



Urban Design and Management | Planning & Design

EXCAVATION GUIDELINES & PERMIT APPLICATION REQUIREMENTS

Introduction

An Excavation Permit (Permit) is required prior to the removal of any materials (e.g. asphalt, concrete, grass, gravel, etc.) within any part of a City of Lethbridge (City) owned Right of Way, Public Utility Lot or Utility Right of Way (herein referred to as the ROW for all) to a depth of 0.3m or greater below the established elevation.

The intent is to ensure that all excavations undertaken within the ROW prioritize public safety, and that any areas disturbed from the excavation activities, including the area surrounding the excavation, are restored by the contractor to the pre-excavation condition or better. For the purposes of this document, the Contractor is considered:

- A contractor performing an excavation on behalf of:
 - a business or resident,
 - a utility or facility owner (including the City); or
- A utility owner's own forces performing an excavation.

If an excavation is part of a **new installation or re-alignment** within the ROW, a Utility Location Assignment (ULA) Permit is required as described under the *Utility Location Assignment Guidelines*.

For street-use requirements, refer to the *Street-Use Guidelines*.

Given the City's ever-changing physical and social environment, it is expected that these guidelines will evolve over time. It is the responsibility of those employing the use of this document, to ensure they have the most current and up-to-date version.

Purpose

These guidelines will outline the Permit process and identify standard safety and operational requirements, as well as provide general conditions, clarity, and direction to individuals who would like to understand this process from the perspective of the Permit applicant (Applicant), a business, or a citizen.

These Permits support the City in monitoring and coordinating activities within the ROW in order to:

- Allow excavation work to take place in a safe and timely manner.
- Prevent conflicts between activities.
- Protect and maintain (ensuring longevity of) public infrastructure.
- Minimize disruption to businesses, residents and road users (i.e. motorists, cyclists and pedestrians).
- Maintain safety for all users.

Table of Contents

| | |
|--|----|
| Application Process..... | 3 |
| General Conditions..... | 3 |
| Safety Requirements | 5 |
| Minimum Requirements from Existing Infrastructure..... | 7 |
| Surface Repairs..... | 9 |
| Warranty..... | 10 |
| Remedial Work | 11 |
| Excavation Fees..... | 11 |
| Additional Fees..... | 11 |
| Public Service Announcement (PSA) FORM..... | 12 |

Application Process

Permit applications, pictures, PSA's, compaction test results, etc. shall be sent to the Planning and Design Department by emailing rowapplications@lethbridge.ca or by calling 311 (403.320.3111) and asking to speak to a ROW Coordinator.

The following information shall be submitted with all Permit application a minimum of three (3) business days in advance of the work:

1. Detailed work plan, including:
 - a. Description of the work
 - b. Start date and end date
 - c. Sketch of all excavation locations, with the municipal address of the adjacent parcel(s)
 - i. If the excavation is related to an approved ULA permit, the permit number shall be provided
 - d. ROW facility type (e.g. street, sidewalk, pathway, boulevard, roadway, median, alley)
 - e. Existing surface material (e.g. concrete, asphalt, gravel, grass, dirt, etc.)
Traffic accommodation plan (only required if motor vehicles and/or pedestrians are affected) compliant with the City of Lethbridge Temporary Traffic Control (TTC) Manual.
To arrange for traffic control services, contact the Traffic and Signs Coordinator at 403.315.1508
2. Contractor name, address and site contact information.
3. Utility owner name, address and site contact information (if applicable).
4. A valid copy of the Contractor's general commercial liability insurance with the City of Lethbridge listed as an "Additional Insured", with a minimum of \$2,000,000 coverage.
5. A valid copy of the Contractor's City of Lethbridge Business License.
6. Contractor's job number (if applicable).
7. Billing information including contact name, phone number, mailing address, and email address.

Once approved, a copy of the Permit will be emailed to the Applicant.

Note: If the location changes or the work zone is expanded after a Permit has been issued, contact a ROW Coordinator as soon as possible with all updated information.

General Conditions

It is the Contractor's responsibility to ensure that their Permit is valid prior to commencing any excavation work, and a copy of the Permit is on site at all times. *Please note that excavation permits will only be issued to contractors with utility owner approval.*

1. Upon completion of the installation, the contractor shall update the drawing with the dimension off either the property line (PL), back of walk (BOW), or back of curb (BOC) and submit to the utility owner so that they provide accurate asbuilts to the City.
2. It is the Applicant's responsibility to determine whether public services will be affected and to notify the service provider prior to the commencement of the work. These services include but are not limited to:
 - a. Waste & Recycling (commercial or residential)
 - i. Waste & Recycling Foreman: 403.320.4149 or 403.320.3139

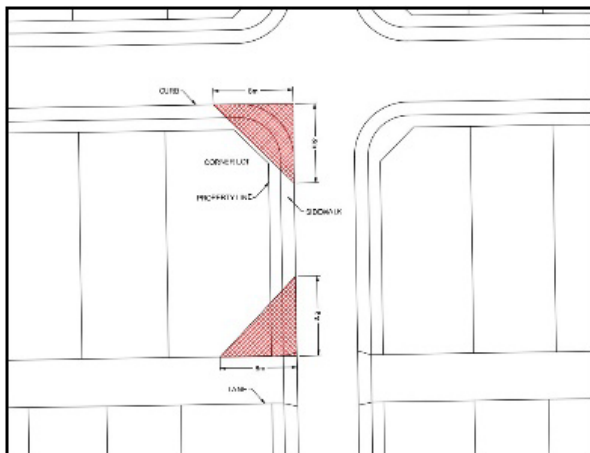
- ii. Collection schedule: <http://www.lethbridge.ca/living-here/Waste-Recycling/Pages/Automated-Waste-Collection.aspx>
 - a. Lethbridge Transit
 - i. Transit Operations Coordinator: 311 (403.320.3111)
 - ii. Transit routes and schedules: <http://www.lethbridge.ca/living-here/getting-around/Transit/Pages/RoutesSchedules.aspx>
 - b. Emergency Medical Services (EMS)
 - a. EMS only needs to be contacted when the roadway is impassable
 - i. The attached public service announcement (PSA; sheet 12 of 12 in this document) needs to be received by the City a min of 2 business days in advance of closure.
 - c. Canada Post
 - a. Please contact an ROW Coordinator for a contact number should a Canada Post super box (or any Canada Post infrastructure) be affected.
- 2. Permits issued under these Guidelines require a site inspection by a ROW Coordinator prior to backfilling to ensure compliance with conditions from both the ULA Guidelines as well as the Excavation Guidelines for new utility installations, which include ensuring: the approved alignment is followed, the required minimum separations from existing utilities are adhered as well as the required depth zone is achieved. **Please call your City project manager or text 403.360.0230 / 403.635.1590 with a minimum two (2) hour notice for an inspection.** *Note: Pre-construction meetings with the City on site is a great way to ensure all parties are on the same page.* Any arterial or collector road closure requires a Public Service Announcement. The attached public service announcement (PSA; sheet 12 of 12 in this document) needs to be received by the City a minimum of 2 business days in advance of closure.
- 3. Any subcontractors working on behalf of the Contractor within the work zone must be listed on the Permit. Contractors that are not listed on the Permit are required to apply for their own Permit. Failure to do so will be in contravention of the Streets Bylaw.
- 4. Utility excavations shall not be permitted on streets resurfaced or top lifted within the past two (2) calendar years with exceptions granted only where it can be shown that the utility excavation was beyond the control of the utility involved. This shall include, but not limited to, emergency work or redevelopment/development requiring service connections. All utility excavation permits applied for prior to the two (2) years shall be reviewed case by case, and subject to the following rehabilitation standard of the street surface, in addition to the rest of the guidelines outlined in this document. If approval is granted, special conditions may be made in addition to Transportation standard details str_35 & str_36 followed.
- 5. It is illegal to remove or tamper with an official boundary marker (a survey pin). Should an excavation result in a boundary marker (survey pin) being removed or destroyed, it is the responsibility of the utility owner (or contractor on their behalf) to have an Alberta Land Surveyor re-measure and re-establish the destroyed/removed markers. For more information regarding this, please contact Alberta Land Surveyor's Association (www.alsa.ab.ca).
- 6. Unrestricted access and egress to all businesses and/or residences, including private garages and parking pads, must be maintained at all times unless written approval has been obtained from the affected business or resident (with a copy submitted with the Permit application).

7. For Permit requests adjacent to any business and/or residence, the Applicant must deliver a letter to those affected with a minimum of two (2) business days' notice. The letter shall include:
 - a. A description of the work taking place
 - b. Anticipated duration
 - c. Site contact information including phone number and email addressThe letter must be reviewed by your City contact prior to delivery. If any business/resident reaches out to the contractor to discuss a concern that may have a significant impact on their daily routine, the contractor must try their best to alleviate any conflicts and/or concerns prior to reaching out to ROW for assistance. If work adjacent to a business will only take place outside of their regular business hours, a letter is not required.
8. Closures that affect the use of a parking kiosk, a time controlled parking area, or a parking location specific to individuals with mobility constraints require approval by contracting 311 (403.320.3111) to speak with the Parking Coordinator.
9. The Contractor shall comply with all relevant City Bylaws.
10. The disposal of hydrovac waste must be compliance with government regulations.
11. Any work that encroaches/crosses the Oldman River may require approval from Fisheries and Oceans Canada prior to construction.
12. For private property parcels owned by the City, contact 311 (403.320.3111) to speak with the Corporate Land Administrator
 - a. If approval is granted, a URW easement may be required.
13. For public parcels owned by the Parks Department, contact 311 (403.320.3111) to speak with the Parks Infrastructure Coordinator
 - a. If approval is granted, a URW easement may be required.
14. For privately owned parcels (owned by any entity other than the City of Lethbridge), approval must be obtained by the property owner.
15. Any work within 50m Alberta Transportation's (AT's) ROW requires approval from AT prior to construction.
 - a. For drawings that show the ROW limits (AT vs. City of Lethbridge), email rowapplications@lethbridge.ca.
16. Irrigation lines may be present in any greenspace and if damaged due to utility work, must be repaired by the excavator and/or Utility Owner.
17. If any condition of the Permit is not followed or parameters change without prior approval from the City, the Contractor may be subject to a non-compliance fee (refer to *Additional Fees* below) and/or the Permit revoked.

Safety Requirements

1. Under the Occupational Health and Safety Act, Regulation and Code; the Alberta Electrical Utility Code; and the Alberta Pipeline Act, field location of all existing utilities is mandatory, and failure to obtain same will INVALIDATE the Permit. Prior to excavating, existing utilities are to be located through the services of:
 - a. Alberta One-Call: 1-800-242-3447
 - b. DigShaw Facility Locate Service: 1-866-DIG-SHAW (344-7429)

- c. City Parks Irrigation: contact 311 (403.320.3111) and ask for irrigation locates (if City owned irrigation lines are present or suspected)
- 2. When working in proximity to live electric cables and/or exposing energized cables, contact 311 (403.320.3111) prior to construction to speak with the Electric Control Room
 - a. Ensure locates slips are available
- 3. The work must comply with the current City TTC Manual, which can be found online at www.lethbridge.ca/ttcmanual including but not limited to:
 - a. Peak hour traffic typically occurs from 7 a.m. to 9 a.m. and from 3 p.m. to 6 p.m. Monday to Friday. During these times, construction work and/or traffic disruption is not permitted on arterial and major collector roads except in cases of emergencies or with prior approval from the City Transportation Department.
 - b. For partial road closures, a minimum unobstructed clearance of 3m is required at all times for each direction of traffic flow.
- 4. A minimum clearance of 1.8m of sidewalk for pedestrian movement must be maintained at all times.
 - a. In situations where this cannot be achieved, a full sidewalk closure is required. Parking stalls adjacent to a sidewalk closure must also be closed to the public.
- 5. The Contractor is to contain and maintain their own safe work area within the temporary traffic controlled area.
- 6. The safe work zone shall be properly defined with a physical barrier (e.g. barricades, fencing).
- 7. If the work requires the closure of a Regional Pathway, an approved mobility-friendly pedestrian detour must be provided.
- 8. When two or more contractors are working within the same temporary traffic controlled area, all must communicate with the first one approved to be on site, prior to starting construction.
- 9. No building emergency exits or fire lanes may be blocked.
- 10. No item, with a height greater than 1m above the established elevation, measured from the top of the curb where there is a sidewalk or from the level of the crown of the roadway where there is no sidewalk, shall be placed within a triangle formed on a corner site by the way of two curb lines adjoining an intersection, including an alley intersection, and two points located 8m from the said corner where the curb lines meet.



Minimum Requirements from Existing Infrastructure

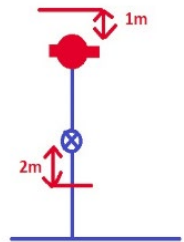
Unless approved otherwise by the owner of the existing utility, the below are minimum requirements maintained from existing infrastructure, which are in line with their existing standards (please note that separation requirements listed are measured from *edge to edge* of the existing utility to the new utility, for a full 'unobstructed clearance')

1. For all utilities

- a. 0.3 m vertical separation when crossing is required.
- b. If installing a utility with an identified horizontal separation of 1.5m or less from an existing utility and the installation method is drilling, exposing that existing line at regular intervals is required (~10) unless it's a LEU or Fibre cable *see *LEU & Fibre*
- c. Approval from the owning utility is required prior to any deviation from their below separation requirements.

2. City of Lethbridge Storm, Sanitary or Water

- a. 2.0 m horizontal separation while paralleling any Storm, Sanitary or Water facility (including hydrants, valves, etc.), except:
 - i. Minimum 1.0 m separation from the *backside* of any hydrant or catch basin only (as per diagram)
 - ii. Minimum 1.0 m separation from a curb stand.



2. ATCO Gas:

- a. 1.0 m horizontal separation while paralleling any ATCO Gas facility
 - i. 0.5 m horizontal separation for the placement of vaults, pedestals, cabinets, etc.

3. Lethbridge Electric Utility (LEU):

- If installing a utility with an identified horizontal separation of 1.5m or less from an existing electric line, exposing that electric line **every 6m** is required.
- Contacting LEU operations (by calling 311 @ 403.320.3111) is required prior to construction when planning to expose and work around LEU's energized cables.
 - a. Primary
 - i. 1.0m horizontal separation when drilling parallel to any primary line
 - i. 0.5m horizontal separation when fully exposing any primary line
 - ii. When a primary line is exposed in any capacity, a LEU inspector is to be on site prior to conduit/cable placement and/or backfilling
 - b. Secondary
 - i. 0.5m horizontal separation when drilling parallel to any secondary cable
 - ii. No horizontal separation when fully exposing any secondary cable
 - c. Single Phase (1ph) Transformers
 - i. 1.0m horizontal separation from underground infrastructure
 - ii. When working within 3.0m of any of transformer concrete base, exposing the ground grid adjacent to the planned excavation location is required
 - Bonding to the transformer is required prior to construction for all metallic above grade structures
 - iii. 3.0m separation from the **opening/access side** for above ground infrastructure
 - 0.75m separation from the other 3 sides
 - d. Three Phase (3ph) Transformers & Switching Cubicles

- i. 1.5m horizontal separation from underground infrastructure
 - ii. When working within 3.0m of any of transformer/switching cubicle base, exposing the ground grid adjacent to the planned excavation location is required
 - For locations with transformers only, metallic above grade structures (existing and new) are to be bonded (to the transformer).
 - iii. 3.0m separation from the **opening/access side(s)** for above ground infrastructure
 - 1.25m separation from the other sides
 - e. Pedestals
 - i. 0.6 m clearance if placing any above ground utility adjacent to an above ground pedestal on access side of the pedestal.
 - f. Junction Enclosures/Loop Boxes
 - i. Minimum 0.15m horizontal separation when conduit is hydrovaccated in
 - ii. Minimum 0.3m horizontal separation when conduit is drilled in
 - g. Overhead power poles and street light poles
 - i. 0.6m horizontal separation from underground infrastructure
 - ii. Crossing between poles and guy wires is not permitted
 - iii. Any excavation within 1m of any overhead LEU power pole must be backfilled the same day
 - iv. Workers must be familiar with limits of approach when working around overhead cables. Orientation can be supplied by LEU if required
- 4. **Fibre:**
 - a. If installing a utility with an identified horizontal separation of 1.5m or less from an existing fibre line, exposing that fibre line **every 6m** is required.
- 5. **Telus:**
 - a. 0.6m clearance if placing any above ground utility adjacent to an above ground Telus-owned pedestal on opening/access side of the pedestal.
- 6. **Shaw:**
 - a. 0.6m clearance if placing any above ground utility adjacent to an above ground Telus-owned pedestal on opening/access side of the pedestal.
- 7. **City of Lethbridge Transportation:**
 - a. 0.15m of unobstructed clearance from any public sidewalk/pathway, to any vertically installed utility/infrastructure (e.g. ground water monitoring well, Little Lethbridge Library, etc.)
 - b. Shallow utility installations across paved roads must be completed by way of directional drill
 - c. The Contractor must meet all standards as required, as per the City of Lethbridge Transportation Construction Drawings (Appendix B) and Backfilling Regulations of Public Right-of-Ways (06000), found online at <https://www.lethbridge.ca/Doing-Business/Planning-Development/Urban-Construction-Right-of-Way-Coordination/Pages/Construction-Specifications.aspx>
 - i. Shallow utilities installation must comply with the required depth zone of 0.9m to 1.2m unless approved otherwise by the Director of Infrastructure or designate.
Note: minimum depth is dependent on road classification

- a) Minimum 0.9m when located within a local roadway/alley
- b) Minimum 1.0m when located within a collector/industrial local
- c) Minimum 1.1m when located within an industrial collector
- d) Minimum 1.2m when located within an arterial or super collector
- ii. For a copy of the map showing the different road classifications, please request one from a ROW Coordinator

8. City of Lethbridge Parks

Open excavations and bore holes are not permitted to be located within the drip line (under the branch canopy) or within 3m of a tree base (whichever of the two is the lesser distance).

- a. Any non-compliance resulting in damage to a tree may be subject to a fee (issued by Parks) equivalent to the 3:1 replacement cost of a tree, invoiced to the Contractor
- b. For questions regarding a City-owned tree, contact 311 (403.320.3111) to speak with the Parks Infrastructure Coordinator.

9. Train Rails

Any work planned, including but not limited to excavating, placement of equipment and/or machinery operation in proximity of a rail line requires approval from the Canadian Pacific Railway (CPR) as well as the City prior to construction, and may require a crossing and/or proximity agreement (for a map distinguishing ownership between the two, please contact ROW).

- b. Within 15m of a CPR rail; CPR Contact: Graeme Dales 403.319.3831 (graeme_dales@cpr.ca)
- c. Within 5m of a City owned rail; City Signals Department by calling 311 (403.320.3111) and asking to speak with the Signals & Streetlights Operations Manager.

Surface Repairs

All surface repairs must comply with the following, unless approved otherwise by the Director of Infrastructure or designate:

1. Concrete repairs must be completed by the City. Please email for a copy of the concrete surface repair request form.
 - a. If concrete is not available due to cold weather, it is the Contractor's responsibility to complete the surface repair using a temporary surface material (e.g. cold mix asphalt or gravel)
 - i. Contractor must email ROW the type temporary surface material used, with permit number.
 - b. All temporary surface repairs are to be monitored by the Contractor or Utility Owner (if applicable) on a regular basis to ensure public safety.
3. Hot-mix asphalt repairs must be completed by the City. Please email for a copy of the asphalt surface repair request form.
 - a. If hot-mix asphalt is not available due to cold weather, it is the Contractor's responsibility to complete the surface repair using a temporary surface material (e.g. cold mix asphalt or gravel)
 - i. Contractor must email ROW the type temporary surface material used, with permit number.

- b. All temporary surface repairs are to be monitored by the Contractor or Utility Owner (if applicable) on a daily basis to ensure public safety.
- 4. On asphalt alleys, Contractors have the option of doing their own surface repairs, provided a copy of their Quality Control (QC) plan is submitted to and approved by a ROW Coordinator prior to paving.
- 5. Seeding/sod/gravel can be completed by the Contractor.
 - a. Any remedial work within the river valley requires a site-specific grass seed to protect the native ecological diversity. Please see the seeding section of the Parks development specs Section 2.1.D (<https://www.lethbridge.ca/Doing-Business/Planning-Development/Urban-Construction-Right-of-Way-Coordination/Documents/Section%2007050.pdf>) for the Native Grass Seed (restoration) species list. This is a list of approved species only. Each site requires an ecological assessment for species composition to determine the proper ratio. The Utility Owner may need to hire a consultant to determine the appropriate seed ratios.
- 6. Upon completion, it is recommended that surface repairs done by the City are reviewed by the Contractor and/or Utility Owner for owner acceptability.

Warranty

All excavations (up to an including the surface repair) carry a full two (2) calendar year warranty period with the Contractor. The City does final warranty inspections of all locations, but should a contractor or utility owner want to ensure that an inspection is completed as soon as the warranty is up, they are welcome to do so. Submitting the following information so that the warranty expectations can be marked as completed. *Note: ROW encourages all contractors do take many pre-work photos (date stamped; videos are encouraged as well) as a precaution.*

- 1. Warranty remains until a final inspection is completed with a record submitted (either by the City or by the Utility Owner or their Contractor)
- 2. When determining if warranty remedial work is required, the following is looked at:
 - a. Any settlement that could cause moisture to be held/trapped;
 - b. A settlement greater than 0mm for concrete as the surface material
 - c. Any cracking (including alligator/fatigue) for asphalt as the surface material
 - d. Any settlement greater than 5mm over 3m for asphalt surface
 - i. Seam cracks are a good indication warranty remedial work will be required
 - ii. Follow the City of Lethbridge Asphalt Concrete Specification Section 05140 (5.6: Smoothness)
- 3. If a final inspection is completed by the Utility Owner or their contractor, the following is to be submitted to the City
 - a. Date stamped photos of all repairs
 - i. If more than one (1) location exists, please identify the repair locations
 - b. Permit number related to the original excavation(s)
 - c. Indication if remedial work is required
- 4. Should an inspection find that remedial work is required, the Contractor (or Utility Owner if applicable) will be given fourteen (14) days to correct the deficiency unless a time extension is

requested. Should the deficiency not be corrected without an approved time extension, the City will coordinate the repair at the expense of the Contractor or Utility Owner.

Remedial Work

The City of Lethbridge is trying to identify the root causes for failures when an excavation repair fails, resulting in the need for remedial work. Prior to commencing any remedial work the following information shall be submitted a minimum of three (3) business days in advance of the work, while ensuring that the rest of the guidelines are followed:

1. Description/Scope of the Work (e.g. surface repair only, re-excavation required, etc)
2. Start date and end date (if work will take longer than one day)
3. Any additional documents required as outlined in the standard *Application Process*
4. Potential reason for failure (e.g. winter work, lack of compaction testing, etc)

All remedial work repairs will be inspected again after two (2) years following the criteria of *Warranty*, but will carry no additional ROW permit costs. The City's goal is to minimize these failures while holding the responsible party accountable.

Excavation Fees

All fees (including non-compliant fees) related to the excavation work are billed to the Contractor (or Utility Owner if applicable), unless otherwise stated in their Municipal Access Agreement or Franchise Agreement.

- \$200 per single excavation and/or hydro-excavation hole, excluding Transportation signs
- \$400 per 100m block (for unlimited excavations and/or hydro-excavation holes), excluding Transportation signs

Payment is due upon the issuance of the invoice.

Additional Fees

1. Applications with less than three (3) business days' notice carry an additional fee equal to half of the regular Permit cost to cover administrative processing costs, pending a ROW Coordinator is able to accommodate the construction schedule.
2. Non-compliance fees may be issued to Contractors (or Utility Owners if applicable) in the sum of five (5) times that of the standard Permit fee for the following circumstances:
 - a. Failure to obtain a Permit prior to excavating
 - b. Failure to obtain prior approval of a 'no-cut' location
 - c. Failure to comply with the City of Lethbridge Construction Specification Backfilling Regulations
 - d. Failure to comply with the Field Change Process outlined in the ULA Guidelines
3. When an excavation affects the travel path of a pedestrian and/or motor vehicle, hoarding (street-use) fees following the Streets Bylaw may apply.

Public Service Announcement (PSA) FORM

(Note to Applicant, please fill out all **bolded and underlined** areas below and email to rowapplications@lethbridge.ca)

For Immediate Release

Month Day, Year

Road closure – **Name of Road**

Effective immediately, the **(street and road)** will be closed to facilitate work for **your company name.**

This work is expected to be completed by end of day on **Day of the week, Month Day,** weather permitting.

Motorists are advised to drive with caution in this area and follow posted detours.

Project Contact:

Name

Company Name

Phone Number