence, Cullman, The Shoals, Decatur, Hartselle, and Madison. If the utility contractor had an fiber optic map he could have avoided this outage.

The cut to the fiber optic cable happened while the contractor was digging, but was restored later that afternoon after AT&T's personnel made the appropriate repairs to the cable. It is surprising to many that a single cut to one fiber optic cable could affect AT&T's service to so many customers in the region. Most people expected the territory would not have a single point of failure or at least have redundancy set up in case of something like this happening.

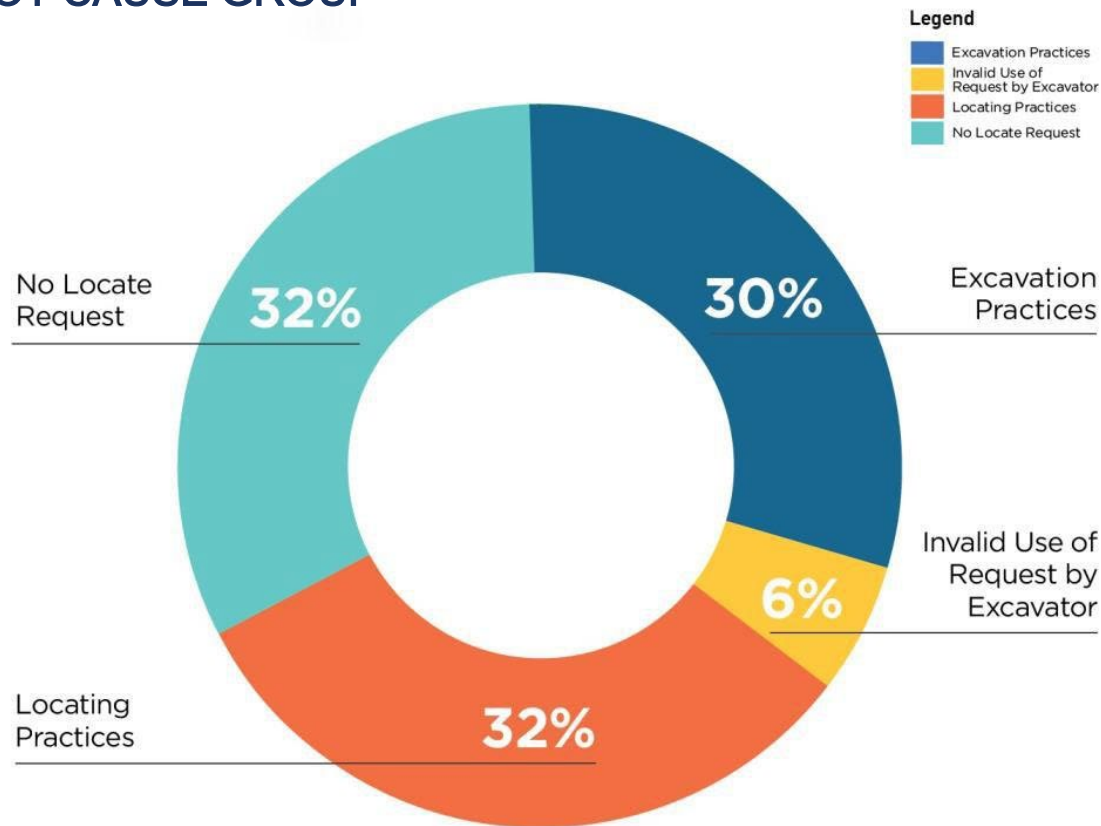
In the unforeseen event of a cut fiber optic cable, like what happened this week in Alabama, telecommunications providers and city officials can use various [telecom GIS data products](#), such as [fiber optic maps](#) and [metro fiber maps](#), to determine the best alternate fiber route to redirect traffic so that less people are inconvenienced while the cut fiber optic cable is being repaired.

At GeoTel Communications, our products integrate telecom infrastructure data with geospatial technologies so that telecom providers like AT&T can analyze fiber network assets in a spatial, map-like environment and quickly make decisions when every minute counts. GeoTel's Fiber Maps data set is digitized in GIS for cities and layered onto high-quality street data or aerial imagery. To order any of GeoTel's data sets for a particular city or metro area, give GeoTel Communications a call at 407.788.8888.

TAGS: [att broadband](#), [att fiber optic map](#)

This case involves a [construction](#) worker who was hired by a city utility to help install modular buildings as part of a city's re-development project. The city was converting and redeveloping a former naval base into a mixed-use development. A construction worker was working in a trench when a drill that he was operating hit an underground energized [electrical](#) line. The construction worker suffered extensive physical injuries, including an [amputation](#) of his left arm, lower right leg, and transtibial amputation of his left foot. The construction worker also suffered a brain injury that left him rendered incompetent. At the time of the accident, the worker and his supervisor were present and observing operations at the construction site. The construction worker had been told by an employee of the city utility that the drilling was in a safe location. The construction worker sued the city for [negligence](#) claiming that the city failed to advise him of the dangerous condition created by the underground energized electrical lines.

REPORTED DAMAGES BY ROOT CAUSE GROUP



REPORTED DAMAGES BY ROOT CAUSE for 2020

Root Cause	Reports	2020 % of Total	2019 % of Total
No Notification made to one call center / 811	84,918	31.81%	29.10%
Excavator dug prior to verifying marks by test-hole (pothole)	41,446	15.53%	1.94%
Facility marked inaccurately due to abandoned facility	20,569	7.71%	7.29%
Facility not marked due to locator error	17,539	6.57%	3.56%
Excavator failed to maintain clearance after verifying marks	17,128	6.42%	16.70%
Facility marked inaccurately due to locator error	15,163	5.68%	10.57%
Improper excavation practice not listed elsewhere	13,444	5.04%	4.97%
Site marked but incomplete at damage location	8,551	3.20%	0.41%
Excavator dug before valid start date/time	7,851	2.94%	9.78%
Facility marked inaccurately due to incorrect facility record/map	7,006	2.62%	2.16%
Excavator dug after valid ticket expired	5,713	2.14%	1.91%
Facility not marked due to no response from operator/contract locator	5,330	2.00%	1.27%
Facility not marked due to unlocatable facility	4,615	1.73%	1.44%
Marks faded, lost or not maintained	4,343	1.63%	1.49%
Excavator failed to shore excavation/support facilities	3,087	1.16%	3.90%
Facility not marked due to incorrect facility record/map	2,729	1.02%	0.74%
Facility marked inaccurately due to tracer wire issue	2,664	1.00%	0.14%
Excavator dug outside area described on ticket	1,489	0.56%	1.51%
Facility not marked due to abandoned facility	1,369	0.51%	0.14%
Excavator provided incorrect notification information	726	0.27%	0.25%
Previous damage	555	0.21%	0.11%
Facility not marked due to tracer wire issue	263	0.10%	0.06%
Deteriorated facility	251	0.09%	0.36%
Improper backfilling	157	0.06%	0.04%
One Call Center error	38	0.01%	0.17%

Coded by Root
Cause Group
Legend

- Excavation Practices
- Invalid Use of Request by Excavator
- Locating Practices
- Miscellaneous
- No Locate Request

About **ALABAMA 811**

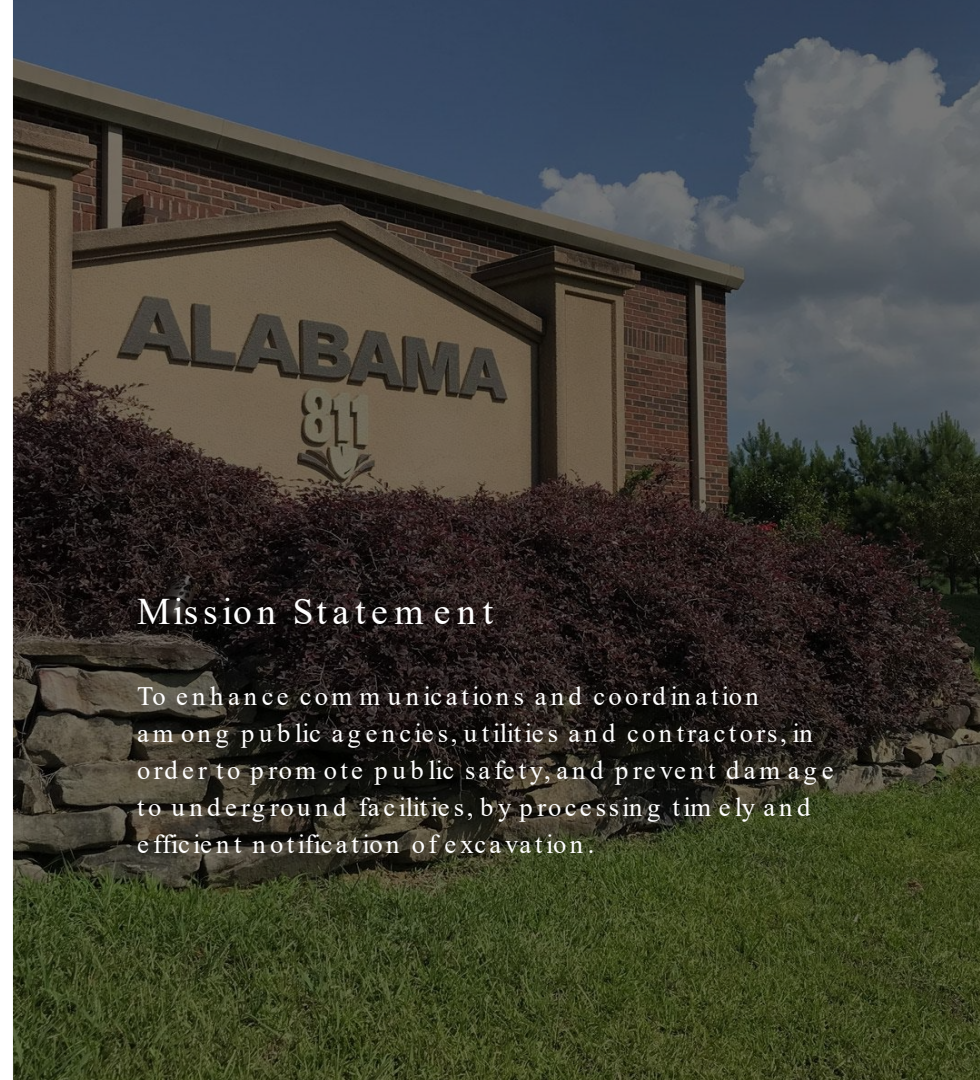
Alabama 811 is a state-wide communication system established to provide an efficient process for excavators to utilize for notification of their intent to dig, blast, bore, or other similar excavation work.

This one-call system provides our members an opportunity to locate and mark their underground facilities prior to the start of excavation work.

Alabama 811 does not locate underground lines. Member companies of Alabama 811, or their contracted locating services are responsible for marking the underground lines.

Mission Statement

To enhance communications and coordination among public agencies, utilities and contractors, in order to promote public safety, and prevent damage to underground facilities, by processing timely and efficient notification of excavation.



REQUIRED TIME FRAMES

Two working days (routine notice)

- 24 hour working period commencing from the time of receipt of the notification excluding weekend and defined holidays
- The law requires a minimum of 2 working days (not including the day of notification) but no more than 10 working days notice

Emergency Locate

- There is no legal time frame for the utilities to respond to an emergency locate request. Most utilities will try to respond as soon as possible, but still have up to the 2 working days to have it marked
- What is defined as an emergency is discussed later

Design/Survey Locate Request

- Minimum of a 5 working day notice

Demolition Locate Request

- Minimum of a 2 working day notice, but not more than 30 calendar days notice

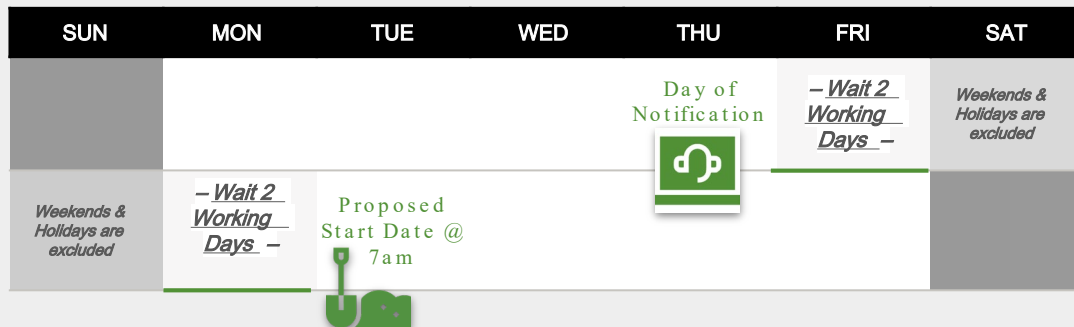
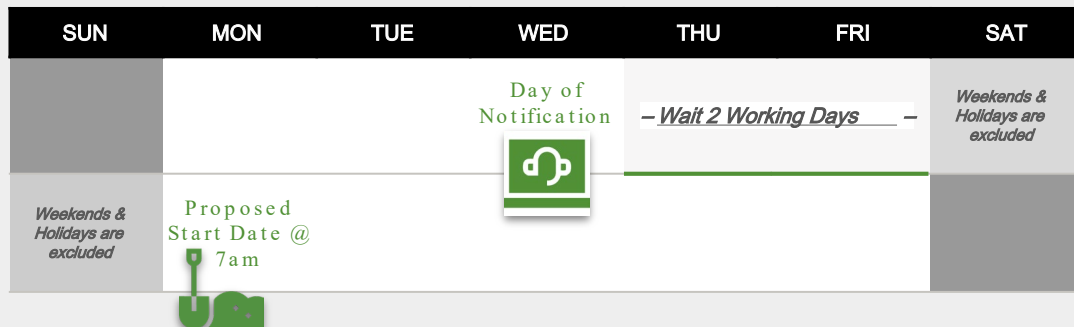
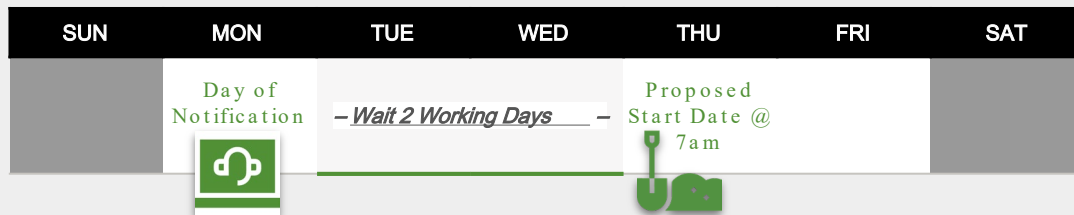
Locate Request “Life”































- A locate request is considered valid for a period of 20 working days from the given proposed starting date for excavation and 30 working days for demolition. If work is continuing past that time, the locate request must be updated at least two working days prior to the expiration date.

NOTIFICATION CALENDAR

Key Things to Remember

- Day of notification is not calculated in two working day notice
- All locate requests start and end time is 7am
- Locates placed after 5pm are considered as being placed the next business day



SUN	MON	TUE	WED	THU	FRI	SAT
	Day of Notification 			Proposed Start Date 	Day 1 	
	 2	 3	 4	 5	 6	
	 7	 8	 9	 10	 11	
	 12	 13	 14	 15	 16	
	**Update if Work Continues 	 18	 19	Ticket Expires 		

LIFE OF TICKET CALENDAR

Key Things to Remember

- All locate requests expire at 7am on the 20th day
- Locate request confirmation will note the day to renew and the day of expiration

What does the law require:

EXCAVATION

When engaged in extensive and contiguous construction, demolition or excavation activity, working agreements may be established after initial notification is made

Notification is not required if excavating less than 12 inches in depth for AGRICULTURAL purposes only

Notification is not required if excavating on property/easement owned when no other underground facilities are present

Except for survey, a locate request can not be placed if excavation is not scheduled to be conducted, and repeated update requests can't be made if work is not being performed

§ 37-15-4.1 Design and Survey Locate Request

Section 4.1

A design or survey locate request is the request for existing underground facilities to be located for the purpose of:

- Bidding
- Redesign
- Advance Planning

Typically this type of request will not result in excavation, this is a separate request from a traditional excavation locate request and the two are not to be interchanged

§ 37-15-4.1 Design and Survey Locate Request

Possible Responses



- Proceed to properly mark the requested area
- Providing to the person submitting the request the best available description of all underground facilities in the area, which may include drawings of the underground facilities, or other facility records that are maintained by the facility operator
- Allow the person making the request or any other authorized person to inspect or copy drawings or other records for all of their underground facilities within the proposed area defined for the design and/or survey request

§37-15-6 Requirement on the Operator to Respond to Notification

Any ***operator** served with a notice of intent to excavate must mark, cause to be marked, or otherwise provide the **approximate location** of their underground facilities

** An operator is defined as a person, governmental agency or political subdivision, or its agents, who owns or operates a public or private underground facility which furnishes services, information, or materials, transports or transmits electric energy, light, water, steam, oil, gas, mixture of gases, petroleum products, hazardous or flammable liquids, toxic or corrosive fluid/gases, telecommunications, cable tv, water drainage, sewer or other like services*

The term does not apply to any entity listed above if all of the underground facilities owned or operated are for the sole use of the entity and locates solely on their property or over property they have rights of operation.

§37-15-6 Requirement on the Operator to Respond to Notification

Any operator response must be done in accordance with the law, prior to the planned start of the excavation, demolition, or blasting

If any underground facility is damaged due to the operator furnishing inaccurate information as to the approximate location, through no fault of the operator, the civil penalties do not apply

In lieu of this information, an operator may request to be present at the time of work

The correct APWA Color Code must be used when marking utilities

The proposed excavation area will always be outlined in WHITE, not any other color that pertains to the other utilities

COLOR CODE / TOLERANCE ZONE

The color code is a universal set of colors to signify which utility is being marked

(Page 12 of Excavation Manual)

The tolerance zone is an 18” area measured horizontally from the outside of edge of each side of a utility or strip of land 18” either side of the operator’s field mark or the marked width of the facility plus 18” on each side of the marked width of the facility. If working inside the tolerance zone, excavators must proceed with non mechanized, non-invasive digging tools, such as hand tools, hydro excavation, etc.

(See Page 16 -17 of Excavation Manual)



White
Proposed Excavation



Red
Power/Electric



Yellow
Gas-Oil-Steam



Orange
Communications



Blue
Potable Water



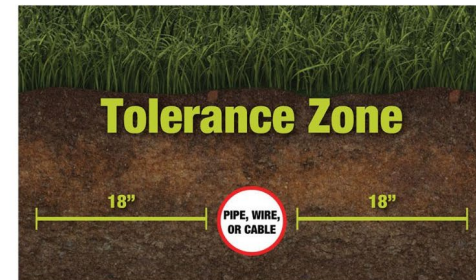
Green
Sewer & Drain Lines

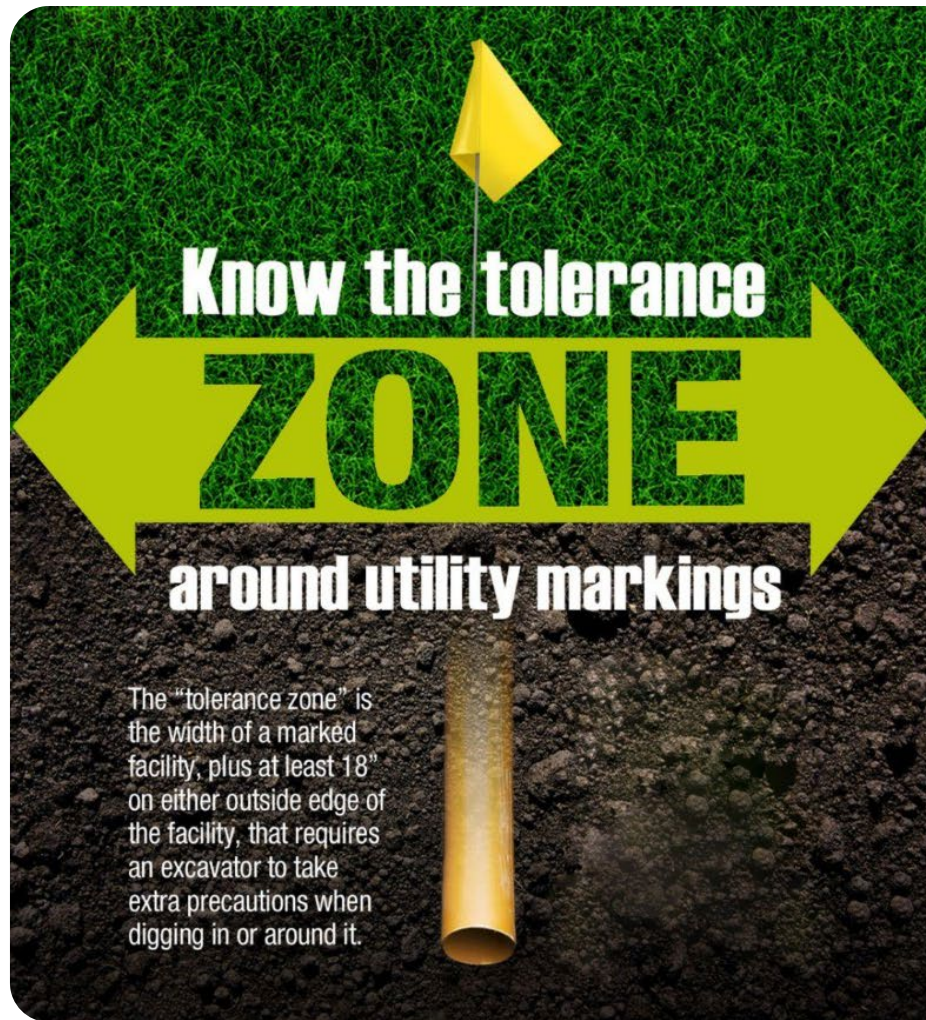


Purple
Reclaimed Water



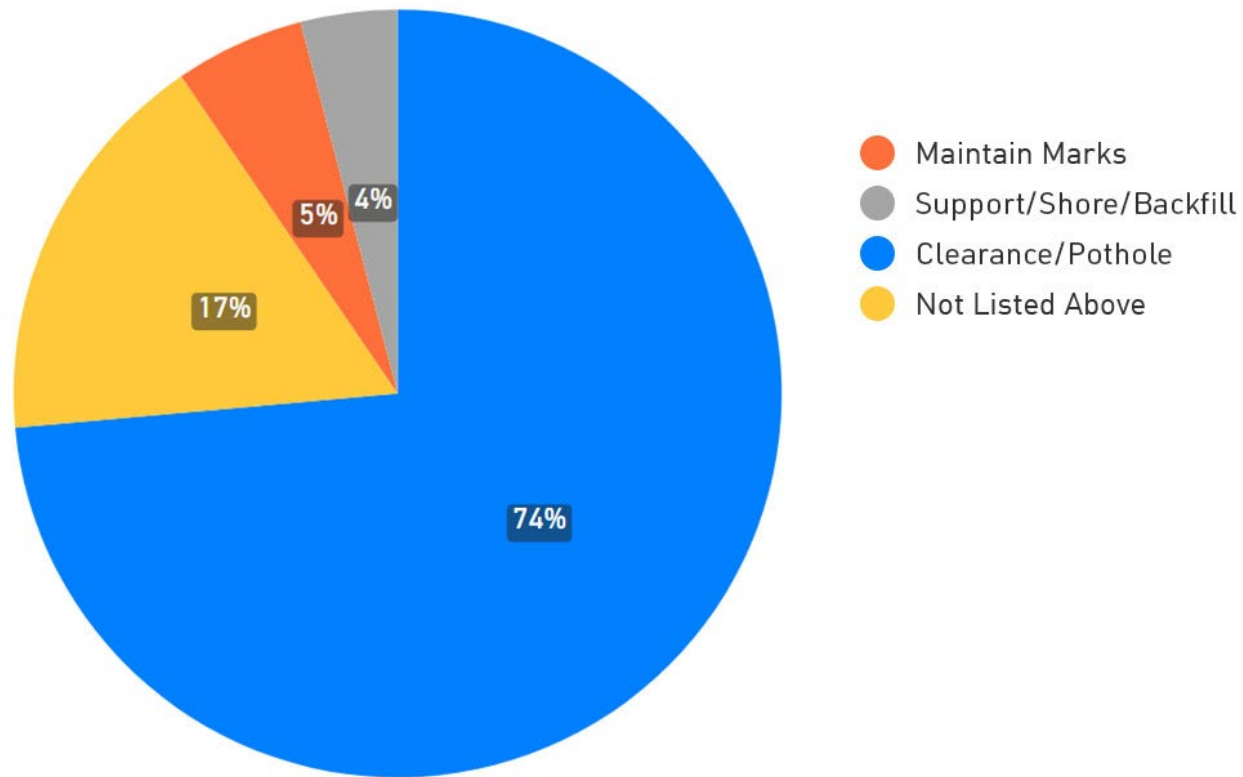
Pink
Temporary Survey





EXCAVATING PRACTICES ROOT CAUSES

% of Total



§37-15-7 Emergency Excavations

Compliance with the notification requirements is not required of persons responsible for emergency excavation or demolition.

Emergency is defined as an excavation or demolition that is required to eliminate an imminent danger to life, health, property or environment or required for the repair or restoration of an operator's service that is required to be performed BEFORE the notification and response procedures required may be fully utilized.

However, the excavator must give, upon commencing of the work or as soon as practical thereafter, notice of the emergency excavation/demolition to the operators who have utilities in the area

The excavator must still take all necessary precautions when digging that apply to the state law

An excavator misrepresenting an emergency will be subject to civil penalties pursuant to §37-15-10.

§37-15-8 Precaution to Avoid Damage

In addition to the notification requirements, when working within the tolerance zone the following must be done to avoid damage and minimize interference:

- Use non -invasive methods of excavation
- If working parallel to marked facility, expose facility at intervals as often as needed to avoid damage
- Maintain a clearance of 18" between facility and cutting edge/point of equipment
- Provide support of the underground facilities including backfilling operations, as may be reasonably required by the facility owner to protect the facility
- Protect and preserve the approximate location marks until those are not longer required

§37-15-9 Excavation or Demolition Damage

Each person responsible for any excavation or demolition operation that results in any damage to an underground facility, immediately upon discovery of that damage, must notify the operator of said facility (or One Call center operating on behalf of the owner) of the damage

- The operator of the facility must then be given the necessary time to perform repairs before the job can resume
- If the damage results in the escaping of flammable, corrosive, explosive, or toxic liquids or gas, the appropriate law enforcement/emergency agencies must be notified
- If there is ever a “near miss”, it must be reported as well

§37-15-10 Civil Penalties

Any person who violates the Underground Damage Prevention Legislation, or rules established under this law, will be subject to a civil penalty and required training

Any person required to complete a course of training is responsible for the cost of that training

It may be required that at least one manager or supervisor attend required training

§37-15-10 Civil Penalties

The penalty for violation under the Underground Damage Prevention Law does not affect any civil remedies for personal injury or property damage or criminal sanctions except as otherwise specifically provided for in this chapter

No civil penalty may be imposed against an excavator or operator who violates a provision while they are responding to an emergency, unless the violation was malicious or willful

Any person who willfully removes or destroys a marking used by an operator to mark the location of underground facilities, except in the ordinary course of excavation, is guilty of a Class C misdemeanor

§37-15-10 .1 Enforcement Authority

The law created an Underground Damage Prevention Authority for the purpose of enforcing and reviewing the penalty provisions of the Alabama Underground Damage Prevention law.

The Public Service Commission serves in an administrative capacity on behalf of the Authority. None of their jurisdiction is expanded due to this role.

The Authority is made up of 17 members representing various stakeholder groups. All but three of the positions are appointed by the Governor.

An Executive Committee made up of 5 of the Authority members shall be appointed by its membership.

§37-15-10 Civil Penalties

- **ALABAMA ATTORNEY GENERAL'S OFFICE
- **ALABAMA PSC – GAS PIPELINE SAFETY
- **ALABAMA DEPT OF TRANSPORTATION
- ALABAMA COUNTY ENGINEERS
- CABLE TELEVISION INDUSTRY
- ELECTRIC UTILITY INDUSTRY
- MUNICIPAL UTILITY OPERATOR INDUSTRY
- NATURAL GAS DISTRIBUTION INDUSTRY
- ONE CALL NOTIFICATION CENTER

- PROFESSIONAL EXCAVATOR INDUSTRY
- PROFESSIONAL ROAD BUILDER INDUSTRY
- PROFESSIONAL LAND SURVEYOR INDUSTRY
- TELECOMMUNICATION INDUSTRY
- TRANSMISSION PIPELINE INDUSTRY
- UTILITY FACILITY LOCATING INDUSTRY
- WATER UTILITY INDUSTRY
- WASTEWATER INDUSTRY

*** NOT APPOINTED BY GOVERNOR, APPOINTED BY STATE AGENCY*

§37-15-10 Civil Penalties

The Authority is responsible for the oversight of the enforcement process

Complaints of violation of §37-15, the Underground Damage Prevention Act, are filed with the UDPA. A complaint can be noted for information only or for designated for enforcement provisions

Complaints must be submitted via the Authority website - www.aludpa.org

Documents, pictures, drawings etc. can be attached to the violation complaint

Key Reasons to Utilize the 811 Service

Protection of crews & equipment

Protection of the underground facilities

Public Safety

Compliance with the Law



Key Benefits to Utilize the 811 Service

Reduce the chance of personal injury to employees and citizens

Maintain uninterrupted utility service to the citizens of Alabama

Potentially reduce insurance premium costs

Potentially reduce Workers' Compensation premium costs

Reduce non-productive down-time

Optimize job scheduling activities

Reduce overtime payments

Reduce damages to expensive excavating equipment

Reduce or Eliminate the payment of property damage claims

How to Utilize the System

3 Main Ways to Submit a Locate Request

Telephone

Call in a locate request directly to our call center, which is open 24/7.
Our call center agents are happy to help you through the process of placing a locate request

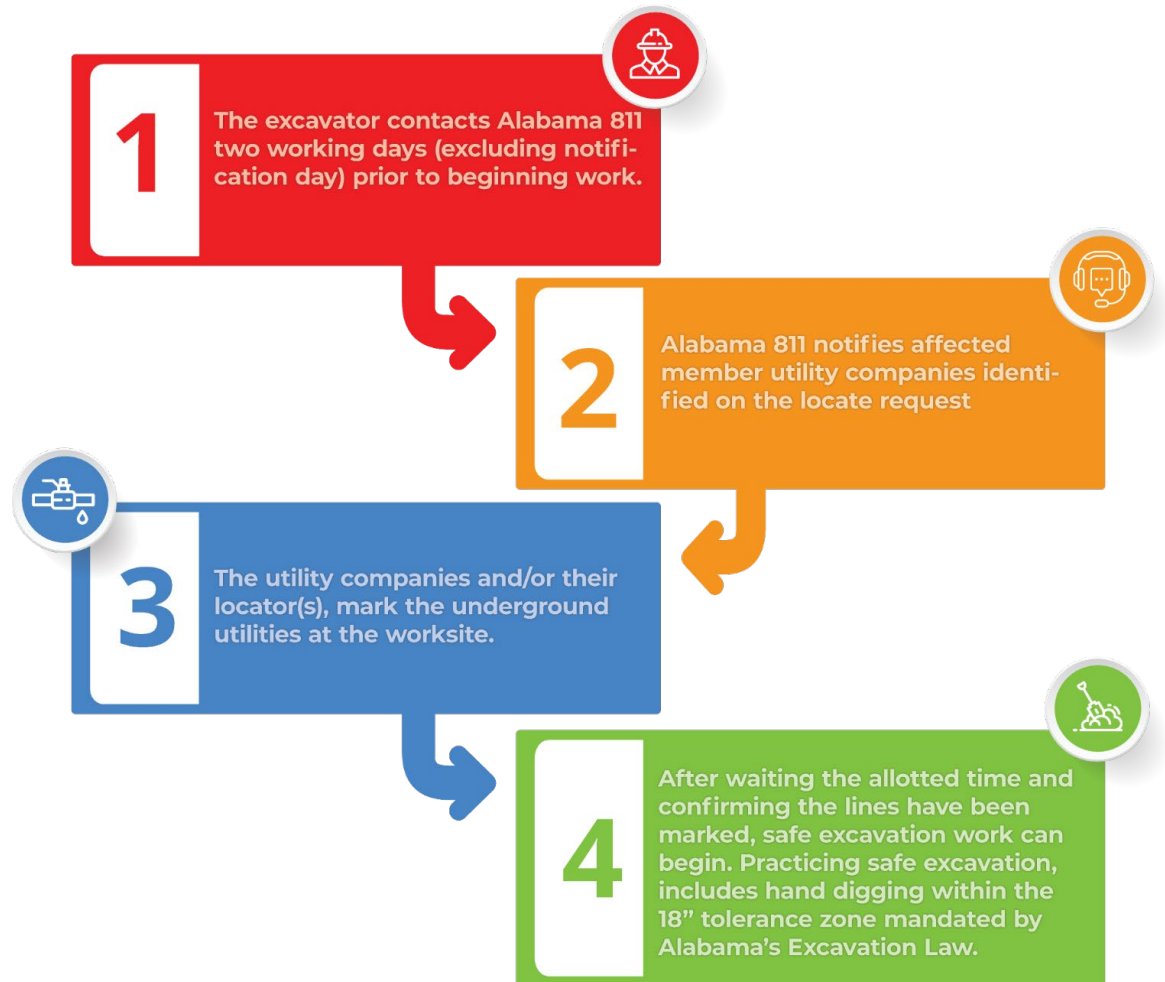
Web Portal

Process a locate request online via our online Web Portal,
Over 58% of locates requests are now being placed online.

Mobile App

Alabama 811 has a mobile app compatible with any smartphone or tablet.
You can place and check locate requests from your mobile device.

The Process



WebPortal

← → ↺ geocal.al811.com/geocal/portal

Apps Getting Started Google Calendar Call forwarding-ex... Polls | Poll Everyw... 0 Notifications AL811 Portal Alabama Foster a... Reporting Identity... Other Bookmarks Reading List

Find Locate Request Help Home Home Owner Create Account Login

Alabama 811 Portal Registration

To register, simply fill in the form on the right.

☒ Find Tickets

☒ Enter Tickets

☐ Positive Response

Please Note:

Registration is not required to view, print, or check the positive response posted to a specific request.

The AL811 Web Portal is intended to be used by professional excavators that need to regularly submit requests. If you are a homeowner or need to enter a single address ticket you can submit a single address ticket through our [Homeowner Portal](#).

The initial permission setting for the Alabama 811 Web Portal allows excavators to enter tickets through our Tier 2 entry level program, which does not require training. An Alabama 811 Call Center Agent will review all tickets submitted by Tier 2 entry level users.

Your Web Portal credentials will also work with the Alabama 811 Mobile App.

After submitting the registration form, you should receive an automated signup confirmation email. You must click the link in the email to activate your account. All of the features may not initially be available to you but the center will contact you with details as you are configured for additional services.

Cancel

Submit

User Information

Email: Your email will be your user name for access.

Verify Email: Verify your email address.

Password: Enter a password. Verify your password.

Name: First Name Last Name

Address:

City/ST/Zip:

Phone: Just type the numbers, we'll format them. Extension

Company / Excavator Information

Name: If you are not representing a company, just use your name.

Type: Please select an excavator type that best describes you or your company.

☐ Company / Excavator Information is the same as the User Information

Address:

City/ST/Zip:

Phone: Just type

Comment: Please pre please no activated

Ticket Contact Information

☐ Ticket Contact is the same as the User information.

Name: First Name Last Name

Phone: Just type the numbers, we'll format them.

Email:

Callback: Enter an altern

Alabama 811 - Google Search

geocal.al811.com/geocal/portal

Apps Getting Started Google Calendar Call forwarding-ex... Polls | Poll Everyw... 0 Notifications AL811 Portal Alabama Foster a... Reporting Identity... Other Bookmarks Reading List

Find Locate Request Help Home Home Owner Create Account Login

Here are some helpful WebPortal tutorial videos as well as other damage prevention related videos:

WebPortal New Ticket Entry

Online Ticket Entry Alabama 811

WebPortal Feature Overview

How to Update a Ticket via the Web

Processing a Positive Response via the Web

Post a Positive Response via the Web

Positive Response

Positive Response is a process to facilitate communication between utilities, excavators and Alabama 811, regarding the status of identifying and marking the underground facilities within the proposed area of excavation on locate request tickets.



LOCATE DIRECTIONS

HWY 150/JOHN HAWKINS PKWY..... LOCATE FROM THE INTERSECTION MARKING NORTH ON THE EAST SIDE OF HWY 31 FOR APPROX 3,500FT

REMARKS
BORE

MEMBERS

CODE	NAME	ADDED MANUALLY?
AGBH01	Spire Alabama Inc - Birmingham - AGBH01	False
ALDT01	Alabama Department of Transportation	False

APC1CL Alabama Power - Birmingham Division - APC1CL

BHWT01 Birmingham Water Works

CHAL01 Charter Communications of Alabama

HOVR01 Hoover, City of

MCIT01 MCI Telecommunications

AFGP01 Crown Castle

AGHP01 Spire Alabama Inc High Pressure Mains - AGHP01

ATTD01 ATT / D

BEAR01 BEAR COMMUNICATIONS

ACMPA2 Spire Alabama Inc - High Priority - ACMPA2 - Birmingham SOC

Find Locate Request

Start Locate Request

Respond

Queue

Report

Help

Home

Home Owner

Log Out

Ticket Number:

Reset

Search

Advanced Options

☐ My Company Tickets

Tickets: 1 days

Between: 06/01/2021 06/03/2021

County: JEFFERSON

Place: Hoover

Work Date:

Excavator:

Addr/Str:

Intersection:

Phone:

Code:

Back Print Show Map View Log History Send To Me Send To Email Update Copy

STATUS	CODE	NAME	FACILITIES	RESULT
Closed	APC1CL	Alabama Power - Birmingham Division - APC1CL • June 05, 2020 12:55 PM	Electric	• Clear: No Conflict for Area Requested
Closed	ATTD01	ATT / D • June 05, 2020 12:55 PM	Phone	• Clear: No Conflict for Area Requested
Closed	BEAR01	BEAR COMMUNICATIONS • June 02, 2020 1:07 PM	Fiber	• Located: Facilities Marked
Closed	BHWT01	Birmingham Water Works • June 05, 2020 12:55 PM	Water	• Located: Facilities Marked
Closed	CHAL01	Charter Communications of Alabama • June 05, 2020 12:55 PM	Cable	• Clear: No Conflict for Area Requested
Closed	AFGP01	Crown Castle • June 02, 2020 7:42 AM	Fiber	• Clear: No Conflict for Area Requested
Closed	MCIT01	MCI Telecommunications • June 01, 2020 10:40 AM	Fiber	• Clear: No Conflict for Area Requested
Closed	AGBH01	Spire Alabama Inc - Birmingham - AGBH01 • June 05, 2020 12:55 PM	Gas	• Clear: No Conflict for Area Requested

Helpful Reminders

Always list good contact numbers for the person submitting the request, as well as the onsite contact.

Always enter the nearest city or town to the worksite. It is hard for the utility companies to determine what part of the town the locate request is in when there is no city or town listed.

Always specify the area of the property to be located.
'See Crew On Site' should only be listed for emergency situations. It is recommended that excavators white line/pre-mark the site if the area to be located at the site is hard to describe.

If working along the roadside, be sure to include which side of the road is to be located.

If there is not an address for the worksite, be sure to include enough information for the utilities to find and mark the worksite. The map is only used in-house at Alabama 811. GPS can be used to mark the map on the ticket entry screen but are not accepted as the only source of property identification in the locate description.

Additional Resources



The Common Ground Alliance is a national damage prevention group that has plenty of great resources and reporting on its website, which can be found at <https://commongroundalliance.com/>

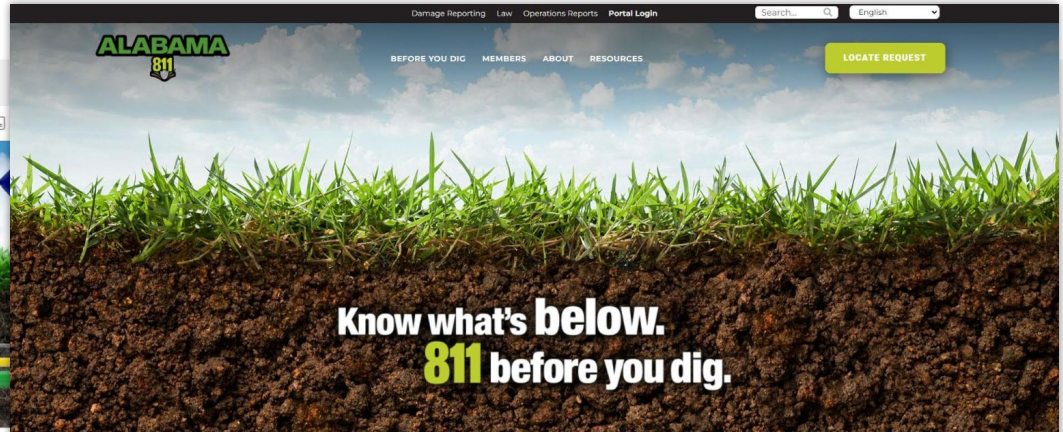
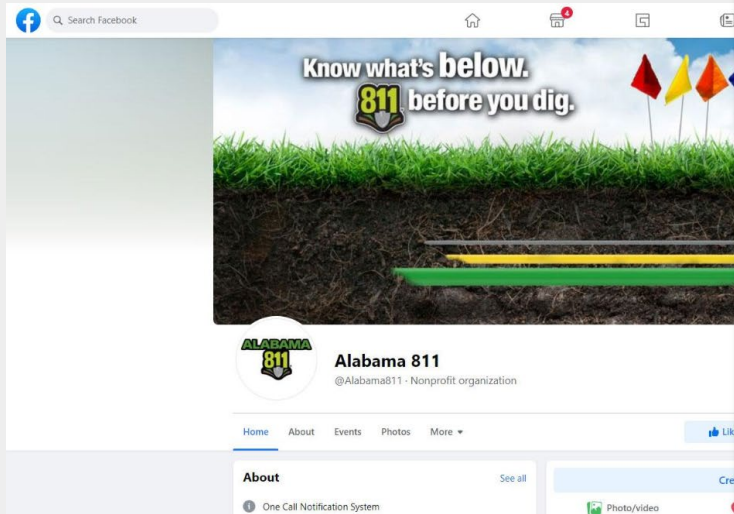
Dirt Report - The CGA publishes an annual report based on data entered into the Damage Information Reporting Tool for a given year

- *Gives metrics on damage counts, locations where damages are prevalent, etc.*

Best Practices Report- an annual publication from CGA that combines and updates all of the best practices pertaining to excavators, utility operators, locators, designers, and the One Call Centers

Additional Resources

Contact 811 for toolkits and member specific materials to push out to your area and customers.
Find us on the web, Facebook, and Twitter to help spread the damage prevention word!



READY TO START DIGGING?

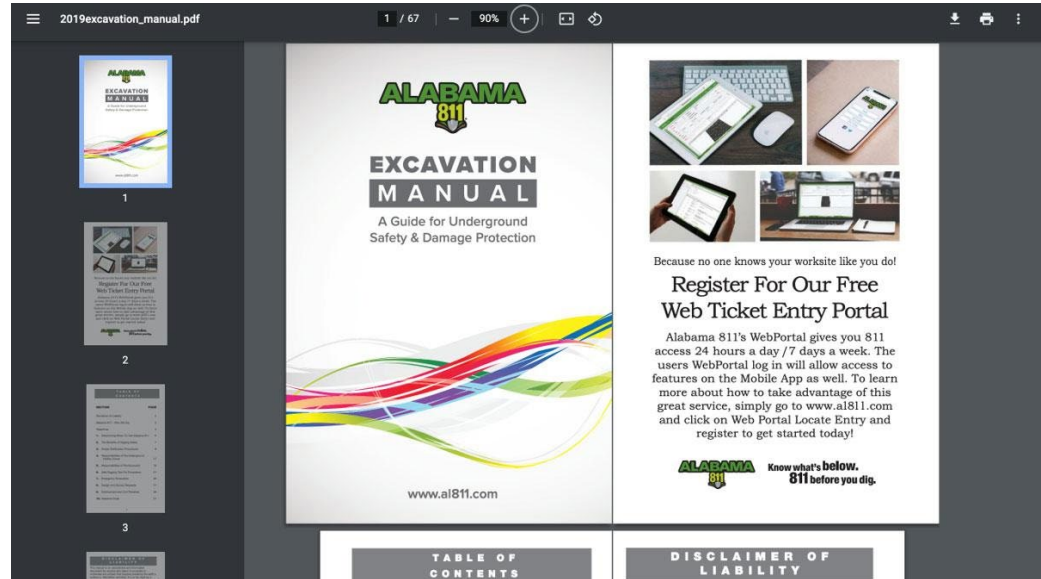
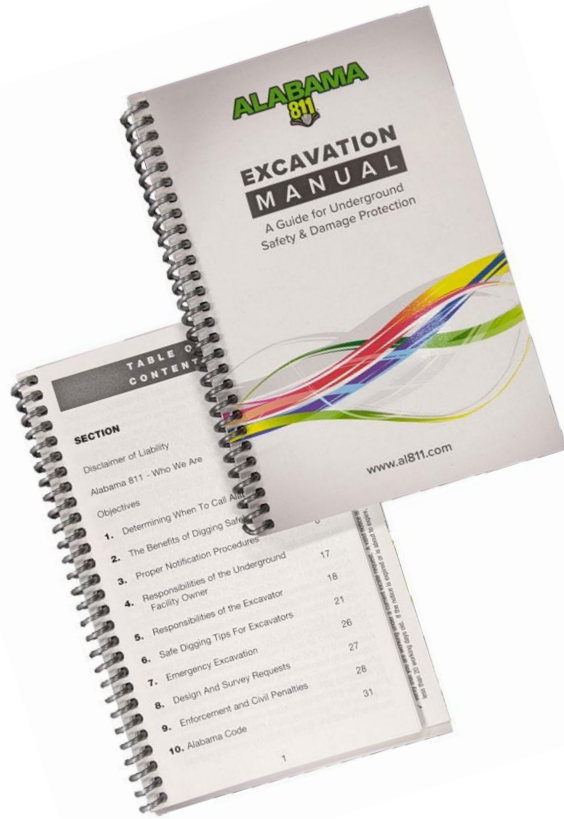
What is 811?

Do I need to contact 811?

When can I dig?

What's next?

Excavation Manual



Available as a handbook and as a pdf download on the website



Questions?

McKay Lyvers

Damage Prevention Education Manager

mlyvers@al811.com

205.567.5737 -or- 205.731.3207