

The City of Calgary

Rights-of-way utility alignment permit guidelines

**Corporate Analytics and Innovation (CAI)**

## **Rights-of-Way Utility Alignment Permit Guidelines**

The purpose of these guidelines is to provide the necessary information to ensure that construction by shallow utility providers in The City of Calgary's rights-of-way are carried out in accordance with The City of Calgary's Municipal Rights-of-Way Bylaw 17M2016 (the ROW bylaw), and in compliance with all legislative requirements in order to minimize environmental, financial and maintenance costs and to ensure the optimal use of the rights-of-way.

## Chapter 1 - Introduction

The goal of these guidelines is to outline the requirements for utility provider's work in, on and above The City of Calgary's (The City) rights-of-way and to provide for the efficient review of permit application submitted by utility providers. This document brings together a broad section of many industry practices that utility provider's already follow while working in City rights-of-way. These guidelines will help The City satisfy its role as custodian of The City's rights-of-way and allow greater safety, accuracy and environmental compliance when working within The City's rights-of-way.

These guidelines apply to all shallow utility providers including telecommunication companies, oil and gas companies, pipeline companies, contractors and third-party stakeholders intending to access and work within The City's rights-of-way.

Activities of utility providers installing and operating in The City's rights-of-way are required to comply with all safety and environmental requirements and have the necessary permits issued under the ROW bylaw, or other applicable bylaws or legislation prior to the beginning of work.

The City is aware of the demand that exists for the use of The City's rights-of-way, a limited resource. With numerous interests competing for both short and long-term use of these rights-of-way, it is crucially important that a balance exist where its intended use, present and future, is protected. In achieving this balance, the City strives to provide streets that safeguard the public and help fulfill the City's mission, values and objectives. The City assumes the responsibility for managing the use of the rights-of-way, ensuring equitable treatment for all utility providers, while simultaneously ensuring strict compliance to and enforcement of all City bylaws, including but not limited to the ROW bylaw.

The City and all utility providers and third parties must work together to protect all existing and proposed equipment and plan any work in such a way to enable future installations and works. Permit applications must clearly state why a particular design and placement location was chosen.

Given Calgary'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.

The most recent version of this document will be available through [Utility Alignment Permit page on Calgary.ca](#).

## **Chapter 2 - Order of Precedence**

In the event of any inconsistency or conflict between a term or condition of the ROW bylaw and other publications, bylaws or legislation, the following applies:

1. a term and/or condition of The Municipal Rights-of-way Bylaw will prevail over a term and/or condition of these guidelines;
2. a term and/or condition of the Municipal Rights-of-way Bylaw will prevail over a term and/or condition of any other bylaw passed by The City of Calgary;
3. a term and/or condition in provincial and federal legislation will prevail over an inconsistent or conflicting term in the Municipal Rights-of-Way Bylaw; or,
4. a term and/or condition expressly included in a lawful permit, order or license will prevail over an inconsistent or conflicting term in the Municipal Rights-of-Way Bylaw.

## Chapter 3 - Utility Provider Requirements

### As a utility provider you are responsible to:

- Ensure the contact information for sending notices or orders and the 24-hour emergency contact personnel for each project is up-to-date with The City by sending this information to [ulasupport@calgary.ca](mailto:ulasupport@calgary.ca). See appendix M.
- Maintain membership in The City's Capital Works Coordinating Committee. This includes having a representative attend at least 60 per cent of the meetings each calendar year.
- Have read, signed and acknowledged the expectations of the Environmental Compliance Plan (Appendix C) by means of submitting a signed Municipal Rights-of-Way Bylaw17M2016 Utility Provider Environmental Acknowledgement form (appendix D) on or before the **31 January** every year.
- Have comprehensive commercial liability insurance, issued by an insurer licensed to operate in the Province of Alberta, for the construction, operation and maintenance of the utility provider's equipment shall be provided in accordance with the ROW bylaw. See appendix K for the complete terms and conditions.
- Perform all work and ensure contractors perform all work in accordance with any legislation or negotiated agreements that the utility provider is party to.

## Chapter 4 - Permit Application Requirements

The following section outlines some of most common requirements for permits necessary to undertake work in The City's rights-of-way. A permit may be required whenever the utility provider's proposed work includes:

- performing maintenance to existing equipment;
- installing new equipment;
- making additions or upgrades/alterations to existing equipment;
- excavating, breaking-up or otherwise disturbing or cutting the surface of any City's rights-of-way, or which requires the placement of equipment on City Structure.

### Types of Permits

City Business Unit	Types of permits	Description	Where to apply?	Notes
CAI	<a href="#">Utility alignment permit</a>	A Utility Alignment Permit is required by any utility provider excavating, breaking-up or otherwise disturbing or cutting the surface of any City's rights-of-way. These permits typically are valid for six (6) months.	<a href="#">CROWM portal</a>	Once the utility provider has completed the work for which they received a utility alignment permit, they must notify The City through CROWM within ten (10) business days.
Roads	<a href="#">Excavation permit</a>	An Excavation Permit is required to break or dig into the surface of a The City's road rights-of-way. The road rights-of-way includes city streets, sidewalks, driveway crossings/concrete roadways, boulevards, curbs and gutter, back lanes/alleys, and walkways. These permits are typically valid for fourteen (14) days.	<a href="#">ePermits system</a>	The utility provider must return the completed excavation permit to The City not later than ten (10) business days after the day on which the excavation for the work is completed.

City Business Unit	Types of permits	Description	Where to apply?	Notes
	<a href="#">Street use permit</a>	Required to exclusively use any City road rights-of-way, that is, a street, a sidewalk, an alley, a walkway, a back lane, a boulevard, or traffic control set-up.	<a href="#">ePermits system</a>	
	<a href="#">Hoarding permit</a>	Hoarding permits are required to occupy space on City owned rights-of-way (i.e. alley, sidewalk, boulevard, and street) for the purpose of storing building materials and equipment (i.e. cranes, concrete trucks, forklifts, material delivery vehicles) around a construction site as per  <a href="#">Bylaw 20M88</a> Parking of contractor vehicles is not permitted within the hoarded area owned by The City.	<a href="#">ePermits system</a>	

These online application systems require a [myID Business Account](#). See appendix I for how to set this up.

NOTE: This is not necessarily a comprehensive list of permits. It is the responsibility of the utility provider and/or its contractor(s) to ensure they have all of the proper permits.

**Utility Alignment Permit**

The City is aware of the demand that exists for use of its rights-of-way, a limited resource. Thus, The City will grant a utility alignment permit for a single utility alignment within a City’s rights-of-way or within a City Structure to each utility provider if capacity is available. If there is any issue with capacity, The City will facilitate conversations to find a solution.

## Utility Alignment Permit – Additional alignments

The City recognizes there may be valid reasons why a utility provider may want a second alignment rather than digging up its original alignment. At the sole discretion of The City, a utility provider may be granted a utility alignment permit for a second or additional utility alignment within that specific City rights-of-way (i.e. 14 Street NW between John Laurie and 16 Avenue NW) or City Structure (i.e. 9 Avenue bridge) only if an additional utility alignment is available and all the following terms and conditions apply:

- i. If requested, the utility provider will install The City's equipment to facilitate fibre optic cables (such as conduit, flush pull-boxes) in the utility alignment on behalf of The City while the utility provider installs its own equipment.
  - a. If the equipment requested is something the utility provider typically uses, the utility provider can install and bill back to The City.
  - b. If the equipment is not something the utility provider typically installs, The City will provide the equipment and the utility provider can bill back for the utility provider's additional costs.
- ii. The City will pay the utility provider for the installation of The City's equipment in the utility alignment and The City's proportionate share of the reasonable and verifiable costs of the installation (including as-built drawings). The City's equipment will be owned by The City.

When an additional utility alignment application comes in, The City will request the utility provider contact City Fibre to see what, if anything, they may want in that area. This request will be made through [CROWM](#). If an agreement is reached the utility provider may upload the agreement as a supporting document for its utility alignment permit application in [CROWM](#).

If the utility provider does not agree with the conditions of the utility alignment permit, the utility provider may choose an alternate route that is not an additional alignment.

Any issues with these conditions can be sent to [ROWManagement@Calgary.ca](mailto:ROWManagement@Calgary.ca).

## When do I need a utility alignment permit?

A Utility Alignment Permit is required by any utility provider that is excavating, breaking-up or otherwise disturbing or cutting the surface of any City's rights-of-way or attaching equipment to a City Structure (see appendix H). The application must be submitted by the appropriate utility provider or its designate for work on equipment that belongs to that utility provider, as the submission is considered a binding agreement.

## **Do I need a utility alignment permit to put equipment on a City Structure?**

Yes. A utility alignment permit is required if the utility provider intends to place equipment on any City Structure including:

1. Bridges,
2. Viaducts,
3. Tunnels,
4. Pedestrian overpasses or underpasses.

The utility provider must contact [ROWManagement@Calgary.ca](mailto:ROWManagement@Calgary.ca) in order to begin this process, which would include identifying if the structure is engineered to take additional load.

A separate agreement between The City and the utility provider describing the terms and conditions under which the utility provider will be allowed to attach its equipment to a City Structure is required if the utility provider wishes to attach its equipment to transit equipment, streetlights, and sanitary and storm water equipment.

This does not include buildings. If you would like to attach your equipment to a City owned building you would need to contact facility management at [FacilityManagement@calgary.ca](mailto:FacilityManagement@calgary.ca).

## **Do I need a utility alignment permit for routine work without excavation?**

The utility provider may enter The City's rights-of-way and carry out routine work such as maintenance, field testing, installation and repair of service drops, or testing of subscriber connections, if such work does not require the utility provider to excavate, break-up or otherwise disturb or cut the surface of any rights-of-way. If placing a service drop, the utility provider must notify The City.

## **Do I need a utility alignment permit for maintenance work on equipment?**

Yes, if you are excavating, breaking-up or otherwise disturbing or cutting the surface of any rights-of-way you must get a utility alignment permit. This includes checking the integrity of poles and installing ground rods.

If the work will be continuous (i.e. poles all in a row) you may submit it as a project and do them in one utility alignment permit application.

If the work is discontinuous, a utility alignment permit will be required for every 175 metres.

## How do I apply?

Each utility provider manages its utility alignment permit applications through the [Calgary Rights-of-Way Management \(CROWM\) portal](#). See appendix I for step-by-step guide.

### ***Utility provider***

Utility providers can apply for a permit or authorize contractors to apply for a permit on its behalf. The utility provider can manage its contractors through [CROWM](#).

### ***Contractor***

Contractors must be authorized by the utility provider before they are able to apply for a utility alignment permit.

## What information do I need to apply?

You will need the following information to apply for a utility alignment permit:

1. The work that will be done;
2. The proposed work location including proposed area, distance, and elevation if known;
3. The proposed construction method and materials including description of equipment (number and size of any pipes, ducts, chambers and manholes);
4. Any safety considerations;
5. Proposed schedule; and,
6. Any additional information that may be relevant (i.e. permissions for relaxation of minimum separation, approval from Water Resources Etc.).

If an application for a utility alignment permit is for work on a City Structure, see appendix H for the terms and conditions that will apply to that work.

NOTE: The City is not responsible for the condition of or the suitability of the location approved. The City makes no representations or warranties as to the state of repair of the rights-of-way or the suitability or fitness of them for any business, activity or purpose, and the utility provider accepts the approved alignment on an “as is” basis.

Additionally, the equipment must be within 350 millimetres horizontally or vertically from the approved utility alignment permit location.

## **Is there a fee associated with my application?**

Yes, there are fees associated with your application. In addition to the utility alignment permit fee (see appendix L) there is a \$200 non-refundable fee that will be charged per submission. Upon approval, \$200 will be deducted from the total cost of the utility alignment permit.

Utility alignment permit fees will be invoiced monthly on the 1<sup>st</sup> of the month for the month prior and utility providers will have 30 days from day of receipt to pay.

NOTE: If the application is submitted in paper, a data entry fee of \$1,000 will be applied.

## **What if I need help with my application?**

Prior to applying for a utility alignment permit, the utility provider may book an appointment to come in and discuss an application **free of charge**. Alternatively, for a fee, a utility provider may submit a pre-application design of its proposed utility alignment for The City's review and advisory comments.

## **Help with Planned Project Work?**

If the utility provider has planned projects across a large area, for example integrity digs or pole replacements, it is recommended that the utility provider come in and work out a plan with a ULA specialist before applying for a permit. This consultation is free of charge. These requests can be made by emailing [ULASupport@Calgary.ca](mailto:ULASupport@Calgary.ca).

## **I'm in the field and my approved utility alignment will not work. I need a line deviation. What do I do?**

If a need arises to deviate from the initial utility alignment by more than 350 millimetres, the utility provider must request a line deviation from The City. These can be done through [CROWM](#) by accessing the approved application and selecting Line Deviation post-approval request. To reduce review time and costs, utility providers should only request a deviation for the section of the alignment that is changing from the original request.

NOTE: If you are moving to avoid a catch-basin you may do this without submitting a line deviation request. You must though ensure your as-built shows where your line is.

## **Construction is not finished; can I get an extension?**

Yes, the utility provider can request a utility alignment permit extension through [CROWM](#) if the permit has not expired at no additional charge. No further documentation is required, only the proposed construction completion date.

If the permit expires, the utility provider will need to re-submit the application and pay the utility alignment permit fee again as it will require a full review.

## What are the design standards?

To ensure consistency and accuracy, all submissions must adhere to The City's drawing standards. The most current standards will always be available through the drawing checker in [CROWM](#). For more information about the drawing checker and standards applicants can visit the Help section of [CROWM](#).



## Who do you contact if there are issues?

If you are having issues with CROWM or your application you can email [CROWM@calgary.ca](mailto:CROWM@calgary.ca).

If you are having issues with your myID Business account you can contact [myIDSupport@calgary.ca](mailto:myIDSupport@calgary.ca).

## Rejection of utility alignment applications

All applications must comply with the standards set out in this document. The City's [CROWM](#) portal allows for both internal and external requests for information, so if there is an issue, The City may require amendments or changes to an application for an alignment. The City may reject an application for an alignment if there is not enough space or the application conflicts with any legitimate municipal purpose, including any one or more of the following reasons:

- (a) public health and safety;
- (b) conflict with existing equipment;
- (c) the protection and sustainment of The City's natural resources located in a City's rights-of-way, including plant installations and trees;
- (d) proposed road construction;
- (e) the functioning of public services.

If The City rejects an application for any of the reasons above, The City will provide written explanation why the work has been rejected and will facilitate conversations to find a solution.

## What are the minimum separations required?

Utility providers are encouraged to understand the minimum separations of utilities, set by the equipment owners, and ensure these requirements are noted in the application design. If the utility provider has permission from another utility owner to reduce the minimum separations, this confirmation can be uploaded as a supporting document with the application.

<b>Utilities</b>	<b>Minimum separations (measured edge to edge)</b>
Water Equipment (Water, sanitary, storm)	2.5 m (3.0 m for Feeder mains)
Shallow Utilities (Telecommunications, Gas, Electricity)	1 m
High Pressure Oil and Gas	5 m

The minimum separations to the water equipment can vary when the pipe size increases. In these cases, Water Resources office must be contacted at [WA-ResourcesDevelopmentApprovals@calgary.ca](mailto:WA-ResourcesDevelopmentApprovals@calgary.ca) for coordination of work and necessary approvals. Please ensure your email indicates this is a condition of your utility alignment permit approval and provides sufficient information as to the work being undertaken.

**NOTE:** The minimum separations are set by the equipment owner and a reduction in the minimum separations will be considered with written permission from the equipment owner. These minimum separations do not necessarily apply to joint use. In those instances, the equipment owners may have other agreements.

### Priority Applications

Recognizing that the shallow utility providers do good work; The City wants to reward this. Based on several factors utility providers can have its jobs prioritized.

## **How is the ranking determined?**

At the beginning of every quarter utility providers will be ranked in tier 1, tier 2 or tier 3 based on a review of the previous quarter's performance using the following criteria:

- number of reviews per approval,
- as-built drawings done on time,
- use of joint trench,
- membership in JUMP,
- up-to-date payments,
- responsiveness to complaints and
- per cent of excavation permits returned.

Additional consideration will be given starting in Q3 2018 for:

- submission of the annual utility provider environmental acknowledgement form;
- inspection reports for bylaw compliance (including environmental provisions).

Based on this data, The City will rank and the utility companies and its applications will be reviewed according to the rank at time of application.

Tier 1 companies will have applications reviewed within 48 hours

Tier 2 companies will have applications reviewed within 2 weeks.

Tier 3 companies will have applications reviewed within 4 weeks.

NOTE: New timelines will come into effect Q2 2018 as all utility providers will be Tier 1 to start in Q1 2018. Thus, the standard 2-week turnaround will continue until Q2 2018.

If a project is more urgent or time constrained the tiering will still apply. Obviously, emergencies will be carried out as needed according to the ROW bylaw/guidelines.

The utility provider has the option to promote or demote its own applications within [CROWM](#) if something becomes more of a priority.

## **Does my contractor's work affect my prioritization?**

Yes. Only the utility providers will be ranked, but the work of all of the utility provider's employees and contractors will be included in the evaluation process.

## **Utility alignment permit – conditions**

### **Inspection**

An inspection may be requested at time of approval of a utility alignment permit. See the inspection section for more details.

### **Multi-party installation (joint-use trench)**

To make effective use of the limited space in the rights-of-way, The City may designate certain rights-of-way or certain areas of the city as requiring a multi-party installation.

Where the utility providers are required to construct in a joint-use trench, a multi-party installation manager may be identified by The City or a utility provider may take on the responsibilities of primary applicant to coordinate the work. This coordination includes: obtaining all applicable permits including a utility alignment permit for the project, adhering to any permit conditions, submitting all of the as-built drawings, and the handling of all associated costs. The cost of the application will be invoiced to the primary applicant for one review and approval, resulting in one utility alignment permit, which is shared by all utility providers in the trench.

The guidelines for multi-party applications can be found in the help section of [CROWM](#) under drawing checker submission guidelines for ULA drawings.

## **Chapter 5 - Moratorium Period for The City's Rights-of-Way**

To ensure the long-term sustainability of the City's equipment, The City enforces a moratorium on all newly improved streets.

The moratorium ensures that the integrity of the pavement structure is protected and serves to minimise the disruptions and inconveniences to the public resulting from repeated construction activity.

### **Why does The City have a moratorium?**

The moratorium applies to any new construction, enhancement, maintenance, repair or replacement by a utility provider which may undermine the integrity of the newly improved street equipment or The City's rights-of-way. Unless otherwise stated, the moratorium applies to the whole street, from property line to property line for a 2-year period. The expiry of the moratorium will be calculated starting from 31 December of the calendar year in which the improvement was completed. The most up-to date information can be found on the [Calgary roadway activities map](#).

### **What if I need to do work on a road with a moratorium?**

While these requirements represent the City's standard policy, it is recognised that under special circumstances, such as emergency work, an exception to the moratorium may be made. More information on moratorium can be found in [The City of Calgary's Streets Bylaw](#).

## Chapter 6 - Construction Requirements

### What is prime contractor?

The prime contractor has the responsibility to ensure that contractors, employers, and workers at the work site, as defined in the utility alignment permit, comply with OHS legislation. This includes accepting the role and legislated obligations of prime contractor, in accordance with the *Occupational Health and Safety Act*, R.S.A. 2000, ch. O-2, all its regulations, and the *Occupational Health and Safety Code (Alberta)* (collectively, the “OH&S Legislation”) in such instances where Work is being undertaken in on The City’s right(s)-of-Way and in or on City Structures and:

- maintains full care, control and custody of a site.
- warrants that it is familiar with the OH&S Legislation and that it is qualified to ensure site safety and has the necessary capacity to perform all prime contractor duties. When utility provider accepts the role of prime contractor, utility provider shall do, or cause to be done, all of the following:
  - i. post and maintain in a conspicuous location or locations on THE CITY’S Rights-of-Way and in or on City Structures where Work is being performed the identity of the designated prime contractor, which must also include the name of the person appointed as the safety designate on the Work site; and
  - ii. ensure that the safety designate is competent to oversee the legislated obligations of prime contractor.

### Who is prime contractor?

It is a condition of the utility alignment permit, that the utility provider is deemed prime contractor by The City as the land owner, for the work they plan on doing.

**Situation 1:** Where the utility provider or their designate is doing the work in The City’s rights-of-way or on City Structures, the utility provider or their designate will accept the role of prime contractor.

**Situation 2:** In greenfield (URD) where the developer is the land owner, the developer will be prime contractor. Any issues with prime contractor in these instances will be negotiated between the developer and the utility providers.

**Situation 3:** On a site where multiple utility providers are doing work and the utility provider does not have full control of the site, whoever is in control of the site will determine who will be prime and notify The City.

### Access to Site

During the work, the utility provider’s designate must be able to meet with a City representative at the location where the work is being carried out within two (2) hours of being contacted by The City.

## **During business hours**

The City will contact the site contact identified on the ULA or the individual who applied for the Utility Alignment Permit. That person must be able to meet with the City representative, or designate a utility representative to meet with the City, within two (2) hours of being contacted.

## **After-hours and on weekends**

After hours and on weekends: The City will contact the representative or designate that the utility provider gave as the 24-hour emergency contact. The utility provider may choose to assign one employee at the beginning of the year or give a list of projects with the appropriate contact information by email to [ulasupport@calgary.ca](mailto:ulasupport@calgary.ca). That person must be able to meet with the City representative within two (2) hours of being contacted.

## **Utility Alignment Permit Inspections**

From time-to-time The City may identify, at the time of utility alignment application, projects which they want to inspect during construction. If notice is given on the utility alignment permit that The City will be conducting an onsite inspection while the trench is open, the utility provider must give The City ten (10) calendar days notice prior to the completion of the work so as to allow The City to schedule the inspection. The inspector will make every effort to complete the inspection by 3 p.m. If The City does not carry out an inspection on or before 3 p.m. on the day that the inspection is scheduled, the utility provider may close the trench and complete the work.

The City may choose to conduct an on-site inspection of the work a utility alignment permit was approved for even if it was not noted on the original permit. In this instance, The City may or may not notify the utility provider of the impending inspection. If notice is given, the utility provider will give, where practical, The City three (3) calendar days notice prior to the completion of the work to allow for scheduling an inspection.

After completion of the inspection, the utility provider will be provided with a final report. A copy of the inspector's checklist can be found in appendix K.

## What happens if an issue is identified during inspection?

The utility provider is responsible to ensure that the provisions of all City bylaws and legislative requirements are being followed. If during an inspection, an issue is identified, The City may:

- issue a **Stop Work Order**  
If an authorized representative of The City or any other party having the proper jurisdiction requests a utility provider to stop work, they shall immediately cease work. Verbal orders shall be followed by written notification setting out the reasons for the stop work order within one business day after the verbal order was given. Stop work orders may be given for various reasons including working in an area other than the one specified in the utility alignment permit, failure to adhere to environmental legislation or working without the appropriate permits. Once the violations have been rectified to the satisfaction of The City, the utility provider may resume work.
- issue a bylaw infraction ticket;
- deem equipment non-compliant with the terms of the utility alignment permit  
If the utility provider does work without a valid permit and/or in a location other than that approved by The City (within 350 millimetres horizontally and vertically from the approved utility alignment permit):
  1. the utility provider may be required to remove the equipment immediately, at its own expense. The utility provider may be fined for each calendar day after the date stated in the relocation notice.
  2. or the equipment may be deemed non-compliant and The City can request it to be relocated in the future at the utility provider's sole cost. Restoration shall be performed according to the procedures outlined in this document. The utility provider will have, from the date of relocation notice, ninety (90) calendar days to move above-ground non-compliant equipment and one-hundred and eighty (180) calendar days to move below-ground non-compliant equipment. For relocation of special equipment, see appendix G.
- notify another City business unit (i.e. Parks, Roads, Environmental & Safety Management)

## Working around trees

Any construction activity in the vicinity of trees shall be carried out in strict compliance with The City's [Tree Protection Bylaw](#) and [Street Bylaw](#). Such activity includes, but is not limited to:

- [delivery and storage of equipment and material](#);
- [excavation](#);
- backfilling;
- [plant installation](#);
- traffic control.

## **Working near The Storm Drainage System**

Any construction activity with access to, or in the vicinity of catch basins or other Storm Drainage System shall be carried out in strict compliance with The City's [Drainage Bylaw](#). Activity includes:

- storage and handling of material;
- excavation;
- backfilling;
- Pumping;
- Site access;
- inlet protection (socks and Donuts), where approved

## **Working around low impact development (LID) source control practices (SCPs) for storm water equipment**

Low impact development (LID) source control practices (SPCs) are alternative storm water equipment assets used to convey and treat storm water runoff by improving storm water quality and reducing rate and/or volume at or near its source, to protect watershed health. Types of SCPs that could be near or interact with buried utilities include:

- Bioretention and bioswales;
- Soil Cells (ex. Silva Cells and Strata Cells);
- Permeable pavements; and
- Water reuse sites with either buried or surface storage.

For more information on how to safely work around SCPs see appendix E.

## **Traffic Control**

The utility provider must at all times adhere to such reasonable published [traffic control](#) safety and management standards set out by The City.

## **Environmental Reporting**

In accordance with the Environmental Compliance Plan (appendix C), you have committed to protect the environment and comply with all environmental laws and regulations. Additionally, each worksite must have a Utility Provider Environmental Acknowledgement Form onsite to be produced upon request. See appendix D for a copy of this form.

## **What do you do if there is a spill?**

The utility provider must immediately notify The City of any spill of a substance that has caused, is causing or may cause an adverse effect on the environment. This can be reported by calling 311 or completing an [online service request](#). Also, they are required to report the presence of a hazardous substance, that the utility provider may discharge, leak, spill, release or discover while the carrying out any work within a City's rights-of-way.

Additionally, the utility provider must also report to the appropriate government agencies any escape, discharge, leak, spill or release of a hazardous substance.

## **Damage**

### **Equipment or property damaged by a utility provider**

If a utility provider damages City owned equipment or property during construction that is outside of the scope of the utility alignment permit approved, the utility provider must immediately notify The City. If utility equipment other than City owned equipment is damaged, the utility provider must first notify the affected utility, and then The City.

Once The City has assessed the damage, The City will notify in writing the utility provider within forty-eight (48) hours whether or not The City will repair its own equipment or property. If The City does not give notice within the time specified, The City will be deemed to have elected to have The City do the repairs. If The City elects to have the utility provider do the repairs, the utility provider will carry out the repairs at its sole cost, without improvements and only to the condition prior to the damage, in a manner approved by The City within such time as is specified by The City. If The City carries out the repairs or the utility provider fails to complete the repairs within the time specified by The City, The City may carry out the repairs at the utility provider's sole cost, provided:

- the costs will be in accordance with The City's normal practices and procedures; and
- the invoice submitted by The City to the Company to recover such reasonable and verifiable costs will specify in reasonable detail the amounts allocated.

### **Equipment or property damaged by The City**

If any of the utility provider's Equipment or other property is damaged by The City or its Employees while carrying out The City's work within a City's rights-of-way or City Structure, The City will notify the utility provider immediately of the damage by contacting one of the utility provider's 24-hour emergency contact personnel as provided.

**Cancellation of Permit**

A utility provider must notify The City of any cancelled projects for which a utility alignment permit has been issued prior to the expiry of that utility alignment permit. If work has not started prior to the expiry date, The City may cancel the utility alignment permit.

**Completion of work**

All work, including restoration and repairs, must be completed by the expiry date on the utility alignment permit.

## **Chapter 7 - Temporary repairs and restoration**

All utility providers excavating, breaking-up or otherwise disturbing or cutting the surface of The City's rights-of-way or The City's structures must complete all repairs and restorations according to The City's requirements.

### **Warranty of Temporary Repair**

The utility provider must warrant a temporary repair until they complete the full restoration of the City's rights-of-way in the location of the temporary repair.

### **Exception for Completion of Temporary Repair**

In a case where weather limitations or other external conditions beyond the control of a utility provider prevents the utility provider from restoring The City's rights-of-way, the utility provider may complete a temporary repair. This repair must be completed within the time specified by The City.

### **Restoration**

The utility provider must replace a temporary repair with a restoration within the time period specified by the Director, Roads and must provide a warranty for any restoration for a period of two (2) years from the date the restoration is completed.

### **Allocation of Costs for Restoration:**

#### **1) Restoration by a single utility provider in the City's rights-of-way**

- a. Any utility provider that has undertaken work that excavated, broke-up or otherwise disturbed or cut the surface the City's rights-of-way must, at its own cost, restore the City's rights-of-way in accordance with the requirements of the Director, Roads.

#### **2) Restoration carried out jointly**

- a. The costs of carrying out a restoration may be apportioned between one or more utility providers or between the utility provider(s) and The City (as applicable). These costs will be based on the respective cuts if the City's rights-of-way has been excavated, broken up or otherwise disturbed or cut to jointly provide services to the public.

#### **3) Restoration due to a situation deemed to be in the public interest**

- a. The City will not require the utility provider to grind, mill or plane the surface of a City's rights-of-way if the surface of the City's rights-of-way is being restored because of work arising from a situation deemed by the Director, Roads to be in the public interest.

## Deficiencies

The City may undertake and complete a temporary repair or complete a restoration and the utility provider must pay to The City the reasonable and verifiable costs of completing the temporary repair or restoration within thirty (30) calendar days after receipt of The City's invoice for such costs if the utility provider:

- does not complete a temporary repair within ninety (90) calendar days of being given notice by The City;
- does not complete a restoration within ninety (90) calendar days of being given notice by The City;
- does not complete the temporary repair or complete the restoration in accordance with the applicable standards of The City; or
- agrees that The City will complete the temporary repair or complete the restoration.

## Failure to Pay Invoice for Temporary Repair or Restoration

If the utility provider fails to pay, when due, an invoice issued by The City for temporary repair or restoration work completed due to a deficiency by the utility provider, The City:

- without notice to the utility provider, may realize on any security obtained from the utility provider for The City's costs for completing a temporary repair or completing a restoration to satisfy payment for the costs;
- may collect from the utility provider on demand any deficiency between the costs of completing a temporary repair or the costs of completing a restoration and the amount realized under the security; and
- must return to the utility provider any balance remaining under the security.

## Pavement Degradation

After completion of any work that involves excavating, breaking-up or otherwise disturbing or cutting the surface of a City's rights-of-way, The City will:

- (a) Calculate the pavement [degradation fees](#) resulting from the work based upon the classification of the City's rights-of-way under the pavement quality index; and
- (b) Invoice the utility provider for the fees.

Often costs can be minimized through good planning. Utility providers are encouraged to come in and consult with The City prior to submitting a utility alignment permit to potentially determine alternatives.

## Payment of Pavement Degradation Fees

The utility provider must pay the invoice for pavement degradation fees within thirty (30) calendar days after receipt of the invoice.

## Chapter 8 - Emergency Work and Service Drops

Emergency work is work required in response to a failure of, or damage to, existing equipment that results in, or has the potential to result in, danger to the public, a loss of an essential service, and/or damage to equipment or other utility plant. Below are the processes for emergency work.

### What is an emergency?

An emergency is defined as an unforeseen situation where immediate action must be taken to:

- preserve the environment;
- preserve public health;
- preserve safety;
- address a widespread outage of utility services; or
- to reinstate or protect an *essential service*.

### And how is it best addressed?

If possible immediately notify The City. Where possible for urgent cases, such as loss of telephone service to a couple of properties, utilize temporary service drops to restore service/connection.

### What if the utility provider has an emergency?

#### City's rights-of-way

If a utility provider does work in a City's rights-of-way as a result of an emergency and a temporary service drop could not resolve the emergency, the utility provider must:

- 1) Notify the appropriate department or structure owner in The City of the work performed and reason for the emergency as soon as is feasible;
- 2) Only complete work that is required due to the emergency
- 3) give notice of the emergency to [ULASupport@calgary.ca](mailto:ULASupport@calgary.ca).

#### City Structure

The utility provider must first obtain approval from The City before carrying out any work on a City Structure. Additionally, the utility provider must carry out only work required to resolve the emergency. Any other work requires the standard utility alignment permit process outlined in this document.

## **What if The City has an emergency?**

When The City needs to do emergency work, if feasible, The City will notify the utility provider(s) with equipment located within the City's rights-of-way or City Structure in which The City needs to work in order to allow the utility provider an opportunity to remove, relocate or protect its equipment before interrupting the utility providers services.

## **Service drops, service lines, service connections**

Different utility providers use different terms for the process of quickly restoring service to a customer. Service drops, service lines and service connections are all used to describe when a utility provider places a new line on the ground in the The City's rights-of-way for the sole purpose of connecting the equipment to one (1) customer. This can be done to give service to new customers, to restore service in case of equipment failure or for other utility provider purposes.

Wherever possible, a service drop, should be placed perpendicular to the backbone of the utility provider's existing equipment.

## **When do I need a utility line assignment?**

A utility alignment permit is required if the service drop is parallel to the utility provider's backbone regardless of length or if the service drop is greater than one (1) metre long in The City's rights-of-way.

## **Are there conditions for how I do a service drop?**

Yes, a service drop must be buried to avoid interference with traffic and other operations along the City's rights-of-way and must not be laid on top of or over a City's rights-of-way.

All service drops must stub-off/go at least one half (0.5) metre inside the property line of the property receiving the service. This ensures any work required later can be done on the private property and not in the service corridor.

## **Permanent service drops**

If the utility provider is placing a permanent service drop, the utility provider must obtain a utility alignment permit.

## **Temporary service drop**

The utility provider must notify The City through [CROWM](#) of a temporary service drop within five (5) business days of the placement of the equipment. A fee will not be charged. See appendix F for an example of a temporary service drop.

Equipment installed for a temporary service drop must be buried or removed from the City's rights-of-way within one (1) year of the day on which it was placed. If it is buried, the utility provider must apply for a utility alignment permit. If it is removed, the utility provider must notify The City through the original temporary service drop notification in [CROWM](#) no later than one (1) year from the day on which it was placed. In addition to this notification, The City may require further documentation of removal of the equipment. If confirmation of the removal of the equipment for the temporary service drop is not received by The City by such date indicated by The City, the equipment may be deemed non-compliant equipment.

## Chapter 9 – After construction requirements

The utility provider, through [CROWM](#), must provide The City notice of the completion of work for an approved utility alignment permit within ten (10) calendar days of completing the work.

### As-Built Drawings

The utility provider must submit as-built drawings through [CROWM](#), to The City within sixty (60) calendar days following the completion of work. The drawings must contain the same information as the original application, be in the same format as the original application (MicroStation V8i DGN) and follow CSA standard S250-11 to an accuracy level 3. This level of accuracy states that the x, y and z coordinates shall be accurate to  $\pm 300$  millimetres. Measurements for the x, y and z coordinates should be taken on the top centre of the equipment. Additionally, the utility provider must conform to any other requirements outlined in the permit. See appendix J for a good example of an as-built drawing.

When recording data for as-built drawings, the interval for measuring x, y and z coordinates should 50 metres or less for straight sections. For sections where the utility provider's equipment bends or changes direction the x, y and z should be measured every 25 metres (or at each location of substantial change). All as-built line work specifications can be found in the help section of [CROWM](#) under drawing checker submission guidelines for ULA drawings.

NOTE: Having elevation information does not eliminate the need for anyone excavating in proximity to the facilities or from following appropriate safety procedures such as line locates.

Examples:

- 1) If the main backbone line is running parallel to the property line and is less than one (1) metre from the property line, the elevation can be assumed at the connection going into the property, and the direction must be designated.
- 2) If the main backbone line runs parallel to the property line, and is greater than one (1) meter from the property line, the elevation must be surveyed where the line goes into the property.
- 3) During construction, elevation of an open trenched main backbone line must be measured at least every 50 metres for straight sections and every 25 metres (or at each location of substantial change) for sections where the equipment bends or changes direction.
  - a. The expectation is that if the equipment is placed using a drill that there will be some inferred measurement, but anywhere it is day-lighted coordinates shall be provided.

The City will notify the utility provider through [CROWM](#) if the as-built drawings submitted do not comply with the requirements. A compliance fee for performance of its review may be applied (see appendix L for the fee schedule). The utility provider must correct the as-built drawings, according to The City's comments, and return them to The City within the time period specified. Additional fees may be applied for each subsequent review required to be performed by The City as a result of the utility provider's failure to submit compliant and accurate as-built drawings, in the first Instance.

If the utility provider fails to submit as-built drawings or fails to make necessary corrections, The City may deem the equipment in that utility alignment permit to be non-compliant and follow the process for non-compliant equipment.

## Chapter 10 – Relocations

### When will a utility provider be required to relocate its equipment?

The City may, for a municipal or public purpose, require a utility provider to relocate any of its equipment located within The City's rights-of-way for a City initiated project. For example, a major transit project may require a certain area to be free and clear of impediments such as utility provider's equipment. If such a case arises, The City will issue the utility provider a relocation notice. Once the utility provider receives this notice, they must apply for a utility alignment permit and complete the relocation within one-hundred and eighty (180) calendar days of receiving the initial notice unless another timeframe was approved in the utility alignment permit.

### What if the utility provider has special equipment that requires more time?

If the utility provider has special equipment the notice periods may be longer than the standard one-hundred and eighty (180) calendar days. For these timelines please see appendix G.

### How are relocation costs determined?

The relocation costs will be determined based the number of years after a utility alignment permit was issued and the year in which the relocation notice was given. For example, if a relocation notice were given in 2018, but the specialized equipment could not be relocated until 2019, the cost split will be based on the age of the equipment in 2018.

### What if the utility provider's equipment in a utility alignment is different ages?

The City understands that the utility providers may upgrade its equipment in a utility alignment over time. If this upgrade requires excavation, breaking-up or otherwise disturbing or cutting the ground, the utility provider must apply for a new utility alignment permit. Alternatively, if the utility provider can update its equipment without breaking-up or disturbing the ground (i.e. pull-box to pull-box), the utility provider can notify The City by email to [ULASupport@Calgary.ca](mailto:ULASupport@Calgary.ca) so The City's records are up to date. This will ensure The City has the correct age of he utility provider's equipment in case of a relocation and will be used to determine the cost split based on the appropriate ages.

NOTE: If the utility provider was notified of a proposed City Works project on the approved utility alignment permit, the utility provider will be responsible for one-hundred (100) per cent of the relocation costs.

The following chart outlines how the costs for relocation will be shared.

### Relocation cost breakdown table

Year*	The City will refund:
1-3	100% of the costs of the relocation
4	90 % of the costs of the relocation
5	80 % of the costs of the relocation

6	70 % of the costs of the relocation
7	65 % of the costs of the relocation
8	60 % of the costs of the relocation
9	55 % of the costs of the relocation
10	45 % of the costs of the relocation
11	40 % of the costs of the relocation
12	35 % of the costs of the relocation
13	30 % of the costs of the relocation
14	20 % of the costs of the relocation
15	10 % of the costs of the relocation
16	5 % of the costs of the relocation
16+	0 % of the costs of the relocation

\* Year(s) are the number of years after the utility alignment permit was issued for that equipment. This does not include newer cables that may have been pulled through conduit.

### **Non-Compliant Equipment**

If The City identifies the existence of non-compliant equipment, The City will issue a notice of non-compliance. If The City requires the non-compliant equipment to be relocated, The City will send a relocation notice to the utility provider requesting relocation of the non-compliant equipment according to the following:

- (a) above ground equipment must be relocated within ninety (90) calendar days of the utility provider receiving a relocation notice from The City;
- (b) below ground equipment must be relocated within one-hundred and eighty (180) calendar days of the utility provider receiving a relocation notice from The City only if The City approves to re-open the site where the non-compliant equipment is located.

Prior to removal or relocation of non-compliant equipment, the utility provider must obtain a new utility alignment permit.

NOTE: This only applies to equipment placed with a utility alignment permit approved after 2018 January 1.

### **Non-Compliance with Equipment Relocate**

If the utility provider does not relocate its equipment in accordance with the utility alignment permit, the utility provider may be fined for each calendar day after the date stated in the relocation notice.

### **Identifying Location of Equipment**

At the request of The City, the utility provider must physically identify the location of its equipment by marking the City's rights-of-way and using paint, staking or another suitable method for identification.

The City may make requests of the utility provider to provide information about additional equipment and the utility provider must provide such information within thirty (30) days from the day on which The City requests such information.

### **Third Party Equipment**

The City has no responsibility or liability for any third party's equipment that is attached to the utility provider's equipment, including for costs for relocations of the third party's equipment when a relocation notice is given, or during an emergency.

It is the responsibility of the utility provider to ensure any agreement with a third party include an acknowledgment and agreement that the third party will comply with all of the terms and conditions of the agreement, all municipal bylaws and other applicable legislation.

### **Abandoned Equipment**

The utility provider is solely responsible for all of its abandoned equipment within the City's rights-of-way or on a City Structure until the equipment is removed to the satisfaction of The City.

If The City asks the utility provider if their equipment has been abandoned within a specific utility alignment/location, the utility provider must respond within sixty (60) calendar days. If there is no response, The City will deem the equipment abandoned.

### **Notifying The City of abandoned equipment**

The utility provider may notify The City at any time of any of its abandoned equipment by sending an email to [ulasupport@calgaru.ca](mailto:ulasupport@calgaru.ca) with the ULA#, a description of the equipment, date of abandonment, and any other relevant information. Notifying The City of abandoned equipment will make that alignment available for future use.

**What if The City needs the abandoned equipment removed?**

The City may request removal of abandoned equipment at any time the abandoned equipment interferes with any project approved by The City (including a project of a Third Party as may be approved by The City) which requires excavation or otherwise disturbs or cut a portion of a City's rights-of-way where the abandoned equipment is located. The utility provider must, at The City's request and at the utility provider's sole expense, remove the abandoned equipment as follows:

- (a) above ground Equipment must be removed within ninety (90) calendar days; and
- (b) below ground Equipment must be removed within one-hundred and eighty (180) calendar days of notification by The City.

If requested, the utility provider must produce an abandoned equipment removal certification to The City. Additionally, if requested by The City, the utility provider must provide a photograph of the location where the abandoned equipment was located showing that the equipment has been removed.

After removal of the abandoned equipment, the utility provider must make safe and restore the City's rights-of-way or City Structure to the condition in which it existed prior to the removal of the abandoned equipment. If the utility provider fails to remove the abandoned equipment and restore the City's rights-of-way or City Structure to the satisfaction of The City, The City may complete such removal and restoration and the utility provider must pay The City all reasonable and verifiable associated costs. The City will not take on work that they are not qualified to do.

## Letter of Credit

The City may require a letter of credit or other performance security from the utility provider if the work proposed in the utility alignment permit application requires excavating, breaking-up or otherwise disturbing or cutting the surface of any of The City's rights-of-way. Evaluation as to when a letter of credit may be requested will be based on a risk assessment which may include, but is not limited to:

- the location of the alignment;
- the level of congestion within the rights-of-way;
- the proximity to other infrastructure;
- public safety concerns identified by The City related to the utility alignment permit application; and,
- the utility provider's past performance.

In the event of an infraction of the bylaw, The City may issue a notice to the utility provider of the violation. The cure period is five (5) business days as noted in section 102 of the ROW Bylaw. The letter of credit must meet all the terms and conditions outlined in appendix N.

The City may draw on the letter of credit or other performance security required to cover the following types of costs associated with the non-compliant work:

1. Temporary repairs
2. Restoration
3. Relocation
4. Pavement degradation fees
5. Outstanding fees that are more than sixty (60) calendar days overdue or
6. Any other repairs, corrections or completion of work performed by The City because of the utility provider failing to adhere to these guidelines.

## **Chapter 11 – Disputes**

While best efforts will be made to accommodate utility provider's requests, The City recognizes disputes may happen from time-to-time. In the event of a dispute, the issue may be raised to more senior staff at either The City and/or the utility provider. If a resolution still cannot be reached, an appeal may be made to the appropriate government authority.

## Appendix A - Glossary

**Abandoned equipment** – Any equipment of the utility provider that the utility provider does not utilize and does not require for its future operations.

**As-built drawings**- the drawings provided to The City by the utility provider showing all plans and specifications of the equipment installed in the utility alignment in addition to any changes to such plans and specifications made on site during installation.

**Business day** - means 8:00 a.m. through to 5:00 p.m. Calgary time on any calendar day except Saturday, Sunday or a statutory holiday observed in the Province of Alberta or in the City of Calgary.

**Bylaw**- is the Municipal Rights-of-way Bylaw 17M2016

**Calendar day** - means any day of the calendar year, including weekends and statutory holidays.

**Capital Works Coordinating Committee** - The City's committee consisting of City staff and utility providers' staff that jointly coordinates and manages City Works and the work of all utility providers that install equipment within City's rights-of-ways or within City Structures.

**City Manager** - the person appointed by Council as its chief administrative officer, or that person's designate.

**City Structure** - any one or both of the following that is located within a City's rights-of-way:

- i. a bridge, viaduct or tunnel owned by The City;
- ii. a pedestrian overpass, underpass, or tunnel owned by The City; but excludes transit equipment, streetlights, and sanitary and storm water equipment, all of which require a separate agreement between The City and the utility provider describing the terms and conditions under which the utility provider will be allowed to attach its equipment to the particular equipment.

**City Works** - The City's construction of civil works projects such as City's rights-of-ways or City Structures;

**City Permits** - permits issued under the authority of another bylaw of The City.

**Contractor** - a contractor, subcontractor or worker employed by the utility provider or by The City (as the context indicates) who performs work within a City's rights-of-way or within a City Structure.

**Council** - the municipal council of The City of Calgary.

**Director, Corporate Analytics and Innovation or Director, CAI** - the City Manager, or the City Manager's designate, or the City Engineer.

**Director, Roads Business Unit or Director, Roads** - the City Manager, or the City Manager's designate, or the City Engineer.

**Environmental Compliance Plan** - a form of Municipal Legislation that has the purpose of preserving the environment and assists in determining compliance with Other Legislation during the performance of work approved in a utility alignment permit or in an excavation permit.

**Emergency**- an unforeseen situation where immediate action must be taken to:

- preserve the environment;
- preserve public health;
- preserve safety;
- address a widespread outage of utility services; or
- to reinstate or protect an *essential service*.

**Employee** –

- with respect to a *utility provider*, any *officer*, employee, *contractor*, agent, licensee, or invitee of the *utility provider* who will be *within a City's rights-of-way* or *within a City Structure* in connection with any matter governed by this *Bylaw*; and
- ii. with respect to *The City*, any employee, agent or *contractor* of *The City* but specifically excludes the *utility provider* and any *employee* of the *utility provider* described in "i" above.

**Equipment - includes:**

- systems, structures, utilities, and facilities, including telecommunication facilities defined in the *Telecommunications Act (Canada)*, electrical facilities as described in the *Electric Utilities Act (Alberta)*, natural gas facilities described in the *Gas Utilities Act (Alberta)* and pipelines described in the *Pipeline Act (Alberta)*;
- poles, cables wires, governors, regulators, pipes and/or systems of pipes, ducts, conduits, pedestals, vaults, braces, anchors, anchor rods, amplifiers, connection panels, transformers, valves, or metering equipment fittings, whether or not any of them form part of or are accessory to the systems, structures, utilities and facilities referred to in subsection "i" above; and
- *non-compliant equipment* and *abandoned equipment*.

**Essential service** - any one or more of the following:

- the transmission of energy (including natural gas, steam or electricity);
- the supply of water;
- the removal or carrying of wastewater and stormwater;
- the provision of traffic control;
- the re-instatement of City 9-1-1 emergency centre call-in service.

**Excavation permit** - a permit granted by The City pursuant to Street Bylaw 20M88, which authorizes the utility provider (in accordance with the terms and conditions of the excavation permit) to break the surface of a City's rights-of-way to perform work.

**Fee** - the fees and charges approved by Council in relation to this Bylaw, as may be amended from time to time.

**Governmental Authority** - any agency, board, commission, tribunal, regulatory body or court acting within its jurisdiction.

**Hazardous substance** - includes any solid, liquid, gaseous or thermal irritant or contaminant such as smoke, soot, fumes, acids, alkalis, chemicals, waste and fibrous materials of any kind, and its handling, transport, storage or release, which is subject to the provisions of Municipal Legislation or Other Legislation.

**Inspection** - includes an authorized representative of The City performing any one, or both, of the following activities:

- i. attending on-site where equipment of the utility provider is being or has been installed to verify the proper installation and placement of the equipment;
- ii. Attending on-site where equipment of the utility provider is being installed to determine whether Municipal Legislation or Other Legislation is being followed.

**Lost productivity costs** - additional costs incurred by The City as a result of the presence of a utility provider's equipment within a City's rights-of-way or within a City Structure when The City is:

- i. undertaking repairs, maintenance or replacement of the City's rights-of-way, or of any part of the City's rights-of-way, or of The City's equipment located in a City's rights-of-way; or
- ii. Undertaking repairs, maintenance or replacement of a City Structure.

**Moratorium period** - a 2 year period of time as may be designated by the Director, Roads, during which work cannot be carried out if the work involves breaking or disturbing any part of the surface (from property line to property line) of an identified City's rights-of-way;

**Multi-party installation** - the coincident installation of equipment in a single utility alignment, which may include equipment for providing electricity, natural gas, or telecommunications services;

"Municipal Government Act" means the Municipal Government Act, R.S.A. 2000, c. M-26, as may be amended or substituted from time to time;

**Municipal Legislation** - The City's bylaws, rules, policies, plans, standards, protocols and guidelines, and any approvals or City Permits granted pursuant to them.

**Non-compliant equipment-** all equipment that is not installed in a City's rights-of-way or on a City Structure in compliance with the utility alignment permit granted by The City on or after the effective date of this Bylaw because:

- i. the placement of the equipment is greater than a distance of 35 centimeters horizontally or vertically from the centre line of the location approved in the utility alignment permit, or
  - ii. the equipment does not comply with any other conditions set out in the utility alignment permit;
- "notice" means notice provided in writing by The City to a utility provider at the address provided by the utility provider in accordance with section 119 of this Bylaw.

**Notice of non-compliance** - a written notice issued by The City to a utility provider informing the utility provider that the utility provider's equipment, or some of the utility provider's equipment, is non-compliant equipment.

**Officer-** a person appointed as a Bylaw Enforcement Officer pursuant to Bylaw 60M86, the Bylaw Enforcement Officers' Appointment Bylaw.

**Other Legislation-** all applicable federal and provincial statutes, regulations, policies, guidelines and protocols.

**Pavement degradation-** the diminished lifespan of a paved or concrete surface of a City's rights-of-way which has been excavated, broken up or otherwise disturbed, resulting in reduced lifespan and increased demand for maintenance of the surface or subsurface of the City's rights-of-way.

**Pavement quality index-** is a rating that describes the condition of the surface of a City's rights-of-way and measures the type, extent and severity of pavement surface cracks and ruts and the smoothness and ride comfort of the City's rights-of-way.

**Provincial Offences Procedure Act-** the Provincial Offences Procedure Act, R.S.A. 2000, c. P-34.

**Permit holder-** a utility provider who has been granted a utility alignment permit.

**Person-** an individual or a business entity including a firm, partnership, association, corporation or society.

**Priority application** - an application for a utility alignment permit wherein the utility provider submitting the application is in compliance, at the time of the application, with all of the terms and conditions of this Bylaw, including the utility provider's payment of fees, installation of equipment, and provision of as-built drawings for any utility alignment permit that may have been formerly approved by The City.

**Relocate or relocation** - work that involves the permanent removal of equipment in its entirety from its current location, or the modification, alteration, installation, or moving of equipment that changes the placement or location of the equipment:

- i. within the same City's rights-of-way or within the same City Structure ; or
- ii. from its (current) location within a City's rights-of-way or within a City Structure to a location within a different City's rights-of-way or within a different City Structure.

**Relocation costs** - the actual cost of equipment, materials, labour, engineering and other construction costs for performing relocation.

**Relocation notice**- a written notice issued by The City to the utility provider directing the utility provider to relocate the equipment identified in the notice.

**Resolution plan**- a plan agreed to by The City and a utility provider whereby a utility provider fully satisfies The City:

- i. that it will fulfill its obligations under this Bylaw; and
- ii. the means by which it will fulfill its obligations under this Bylaw;

**Restore or restoration** - to complete the permanent restoration of:

- i. a paved or concrete surface or sub-surface of a City's rights-of-way, or both, that a utility provider has excavated, broken up or otherwise disturbed, in compliance with The City's Standard Specifications for Road Construction for the surface or subsurface (as applicable); or
- ii. a City Structure, to the City Structure's original condition, such condition being substantially the same as the condition the City Structure was in prior to any work being performed by a utility provider, in compliance with The City's Design Guidelines for Bridges and Structures.

**City's rights-of-way**- any one or more of the following (as applicable in the circumstances):

- i. a road, highway, street, lane, alley, pathway, designated bicycle pathway, or light rail transit corridor owned and managed by The City (for additional clarity, excluding other transit equipment or The City's equipment located within the light rail transit corridor);
- ii. a general public utility easement as owned and managed by The City, but excludes a City Structure;
- i. a road, highway, street, lane, alley, pathway, designated bicycle pathway, or light rail transit corridor in the process of development that will be owned and managed by The City upon registration of a subdivision plan and within which equipment will be installed when a utility alignment permit is granted by The City.

**Service drop**- *equipment* that, by its design, capacity and relationship to other *equipment* of a *utility provider*, is reasonably considered to be for the sole purpose of connecting the *equipment* to not more than one individual customer or building point of presence or real property location;

**The City** - means both:

- i. the municipal corporation of The City of Calgary; and
- ii. the geographical area within the boundaries of the City of Calgary where the context requires;

**Third party** - any person that attaches its apparatus or equipment in, on or to the utility provider's equipment pursuant to an agreement with the utility provider.

**Telecommunications** - has the same meaning as stated in section 2 of the Telecommunications Act (Canada).

**Temporary repair** - a repair to the surface of a City's rights-of-way that is satisfactory to the Director, Roads, and:

- i. temporarily returns the surface of the City's rights-of-way to a safe and useable condition until restoration occurs;
- ii. is level with the surface of the surrounding City's rights-of-way;
- iii. complies with all terms and conditions of the utility alignment permit, The City's Standard Specifications for Road Construction, and other applicable Municipal Legislation.

**Utility alignment** - a defined space within a City's rights-of-way or within a City Structure for the installation of equipment as may be approved in a utility alignment permit.

**Utility alignment permit** - The City's written approval, with terms and conditions, which grant a utility provider:

- iv. a utility alignment within a City's rights-of-way or within a City Structure; and
- v. the ability to perform all work to install its equipment in the utility alignment;

**Utility provider** - i. a for-profit corporate person that supplies electrical services, telecommunications services, or oil and natural gas services, and requires access and use of a City's rights-of-way or a City Structure to construct, install, maintain, repair, replace or operate its equipment; and ii. any of the corporate person's (as described in "i" above) employees or contractors of a for-profit corporate person.

**Within** - in, on, over, under, across or along, as applicable in the circumstances.

**Work** - includes any installation, removal, construction, maintenance, repair, replacement, operation and relocation, or adjustment or alteration of equipment that may be performed by a utility provider within a City's rights-of-way or within a City Structure, including the excavation, repair or restoration of the City's rights-of-way or repair and restoration of the City Structure, as applicable.

(2) Wherever a word used in this Bylaw is italicized, the term is being used as it is defined in subsection (1), and where any word appears in regular font, its common meaning in the English language is intended.

(3) A word or expression and grammatical forms of the same word or expression have corresponding meanings.

(4) Reference to "includes" and "including", whether or not used with the words "without limitation" or "but not limited to" will, in all cases, be deemed to be without limitation and interpreted to mean "includes without limitation" and including without limitation".

(5) Headings or sub-headings are inserted for ease of reference and guidance purposes only and do not form part of this Bylaw.

(6) Where this Bylaw cites or refers to any other Act, bylaw, or regulation, the citation or reference is to the Act, bylaw or regulation as amended, whether amended before or after the commencement of this Bylaw, and includes reference to any Act, bylaw or regulation that may be substituted in its place.

(7) Each provision of this Bylaw is independent of all other provisions and if any provision is declared invalid for any reason by a Governmental Authority of competent jurisdiction, all other provisions of this Bylaw remain valid and enforceable.

## Appendix B – Sample Notice

### THE CITY:

The City of Calgary  
P. O. Box 2100  
Station “M”, #8026  
Calgary, Alberta T2P 2M5  
Attention: Leader, ROW Management  
Services

FAX: (403) 268-2546

### WITH A COPY TO:

The City of Calgary  
Law Department  
P. O. Box 2100  
Station “M”, #8053  
Calgary, Alberta T2P 2M5  
Attention: City Solicitor

### THE UTILITY PROVIDER:

- 

### WITH A COPY TO:

- 

**Delivery of Notice.** Any Notice made by mail will be deemed to have been given or served on the fifth (5th) day after it is deposited in any post office in Canada. Any Notice given by facsimile or personal delivery will be deemed to have been given on the day following the day it is sent or delivered. Any Notice to a utility provider may also be served in person by delivering the same to a responsible person in the offices of the Party to be served at the above address. A Party may change its address for service at any time by notice in writing to [ulasupport@calgary.ca](mailto:ulasupport@calgary.ca).

## **APPENDIX C – Environmental Compliance Plan**



Calgary



# Environmental Compliance Plan

Guidelines under Municipal Rights of Way Bylaw 17M2016  
ISC: Protected - version 1.0

January 1, 2018

# Table of Contents

<b>Introduction</b>	<b>3</b>
<b>Purpose</b>	<b>3</b>
<b>Definitions</b>	<b>3</b>
<b>Environmental Compliance Plan Responsibilities</b>	<b>7</b>
The City of Calgary Environmental Policy	7
Compliance	7
Awareness and Competence	7
Erosion and Sediment Control	8
Dewatering	8
Saw Cutting, Coring and Concrete	9
Soil Conservation and Stockpiles	10
Municipal Tree Protection	10
Site Management	11
Hazardous Materials & Waste Management	11
Fuelling	12
Spills and Releases	13
Reporting to a Regulatory Agency	13
Reporting to <i>The City</i>	14
Cleaning up a Spill or Release	14
Contamination Discovery	14
Off-site Disposal of Excavated Soil or Material	15
Recycled and Imported Fill Material	15
Reduced Idling of Vehicles and Construction Equipment	15
Existing Monitoring Wells and Remediation Infrastructure	16
Underground Utilities	16
<b>Utility Provider Environmental Acknowledgement Form</b>	<b>18</b>

# Introduction

The City of Calgary has a significant influence on the local and surrounding environment; therefore it is essential to ensure environmental considerations are part of all activities and operations on City owned lands. As a *utility provider* or *utility provider employee*, your environmental performance is critical to meeting our commitment to protect the environment and comply with all environmental laws and regulations.

This Environmental Compliance Plan is provide in accordance with Chapter 3 of The City of Calgary Rights-of-way utility alignment permit guidelines. This package is to inform you of your environmental responsibilities as a *utility provider* or *utility provider employee*. It will provide you with the current City of Calgary's Environmental Policy, outline some of the regulations and expectations placed upon you the *utility provider* or the *utility provider employee* and includes Form xyz1, the **Utility Provider Environmental Acknowledgement Form**, which must be completed on or before January 31 of each and every year and submitted to *The City*. A copy of the completed form must also be present at the *work* site.

It is your responsibility, as a *utility provider* or *utility provider employee*, to communicate this information to all on-site personnel engaged in carrying out the *work* or providing material to the *work* site, including *contractors*. It is possible that during the course of the work, *The City* will review the information in this document with you and your personnel and undertake an environmental compliance inspection onsite. Given *The City's* ever-changing physical and social environment, it is expected that this Environmental Compliance Plan and associated inspection checklist 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. This document will be available through the Calgary Rights of Way Management portal (CROWM) and Calgary.ca.

## Purpose

The purpose of this Environmental Compliance Plan is to ensure that construction by *utility providers* in The City of Calgary's right-of-way are carried out in accordance with the best practices, to minimize maintenance requirements, ensure optimal use of the right-of-way and reduce costs in accordance with The City of Calgary's Rights-of-way utility alignment permit guidelines.

## Definitions

For the purpose of this package, the following definitions apply:

*Abandoned equipment* – means *equipment* of the *utility provider* that the *utility provider* does not utilize and does not require for its future operations;

*Bylaw* – means Municipal Right-of-Way Bylaw 17M2016; as described in section 1 of the *bylaw*, as it may be amended or substituted from time to time, and includes all Sections attached to it;

*City Permits* – means permits issued under the authority of another bylaw of *The City*;

*Contractor* – means a contractor, subcontractor or worker employed by the *utility provider* or by *The City* (as the context indicates) who performs *work* within a *service corridor* or within a *City Structure*;

*Employee* – means:

- i. with respect to the *utility provider*, any *officer*, employee, *contractor*, agent, licensee, or invitee of the *utility provider* who will be *within a service corridor* or *within a City Structure* in connection with any matter governed by this *Bylaw*; and
- ii. with respect to *The City*, any employee, agent or *contractor* of *The City* but specifically excludes the *utility provider* and any employees of the *utility provider* described in “i” above;

*Equipment* – includes:

- i. systems, structures, utilities, and facilities, including telecommunication facilities defined in the *Telecommunications Act* (Canada), electrical facilities as described in the *Electrical Utilities Act* (Alberta), natural gas facilities described in the *Gas Utilities Act* (Alberta) and pipelines described in the *Pipeline Act* (Alberta);
- ii. poles, cables, wires, governors, regulators, pipes and/or systems of pipes, ducts, conduits, pedestals, vaults, braces, anchors, anchor rods, amplifiers, connection panels, transformers, valves, or metering equipment fittings, whether or not any of them form part of or are accessory to the systems, structures, utilities and facilities referred to in subsection “i” above; and
- iii. *non-compliant equipment* and *abandoned equipment*

*Inspection* - includes an authorized representative of *The City* performing any one of, or both, of the following activities:

- i. attending on-site to where *equipment* of the *utility provider* is being or has been installed to verify the proper installation and placement of the *equipment*;
- ii. attending on-site to where *equipment* of the *utility provider* is being installed to determine whether *Municipal Legislation* or *Other Legislation* are being followed;

*Municipal Government Act* – means the *Municipal Government Act*, R.S.A. 2000, c. M-26, as may be amended or substituted from time to time;

*Municipal Legislation* – means *The City’s* bylaws, rules, policies, standards, protocols and guidelines, and any approvals or *City Permits* granted pursuant to them;

*Non-compliant equipment* – means all *equipment* that is not installed in a *service corridor* or on a *City Structure* in compliance with the *utility alignment permit* granted by *The City* on or after the effective date of this *Bylaw* because:

- i. the placement of the *equipment* is greater than a distance of 35 centimeters horizontally or vertically from the centre line of the location approved in the *utility alignment permit*, or
- ii. the *equipment* does not comply with any other conditions set out in the *utility alignment permit*;

*Officer* – means a person appointed as a Bylaw Enforcement Officer pursuant to Bylaw 60M86, the Bylaw Enforcement Officers’ Appointment Bylaw;

*Other Legislation* - means all applicable federal and provincial statutes, regulations, policies, guidelines and protocols;

*Person* – means an individual or a business entity including a firm, partnership, association, corporation or society;

*Relocate or Relocation* – means *work* that involves the permanent removal of *equipment* in its entirety from its current location, or the modification, alteration, installation, or moving of *equipment* that changes the placement or location of the *equipment*.

- i. *within* the same *service corridor* or *within* the same *City Structure*; or
- ii. from its (current) location *within* a *service corridor* or *within* a *City Structure* to a location *within* a different *service corridor* or *within* a different *City Structure*;

*Restore or Restoration* – means to complete the permanent restoration of:

- i. a paved or concrete surface or sub-surface of a *service corridor*, or both, that a *utility provider* has excavated, broken up or otherwise disturbed, in compliance with *The City's* Standard Specifications for Road Construction for the surface or subsurface (as applicable); or
- ii. a *City Structure*, to the *City Structure's* original condition, such condition being substantially the same as the condition the *City Structure* was in prior to any *work* being performed by a *utility provider*, in compliance with *The City's* Design Guidelines for Bridges and Structures;

*Service corridor* - means any one or more of the following (as applicable in the circumstances):

- i. a road, highway, street, lane, alley, pathway, designated bicycle pathway, or light rail transit corridor owned and managed by *The City* (for additional clarity, excluding transit infrastructure or *The City's equipment* located *within* the light rail transit corridor);
- ii. a general public utility easement as owned and managed by *The City* pursuant to the *Municipal Government Act*, but excludes a *City Structure*;
- iii. a road, highway, street, lane, alley, pathway, designated bicycle pathway, or light rail transit corridor in the process of development that will be owned and managed by *The City* upon registration of a subdivision plan and *within* which *equipment* will be installed when a *utility alignment permit* is granted by *The City*;

*The City* - means both:

- i. the municipal corporation of The City of Calgary; and
- ii. the geographical area within the boundaries of the City of Calgary where the context requires;

*Utility alignment* – means a defined space *within* a *service corridor* or *within* a *City Structure* for the installation of *equipment* as may be approved in a *utility alignment permit*;

*Utility alignment permit* – means *The City's* written approval, with terms and conditions, which grant a *utility provider*.

- i. a *utility alignment within a service corridor* or *within a City Structure*; and
- ii. the ability to perform all *work* to install its *equipment* in the *utility alignment*.

*Utility provider -*

- i. a for-profit corporate *person* that supplies electrical services, telecommunication services, or oil and natural gas services, and requires access and use of a *service corridor* or of a *City Structure* to construct, install, maintain, repair, replace or operate its *equipment*; and
- ii. any of the corporate *person's* (as described in "i" above) *employees* or contractors of a for-profit corporate *person*;

*Within* – means in, on, over, under, across or along, as applicable in the circumstances;

*Work* – includes any installation, removal, construction, maintenance, repair, replacement, operation and *relocation*, or adjustment or alteration of *equipment* that may be performed by a *utility provider* *within* a *service corridor* or *within* a *City Structure*, including the excavation, repair or *restoration* of the *service corridor* or repair and *restoration* of the *City Structure*, as applicable.

# Environmental Compliance Plan Responsibilities

## The City of Calgary Environmental Policy



The City has an Environmental Policy that demonstrates its commitment to protecting the environment. It includes:

- Complying with applicable legislation.
- Conserving resources and preventing pollution.
- Continually improving our environmental performance.

Please review the full policy referenced at the following link [The City of Calgary's Environmental Policy \(UEP001\)](#)

## Compliance



There are many laws and regulations relating to the protection of the environment. In these laws and regulations, all persons share responsibility for the environment. It's your responsibility as a *utility provider* or *utility provider employee* to know which laws, regulations, approvals or permits relate to the *work* you are doing on City lands. It is also your responsibility as a *utility provider* or *utility provider employee* to comply with all applicable laws and regulations, and ensure all requirements imposed by them are met. Failure to comply with applicable laws and regulations can result in prosecution and imprisonment by the appropriate regulator.

In the event of conflict between legislation the Guidelines provide an outline of the order of precedence in Chapter 2 or as amended.

The City may perform *inspections* on-site at the location identified in the *utility alignment permit* where the *work* described in the *utility alignment permit* is performed and the *utility provider's equipment* is installed (Section 90 of the *Bylaw*). The authorized representative of *The City*, performing the *inspection*, will utilize the Inspection Environmental Compliance Plan Checklist to ensure *utility providers*, including their *employees* and *contractors*, are complying with *Municipal Legislation*.

## Awareness and Competence



As a *utility provider*, or *utility provider employee* working on behalf of your company you are expected to be competent to perform your *work* and must be aware of applicable environmental requirements. Awareness and competence can be achieved through proper education, training or experience. *Utility providers* must also ensure *contractors* are aware of their environmental responsibilities and are competent to perform their *work*.

## Erosion and Sediment Control



Construction activities can result in an increase in erosion and sedimentation, which if left uncontrolled can harm the environment. There are many erosion and sedimentation concerns that arise due to construction activities. These include, but are not limited to:

- Mud tracking from construction sites onto adjacent properties or streets.
- Introduction of sediment into the storm/sanitary sewer system.
- Increased sedimentation into the watercourses.
- Generation of windblown/fugitive dust.
- Harmful alteration or disruption of fish habitat.
- Loss of valuable topsoil

There are a number of federal, provincial and municipal laws and bylaws governing erosion and sediment control. *The City* has developed guidelines for erosion and sediment control (ESC), and *utility providers* or *utility provider employees* are expected to adhere to the requirements listed in the current edition of the document.

All sites are required to follow the good housekeeping practices outline in the *Standard Specifications for Erosion and Sediment Control* found in the General Requirements section 100.26 *Good housekeeping practices for utility Right-of-way work*. Some sites may require an ESC Plan approval. For more information on requirements, refer to the section 100.3 of the current edition of **The City of Calgary Standard Specifications for Erosion and Sediment Control** (available at [www.calgary.ca/esc](http://www.calgary.ca/esc)) or contact 3-1-1 (local Calgary calls only) or (403) 268-CITY (for callers outside Calgary).

Erosion and sedimentation are significant environmental concerns on construction projects. *The utility provider* or *utility provider employee* must implement, inspect, and maintain appropriate erosion and sediment control measures for the term of the *work*. All temporary erosion and sediment controls are to be removed when they are no longer required and/or at the end of the *work*.

## Dewatering



Dewatering refers to physically removing accumulated water from a construction site excavation or depression, usually by pumping. Improper disposal of this water may lead to increased sedimentation in watercourses and may result in the introduction of other contaminants to receiving water bodies.

Pursuant to The City's Drainage Bylaw 37M2005, the discharge of impounded water from construction sites located within *The City*, a permit is legally required to directly or indirectly release water into the storm water drainage system (including roadways and swales).

Discharge of materials such as soil, sediment and contaminated water is prohibited under the drainage bylaw. For requests to discharge to the storm drainage system, which has accumulated due to precipitation or subsurface infiltration, call 3-1-1 or for further information on the [stormwater drainage permit application process](#), go to [www.calgary.ca](http://www.calgary.ca).

**Note:** Authorization is also required to discharge impounded water to the sanitary sewer system by obtaining a [Clear Water Waste Disposal Permit Application](#) Contact the Industrial Monitoring Group at 3-1-1 or for further information or go to [www.calgary.ca](http://www.calgary.ca).

Contractors discharging water off-site to private land are responsible for obtaining permission from the affected private landowner.

## Saw Cutting, Coring and Concrete



Slurry generated from saw cutting and coring activities may contain several contaminants including sediment, hydrocarbons and high pH water. If your operations involve saw cutting of asphalt and/or concrete, the slurry must not be allowed to enter the storm water system or water bodies. Federal, provincial and municipal legislation prohibits the release of substances to the storm water system and water bodies that may result in an adverse effect on the environment or on municipal infrastructure.

Some recommended methods to prevent releases include, but are not limited to:

- Minimize the amount of water being used to cool the saw.
- Avoid performing saw cutting or coring operations in wet

weather.

- Contain slurry in the immediate work area by using standard erosion and sediment control mechanisms.
- Cover/block catch basins to prevent slurry from entering them.
- Collect slurry using an appropriate-sized vacuum.
- Use saws with built-in slurry containment systems where possible.

Concrete washout or waste from drums, chutes and tools is not to be discharged onto City owned lands. In instances where concrete washout is to occur or surplus concrete is to be stored on site an impermeable sealed containment system is required. All excess concrete is to be removed from site.

The use of sealed form structures shall be used where necessary to allow for curing cast in place concrete works.

## Soil Conservation and Stockpiles



Storage and stockpiling soil is common to construction operations. There are a number of environmental issues related to stockpiling soil including: generation of dust, introduction of sediment into the storm/sanitary sewer systems, increased sedimentation of watercourses and loss of valuable top soil.

Appropriate soil conservation and stockpiling practices that prevent erosion and the loss of valuable topsoil include, but are not limited to:

- Install and maintain erosion and sediment controls so that they remain effective during construction
  - Stabilize soils and stockpile with a vegetation cover
  - Locate stockpiles away from catch basins and waterbodies.
- Do not store soil on steep slopes.
  - Protect soil from wind and rain
  - Control annual weeds on exposed soil before they can set seed to reduce the likelihood of spread.

## Municipal Tree Protection



Trees are an important part of *The City's* urban environment. The intent of municipal tree protection is to maintain trees as long-term assets to the community and *The City* in general. They cool the city, reduce water runoff and soil erosion, absorb noise and dust and provide wildlife habitat. Calgary's trees represent a significant investment and are highly valued by Calgarians.

Public trees have come under increased stress in recent years due to redevelopment and construction activities. After a tree is established, any activity that changes the soil conditions or disturbs tree branches, trunks and root systems is extremely detrimental to a tree's health. Changes can be brought on by soil compaction, excavation and altering grade.



Public trees, including trees growing in parks, natural areas, road right-of-ways and boulevards, are property of *The City*. The protection of public trees is mandated by municipal bylaws, including the Tree Protection Bylaw 23M2002 and the Street Bylaw 20M88. A **Tree Protection Plan** and a **Tree Protection Agreement** may be required if *work* or construction related activities are to occur within six (6) metres of a public tree. For more information on Tree Protection Plans or inquire about tree ownership, contact The City of Calgary Parks – Urban Forestry at 3-1-1 (local calls only) or (403) 268-CITY (for callers outside Calgary) or for information on [Tree](#)

[Protection Plan - A step by step guide.](#)

## Site Management



Inadequate setup and management of a construction site can have potential adverse impacts on the environment. It's your responsibility as a *utility provider* or *utility provider employee* to implement proper site management practices. Some of the considerations that need to be taken into account include, but are not limited to:

- Suitably locating and protecting chemical, fuel and lubricant storage areas to prevent and minimize any releases or contamination on or around the worksite.
- Ensuring hazardous materials are managed properly.
- Controlling tracking of dirt, mud and generation of dust.
- Keeping the worksite free from accumulations of debris or waste.
- Ensuring all work and work related material, machinery, tools, debris and waste remain within site boundaries
- Appropriate signage for both public and those on site
- Ensuring spill kits and fire extinguishers are present and their location is communicated at the worksite.
- Ensure perimeter fencing or hoarding is secured to provide security against public access during off work hours



## Hazardous Materials & Waste Management



Hazardous materials, such as fuel, oils, solvents, and paints, are common on construction sites. The *utility provider* or *utility provider employee* must be aware of the material-specific handling, containment, storage and disposal procedures of these products. These procedures must comply with all regulatory requirements; for example, materials which are flammable have specific transportation, handling and storage requirements. Fire protection and prevention measures need to be in place along with an understanding of incompatible materials and the control of ignition sources.

Construction projects generate waste materials; these materials fall into two broad categories:

- Waste generated as part of the contract deliverables (e.g. concrete and asphalt demolition waste)
- Waste generated by the *utility provider employees'* activities, such as oil filters, oils, garbage (e.g. plastic, cardboard) paints, solvents, spill clean-up materials, sewage.

If improperly managed, waste can negatively impact the environment. Therefore, the *utility provider* or *utility provider employee* should provide appropriate on-site collection containers for recycling and waste. Waste and recycling will need to be removed regularly from the worksite.

There are a number of federal, provincial and municipal laws or bylaws that require proper handling, storage, transportation and disposal of non-hazardous and hazardous wastes. It's your responsibility as a *utility provider* or *utility provider employee* to know and adhere to the regulatory requirements that apply to the work you perform. As a *utility provider* or *utility provider employee* you are responsible for ensuring waste material is disposed of at an approved area or facility in accordance with the law and ensure compliance by retaining copies of all waste records for materials disposed or recycled.

*The City* also encourages you as a *utility provider* or *utility provider employee* to reduce and divert waste from landfills through recycling. At a minimum, you are expected to consider recycling cardboard, wood, asphalt, concrete, metal and plastics that are generated during *work*. Construction materials with recycled content should be used where reasonably practical.

## Fuelling



Fuel spills can occur during fuelling operations at construction sites. As a *utility provider* or *utility provider employee* it is your responsibility to ensure sufficient measures are in place to prevent environmental impacts from fuelling activities. Measures to ensure fuelling operations do not cause an environmental impact include, but are not limited to:

- Conducting fuelling operations a minimum of 30 metres away from waterways, including the storm system or environmentally sensitive areas, unless a written fuelling standard operating procedure is developed by the *utility provider employee* or *contractor*, approved by the *utility provider*, and followed at the *work site*.
- Ensuring written standard operating procedures are in place for fuelling activities.
- Communicating refueling procedures to on-site personnel.
- Ensuring all dispensing or transfer of fuel will be attended for the duration of the operation. The attendant will be aware of proper fuel handling procedures to minimize the risk of a spill and will continuously scan the area adjacent to the fuelling operation for possible leaks or spills
- No smoking will be permitted during any fueling operations.
- Keeping adequate quantities of absorbent materials readily available. When the site is within 30m of a waterway, the spill kit shall include absorbent boom supplies.
- The transportation of dangerous goods is restricted in the Central Business District from 0600hrs to 1800hrs Mon-Sat. Central Business district is bounded by in the North by the Bow River, East by the Elbow River, South by 17 AV and West by 14 ST SW (Bylaw 23M2005). This means no refueling can occur unless approved by Hazmat and a special permit is issued.

## Spills and Releases



Spills can cause environmental damage. If a substance leaks into a drain it can pollute the local water supply. If humans are exposed to a hazardous substance, serious health effects can occur. If a substance is flammable, explosive or reactive, it can also create other hazards. As a utility provider or utility provider employee, you must take measures to prevent pollution of land or waterways, including the storm water system. If a spill or release occurs, you have a legal responsibility to report such an incident to the appropriate regulatory agency and The City of Calgary (by calling 3-1-1).

*Table 1 Examples of commonly used substances that may cause an adverse effect on the environment*

Gasoline & Diesel Fuel	Paint	Propane
Antifreeze/Glycol	Solvents	Oil Containing PCBs
Lubricating Oil	Chemicals	Acids or Caustics
Hydraulic Fluid	Sewage	Fertilizers
Other petroleum products and synthetic oils	Sediment laden water or fugitive dust	Excessive smoke, fumes, odours
Freon/CFCs	Ammonia	Chlorine
Industrial Wastes	Hot Asphalt	Pesticides and Herbicides

This list is not all-inclusive. Other substances may cause an adverse effect on the environment.

### Reporting to a Regulatory Agency



There are specific legal requirements related to reporting spills and releases. As a utility provider or utility provider employee, you must ensure spills and releases are immediately reported to the appropriate regulatory agencies as required by law. Release reporting is a requirement under the Alberta Environmental Protection and Enhancement Act (AEPEA). A substance release that caused, is causing or may cause an adverse effect on the environment must be reported to Alberta Environment and Parks (AEP). An adverse effect is defined in Alberta EPEA as “impairment of or damage to the environment, human health or safety or property.” Failure to report could result in enforcement action against persons responsible, including you. Release reporting is also a requirement of federal, provincial and municipal legislation such as

the Canadian Environmental Protection Act, Transportation of Dangerous Goods Act, the Alberta Fire Code and The City of Calgary Sewer Service Bylaw.

## Reporting to *The City*

Release reporting is a requirement of *The City's* Environmental Policy and The City of Calgary Substance Release Reporting Procedure. As a *utility provider* or *utility provider employee*, you must immediately report all spills and releases (including sediment laden water into the storm drainage collection system and releases to the air) to *The City* by calling 3-1-1. If the product enters or is likely to enter a waterway or sewer system, or assistance is needed, the contractor should call 911 and request dispatch of the Fire Department.

## Cleaning up a Spill or Release

The most important component of managing the hazardous materials spill or release after ensuring the health and safety of the public and responders is to initiate steps to immediately control the environmental impact of the release/spill. What substance was spilled, the quantity of the substance spilled and where spill occurred are all factors to consider when deciding what action must be taken.



If you cause a spill or release into the environment, it is your responsibility as the *utility provider* or *utility provider employee* to satisfactorily clean up and, if necessary, remediate the affected area. The *utility provider* or *utility provider employee* is responsible for identifying a satisfactory level of cleanup in consultation with *The City* and relevant regulatory agencies. Adequate quantities of absorbent material must be readily available to clean up spills. Spill cleanup materials must be properly disposed of in accordance with federal, provincial and municipal requirements.

## Contamination Discovery



As a *utility provider* or *utility provider employee* you are expected to immediately notify *The City* of any contamination discovery during ground disturbance activities. During construction, indications of possible contamination include, but are not limited to:

- Buried drums and containers.
  - Stained or discolored earth in contrast with adjoining soil.
  - Fill material containing debris.
  - Trash covered by earth or industrial waste debris.
  - Suspect odours which emanate when the earth is disturbed.
  - Oily residue intermixed with earth.
- Sheen or discoloration on groundwater.
  - Cinders or other combustion products like ash.
  - Structures such as asbestos cement pipe, abandoned pipes and underground storage tanks.

As a *utility provider* or *utility provider employee*, you must immediately report any suspected contamination discovery to *The City Fire Department* (911 for emergency or for non-emergency (403) 268-1022), [Alberta Environment and Parks](#) (AEP), and any other regulatory authority with jurisdiction must also be contacted if it is known to be a reportable release. It is important to implement health and safety procedures which could include stopping work in the area of contamination discovery, securing the worksite, and taking the appropriate measures to protect workers and public safety.

## Off-site Disposal of Excavated Soil or Material



Any material excavated from a site not required or suitable for fill or other purposes must be appropriately disposed of off-site. As a *utility provider* or *utility provider employee* you are responsible for ensuring such material is disposed of at an approved area or facility in accordance with the law.

## Recycled and Imported Fill Material



When imported fill material is used at a construction site, as a *utility provider* or *utility provider employee*, you are responsible for reporting the source location of the material to *The City* when requested. The source location of any imported or recycled fill material must be reported to *The City* when requested prior to material being brought on-site. The *utility provider* or *utility provider employee* may be asked to verify the environmental suitability of the material for its use (i.e. provide copies of laboratory analytical testing to verify the material meets the most current AEP's Soil and Groundwater Remediation Guidelines).

## Reduced Idling of Vehicles and Construction Equipment



Vehicle idling contributes to several environmental problems such as the deterioration of air quality and the production of unnecessary emissions of greenhouse gases like carbon dioxide (CO<sub>2</sub>). In addition to these environmental concerns, idling vehicles also waste fuel and may damage vehicle engines. As a *utility provider* or *utility provider employee* you are required to minimize idling vehicles and equipment not essential for the performance of the work. It is advised as a *utility provider* or *utility provider employee* not to park diesel and natural gas powered vehicles or construction equipment on the project site for more than five consecutive minutes with the engine operating unless the operation of the engine is essential for the performance of the work or for initial warm up of the engine or during periods of cold weather below -10 degrees Celsius. Avoiding unnecessary idling is a universal approach to reduce the environmental impact of vehicles. After all, idling gets you nowhere.

## Existing Monitoring Wells and Remediation Infrastructure



The City has agreements with many third party companies, through the Environmental Agreements Bylaw 11M2010, to allow for environmental monitoring wells and remediation infrastructure to be placed within a service corridor. As a *utility provider* or *utility provider employee* it is your responsibility to ensure that if an environmental monitoring well or infrastructure related to an environmental remediation system is encountered during work that your equipment is placed as not to disturb any existing monitoring wells or remediation infrastructure.

If an existing monitoring well or remediation infrastructure needs to be removed to accommodate the placement of the equipment, it is your responsibility as the *utility provider* or *utility provider employee* to work with The City and the affected third party for the removal and or relocation of the existing monitoring well or remediation infrastructure.

## Underground Utilities

**DANGEROUS WEAPONS**  
**CALL BEFORE YOU DIG!**  
2 FULL WORKING DAYS NOTICE  
**1-800-242-3447**  
www.alberta1call.com

**INTERNATIONAL COLOUR CODE FOR MARKING BURIED FACILITIES**

- WHITE - Proposed Excavation
- PINK - Temporary Survey Markings
- RED - Electric Power Lines, Cable Conduit and Lighting Cables
- YELLOW - Gas, Oil, Petroleum and Gaseous Materials
- ORANGE - Telephone, Cable TV, Communication, Alarm and Signal Lines
- BLUE - Potable Water
- GREEN - Sanitary Sewers, Storm Sewers and Drain Lines
- PURPLE - Reclaimed Water, Irrigation and Slurry Lines

FACILITIES MUST BE HAND EXPOSED AND VISIBLE BEFORE MECHANICAL EQUIPMENT IS USED WITHIN THE HAND EXPOSE ZONE.

**CALL BEFORE YOU DIG**  
**1-800-242-3447**  
www.alberta1call.com  
PLEASE PROVIDE AT LEAST 2 FULL WORKING DAYS NOTICE

**ALBERTA 1 CALL™**

The Alberta Occupational Health and Safety Code, the Alberta Electrical Utility Code and the Alberta Pipeline Regulation require that the locations of all buried utilities be marked before a ground disturbance begins therefore, it is essential that as a *utility provider* or *utility provider employee* that you submit your locate request online or by phone to **AlbertaOneCall.com** or **1.800.242.3447** to request that buried utilities be located and marked. It is necessary that you plan ahead and submit your request at least two full working days before you start your project. A copy of the completed Alberta 1 Call utility locate request should be present on site to verify that locates have been completed within the past 14 days.

It is important to know that customer-owned lines on private property, such as water and sewer service lines, sprinkler systems and any lines connecting buildings, are not registered with Alberta One-Call. The utility owners do not know the location of these lines, so it is your responsibility as a *utility provider* or *utility provider employee* to identify them.

The area within 30 m either side of a provincially regulated pipeline is a controlled area. The area within 30 m of the right of way of a federally regulated pipeline is a safety zone. The pipeline operator must be notified of any intent to disturb the ground within the controlled area or safety zone and the ground disturber must request locates.

The Alberta Pipeline Act and Regulation further requires that anyone proposing to undertake a ground disturbance search an area of 30 m beyond the limits of the proposed ground disturbance for the presence of pipelines. A pipeline right of way has specific boundaries within which the pipeline operator has the right to construct pipelines and control activity. If the proposed ground disturbance is within the pipeline right of way, the ground disturber must obtain written permission from the pipeline operator.

Mechanical excavation equipment may not be used within 5 m of a provincially regulated pipeline until the pipeline has been hand exposed and is clearly visible. Mechanical equipment may not be used within 600 mm of the exposed pipeline, except under the direct supervision of the pipeline operator. Mechanical excavation equipment may not be used within 3 m of a federally regulated pipeline until the pipeline has been hand exposed and is visible.

The construction of haul or access roads and the movement of vehicles or equipment along or across a pipeline right of way, other than in the upgraded and traveled portion of a highway or public road, have the potential to damage pipelines. Advance written permission and approval for this type of activity must be obtained from the pipeline operator. Written permission from the operator of a pipeline to undertake activities near a pipeline may take the form of a crossing agreement or proximity agreement. These often impose stricter conditions on the ground disturber than the minimum regulatory requirements.

**Appendix D – Utility Provider Environmental Acknowledgement Form**

# Utility Provider Environmental Acknowledgement Form

All *utility providers*, along with the *utility provider employees* and their *contractors*, need to be aware of their responsibilities for protecting the environment. The *utility provider* is responsible, either by its own actions or through its *employees* or *contractors*, for providing the resources needed to adhere to the *Environmental Compliance Plan*. The *utility provider* is responsible for ensuring their *employees* and *contractors* are provided the resources and trained to understand their roles and responsibilities, and operate in compliance with the *Environmental Compliance Plan* and *Municipal Legislation*. As a representative of the *utility provider*, with authority to bind the *Utility Provider Corporation*, your review and execution of this form is necessary prior to beginning *work*. **Please complete this form by initialing each item in the checklist and then signing the acknowledgement at the bottom of the document.** A copy of this completed form must be submitted to *The City* on or before January 31 of each and every year.

Utility Provider Company Name: \_\_\_\_\_

Initial	<p><b>Environmental Policy</b></p> <p>I acknowledge that I have been made aware of <i>The City</i> <a href="#">Environmental Policy</a> and will ensure the <i>utility provider employees</i> and <i>Contractors</i> will follow the Environmental Policy. The policy includes the following obligations:</p> <p><b>Comply</b> with applicable legislation.  <b>Conserve</b> resources and prevent pollution.  <b>Continually</b> improve our environmental performance.</p>
Initial	<p><b>Compliance</b></p> <p>I am aware of the environmental regulatory requirements applicable to the <i>work</i>. I understand the importance of compliance with <i>Municipal Legislation</i> as well as any other provincial or federal environmental legislation, approvals or permits, and the consequences of non-compliance.</p> <p>I am aware <i>The City</i> may perform <i>inspections</i> on-site at the location identified in the <i>utility alignment permit</i>.</p>
Initial	<p><b>Awareness and competence</b></p> <p>I acknowledge that I am responsible for ensuring that environmental responsibilities contained in the <i>Environmental Compliance Plan</i> are communicated to all <i>work</i> site personnel including <i>Contractors</i>.</p> <p>I acknowledge that I am responsible for ensuring that all <i>work</i> site personnel and <i>Contractors</i> are competent to perform the assigned work based on training, education and experience.</p>
Initial	<p><b>Erosion and Sediment Controls</b></p> <p>I acknowledge that recognized practices will be utilized at all times to minimize erosion and prevent the movement of sediment into watercourses and storm infrastructure as per the Drainage Bylaw 37M2005 and The City of Calgary Standards and Specifications for Erosion and Sediment Control, Section 100.26 (Good housekeeping practices for utility Right of way work) and Section 100.3 (Requirement to Comply). Any required erosion and sediment control devices will be frequently inspected and maintained during the work, and will be removed at the completion of the work and the area has been stabilized against erosion.</p> <p><i>This information has been included for ease of use, but consult Section 100.26 of The City of Calgary Standards and Specifications for Erosion and Sediment Control for the most current requirements.</i></p> <ol style="list-style-type: none"> <li>Proper placement and protection of stockpile soils and materials. Placement of materials on a City Street or where wind/water could transport material off-site is prohibited under the City of Calgary Street Bylaw. Stockpiles are to be properly placed and protected on site so material will not be eroded to off-site areas, including storm inlets.</li> </ol>

	<ol style="list-style-type: none"> <li>2. Control of mud track out during construction, usually by means of a well-maintained construction entrance/exit on all access locations, supplemented with periodic street sweeping if required.</li> <li>3. Dust control must be implemented on site, when required.</li> <li>4. Down-gradient perimeter protection (such as silt fence, compost socks or fiber rolls) to protect off-site areas from stormwater runoff and sedimentation during construction.</li> <li>5. Soil windrowed during utility excavations should be placed up-gradient of the trench.</li> <li>6. Inspections are required every 7 days and after rainfall or snowmelt events.</li> <li>7. Temporary sediment control at any storm inlets requires prior written approval. For most sites, the only location where inlet protection would be approved is directly adjacent to a gravel pad or stockpile. Failure to obtain approval can lead to fines under the Drainage Bylaw. Please request more information through 3-1-1 if you wish to use inlet protection for erosion and sediment control on or near your good housekeeping site.</li> <li>8. All disturbed areas must be stabilized within 30 days of construction completion (e.g. Asphalt, concrete, sod, mulch tackifier and seed).</li> </ol>
Initial	<p><b>Dewatering</b></p> <p>I acknowledge that discharge of surface and subsurface water, resulting from dewatering activities at a <i>work</i> site, will be conducted following <i>The City's</i> Drainage Bylaw 37M2005.</p> <p>Written authorization will be obtained from <i>The City</i> to dispose of water, which has accumulated on work sites by precipitation or groundwater infiltration, into the storm/sanitary system.</p>
Initial	<p><b>Saw Cutting, Coring and Concrete</b></p> <p>I acknowledge that when <i>Utility Provider employees</i> or <i>Contractor</i> undertaking saw cutting or coring activities, concrete and/or asphalt slurry will be fully contained and not allowed to enter the stormwater system or waterbody.</p>
Initial	<p><b>Soil Conservation and Stockpiles</b></p> <p>I acknowledge that appropriate soil conservation and stockpiling practices will be implemented, during the <i>work</i>, to prevent erosion, the loss of topsoil and spread of weeds.</p>
Initial	<p><b>Tree Protection</b></p> <p>I acknowledge that adequate protection, as per the Tree Protection Bylaw 23M2002, will be taken to not damage <i>The City</i>-owned or controlled trees at the <i>work</i> site and on adjacent properties. <i>The City</i> Urban Forestry division will be contacted, through 3-1-1, to inquire about tree protection requirements for the <i>work</i>.</p>
Initial	<p><b>Site Management</b></p> <p>I acknowledge that the <i>work</i> site will be maintained free from accumulation of debris and waste. The effects of noise, odour, light, dust emissions, and tracking of dirt and mud will be maintained.</p>
Initial	<p><b>Hazardous Materials &amp; Waste Management</b></p> <p>I acknowledge that appropriate non-hazardous and hazardous materials management procedures will be implemented at the <i>work</i> site. Chemical, fuel and lubricant storage areas will be suitably located and protected to minimize releases. <i>Work</i> site specific hazardous materials management procedures will be communicated to all <i>utility provider employees</i> and <i>Contractors</i>. Spill kits and fire extinguishers will be available at the <i>work</i> site.</p> <p>I acknowledge that all waste materials generated from <i>work</i> site activities will be removed and disposed of in accordance with regulatory requirements and facility procedures. Generation of waste will be avoided or minimized. At a minimum, the recycling of cardboard, wood, concrete, asphalt and metal will be considered and assessed.</p>
Initial	<p><b>Fuelling</b></p> <p>I acknowledge that fuelling or maintenance of equipment will not take place within 30 metres of waterways, including the storm system or environmentally sensitive areas, unless a written standing operating procedure is developed, approved by <i>The City</i> and followed. Spill kits will be present at the <i>work</i> site.</p>

Initial	<p><b>Spills and Releases</b></p> <p>I acknowledge that measures will be taken to prevent pollution of land or waterways, including the storm water system.</p> <p>I acknowledge that spills and releases will be reported to the appropriate regulatory agencies by law and will be reported immediately to <i>The City</i>. If the product enters or is likely to enter a waterway or storm system, or assistance is needed, the <i>utility provider</i> or their <i>Contractor</i> should call 9-1-1 and request dispatch of the Fire Department. If a spill or release into the environment occurs, I acknowledge that the affected area will be cleaned up and remediated to the satisfaction of <i>The City</i> and appropriate regulatory agency.</p>
Initial	<p><b>Contamination Discovery</b></p> <p>I acknowledge that as the <i>utility provider</i> to immediately notify <i>The City</i> Fire Department and <i>The City</i> if any unexpected contamination is encountered during the <i>work</i>.</p> <p>Any suspected or potentially hazardous building materials exposed during the <i>work</i> will be reported immediately to <i>The City</i> and handled and disposed of in accordance with appropriate regulatory requirements.</p>
Initial	<p><b>Off-Site Disposal of Excavated Soil or Material</b></p> <p>I acknowledge that all excavated soil or material that is not required for fill or other purposes of the <i>work</i> will be properly disposed of in accordance with the law.</p>
Initial	<p><b>Recycled and Imported Fill Materials</b></p> <p>I acknowledge that the source location of any imported fill material will be reported to <i>The City</i> when requested.</p>
Initial	<p><b>Vehicle Idling</b></p> <p>I acknowledge that idling of vehicles and construction equipment not essential for the performance of the <i>work</i> will be minimized.</p>
Initial	<p><b>Existing Monitoring Wells and Remediation Infrastructure</b></p> <p>I acknowledge that if existing monitoring wells or environmental remediation infrastructure is encountered during the <i>work</i>, the <i>utility provider employee</i> or <i>contractor</i> will be directed to work around this existing infrastructure or consult with <i>The City</i> to have the infrastructure removed or relocated.</p>
Initial	<p><b>Underground Utilities</b></p> <p>I acknowledge that all reasonable measures will be undertaken to locate all underground utilities prior to commencing any construction activities at the <i>work</i> site. This would include all requirements related to provincial or federal regulated pipelines are adhered to.</p>

I, \_\_\_\_\_, as a representative of \_\_\_\_\_, and has authority to bind the *Utility Provider*, acknowledge that I have been made aware of the expectations of the *Environmental Compliance Plan*, and I understand it is my responsibility to comply with them and communicate this information to all *utility provider employees*, including *Contractors*, that are engaged in carrying out the *work* or providing material to the *work* site.

\_\_\_\_\_  
Representative's Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
*Utility Provider Company*

\_\_\_\_\_  
Date (YYYY-MM-DD)

## **Appendix E - Guidelines for safe construction in the proximity of low impact development source control practices for storm water equipment**

**Low Impact Development (LID) Source Control Practices (SCPs)** are alternative storm water equipment assets used to convey and treat storm water runoff by improving storm water quality and reducing rate and/or volume at or near its source, to protect watershed health.

### **Background**

The traditional focus of storm water management has been on protection from flooding and erosion and proper operation and maintenance of the storm water system. The Storm water Management Strategy, approved by Council in 2005, was developed to additionally address the impacts of urban growth on water quality and watershed hydrology. There are limits to the assimilative capacity of the Bow River and for some pollutants the discharged loads are approaching the provincially regulated limits and current federal guidelines. The strategy identified that an integrated approach to storm water management is necessary to protect watershed health and ensure sustainability of future growth. This led to the implementation of the LID initiative.

The main strategic goals of the LID initiative include watershed protection, reduction of volume and sediment loading to the Bow River, and development of cost-effective and sustainable storm water management practices applicable to both new and redevelopment areas.

Other Council approved/adopted guiding policies that support the LID initiative include the Municipal Development Plan (MDP), the Calgary Transportation Plan (CTP), Watershed Management Plans for the Bow and Elbow Rivers and Nose Creek, the Drainage Bylaw, and Erosion and Sediment Control requirements. City wide

The City is currently conducting research on, and piloting LID technologies, improving existing storm water design guidelines, developing and implementing watershed plans for our critical watersheds, and constructing storm water treatment retrofit projects to offset Total Suspended Solids (TSS) increases and reduce storm water volumes. As part of the City's commitment to reducing the volume and sediment loads from older neighbourhoods that currently discharge untreated runoff to our rivers and where the opportunities to acquire land for wet ponds or wetlands are limited or far too expensive, The City is piloting storm water LID source control retrofit projects in communities throughout Calgary.

### **Source Control Practices Storm water Equipment (SCPs)**

SCP storm water equipment differs from storm water treatment ponds in that they manage storm water at its source. Types of SCPs that could be near or interact with buried utilities include:

- Bioretention and bioswales;
- Soil Cells, ex. Silva Cells and Strata Cells;
- Permeable pavements; and
- Water reuse sites with either buried or surface storage.

Key functions that differentiate SCPs from pond management is that they incorporate conveyance, e.g. transport of storm water from a point of origin (ex: section of paved road, parking lot, etc.) to a destination point (ex: downstream portion of the storm drainage system, emergency overland escape route, etc.). bioretention areas include ponding capacity to increase the volume of water that can be infiltrated for a given catchment size.

There are 6 key elements to a functional SCP that is not visible on the surface and they can look like a normal landscape bed or pavement surface, but is dependent on the type of SCP in question:

- Growing medium soil layer or variable type of permeable pavement surface;
- Filter layer separating the soil from a rock reservoir below;
- Rock reservoir or in some cases manufactured underground storm water storage units or structural support units;
- Under-drain pipe connected to the storm drainage system;
- Inlet/outlet that drains excess water to the storm drainage system or emergency overland escape route; and
- Specifically chosen vegetation on the surface where SCP appropriate.

**Contact Information**

If the utility provider is planning maintenance or contraction activities that will disturb the ground in or around a SCP, certain procedures will need to be undertaken prior to commencing Work.

Once notified by Alberta One-Call or by The City upon application for an Excavation Permit that a SCP is within the work area, the utility provider must contact:

**Scheduled Construction Contact:**

Primary Contact: Team Lead Operations Engineering, Water Services.....(403) 268-1297

**Emergency Contacts: (“Emergency” as defined in Section 1.01(r))**

Primary Contact: Team Lead Operations Engineering, Water Services.....(403) 268-1297

After Hours: After Hours Duty Supervisor .....(403) 225-1018

**Note:** *In the event of an Emergency, the utility provider must attend to the Emergency and immediately notify the Primary Contact of the utility provider’s*

*actions. If the utility provider must undertake action between the hours of 5:00 p.m. and 8:00 a.m., it must notify the After-Hours Duty Supervisor and follow up with the Primary Contact on the first Business Day following the occurrence of the Emergency.*

### **Rehabilitation and Reconstruction Activities:**

Primary Contact: Team Lead Operations Engineering, Water Services.....(403) 268-1297

### **For Technical Information:**

Primary Contact: Team Lead Operations Engineering, Water Services.....(403) 268-1297

### **Locate Information and Exposure Guidelines**

Alberta One-Call and the Excavation Permitting process will notify the utility provider if the SCP is found within five (5) meters of the proposed construction area.

City Personnel will need to be present to delineate the full extent of the SCP on site to determine the potential magnitude of disturbance prior to construction activities.

Buried sub-drain and storm water connections will need to be hand exposed by non-destructive means within the construction area where present.

### **Construction Guidelines**

In the case where construction or maintenance activities disturb and negatively impact an SCP, the utility provider will need to make arrangements with The City to ensure the installation is offline. Once completed, disturbance can occur. City inspectors will have uninterrupted access to the work site. Copies of the following documentation shall be provided if requested:

- Excavation Permit (contact City of Calgary Roads at 403-268-4936).
- Valid locating documentation.
- Alignment (contact City of Calgary Land Info and Mapping at 403-268-5794).

### **Remediation Activities**

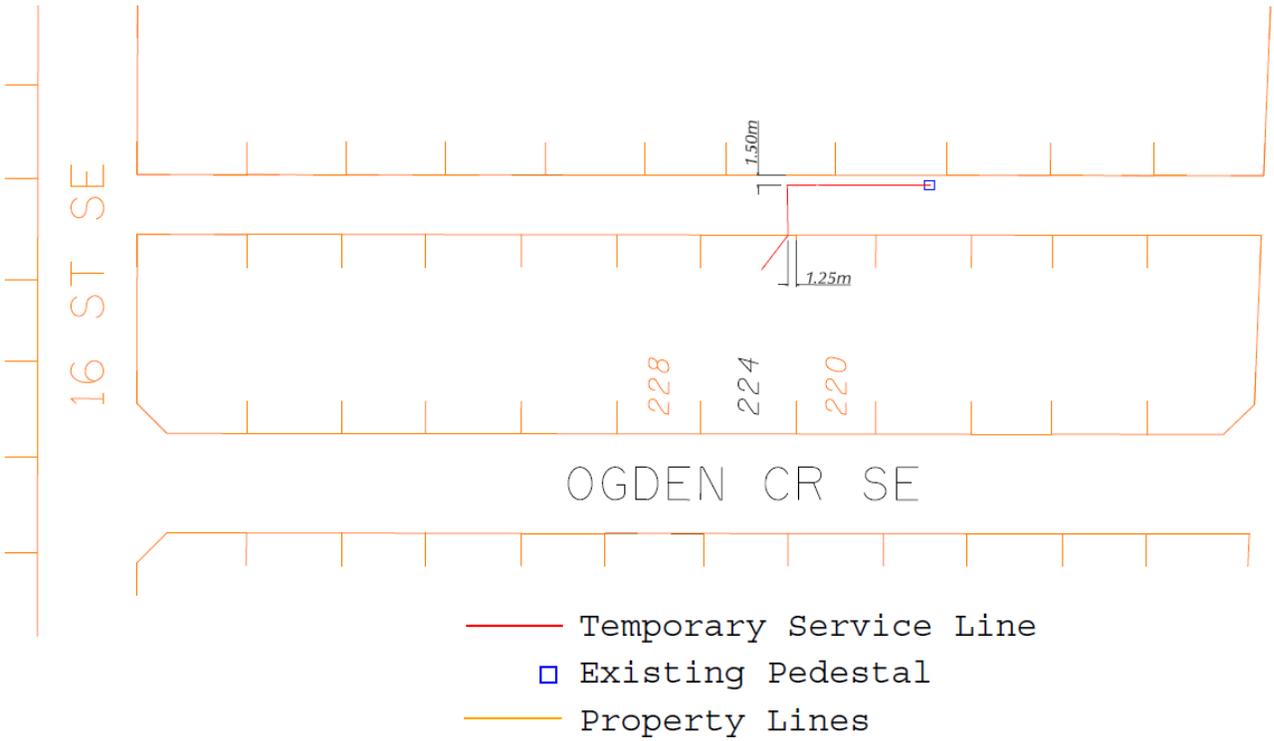
Due to the detailed engineering parameters used in the design and construction of SCPs, and the potentially site-specific materials specifications and plants, the excavation must be filled with a clean fill upon completion of any activity within the footprint and adjacent land that is part of the design (inlets, outlets, overflow areas, underground storm water equipment connections, etc.) of the SCP installation.

Upon completion, The City and its pre-approved contractors will undertake rehabilitation activities wherever possible, or complete reconstruction activities where warranted. The decision on whether rehabilitation activities can be undertaken on an installation is 1) dependent on the type of SCP disturbed and 2) the amount of disturbance, and will be

at the sole discretion of The City. This will ensure that the SCP functions as it was intended as part of the larger storm water management system.

## Appendix F - Temporary Service Drop Example

### EXAMPLE: RESTORE SERVICE TO 224 OGDEN CR. SE



## Appendix G – Special Equipment Relocation

### NOTICE PERIODS FOR RELOCATION OF SPECIAL EQUIPMENT

1. Subject to *Other Legislation*, *The City* may extend the *notice* period of 180 *calendar days* as described in section 60 for the *relocation of equipment*, taking into consideration the following factors:
  - (a) the nature of the *equipment* to be *relocated*, such as the size of the *equipment*, the specific operating constraints of the *utility provider* and the *utility provider's* obligation to maintain service to customers;
  - (b) specific engineering and design constraints impacting the *relocation* of the *equipment*, such as the amount of time required to procure materials and land and undertake design work;
  - (c) construction constraints such as the season of year; and
  - (d) compliance with the requirements of a *Governmental Authority*.
  
2. If a *utility provider* can provide sufficient evidence to the satisfaction of *The City* to justify an extension of the *notice* period for the *relocation of equipment* under section 1 of this Schedule "C", the following *notice* periods for *relocation* will apply:

Utility Facility	Description	Notice Guidelines
<b>Natural Gas Facilities and Pipelines</b>		
Pipeline – Transmission	Steel 6" and under	365 days
	Steel 6" and over	545 days
Pipeline – Transmission Metering / Regulating / Compressing Stations	Modification to existing station site within existing station boundaries which does not require additional land	545 days
	Modification to existing station site requiring additional land	545 days from date of land acquisition (i.e. land title transferred or lease signed)
	Relocation of existing station to a new location	545 days from date of land acquisition (i.e. land title transferred or lease signed)
Pipeline – Distribution Main	PE 6" and under	270 days
	PE 6" and over	365 days
	Steel 6" and under	270 days
	Steel 6" and over	365 days
Pipeline – Distribution Service	Residential	270 days
	Commercial	270 days
	Industrial	270 days
Pipeline – Distribution Metering / Regulating Stations	Modification to existing station site within existing station boundaries	365 days
	Modification to existing station site requiring additional land	365 days from date of land acquisition (i.e. land title transferred or lease signed)

	Relocation of existing station to a new location	365 days from date of land acquisition (i.e. land title transferred or lease signed)
<b>Electric Facilities</b>		
Transmission	Electrical lines greater than 25kv	545 days
Sub Stations	Modification to existing station site within existing station boundaries	365 days
	Modification to existing station site requiring additional land	365 days from date of land acquisition (i.e. land title transferred or lease signed)
	Relocation of existing station to a new location	365 days from date of land acquisition (i.e. land title transferred or lease signed)
Distribution – Concrete encased duct banks		270 days
Distribution – Transformers		270 days

## Appendix H – Guidelines for Attachment to City Structures

This Design Guideline for Bridges and Structures are part of the *Municipal Legislation* and apply to both newly constructed *City Structures* and to existing *City Structures*.

*The City*, at its discretion, may consider alternatives to these Guidelines if a developer or contractor submits a written request to *The City* identifying their reasons for special consideration.

*The City* discourages *equipment* attachments to *City Structures* and requires *utility providers* to seek alternative routes where possible for accommodation of their *equipment*. *Equipment* attachments to *City Structures* often create interference with future work undertaken by *The City*, including scheduled and unscheduled maintenance of the *City Structure*.

If the *utility provider* demonstrates to the satisfaction of *The City* that no other route is feasible for installation of its *equipment*, *The City* retains the right to install its own *equipment*, and will work together with the *utility provider* to ensure that the *equipment* accommodates the needs of the *utility provider* to the degree that the design of the *City Structure* allows. Access to *The City's equipment* will be allocated by *The City* on an equitable basis.

*The City* retains full ownership of any *equipment* that is constructed by *The City* within its *City Structures*.

*Utility providers* must enter into a licensing agreement with *The City* as a condition of accessing *The City's equipment* located on a *City Structure*. A condition of approval for access to such *equipment* is that the *utility provider* must have an alternative route that can be utilized in the event of an emergency where the *City Structure* or *equipment* is compromised by any act, including fire, flood, vehicle collision, etc.

In the event *The City* decides not to install its own *equipment* on a *City Structure* and grants approval to the *utility provider* to construct or install the *utility provider's equipment* on the *City Structure*, the *work* must be in accordance with the following technical guidelines:

- (a) the *utility provider's equipment* must be of non-corrosive material or galvanized steel, which must be located in non-structural elements or in low-stress areas of secondary components of the *City Structure*. If attachment to primary structural elements of the *City Structure* is approved, the attachment must not compromise the structural integrity or long-term durability of the *City Structure*;
- (b) at transition points, such as expansion joints, couplings and fittings must be capable of accommodating the bridge transition. An allowance must be made for vertical movement due to bridge jacking during bearing replacement;

**APPENDIX I – Calgary Rights-of-way Management (CROWM) Portal Step-by-Step Guide**

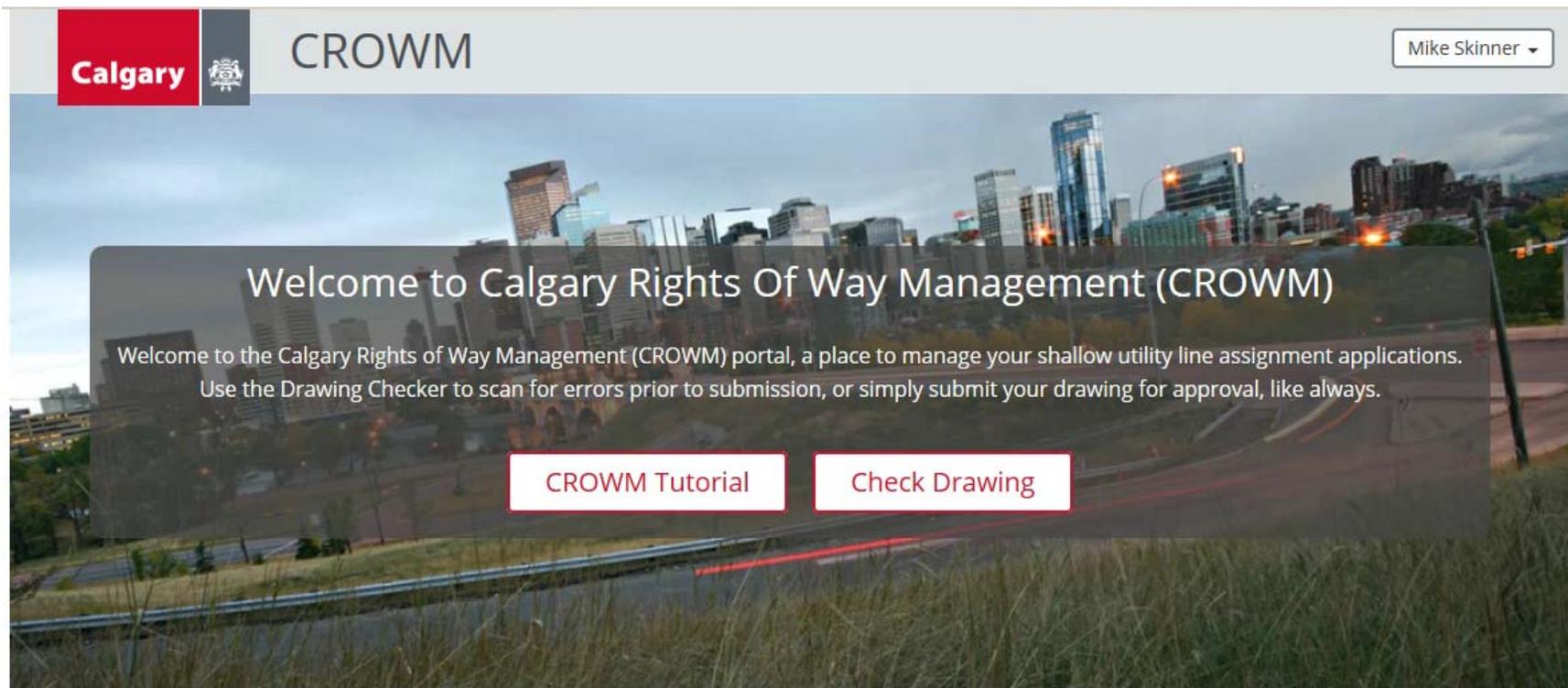
# Calgary Rights of Way Management (CROWM) Portal

## Overview

# Feature Highlights

- Project IDs – can have up to 5
- Contractor Management
- Queue Management
- Real time application status information
- Separate fields for Address and Scope of Work
- Application Management
  - Withdraw/put on hold/cancel/requests for additional information

# Home Screen on First Log In



# Online Training

Calgary  CROWM Mike Skinner ▾

## CROWM Tutorial

[Return Home - I'm not ready yet](#)

Learn how to use the new Calgary Rights of Way Management (CROWM) portal

Watch these videos and accept the Terms of Use before proceeding.



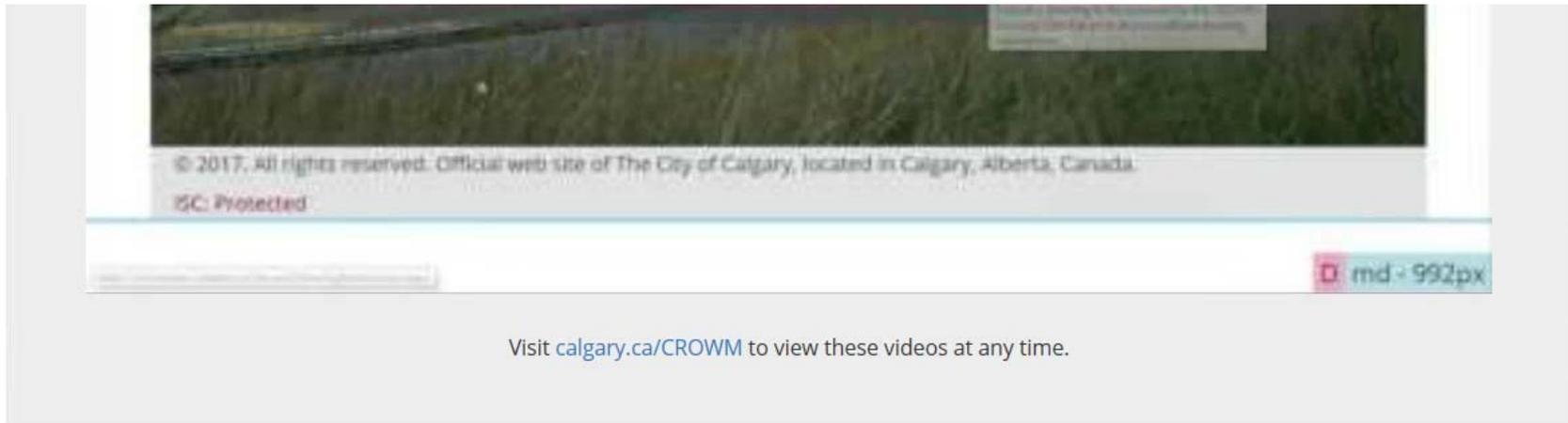
01 How to Navigate in CROWM Mike Skinner ▾

Welcome to Calgary Rights Of Way Management (CROWM)

Welcome to the Calgary Rights of Way Management (CROWM) portal, a place to manage your shallow utility line assignment applications. Use the Drawing Checker to scan for errors prior to submission, or simply submit your drawing for review like always.

D lg -

# Terms of Use to Gain Access



Visit [calgary.ca/CROWM](http://calgary.ca/CROWM) to view these videos at any time.

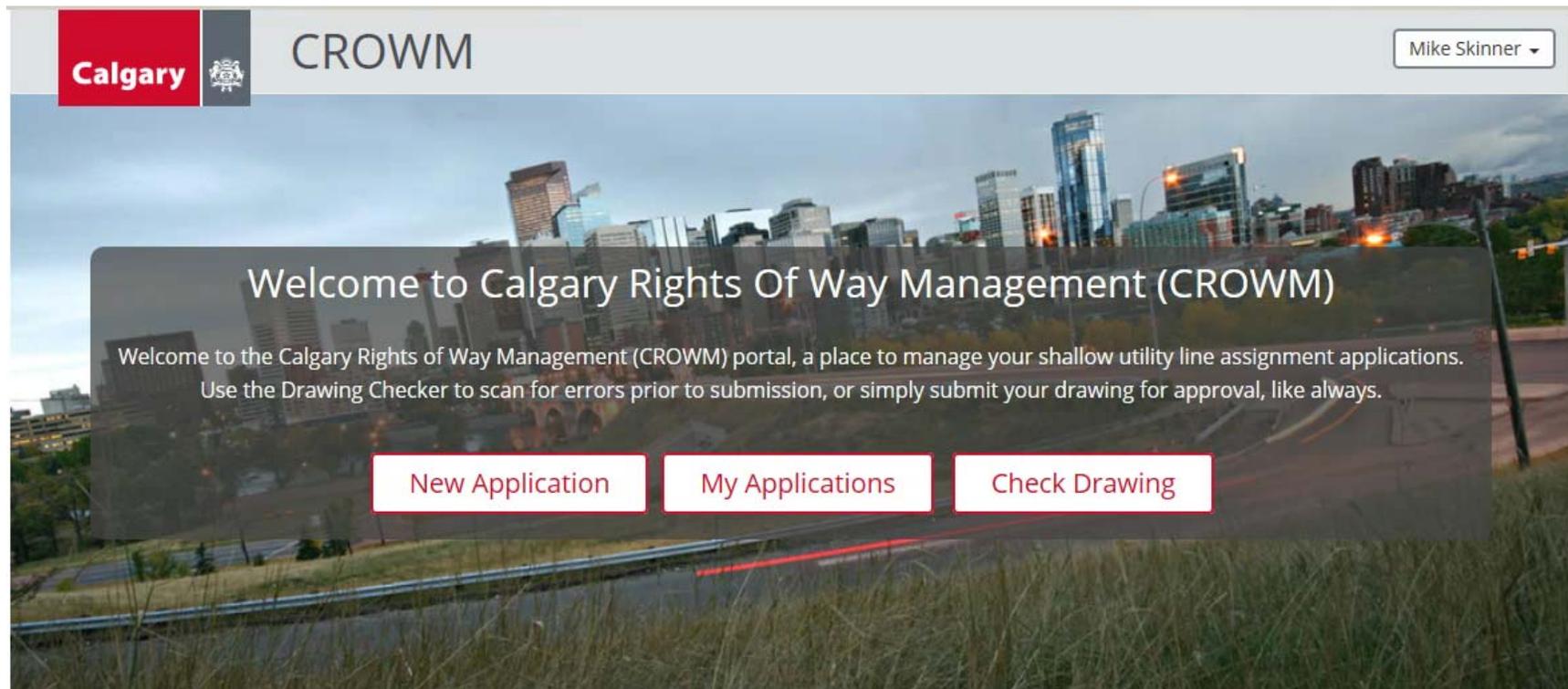
## Terms of Use

Access to the CROWM system is granted only to those users who have taken the provided online video tutorials and have reviewed the online help. The CROWM system is provided as an online portal for submitting and managing utility line assignment (ULA) applications. By accepting these terms, I render The City of Calgary free of liability for any misuse of the CROWM system, intentional or otherwise.

I agree to the 'Terms of Use'

Let me into CROWM

# Business User Home Screen



# New Application Data Entry

Create New Application

Step 1: Details   Step 2: Location   Step 3: Files   Step 4: Review & Submit

**\* Utility Provider:**  
SHAW CABLE SYSTEMS (ALBERTA) LTD

**\* ULA Type:**  
Single Line Assignment

**\* Applicant Name:**  
Michael Skinner

**\* Email:**  
michael.skinner@calgary.ca

**\* Length (meters):**  
15

**\* Date of Construction:**  
2017/04/08

**\* Project Id (up to 5):**  
RPN999555

**\* Telephone:**  
(403) 222-2222 x\_\_\_\_

**Alternate Email:**  
kelly.hess@calgary.ca

**\* Number of Proposed Structures:**  
0

Cancel  
< Prev   Next >

- Applicant name and email address auto populated based on log in
- Utility Provider drop down restricted to who you are working for

# New Application Data Entry

Step 1: Details   **Step 2: Location**   Step 3: Files   Step 4: Review & Submit

**\* Address:**  
2211 7 st sw

**\* Section/Township/Range:**  
9   24   1   +

**\* City Quadrant:**  
SW

**\* Scope of Work:**  
New Service Drop

**\* Installation Types: (Check all that apply)**

- Abandon
- Conduit
- Direct Buried
- Distribution
- Gas Line
- O.H. Poles / Anchors

**\* Attach Map to Application**   Map Attached. (Preview)

Cancel  
< Prev   Next >

- Can use map or text address search.
- Once user accepts the address, CROWM will auto populate City Quadrant and STR

# New Application Data Entry



**\* Attach Design File:**

Note: Please verify the drawing with the Drawing Checker before uploading DGN file and submitting the application. An administration fee may be charged if the application is rejected because of an invalid drawing.

A0000716.dgn (0.02 MB)

**Attach Supporting Documents:** (Select multiple files up to 50 MB (Megabytes) in total)

- Can only add one design (dgn) file
- Can add many supporting documents

# New Application Data Entry Review and Submit

Step 1: Details   Step 2: Location   Step 3: Files   **Step 4: Review & Submit**

**ULA Type:**  
Single Line Assignment

**Utility Provider:**  
SHAW CABLE SYSTEMS (ALBERTA) LTD

**Company:**  
SHAW CABLE SYSTEMS (ALBERTA) LTD

**Applicant Name:**  
Michael Skinner

**Primary Email:**  
michael.skinner@calgary.ca

**Alternate Email:**  
kelly.hess@calgary.ca

**Telephone:**  
(403) 222-2222

**Construction Date:**  
2017-04-08

**Project ID's:**  
RPN999555

**Line Length:** 15      **# of Structures:** 0

**Quadrant:** SW      **Map Address:** 2211 7 st sw

**Section / Township / Range:**  
09-24-01

**Scope of Work:**  
New Service Drop

**Installation Types:**  
Conduit

**DGN File:**  
A0000716.dgn (0.02 MB)

**Map Markup File:**  
MapMarkup\_1.png (0.07 MB)

**Supporting Documents:**

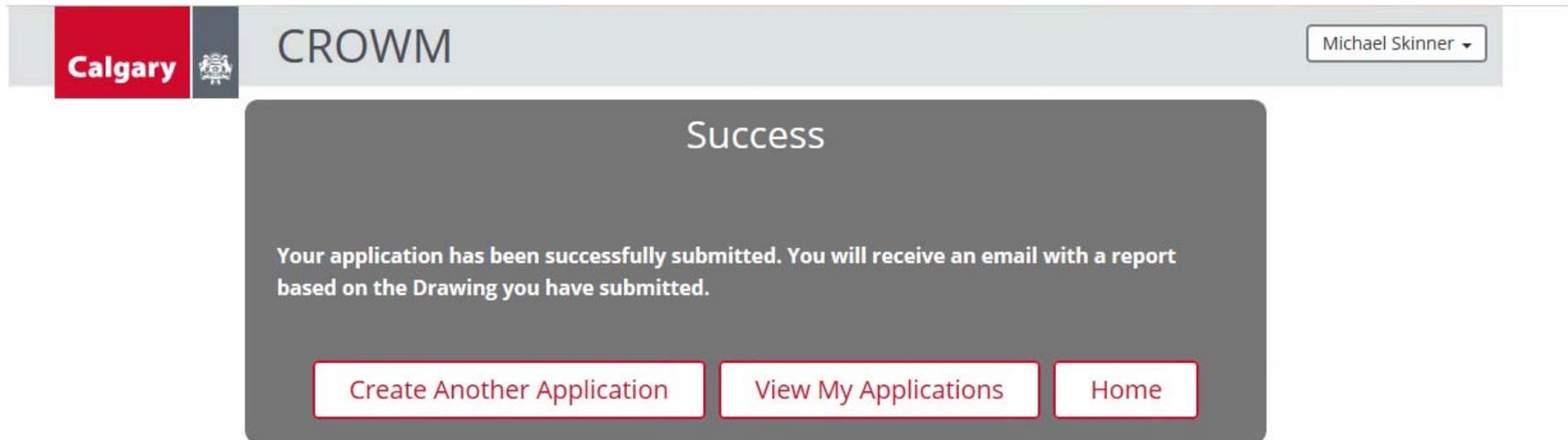
**Estimated Total Cost for ULA:** \$578.30 (Actual cost will be determined by a Utility Planning Specialist on the ULA team).

**Terms and Conditions**  
Submitting a utility line assignment (ULA) application to the CROWM system does not guarantee approval by The City of Calgary. Your application and supporting documents must be reviewed by an authorized ULA specialist prior to formal approval of your ULA. All drawings are subject to thorough manual evaluation during this process. A drawing may be deemed non-compliant during the manual review and may require additional changes before it is officially accepted.

I agree to the above Terms and Conditions

Cancel  
< Prev   Next >  
Submit

# New Application Message



The screenshot shows a web interface for CROWM. The header includes the Calgary logo, the CROWM text, and a user profile for Michael Skinner. A central grey box displays a success message: "Success" followed by "Your application has been successfully submitted. You will receive an email with a report based on the Drawing you have submitted." Below the message are three buttons: "Create Another Application", "View My Applications", and "Home".

- An email will be sent confirming the application has been successfully submitted. The email will contain a drawing checker report.

# Applications Listing

## My Applications

### My Pending Applications

Total record count: 5

App Number	Queue	Pending State	Project IDs	Construction Date	Work Location
		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
A0000000016	1	On Hold	Test for Danny	2017/04/08	2808 12 AV NW
A0000000026	2	Pending Review	RPN123456, Temp Drop Replacement	2017/03/24	3837 12 ST SW
A0000000027	3	Pending Review	RPN175444, JR Shaw Build	2017/03/24	1007 HILLCREST AV SW
A0000000028	4	Pending Review	123456	2017/04/07	1212 1 ST NW
A0000000030	6	Pending Review	RPN1223344	2017/04/08	151 CROWFOOT CR NW

Edit

Home

Create New

View Closed Apps

- All users for a specific utility provider will see all applications for the company.
- When the application is pending review, applicants can edit the application, update the dgn file, put the application on hold, or withdraw the application.

# In progress applications

## My Applications In Progress

Total record count: 4

App Number	In-Progress Status	Project IDs	Construction Date	Work Location
	<input type="text"/> ▼	<input type="text"/> ▼	<input type="text"/> ▼	<input type="text"/> ▼
A0000000017	Under Review	SHAW_ADMIN_1 submitted 1	2017/04/07	2506 16A ST SW
A0000000018	Approved	522144_CROWM_USER submitted 1	2017/04/07	342 15 AV SW
A0000000026	Under Review	RPN123456, Temp Drop Replacement	2017/03/24	3837 12 ST SW
A0000000028	Request Information	123456	2017/04/07	1212 1 ST NW

- This listing will show the applications as they progress through the review and approval process.

# In Progress Application – Under Review

**Calgary**  **CROWM** Michael Skinner ▾

## ULA Application In Progress - Under Review

<b>Application ID:</b>	A0000000026	<b>Project ID's:</b>	RPN123456, Temp Drop Replacement
<b>ULA Type:</b>	Single Line Assignment	<b>Quadrant:</b>	SW
<b>Company:</b>	SHAW CABLE SYSTEMS (ALBERTA) LTD	<b>Work Location:</b>	3837 12 ST SW
<b>Applicant Name:</b>	Mike Skinner	<b>Section / Township / Range:</b>	04-24-01
<b>Primary Email:</b>	miskinner@calgary.ca	<b>Scope Of Work:</b>	down 38 av from west of noted address to 6 street
<b>Alternate Email:</b>	kelly.hess@calgary.ca	<b>Line Length:</b>	10 m
<b>Telephone:</b>	(403) 222-2222	<b># of Structures:</b>	5
		<b>Construction Date:</b>	2017/03/24

**Installation Types:**

- Abandon
- Conduit
- Direct Buried
- Distribution

DGN File:		Supporting Documents:					
Submitted Drawing	Submitted Date	Emailed PDF's		Submitted File	Submitted Date	Uploaded By	File Type
a0000000026.dgn	2017-03-23 10:31:42 PM	 DrawingChecker_Report.pdf		 1009 - 24 Ave.docx	2017-03-23 10:31:43 PM	Mike Skinner	Supporting Document

**Other Application Requests**

\* Please select your request:  Put on Hold  Withdraw Application

[Home](#) [Cancel](#)

- When the application is under review by ULA, the applicant can request to put the application on hold or request to withdraw the application.

- CROWM will be used to request additional information regarding this application

# In Progress Application

CROWM

Michael Skinner ▾

## ULA Application In Progress - Request Information

**Application ID:** A0000000028

**ULA Type:** Single Line Assignment

**Company:** PRIMARY ENGINEERING AND CONSTRUCTION CORPORATION

**Applicant Name:** Michael Skinner

**Primary Email:** michael.skinner@calgary.ca

**Alternate Email:** kelly.hess@calgary.ca

**Telephone:** (403) 222-2222

**Installation Types:**

Abandon  
 Conduit  
 Direct Buried  
 Distribution  
 ...

**Project ID's:**

123456

**Quadrant:** NW

**Work Location:** 1212 1 ST NW

**Section / Township / Range:**

22-24-01

**Scope Of Work:**

single site services

**Line Length:** 100 m

**# of Structures:** 0

**Construction Date:** 2017/04/07

**DGN File:**

Submitted Drawing	Submitted Date	Emailed PDF's
a0000000028.dgn	2017-03-23 11:02:58 PM	DrawingChecker_Report.pdf

**Supporting Documents:**

Submitted File	Submitted Date	Uploaded By	File Type
No records to display.			

# In Progress – Request Additional Information (cont)

**Required Actions**

**ULA Specialist Comments:**

wisuagh

**\* Attach Design File:**  
Note: Please verify the drawing with the Drawing Checker before uploading DGN file and submitting the application. An administration fee may be charged if the application is rejected because of an invalid drawing.

**\* Attach Supporting Documents:** (Select multiple files up to 50 MB (Megabytes) in total)

**\* Required Actions:**

Provide Addition Info  
 Provide Updated Design File

**\* Completed Comments for the ULA Specialists**

**Other Application Requests**

**Terms of Use**

Submitting a utility line assignment (ULA) application to the CROWM system does not guarantee approval by The City of Calgary. Your application and supporting documents must be reviewed by an authorized ULA specialist prior to formal approval of your ULA. All drawings are subject to thorough manual evaluation during this process. A drawing may be deemed non-compliant during the manual review and may require additional changes before it is officially accepted.

I agree to the 'Terms of Use'

- There will be comments from ULA as to what information is needed.
- Applicant will have opportunity to upload revised design file or other supporting documentation and as well as provide comments.

# Approved Application

CROWMMichael Skinner ▾

## ULA Application In Progress - Approved

**ULA Number:** 17-12350  
**Application ID:** A0000000018  
**ULA Type:** Single Line Assignment  
**Company:** SMITH BROTHERS EXCAVATION  
**Applicant Name:** Michael Skinner  
**Primary Email:** michael.skinner@calgary.ca  
**Alternate Email:** Travis.Smith@calgary.ca  
**Telephone:** (222) 333-4444

**Installation Types:**

- Abandon
- Conduit
- Direct Buried
- Distribution
- Gas Line

**Project ID's:**

522144\_CROWM\_USER submitted 1

**Quadrant:** SW  
**Work Location:** 342 15 AV SW  
**Section / Township / Range:** 15-24-01

**Scope Of Work:** Dig and stuff.

**Line Length:** 15 m  
**# of Structures:** 5  
**Construction Date:** 2017/04/07

**DGN File:**

Submitted Drawing	Submitted Date	Emailed PDF's
17-12350.dgn	2017-03-14 3:03:38 PM	 DrawingChecker_Report.pdf  Approved_Report.pdf

**Supporting Documents:**

Submitted File	Submitted Date	Uploaded By	File Type
No records to display.			

Post Approval Drawing Upload

\* Please select your request:  Line Deviation  As-Built  Extend Expiry

Other Application Requests

Home

Cancel

- Email with approval and redline file will be sent to the applicant; can also get a copy of it on this screen.
- This is also where the applicant will go to provide as-built drawings, request a line deviation, or request and extension to the expiry date.

# Closed Applications

## My Closed Applications

Application Number:  ULA Number:  Submitted Date From:  Submitted Date To:  [Refresh](#)

Total record count: 3

App Number	ULA Number	Closed Status	Project IDs	Submitted Date	Construction Date	Work Location
<input type="text"/>						
A0000000015	17-00003	Completed	DADFG-555	2017/03/13	2017/04/07	202 6 AV SW
A0000000014		Cancelled		2017/03/13	2017/03/31	322A 15 AV SW
A0000000023		Cancelled		2017/03/23	2017/04/08	627 15 AV SW

[Home](#)  
[Cancel](#)  
[View](#)

- The closed applications listing will list applications which have been completed, canceled/withdrawn, or non compliant infrastructure.

# Business Administrator Home Screen

**Calgary**  CROWM Michael Skinner ▾

## Welcome to Calgary Rights Of Way Management (CROWM)

Welcome to the Calgary Rights of Way Management (CROWM) portal, a place to manage your shallow utility line assignment applications. Use the Drawing Checker to scan for errors prior to submission, or simply submit your drawing for approval, like always.

[New Application](#) [My Applications](#) [My Contractors](#) [My Queue](#) [Check Drawing](#)

© 2017. All rights reserved. Official web site of The City of Calgary, located in Calgary, Alberta, Canada.  
ISC: Protected

# Business Administrator Features

## Contractor Management

Calgary CROWM Michael Skinner

My Contractors - SHAW CABLE SYSTEMS (ALBERTA) LTD

**Available Contractors**

- Brians Excavation Ltd.
- Calgary Networks Ltd.
- Carly and Carly Inc.
- CROWM\_009\_S
- Marc Sabraw Industries
- Original Rays Construction
- ROGERS COMMUNICATIONS CANADA INC.
- Skinner Management Inc.
- SMITH BROTHERS EXCAVATION
- STRATEGIC REALTY MANAGEMENT CORP

**My Authorized Contractors**

- DIXON NETWORKS
- PRIMARY ENGINEERING AND CONSTRUCTION CORPORATION

Home

Authorize

Revoke Privileges

- The authorization of contractors will be handled by utility provider business administrators
  - No longer need to provide a letter of authority for contractors
- Can authorize and revoke at any time

# Business Administrator Features

## Queue Management

CROWMMichael Skinner ▾

### My Queue

#### My Application Queue

Total record count: 6

App Number	Pending State	Company	Date of Submission	Date of Construction	Applicant Name	Address	Position In Queue
A0000000027	Pending Review		2017/03/23	2017/03/24	Mike Skinner	1007 HILLCREST AV SW	3
A0000000028	Pending Review		2017/03/23	2017/04/07	Michael Skinner	1212 1 ST NW	4
A0000000030	Pending Review		2017/03/23	2017/04/08	Mike Skinner	151 CROWFOOT CR NW	6
A0000000031	Pending Review		2017/03/23	2017/04/08	Michael Skinner	2211 7 st sw	7

Home

↑

↓

Save

- Utility provider business administrator have the ability to promote or demote pending applications to meet business requirements.

# Closed Applications

## My Closed Applications

Application Number:  ULA Number:  Submitted Date From:  Submitted Date To:  [Refresh](#)

Total record count: 6

App Number	ULA Number	Closed Status	Project IDs	Submitted Date	Construction Date	Work Location
<input type="text"/>						
A0000000011	17-12348	Completed	asdfasdf	2017/03/13	2017/03/30	1021 SYDENHAM RD SW
A0000000012		Cancelled		2017/03/13	2017/03/30	2121 5 ST SW
A0000000013	17-00001	Non-Compliant	234-78, 567-KLT	2017/03/13	2017/03/30	513 20 AV SW
A0000000015	17-00003	Completed	DADFG-555	2017/03/13	2017/04/07	202 6 AV SW
A0000000014		Cancelled		2017/03/13	2017/03/31	322A 15 AV SW
A0000000023		Cancelled		2017/03/23	2017/04/08	627 15 AV SW

[Home](#)  
[Cancel](#)  
[View](#)

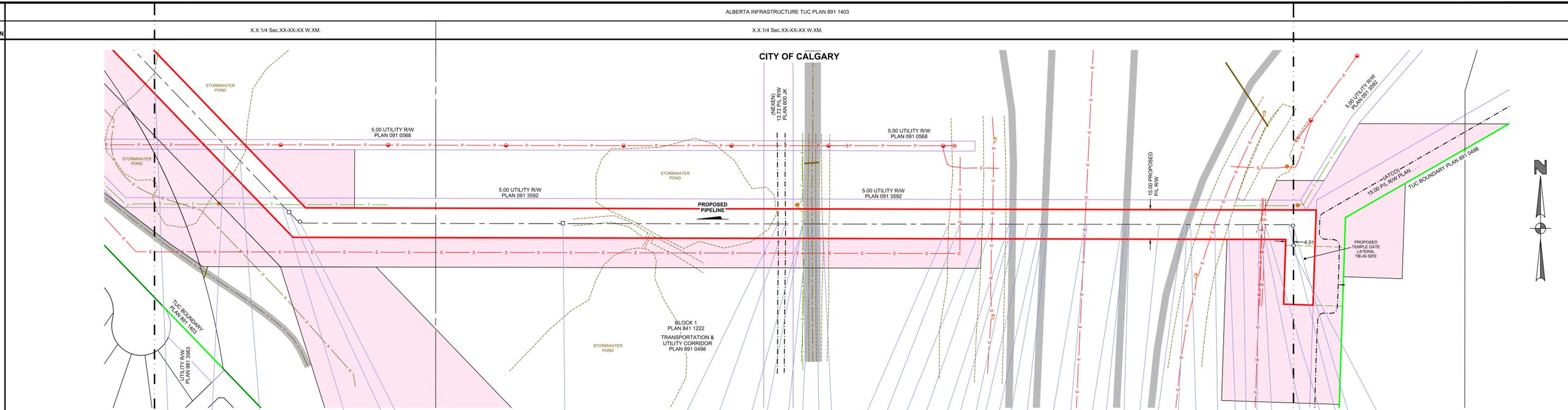
- The closed applications listing will list applications which have been completed, canceled/withdrawn, or non compliant infrastructure.

# Next Steps

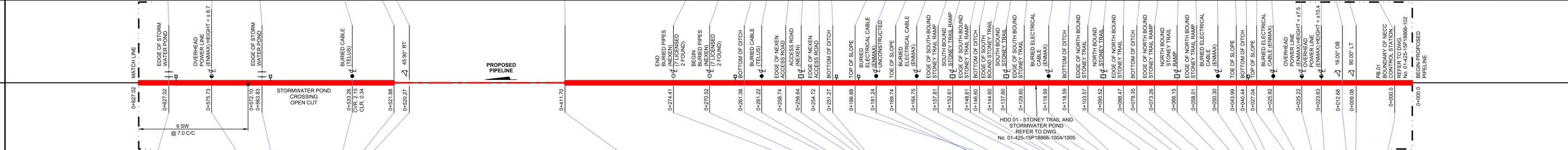
- Get your City myID account set up
  - Information is available at [www.calgary.ca/myid](http://www.calgary.ca/myid)
  - If you have issues please contact [myIDSupport@calgary.ca](mailto:myIDSupport@calgary.ca)
- Watch the video available on [www.calgary.ca/crowm](http://www.calgary.ca/crowm)
- Send questions to [crowm@calgary.ca](mailto:crowm@calgary.ca)

## Appendix J – As-built sample

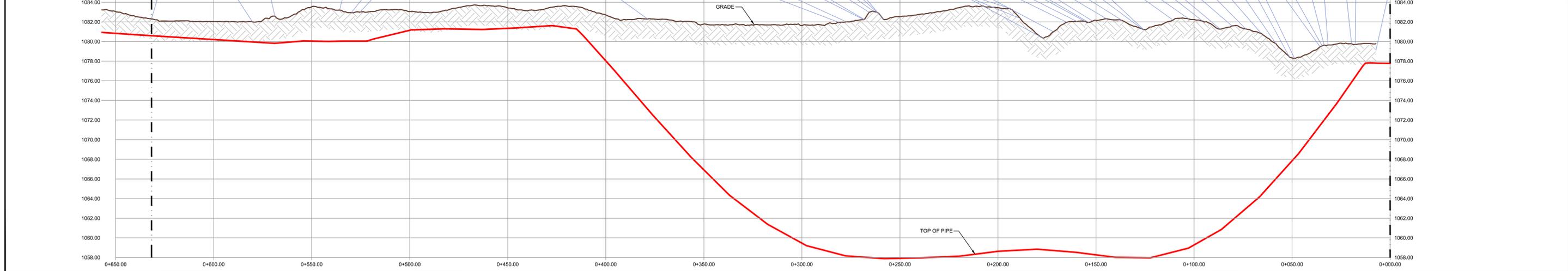
OWNERSHIP (TRACT) No.  
LEGAL DESCRIPTION  
PIPELINE PLAN SCALE 1:1000



ENGINEERING / SURVEY SCHEMATIC  
DESCRIPTION  
CHAINAGE



PIPELINE PROFILE  
VERT: 1:200



PIPELINE MATERIAL SUMMARY			
ITEM No.	MATERIAL No.	DESCRIPTION	QUANTITY
1		406mm x 7.9mm W.T. CSA Z245.1 GR. 483 CAT 2 FBE PIPE	110.18
2		406mm x 7.9mm W.T. CSA Z245.1 GR. 483 CAT 2 DPA PIPE	518.84

REFERENCE DRAWINGS	
DRAWING FIELD BOOK No.	TITLE

LEGEND:					
	PROPOSED RIGHT OF WAY		PIPELINE RIGHT-OF-WAY (PIL RW)		BLOCK VALVE ASSEMBLY
	AS BUILT BURIED PIPE		WELL SITE AND ACCESS ROAD		WARNING SIGN ON POST
	PROPOSED TEMPORARY WORK SPACE		TUC BOUNDARY		PIPE CROSSING
	BURIED PIPELINE		CARRIER PIPE: 406mm x 7.9 mm W.T. CSA Z245.1 GR. 483 CAT 2 FBE PIPE		CABLE CROSSING
	BURIED WATER LINE		CROSSING PIPE: 406mm x 7.9 mm W.T. CSA Z245.1 GR. 483 CAT 2, DPA PIPE		WATER COURSE CROSSING
	BURIED TELUS CABLE		FIELD BEND (PB) UP TO 20° MIN. RADIUS = 40D		ROAD CROSSING
	FENCE		PREFAB BEND (PB) > 20° MIN. = 5D		POWER LINE CROSSING
	BURIED GAS LINE				TEST LEAD
	BURIED CABLE				PIPE TRANSITION
	POWER POLE				POINT OF INFLECTION (PI)
	MANHOLE				CATHODIC TEST POINT
	LIGHT STANDARD				ANGLE OF DEFLECTION
	PROPOSED INTERCHANGE				

REVISION / ISSUED		
No.	DATE	DESCRIPTION
1		- ISSUED FOR INFORMATION ONLY

ENGINEERING RECORD	
DRAWN BY	DATE
DESIGNED BY	
CORROSION CONTROL	
CHECKED BY	
APPROVED BY	

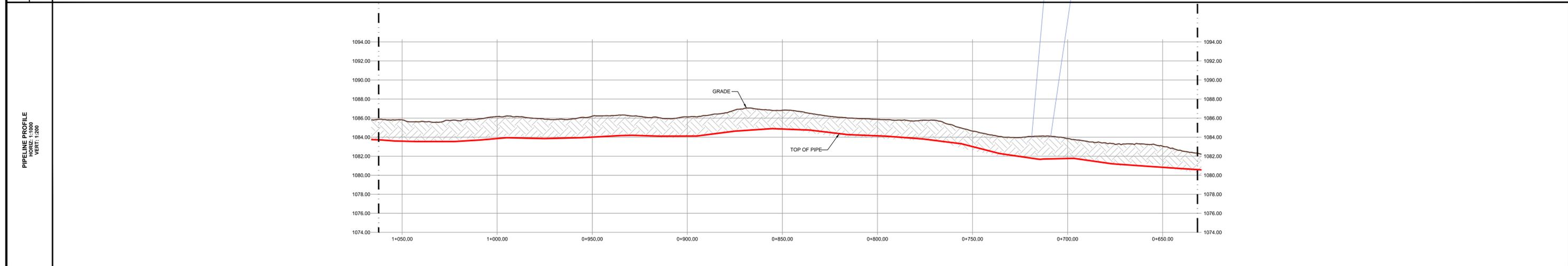
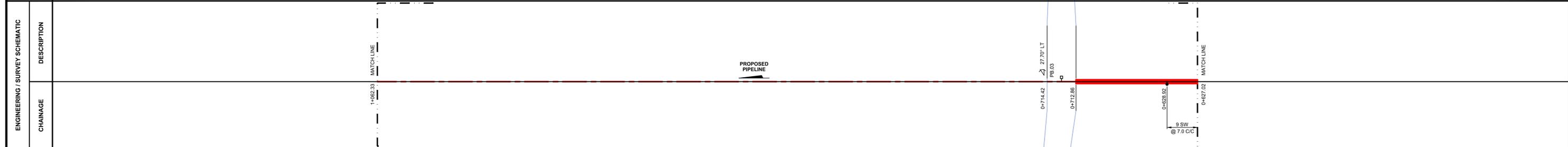
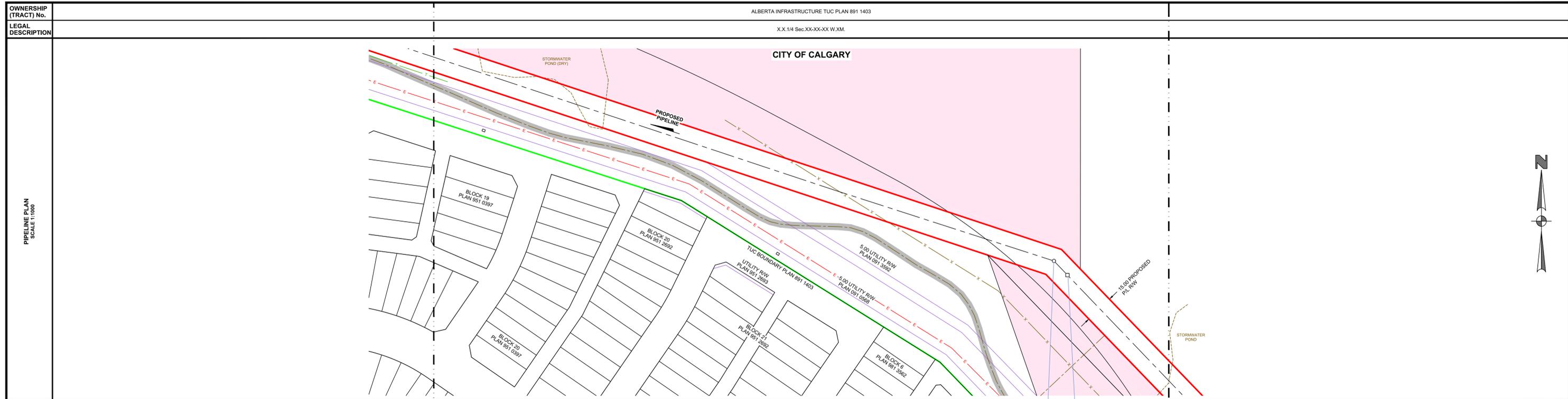
PROFESSIONAL ENGINEERS STAMP	
COMPANY NAME	

PIPE ASSEMBLIES	
QUANTITY	DESCRIPTION

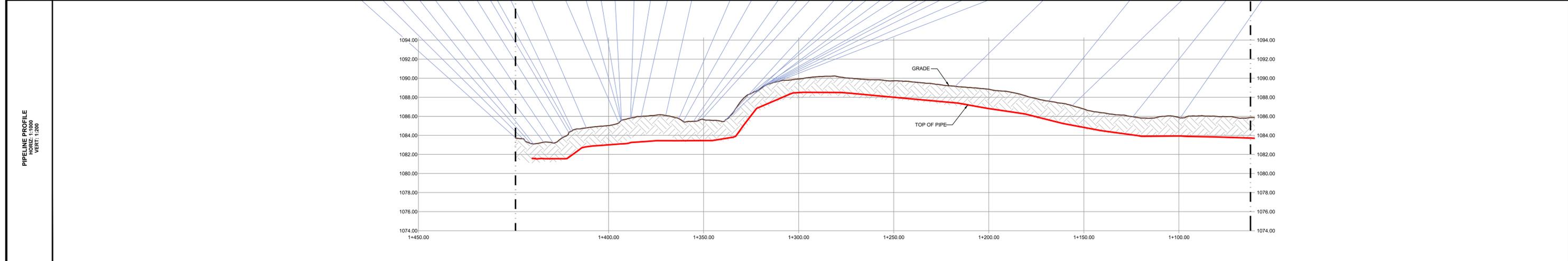
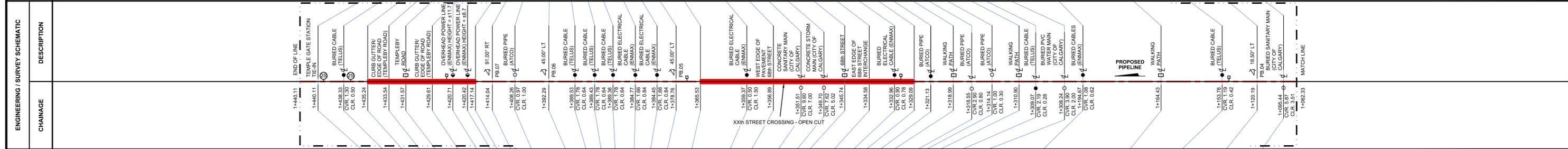
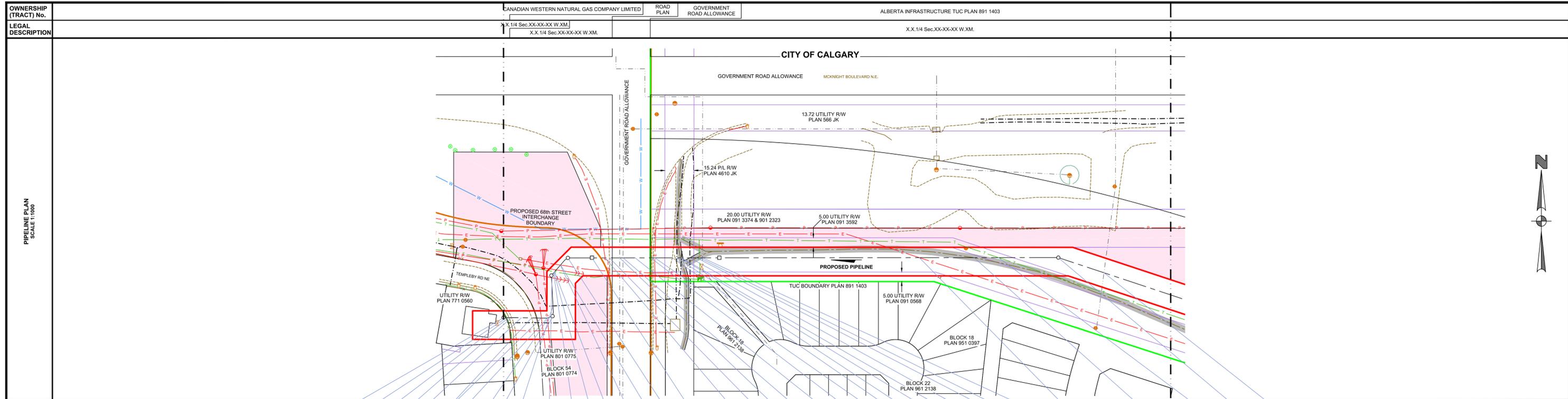
NOTES:					
INFORMATION PROVIDED BY AER, IHS ENERGY AND CITY OF CALGARY.					
ELEVATIONS ARE BASED ON THE CANADIAN GEODETIC VERTICAL DATUM 1928 (CGVD28) USING HT2.0 GEOID MODEL.					
DISTANCES ARE IN METRES AND DECIMALS THEREOF.					
PROFILE INFORMATION IS BASED ON LIDAR DATA COLLECTED BY AIRBORNE IMAGING INC. (SEPT. 2014)					
ALL RIGHT OF WAY AND BURIED FACILITIES ARE APPROXIMATE.					
ALL ANGLES ARE GIVEN IN DECIMAL DEGREES.					

PERMIT STAMP	
PROJECT NAME (X.X.1/4 Sec.XX Twp.XX Rge.XX W.XM.) to Tie In (X.X.1/4 Sec.XX Twp.XX Rge.XX W.XM.) CITY OF CALGARY ALBERTA	

STATION 0+000.00 TO STATION 0+627.02	
SCALE: 1:1000	
SHEET No.: 1 of 3	



PIPELINE MATERIAL SUMMARY				REFERENCE DRAWINGS		LEGEND:		ENGINEERING RECORD		PROFESSIONAL ENGINEERS STAMP		
ITEM No.	MATERIAL No.	DESCRIPTION	QUANTITY	DRAWING FIELD BOOK No.	TITLE	SYMBOL	DESCRIPTION	DRAWN BY	DATE	COMPANY NAME		
1		406mm x 7.9mm W.T. CSA Z245.1 GR. 483 CAT 2 FBE PIPE	110.18			[Symbol]	PROPOSED RIGHT OF WAY AS BUILT BURIED PIPE			PROJECT NAME (X.X.1/4 Sec.XX Twp.XX Rge.XX W.XM.) to Tie In (X.X.1/4 Sec.XX Twp.XX Rge.XX W.XM.) CITY OF CALGARY ALBERTA		
2		406mm x 7.9mm W.T. CSA Z245.1 GR. 483 CAT 2 DPA PIPE	516.84			[Symbol]	PROPOSED TEMPORARY WORK SPACE					
PIPE ASSEMBLIES						REVISION / ISSUED		NOTES:		PERMIT STAMP		
QUANTITY	DESCRIPTION					No.	DATE	DESCRIPTION	BY	CKD.	APP.	STATION 0+627.02 TO STATION 1+062.33 SCALE: 1:1000 SHEET No.: 2 of 3
						1		- ISSUED FOR INFORMATION ONLY				
						2						
						3						
						4						



PIPELINE MATERIAL SUMMARY			
ITEM No.	MATERIAL No.	DESCRIPTION	QUANTITY
1		406mm x 7.9mm W.T. CSA Z245.1 GR. 483 CAT 2 FBE PIPE	110.18
2		406mm x 7.9mm W.T. CSA Z245.1 GR. 483 CAT 2 DPA PIPE	516.84

REFERENCE DRAWINGS	
DRAWING FIELD BOOK No.	TITLE

LEGEND:					
	PROPOSED RIGHT OF WAY AS BUILT BURIED PIPE		PIPELINE RIGHT-OF-WAY (P/L RW)		BLOCK VALVE ASSEMBLY
	PROPOSED TEMPORARY WORK SPACE		WELL SITE AND ACCESS ROAD		WARNING SIGN ON POST
	BURIED PIPELINE		TUC BOUNDARY		PIPE CROSSING
	BURIED WATER LINE		CARRIER PIPE: 406mm x 7.9mm W.T. CSA Z245.1 GR. 483 CAT 2 FBE PIPE		CABLE CROSSING
	BURIED TELUS CABLE		CROSSING PIPE: 406mm x 7.9mm W.T. CSA Z245.1 GR. 483 CAT 2, DPA PIPE		WATER COURSE CROSSING
	FENCE		FIELD BEND (PB) UP TO 20° MIN. RADIUS = 40D		ROAD CROSSING
	BURIED GAS LINE		PREFAB BEND (PB) > 20° MIN. = 5D		POWER LINE CROSSING
	BURIED CABLE				TEST LEAD
	POWER LINE				PIPE TRANSITION
	POWER POLE				POINT OF INFLECTION (PI)
	MANHOLE				CATHODIC TEST POINT
	LIGHT STANDARD				ANGLE OF DEFLECTION
	PROPOSED INTERCHANGE				

REVISION / ISSUED					
No.	DATE	DESCRIPTION	BY	CKD.	APP.
1		- ISSUED FOR INFORMATION ONLY			

ENGINEERING RECORD		PROFESSIONAL ENGINEERS STAMP	
DRAWN BY	DATE	<div style="text-align: center; font-size: 24px; font-weight: bold;">COMPANY NAME</div>	
DESIGNED BY			
CORROSION CONTROL			
CHECKED BY			
CHECKED BY			
APPROVED BY		<div style="text-align: center; font-weight: bold;">PERMIT STAMP</div>	
APPROVED BY			
APPROVED BY			

PIPE ASSEMBLIES	
QUANTITY	DESCRIPTION

NOTES:					
INFORMATION PROVIDED BY AER, IHS ENERGY AND CITY OF CALGARY.					
ELEVATIONS ARE BASED ON THE CANADIAN GEODETIC VERTICAL DATUM 1928 (CGVD28) USING HT2.0 GEOD MODEL.					
DISTANCES ARE IN METRES AND DECIMALS THEREOF.					
PROFILE INFORMATION IS BASED ON LIDAR DATA COLLECTED BY AIRBORNE IMAGING INC. (SEPT. 2014)					
ALL RIGHT OF WAY AND BURIED FACILITIES ARE APPROXIMATE.					
ALL ANGLES ARE GIVEN IN DECIMAL DEGREES.					

<b>PROJECT NAME</b> (X.X/1/4 Sec.XX Twp.XX Rge.XX W.XM.) to <b>Tie In</b> (X.X/1/4 Sec.XX Twp.XX Rge.XX W.XM.) <b>CITY OF CALGARY</b> <b>ALBERTA</b>	
STATION 1+062.33 TO STATION 1+440.11 SCALE: 1:1000 SHEET No.: 3 of 3	

## **Appendix K – Utility Alignment On-Site Inspection Checklist**

# Guidelines under Municipal Rights-of-Way Bylaw 17M2016 Inspection Checklist

This *Environmental Compliance Plan* Checklist is to be used when *utility provider employees* or *contractors* are conducting work for a *Utility Provider* under the Municipal Rights-of-Way Bylaw 17M2016. This inspection checklist will be used for on-site inspections to ensure *Utility Providers* and their *employees* and *Contractors* are complying with *Municipal Legislation* as well as with all environmental laws and regulations. This checklist follows the information outlined in *The City's Environmental Compliance Plan*.

**Contractor Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Project Description:** \_\_\_\_\_

**Inspector Name:** \_\_\_\_\_ **Work Order #:** \_\_\_\_\_

**Utility Provider:** \_\_\_\_\_ **Weather:** \_\_\_\_\_

DOCUMENTATION				COMMENTS
Is a signed copy of the <b>Utility Provider Environmental Acknowledgement Form</b> present on site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is a copy of the Utility Alignment Permit present on site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is a copy of the Excavation Permit present on site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
A copy of the Street Use Permit is present on site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

AWARENESS				COMMENTS
Is the <i>utility provider employee</i> or <i>contractor</i> aware they are conducting work on <i>City</i> property?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has the <i>utility provider employee</i> or <i>contractor</i> been made aware of the <i>Bylaw</i> and the requirements of the <i>Environmental Compliance Plan</i> ?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

EROSION AND SEDIMENT CONTROLS (ESC)				COMMENTS
Are soil stockpile(s) stabilized (i.e. tarped, vegetated, mulch or tackifier applied, etc.) from wing/water transport? <i>Note: placing stockpiles on the upstream side of a utility excavation is often an effective way of capturing sediment.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is there perimeter protection (i.e. straw/fibre wattles/rolls) around the stockpile to prevent material from migrating off-site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

Are soil stockpiles located away from catch basins and Waterbodies?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are soil stockpiles located on generally flat ground (i.e. not stored on steep slopes)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are site access/egress point(s) stabilized (i.e. no dirt or mud tracking off-site)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
If dirt and mud is being tracked off-site, is the utility provider employee and/or Contractor sweeping/scraping up the mud and debris by the end of the work day?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are all reasonable measures to control dust (i.e. use of water trucks, stockpile stabilization) within the Project Site - including haul roads, dump sites, stockpiles, detour roads, etc. - are being undertaken?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is there down-gradient perimeter protection (such as silt fence, compost socks, fibre rolls) to protect off-site stormwater runoff and sedimentation during construction?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is temporary sediment control at any storm inlet being used? Has approval from a City's Stormwater Pollution Prevention Specialist be received to install any catch basin/inlet protection control measures?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
If no ESC Report is required for the site, are ESC measures being inspected (at least every 7 days or within 24 hours of significant rainfall or snowmelt) by the utility provider employee and/or Contractor and records of these inspection(s) are available on site for review?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
If an approved ESC Report has been issued for the project, is the utility provider employee and/or Contractor completing the inspection sheet (ESC Appendix B) of the ESC Report at least every 7 days or within 24 hours of significant rainfall or snowmelt? Are copies of the inspection(s) available on-site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

DEWATERING				COMMENTS
Is dewatering (i.e. removal of run-off impounded water or groundwater in an excavation) being undertaken?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
If dewatering is being discharged to the storm system (catch basin or storm manhole) has a Stormwater Disposal and Drainage Permit been obtained prior to any discharge being undertaken?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is a copy of the <b>Drainage Permit</b> (non-standard site) or completed <b>Site Drainage Self-Assessment and</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

<p><b>Application</b> form (standard site) available on-site? Is monitoring being undertaken to ensure turbidity levels are less than 100 NTU and pH ranges from 6.5 – 9?</p> <p><i>Note: Refer to the City's <a href="#">Code of Practice for Drainage Activities</a> Schedule E (page 18) for an example of the inspection Documentation Table.</i></p>				
<p>If dewatering is being discharged to the sanitary system, has a <a href="#">Clear Water Waste Disposal Permit</a> been obtained? Is a copy of the permit available on-site?</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
<p>If dewatering is off-site to private land has the utility provider employee and/or Contractor obtained permission from the affected private landowner prior to discharging? Is a copy of the permission available on-site?</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

SAW CUTTING, CORING AND CONCRETE				COMMENTS
Is saw cutting or coring of concrete or asphalt being undertaken on-site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is saw cutting or coring slurry and dust being contained (use of fibre rolls or other containment system) and/or cleaned up (vacuumed, swept up) to prevent discharge in the storm system (catch basins, storm manholes, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is concrete washout – from equipment to transport or place concrete (tools, chutes, drum, hopper, pump, extruder, etc.) – being undertaken on-site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
If concrete washout is being undertaken on-site, is it in a location that is lined with an impervious liner and bermed to prevent run-off?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

MUNICIPAL TREE PROTECTION				COMMENTS
Are there any public trees within 6m of construction activities?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
If there are public trees within 6m of construction activities, has the Tree Protection Plan been approved by City of Calgary Urban Forestry? Is a copy of the Tree Protection Plan and Approval letter present on site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are all public trees within 6m of construction activities adequately protected (i.e. tree protection zone extends at least 4m from the trunk of the protected tree and is 1.2m high from ground level)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

<i>Note: tree protection fencing generally consists of either: 1) snow fencing secured to either solid wood frame or staked with metal rods; 2) metal fencing; or, 3) something equivalent.</i>				
Has the “protected tree” sign – as provided by the City – been attached to each protective fence area?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is area inside the tree protection fence free and clear of all construction activities (i.e. no storage of any materials, no driving or parking of vehicles and equipment, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has pruning (under or above ground) been undertaken for this project? If ‘yes’, has written permission from the City of Calgary Urban Forestry office been obtained prior to any pruning? Is a copy of the authorization present on site? Did a City approved <a href="#">arborist</a> complete this work?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is public tree removal required for the project? If ‘yes’, has written authorization from City of Calgary Parks Urban Forestry office been obtained prior to removal(s) occurring? Is a copy of the authorization available on-site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

SITE MANAGEMENT				COMMENTS
Is sufficient weed control being undertaken on exposed soils, including stockpile(s) (i.e. weeds being removed before they can set seed to reduce the likelihood of spread)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are spill kits and fire extinguishers available in appropriate locations at the work site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is perimeter fencing and hoarding secure to provide security against public access during off-work hours?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is all work and work related materials, machinery, tools, debris and waste contained within the work site boundaries?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

HAZARDOUS MATERIALS & WASTE MANAGEMENT				COMMENTS
Are hazardous substances (fuel, oils, solvents, paints, concrete washout, etc.) being stored at the work site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are all hazardous materials appropriately labelled, handled and stored at the work site? Is the 110% secondary containment (free of rain and snow) capacity for the largest container of hazardous substances in addition to 10% of the aggregate	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

capacity of all other containers of hazardous materials?				
Are the appropriate Safety Data Sheets (SDS) – for all hazardous substances being used at the work site – available on-site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are adequate “No Smoking” signs posted in areas where hazardous substance are stored?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are recyclable materials (cardboard, paper, wood, asphalt, concrete, metal, plastic) collected for reuse or recycling?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is the work site free of garbage and debris (i.e. good housekeeping)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are all containers containing waste material (hazardous & non-hazardous) identified, labelled, managed and being appropriately disposed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

FUELLING				COMMENTS
Is fuel being stored (slip tank, jerry can, above ground storage tank, cube tank, etc.) at the work site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is fuelling being conducted at the work site? This includes all vehicles, generators, gas powered tools, etc.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is fuelling being conducted a <u>minimum</u> of 30m away from waterways including the storm sewer system, waterbodies and environmentally sensitive areas (ex. wetlands)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is fuelling being conducted <u>within</u> 30m of waterways including the storm sewer system, waterbodies and environmentally sensitive areas (ex. wetlands)? Has a written standard operating procedure been developed and approved by the <i>Utility Provider</i> and is being followed by the <i>utility provider employee</i> and/or <i>Contractor</i> ?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Are spill kits, drip pads, or both present at the fuelling location during refuelling? If refuelling within 30m of a waterway, does the spill kit include absorbent boom supplies?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is personnel present at the transfer point during refuelling operations and remains for the duration of the fuelling process?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
The transportation of dangerous goods is restricted in the Central Business District from 0600hrs to 1800hrs Mon-Sat. Central Business District is bounded in the	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

North by the Bow River, East by the Elbow River, south by 17 AV, and West by 14 ST SW (Bylaw 23M2005). This means no refuelling can occur unless approved by Hazmat and a special permit is issued. Is this being adhered to at the work site?				
--	--	--	--	--

SPILLS, RELEASES AND CLEAN-UP				COMMENTS
Has a spill (hazardous material) or release (sediment; concrete washout; concrete or asphalt slurry; etc.) occurred at the work site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has the spill or release been reported to the City of Calgary (3-1-1)? <i>Note: if 'yes', make note of service request number in the Comment column.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has the spill or release been reported Alberta Environment and Parks (AEP), if reportable? <i>Note: any release into any water course or surface water body required immediate notification to AEP. Refer to AEP's <a href="#">A Guide to Release Reporting</a> for further information on release reporting. Make note of AEP reference number in the Comment column.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has the spill or release been adequately cleaned up?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
If necessary, has the affected area been remediated in consultation with <i>The City</i> and relevant regulatory agencies?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

CONTAMINATION DISCOVERY				COMMENTS
Was unexpected contamination (debris; stained/discoloured soils; unusual odours; cinders/ashes; buried drums or containers; structures such as asbestos cement pipe, abandoned pipes, underground storage tanks; etc.) discovered during the construction project?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
If 'yes' – was the contamination discovery reported to the City of Calgary Fire Department? <i>Note: make note of any correspondence, reference numbers, contact names, etc. in the Comments column.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
If 'yes' – was AEP notified of the discovery? <i>Note: make note of any AEP reference numbers in the Comments column.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

OFF-SITE DISPOSAL OF EXCAVATED SOIL OR MATERIAL				COMMENTS
Has any material excavated from the work site – that is not required, suitable for fill or any other purpose on the project – been appropriately disposed of off-site (ex. at an approved landfill facility)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

RECYCLED AND IMPORTED FILL MATERIALS				COMMENTS
Has imported fill material been used at the work site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Does the <i>utility provider employee</i> and/or <i>Contractor</i> have documentation available to indicate the source location and environmental suitability (analytical testing results) for all imported material used at the work site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

REDUCED IDLING OF VEHICLES & CONSTRUCTION EQUIPMENT				COMMENTS
Idling of vehicles and construction equipment is minimized (no more than 5 consecutive minutes) unless essential for the performance for the work, for initial warm up of the engine or during periods of cold weather below minus 10 degrees Celsius.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

EXISTING MONITORING WELLS AND REMEDIATION INFRASTRUCTURE				COMMENTS
Are existing monitoring wells or remediation infrastructure present at the work site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has the <i>utility provider employee</i> and/or <i>Contractor</i> worked around the existing infrastructure or contacted <i>The City</i> to arrange for removal or relocation?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

UNDERGROUND UTILITIES				COMMENTS
Has an underground utility locate request been completed by Alberta 1 Call?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is a copy of the completed Alberta 1 Call utility locate request present on site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Have all privately owned utilities (i.e. customer owned lines on private property, such as water and sewer service lines, sprinkler systems and any lines connection buildings) been located and marked?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is the project work within 30m of a regulated pipeline?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

Has the pipeline operator been notified of the intent to disturb the ground within 30m of the pipeline?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is the proposed work within the pipeline right-of-way?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has written permission been received from the pipeline operator? Is a copy of the permission on site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Mechanical equipment may not be used within 5m of a provincially regulated pipeline until the pipeline has been hand exposed and is clearly visible. Is this being adhered to on-site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Mechanical equipment may not be used within 3m of a federally regulated pipeline until the pipeline has been hand exposed and is clearly visible. Is this being adhered to on-site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	

**OTHER COMMENTS AND NOTES**

---



---



---



---



---



---



---



---



---



---

As a utility provider employee or contractor I am aware of my role and responsibilities in regards to the Environmental Compliance Plan, of the Municipal Rights-of-Way Bylaw 17M2016, when working on City property. I acknowledge this site inspection as being accurate.

\_\_\_\_\_  
**Representative's Signature**                      **Print Name**                      **Company**                      **Date (YYYY-MM-DD)**

\_\_\_\_\_  
**Inspector's Signature**                      **Print Name**                      **Date (YYYY-MM-DD)**

## Appendix L – Fee Schedule

Utility Alignment Permit Fee schedule in accordance with The Municipal Rights of Way bylaw.

<b>Fee schedule in accordance with The Municipal Rights of Way bylaw</b>	
<b>Application Fee</b>	
Per submission or re-submission	\$200
Only the fee associated with the approved submission will be deducted from the Utility Alignment Permit Fee	
<b>Utility Alignment Permit Fee</b>	
Under 20 meters	\$350 + \$10/m
Over 20 meters	\$725+ \$7/m
<b>Plan Review Fee (optional)</b>	
Per pre-application design submitted for review electronically	\$1,000
<b>Plan data Entry Fee (optional)</b>	
Per utility alignment permit application not submitted in standard format.	\$1,000
<b>As-Built Drawing Compliance Fee</b>	
First as-built drawing compliance review per utility alignment permit	Covered by utility alignment permit fee
Subsequent as-built drawing compliance review – per review	50 per cent of the utility alignment permit fee
<b>On-Site Inspection Fee</b>	
Includes a review of approved utility alignment, travel time, site inspection, follow-up to inspection.	\$150/hour
<b>Environmental Compliance Plan Fees</b>	
Annual review of Environmental Compliance Plan	\$200
Compliance inspection (includes travel time, site inspection, review of on-site document, drafting of an inspection report, environmental technologist and peer review).	\$1,500

Other fees that may be incurred: Excavation fees, road restoration and degradation fees ETC.

NOTE: This is not a comprehensive list and all other applicable fees are the responsibility of the utility provider.

**Appendix M– Contact Information Forms**

## Utility Provider Contact Information for Notices and/or Orders Form



### Utility Provider Contact Information for Notices and/or Orders

This information will be used if a Notice or order is issued.

CORPORATE NAME	
CONTACT NAME	
ADDRESS	
PHONE NUMBER	
EMAIL	
FAX	

### A Copy to be sent to:

CORPORATE NAME	
CONTACT NAME	
ADDRESS	
PHONE NUMBER	
EMAIL	
FAX	

**24-Hour Emergency Contact Form (Need one per work-site)**

	
<b>24 – Hour Emergency Contact Information</b>	
This information will be used if a Notice or order is issued.	
LOCATION OF WORK	
UTILITY ALIGNMENT PERMIT #	
CONTACT NAME	
PHONE NUMBER	
EMAIL	

## Appendix N – Letter of Credit Requirements

The letter of credit must:

1. Clearly state that it is an irrevocable letter of credit;
2. Be drawn on a Canadian chartered bank or other Canadian financial institution acceptable to The City;
3. bear an identifying number;
4. be issued to The City as beneficiary, and identify The City by name and address;
5. be in an amount equal to the estimated costs identified by The City in its notice;
6. state the issue date and expiry date, and be for a term of at least one year from the issue date;
7. identify the applicant for the letter of credit, who must be the permit holder, by name and address;
8. identify this Bylaw as a reference and secure the obligations of the permit holder to The City under the Bylaw;
9. be payable at sight at an identified branch of the issuer located in Calgary;
10. state that the issuer will not enquire as to whether or not the beneficiary has a right to make demand on the letter of credit, that The City may make partial drawings, and that the issuer engages with The City that drafts drawn in conformity with the letter of credit will be duly honoured if presented to the issuer on or before the expiry date of the letter of credit;
11. not include any expression or implication that the letter of credit is a guarantee;
12. state that except as the letter of credit may otherwise expressly provide, the letter of credit is subject to the Uniform Customs and Practice for Documentary Credits most recently published by the International Chamber of Commerce;
13. be signed by an authorized signatory of the issuer; and
14. otherwise be in form and substance acceptable to the City Solicitor or their designate.

The letter of credit may provide for automatic renewal for successive terms of at least

one year each, unless the issuer delivers to The City and to the permit holder at least 60 calendar days prior written notice that the issuer declines to renew the letter of credit.

The first renewal term must begin on the first annual anniversary of the original issue date, and each following renewal term must begin on the first annual anniversary of the issue date for the preceding renewal term.

If the letter of credit does not provide for automatic renewal, or if the issuer delivers such notice declining to renew, the permit holder, at least 50 calendar days before the expiry date of the then current letter of credit term, will deliver to The City a renewal or replacement of the letter of credit on the terms set out in this section, and with an issue date that is the first annual anniversary of the issue date for the then current term.

If the letter of credit secures an ascertainable financial obligation of the permit holder to The City, and if the permit holder reduces the amount of that obligation from time to time by payment to The City according to the terms and conditions of the Bylaw, the permit holder may request The City's consent to replacing the letter of credit with one for a lesser amount, equal to the amount of the permit holder's then outstanding financial obligation to The City. The City will not unreasonably withhold its consent if the replacement letter of credit meets the requirements of the Bylaw, with respect to the original letter of credit, except for the reduced amount.

## **Appendix O – Guidelines Change, Comment or question.**

If there are any suggestions, questions or concerns related to these guidelines please go to the [calgary.ca](http://calgary.ca) page and fill out the form to submit a suggestion if desired. Alternatively, if there are any issues or concerns, email [ROWManagament@calgary.ca](mailto:ROWManagament@calgary.ca).

## Appendix P – Applicable Resources

Utility Alignment Permit web page:

<http://www.calgary.ca/CS/IIS/Pages/Utility-line-assignments/Utility-Line-Assignments.aspx>

Calgary Rights of Way Management (CROWM) portal:

<https://crowm.calgary.ca/Public/Login.aspx?ReturnUrl=%2f>

Utility Alignment Permit Application Portal email:

[CROWM@calgary.ca](mailto:CROWM@calgary.ca)

Utility Alignment Permit Email

[ULASupport@calgary.ca](mailto:ULASupport@calgary.ca)

Excavation Permits contact information:

Email: [ExcavationPermitClerks@calgary.ca](mailto:ExcavationPermitClerks@calgary.ca) / Telephone: 403-268-4936

Street Bylaw 20M88 (Excavations in Streets, section 37 – 45 and other applicable sections.) and Calgary Traffic Bylaw 26M96 (Temporary Closure, section 37 and other applicable sections.) <http://www.calgary.ca/CSPS/ABS/Pages/Bylaws-by-topic/Streets.aspx>

The City of Calgary's Standard Specifications for Road Construction and available on-line at:

<http://www.calgary.ca/Transportation/Roads/Documents/Contractors-and-Consultants/Roads-Construction-2012-Standard-Specifications.pdf>. (Contains instructions for back filling requirements for paved and gravel streets.)

The Temporary Traffic Control Manual and the Standard Specifications for Road Construction: <http://www.calgary.ca/Transportation/Roads/Pages/Contractors-and-Consultants/Contractors-and-Consultants.aspx>

Eco Plans:

<http://www.calgary.ca/UEP/ESM/Pages/Contractor-environmental-responsibilities/ECO-Plans.aspx>

Residential Street Design Policy:

<http://www.calgary.ca/Transportation/TP/Pages/Planning/Calgary-Transportation-Plan/Residential-Street-Design-Policy.aspx>

Environmental Agreements Bylaw:

<http://www.calgary.ca/UEP/ESM/Pages/Our-Environmental-Management-System/Environmental-Agreements-Bylaw.aspx>

Telecommunication Antenna Structures on Municipal Property:

<http://www.calgary.ca/PDA/pd/Pages/Permits/Telecommunication-antenna-structures.aspx>

Standard Specifications for Street lighting Construction:

<http://www.calgary.ca/Transportation/Roads/Pages/Traffic/Traffic-signals-and-streetlights/Streetlight-FAQs.aspx>

NOTE: This list is not comprehensive and it is the responsibility of the utility provider to ensure they are using the most up-to-date information.