

Digging Safely in Alberta

Homeowner Edition



**Developed by: Utility Safety Partners
Best Practices Committee V1.4 Apr 2025**

**Click
Before
You Dig**

UTILITY SAFETY PARTNERS

In 2022, “Alberta One Call” became “Utility Safety Partners” (USP), but continues to offer the same services as before in taking locate requests and sending notification to the member utilities so they can arrange for their buried lines to be marked.

Mission Statement

We keep people, the environment, and utilities safe through education, awareness, engagement and locates to prevent contact with overhead and underground infrastructure.

Vision Statement

We are the trusted resource for utility safety.

PURPOSE

This guide has been developed to help homeowners dig safely in their yards and around their homes. It is based on a much larger, more in-depth document called “**The Damage Prevention Process in Alberta**” which covers more issues and is more complicated (see <https://utilitysafety.ca/learning-centre/resources/publications/> for more information). USP’s focus is to provide guidance for safe digging practices for projects on someone’s land or on road rights-of-way (including boulevards and ditches) adjacent to that land.

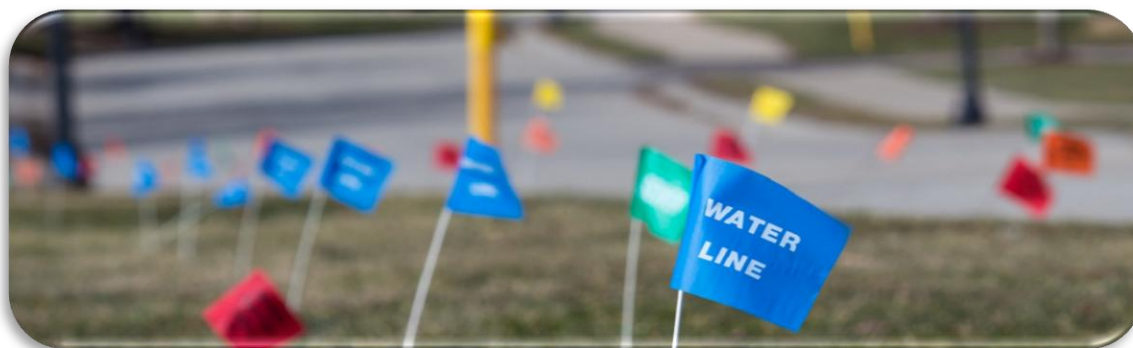
For the purposes of these guidelines, a ground disturbance is any disturbance of the earth, regardless of depth. Activities that disturb the ground include, but are not limited to:

- digging (excavating/trenching)
- deck pilings and foundation work
- installing/removing fence posts
- grading, ditch shaping and land contouring
- topsoil stripping/land levelling
- tree planting/removal
- hydrovaccing
- driving rebar, rods, pins or anchors for flower beds or concrete forms etc.
- trenching to install power or gas to a shop/shed

Should readers of this document have any questions or concerns about the content contained in this document, please refer to the FAQ page on USP website at <https://utilitysafety.ca/learning-centre/faq/>

AVOID DAMAGING UNDERGROUND FACILITIES

Damage to underground facilities is usually preventable and commonly occurs when underground facilities are not properly identified, located or exposed. Proper planning is very important to ensure there is no conflict with anything above or below ground.



Every time someone disturbs the ground, there is a risk of damage to underground facilities. The possible consequences of damaging an underground facility include, but are not limited to:

- loss of life
- personal injury
- environmental contamination
- evacuation of affected areas
- explosion, fire, or flood
- disrupted services to neighbors and inconvenience caused to the public
- third party property damage
- costs of emergency service responses
- underground facility repair costs
- environmental restoration costs
- equipment repair costs
- legal and medical costs
- increased insurance premium

USP offers a free notification service to their members for any locate request in Alberta. When a request is made, USP notifies the relevant members about the planned ground disturbance. However, **USP does not perform the locates**. It is the responsibility of the utility owners to mark the locations of their underground facilities before any ground disturbance occurs.

The homeowner's process includes:

- submitting a locate request online at <https://utilitysafety.ca/wheres-the-line/submit-a-locate-request/>;
- waiting until all the underground facilities have been marked and/or identified, and information has been received from all the affected utility owners listed on the USP response; and
- carefully hand exposing what has been identified in the locate documentation as defined by the utility owner.



PLEASE NOTE: NOT ALL UTILITY COMPANIES ARE MEMBERS OF USP. IT IS THE HOMEOWNER'S RESPONSIBILITY TO CHECK IF ANY NON-MEMBER UTILITY COMPANIES HAVE UNDERGROUND FACILITIES IN THE AREA AND CONTACT THEM DIRECTLY. ENSURE YOU CHECK USP'S WEBSITE FOR THE LIST OF REGISTERED MEMBERS <https://utilitysafety.ca/membership/member-list/>

IF YOU INTEND TO DISTURB THE GROUND

Whether a ground disturbance is to take place on public or private land, all underground facilities should be identified and marked before the ground disturbance begins. You may be required to obtain an excavation permit or written permission before disturbing the ground.

Sources of information on what underground facilities might be at the site of a proposed ground disturbance include:

- USP
- signs or markers in the area
- Alberta Energy Regulator and Canadian Energy Regulator for pipeline information
- your municipality's administration
- utility owners
- surveys
- land titles and more.

CLICK BEFORE YOU DIG

USP promotes “Click Before You Dig” as the preferred method of requesting a locate. Web locate requests can be placed 24 hours/day, 7 days/week, 365 days/year. Locate requests can be completed in minutes without on-hold delays.

Requesting a Locate

The minimum information required to process a locate request includes:

- contact information
- exact ground disturbance location/work area
- type of work; and
- date of the proposed ground disturbance.

Every locate request must include a digitally drawn polygon that accurately represents the size and location of the dig area. **It is very important that you review the ticket information for accuracy and confirm the dig site polygon is in the correct location and fully covers the dig area.** Locates or clearances will not be provided for any area outside of the highlighted dig area polygon.

For more detailed information, courses, and videos for placing a locate request please visit <https://utilitysafety.ca/learning-centre/resources/>

Notice

USP members require a **minimum of 3 full business days** before any planned ground disturbance. They may reach out to you via phone or email or send a locator to mark the area.



PLEASE NOTE: THIS IS NOT A GUARANTEE THAT LOCATES WILL BE COMPLETED AFTER 3 DAYS, BUT RATHER THAT YOU WILL RECEIVE A RESPONSE FROM THE NOTIFIED MEMBERS. HOWEVER, CONFLICTS, DELAYS, OR OTHER ISSUES MAY ARISE THAT COULD LEAD TO FURTHER DELAYS IN THE PROCESS, SO IT'S IMPORTANT TO ALLOW FOR EXTRA TIME IF POSSIBLE.

Emergency and Priority Locates:

For emergency locate requests, call 1-800-242-3447. This is only for situations where the ground disturbance is correcting an immediate threat to life, health, or property, e.g. water, sewer, power, phone, or gas underground facility repairs.

Modifying Locate Requests:

If site conditions change (work type, excavation method, area, depth etc.), you can update your locate request online, by email at info@utilitysafety.ca, or by calling 1-800-242-3447. Be ready with your ticket number and new details.

Cancellations:

If your work is canceled or delayed before locates are done, notify USP and any non-member utilities as soon as possible to avoid unnecessary work. Cancellations can be completed through similar methods to modifications.

UTILITY OWNERSHIP

Utility companies have underground facilities located in public roads allowances or road rights-of-way, utility easements (see Figure 1), or within private property (See Figure 2). These are considered 'publicly owned underground facilities'.

Homeowners may also own underground facilities, this can include sprinkler systems, irrigation lines, or electric and telecom lines that go from the main house or public facility to other buildings like garages or sheds. Water and sewer lines running from the property line to the home are owned by the homeowner, not the utility company. In rural areas, many landowners have private septic tanks, tile beds, and water wells with underground pipes. These private systems won't be found through a USP locate request.



Figure 1



PLEASE NOTE: THERE MAY BE A NEED TO HAVE UNDERGROUND FACILITIES LOCATED *PRIVATELY* TO MARK OUT ANY OTHER LINES THAT ARE NOT PART OF THE USP LOCATE PROCESS SUCH AS PRIVATELY-OWNED UNDERGROUND FACILITIES. PRIVATE LOCATES ARE NOT COMPLETED BY THE NOTIFIED UTILITY OWNERS OR THEIR LOCATORS IN YOUR LOCATE REQUEST.

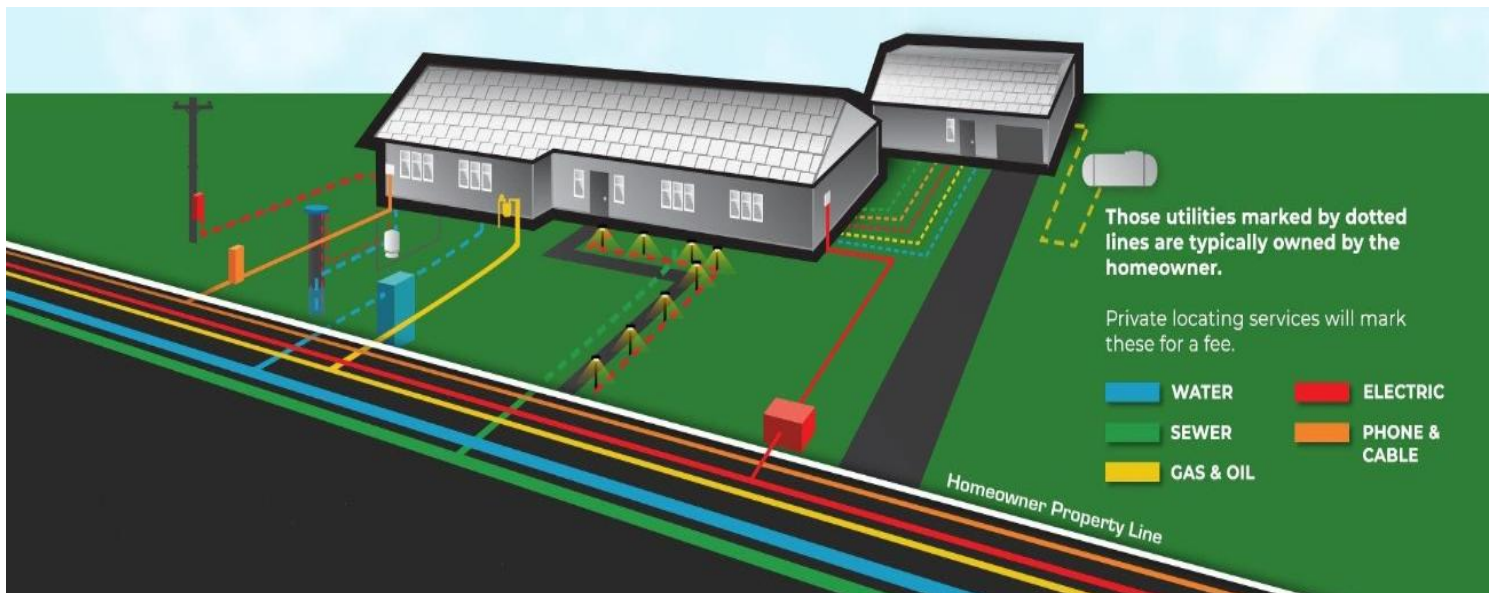


Figure 2

YOUR LOCATE REQUEST IS PLACED, WHATS NEXT?

Utility Owner Responsibilities:

- advising you that there is no conflict and that you are clear to dig near their facilities; or
- completing the locates as requested; or
- planning with you for some other mutually acceptable time for their locators to provide the locates.

Homeowner Responsibilities *include, but are not limited to:*

- maintaining the outline of the area to be located. For work areas physically marked with white (or black) paint, markings may need to be refreshed prior to the arrival of the locators.
- ensure the work area is accessible for all locate staff and/or contracted locate providers (e.g. restrictions: locked gates, dogs, or artificial grass).
- advising USP and any private locators if anything on site changes that could affect the requested locate work.
- cancelling the locate request as soon as possible if necessary; and
- digging only after locates are completed and the work area is cleared

THE LOCATOR

Locators provide a direct field communication link between utility owners of underground facilities and yourself. They can advise and assist you in your approach to dealing with underground facilities at the site. It is recommended that you discuss the scope of work to take place with the locator. Supplying project or plan documentation to the Locator for clarification is recommended.

LOCATE MARKS

Locate marks, be they paint, stakes or flags, indicate the approximate centerline of the underground facility and should be in sufficient quantity and close enough together to clearly identify the horizontal alignment of the underground facilities. Locators will not provide a depth, as you are required to confirm location and depth using non-destructive digging techniques approved by the utility owners prior to mechanical excavation.

Locate marks of underground facilities in Alberta follow the Uniform Color Code introduced by the American Public Works Association. —————>

WHITE - proposed excavation
PINK - temporary survey markings
RED - electrical, lighting cables
YELLOW - gas, oil, steam
ORANGE - telephone, cable, TV, signals, alarms
BLUE - potable water
GREEN - sanitary and storm sewers, culverts
PURPLE - reclaimed water, irrigation, slurry lines

LOCATE DOCUMENTATION

Once the locate request is complete, the locator will give you documentation, including a diagram that shows the location of facilities and any special instructions or limitations from the utility owners. The diagram should help you understand the marks made on-site and include a legend and details of the area located or cleared. It may also include information like pipe sizes and materials, if available. Be sure to check all emails from USP, utility owners, and locators for this documentation.

You must review and keep this documentation on-site during the entire ground disturbance. If there are any differences between the documentation and the on-site marks, or if the work area cleared doesn't match, contact the utility owner before proceeding.

The documentation should also include details to help re-establish the locate marks if needed. Some utility owners may provide measurements from fixed objects to help verify or re-establish the marks.

LIFESPAN OF LOCATES

The locate expires as stated in the locate report - please see the locate documentation for utility owner specific information and guidelines. Additionally, an "all clear" or "clearance" response from a utility owner will also expire when all other locates expire unless otherwise stated in the Locate Report and/or in the utility owners' responses to the initial locate request. You should never assume that the "all clear" or "clearance" response lasts for the entire timeline of the excavation work.

It is important to not proceed with a ground disturbance if the locate documentation is expired. Any damages incurred after the expiry date(s) could be your responsibility.

It is up to the homeowner to, within reason, maintain the locate marks. If the locate marks are not adequate for the successful and safe completion of the work, you must request new locates.

AFTER LOCATES ARE COMPLETED

Notifying USP, and the utility owners who are not members of USP, is only one step in fulfilling your responsibilities in the damage prevention process. Each utility owner is responsible for responding to the notification and ensuring that its underground facilities are properly marked and identified. If a utility owner informs you that your work is not in conflict with its facilities, it does not mean that other facilities are not in conflict. You must ensure that all notified utility owners have responded and either marked and identified their facilities or given confirmation that their facilities are not in conflict.

Once the underground facilities have been marked and identified, you must not use mechanical excavation equipment within the Hand Expose Zones (as listed in the locate report) for any facility until it has been hand-exposed and is clearly visible, unless otherwise specified by the utility owner. Read the completed locate documents that are sent for information on how to safely work around the located utilities.

HAND EXPOSING

Before starting any hand expose activities, it is important to confirm with the utility owner whether their supervision/presence is required during the process and which methods are acceptable. Hand exposing refers to carefully exposing underground utilities using non-mechanical means, such as hand tools or non-destructive methods (e.g. hydrovac) to prevent damages. Homeowners planning ground disturbance that is within the Hand Expose Zone must ensure proper processes are in place.

Figure 3



HAND EXPOSE ZONES

Examples of various hand expose zones common in Alberta.

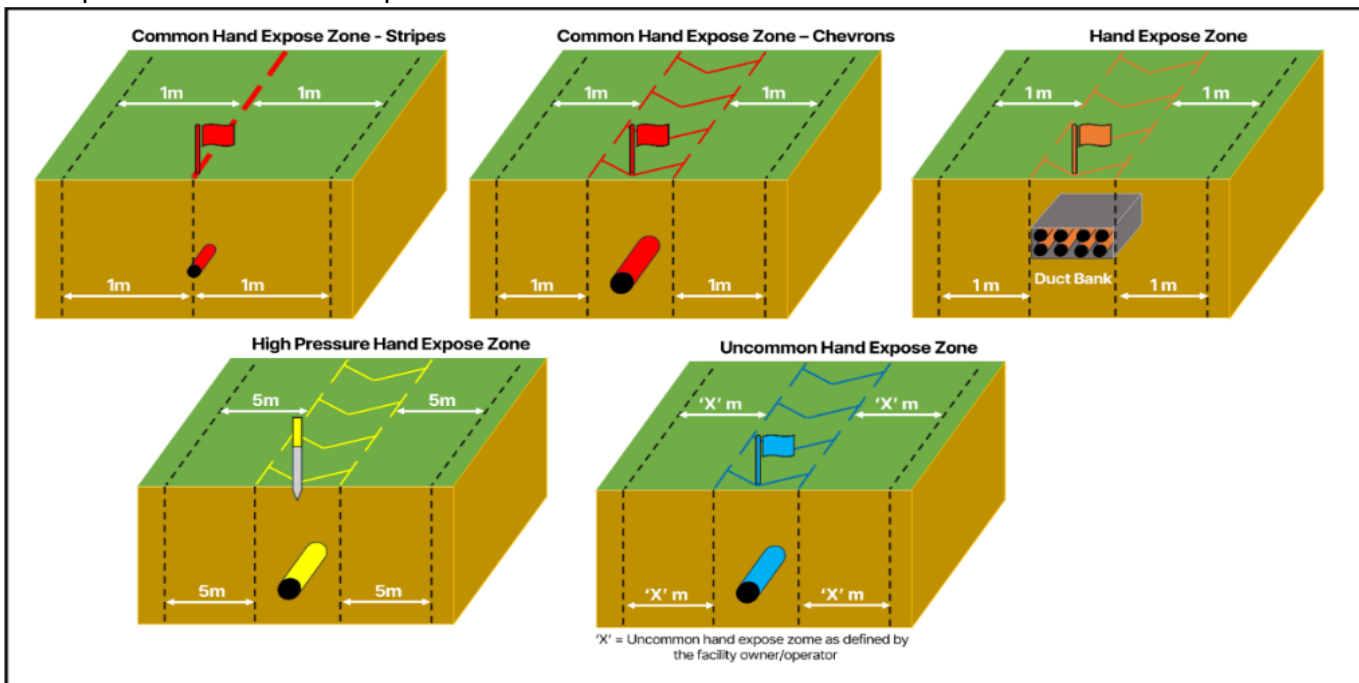


Figure 4



HAND TOOLS LIKE SHOVELS CAN STILL DAMAGE UNDERGROUND FACILITIES. EVEN WHILE HAND EXPOSING, CAUTION MUST BE USED.

SPECIAL SITUATIONS

Not all situations will be covered by the preceding guidelines. There are exceptions and special situations. The following sections highlight some, but not all, of those situations.

Alternate Locate Provider (ALP) Program

When you require a response from utility owners faster than the usual minimum 3 business days, you can choose the Alternate Locate Provider (ALP) option. By selecting ALP, you agree to hire an authorized provider to locate the underground facilities of *ALP participating utilities* in your area. You'll need to arrange and **pay for the provider's services directly**. If you do not select ALP, utility owners will respond to your request the traditional way, at no cost to you. For more details on the ALP and how to use it, [visit the USP website](#).

Ground Disturbance Parallel to an Underground Facility

When locate requests indicate activities require ground disturbance to be conducted parallel to an existing underground facility, please contact the utility owner for direction. Not all shallow utilities are in perfect alignment.

No Members with Registered Assets in your work area

When you submit a locate request and there are no registered members' assets affected by your work, you will receive a confirmation email that includes a PDF of the details of your request. At the very bottom of the page, the affected members list will be blank. This ticket would be valid for 30 days from the date of submission. Please note that if you are aware of, or

discover any other utility owners who are not members of Utility Safety Partners, you are required to contact them directly. It is also recommended that you double-check the location of the work area polygon to ensure that it is correct.

Frozen Ground

Exposing underground facilities in frozen ground can present significant challenges. In situations where the ground is frozen, you have a choice of thawing the ground or using non-destructive excavation techniques (e.g. hydrovac), both which must be acceptable to the utility owner. This information may be found by contacting the utility owner directly.

Extended Work Sites

When a project is extended beyond the work area limits marked by locators, you must request additional locates. Underground facilities should not be assumed to be in the same alignment outside of those limits.

Pipelines

Pipelines in Alberta transport fossil fuels like natural gas, oil, and natural gas liquids, as well as water supply and disposal lines. Pipelines are regulated by the Alberta Energy Regulator and the Canadian Energy Regulator. Regulators enforce different requirements from the standard locate process and ground disturbance activities. Contact pipelines owners or USP for more details.

Locate requests are a form of notification to a pipeline owner. You may require agreements and/or supervision to work around pipelines

SITE RESTORATION

All backfill and restoration procedures have the potential to affect the underground facility too. Ensure that you check with the utility owner to obtain their restoration standards or restrictions.

WHAT TO DO IF YOU HIT A LINE

Safety comes first, stop digging immediately and do not attempt to fix the issue yourself.

Assess the situation to determine the type of utility affected and evacuate if there is an immediate danger, such as a gas leak, exposed electrical wires, or fire risk. Call 911 in emergencies or contact the utility company to report the damage and follow their instructions. Avoid touching potentially energized materials, creating sparks, or using electronic devices near the site. If you are unsure who owns the utility line, contact USP for assistance. Always prioritize safety and wait for professionals to handle the situation.

KEEPING THE GUIDELINES CURRENT

The information in these guidelines is current as of the date of issue. As improvements are made in the underground facility damage prevention process, changes in the guidelines will be required from time to time. Suggestions or comments on these guidelines are welcome and will enhance their usefulness and acceptability. Comments should be addressed to Utility Safety Partners via email (info@utilitysafety.ca) or by mail to PO Box 87131, Douglas Square RPO, Calgary, AB T2Z 3V7.