



1: Excavation Permit Terms and Conditions

IMPORTANT

A. The holder of this Excavation Permit understands and agrees to be liable for and indemnify, defend and save harmless The City and all of its employees, officials, officers and authorized representatives from and against any and all suits, actions, legal or administrative proceedings, claims, damages, demands, liabilities, interest, legal fees, costs and expenses of whatsoever kind or nature, including personal injury or death and damages or loss of any real or personal property, whether arising before or after completion of the Excavation and in any manner directly or indirectly caused, occasioned or contributed in whole or in part, by reason of any wrongful act, error, omission or fault whether active or passive of the holder of this Excavation Permit, sub-contractor, or anyone acting under the Excavation Permit holder's direction or control or on its behalf in connection with or incidental to the Excavation.

B. Line Assignment approval must be obtained for new installations above and below ground within road or utility rights-of-way prior to applying for or release of the Excavation Permit.

C. Back filling requirement for paved and gravel streets are provided in the City's Standard Specifications Road Construction.

<http://www.calgary.ca/Transportation/Roads/Documents/Contractors-and-Consultants/Roads-Construction-2015-Standard-Specifications.pdf>

D. Various facilities might be buried or located in or along any City road or utility right-of-way, including gas pipelines, electrical transmission cables, telephone cables and data transmission cables. **Field location of underground facilities is mandatory.**

E. The holder of this Excavation Permit must comply with all requirements of all applicable legislation, regulations, and policies which apply to the operations from time to time to disturbing the ground near buried facilities, including requirements for reporting the discovery of contamination to Alberta Environment (1-800-222-6514), identifying, marking, and located buried facilities, and prior exposure by hand (which may include jets of water or air) before using mechanical excavation equipment. Failure to comply with such requirements will invalidate this Excavation Permit, and might also give rise to risk of injury or death, or property damage as well as court proceedings.

F. The holder of this Excavation Permit must report the discovery of contamination within the roads or utilities rights-of-way to the City of Calgary immediately. The City is the local authority and may be directly affected by the discovery of a substance release. Call 911 (Emergency) or 311 (Non Emergency) from outside Calgary (403) 268-2489 (Non Emergency)

G. To obtain locates for buried facilities call:

* Alberta One-Call 1-800-242-3447 and

* Shaw Cable 1-866-344-7429

H. On completion of the work contemplated under this Excavation Permit, the Director of Roads representative will inspect the work. The holder of this Excavation Permit must maintain the work contemplated under this Excavation Permit until the work is accepted by the Director of Roads or his representative.



2: Supporting Documents

All Excavation Permit related work is subject to the following:

Streets Bylaw 20M88. Excavations in Streets. See link below:

<http://www.calgary.ca/CA/city-clerks/Documents/Legislative-services/Bylaws/20M88-Streets.pdf>

Traffic Bylaw 26M96. Temporary Closure, See link below:

<http://www.calgary.ca/CA/city-clerks/Documents/Legislative-services/Bylaws/26m96-Traffic.pdf>

The City of Calgary Roads Construction Standard Specifications, 300.01 Excavation Permits, Road Construction, 304.06 Surface Rehabilitation of Trenches or Cuts, 304.07 Excavation in Newly Resurfaced or Top Lifted Streets. See link below:

<http://www.calgary.ca/Transportation/Roads/Documents/Contractors-and-Consultants/Roads-Construction-2015-Standard-Specifications.pdf>

The Temporary Traffic Control Manual and the Standard Specifications for Road Construction. See link

below: <http://www.calgary.ca/Transportation/Roads/Pages/Contractors-and-Consultants/Contractors-and-Consultants.aspx>



3: Fee Structure

**CITY OF CALGARY
TRANSPORTATION / ROADS**

EXCAVATION PERMIT RATES

Please check the Roads Excavation Permit web page for the most current permit rates.

<http://www.calgary.ca/Transportation/Roads/Pages/Traffic/Permits/Excavation-permit.aspx>



4: Information

PAVEMENT TOPLIFT PAVING* LISTING

VISUAL CONDITION INDEX (VCI) \geq 7

Toplift Paving Requirements

Toplift paving is required for any excavation made in a street with a visual Condition Index (VCI) equal to or greater than 7.0. This includes streets listed in this document and streets located in areas that recently received a Final acceptance certificate (FAC). Some recently FAC'd streets may not be listed in this document. However, toplift paving requirements apply.

Toplift pavings must be completed in accordance with The City of Calgary, Standard Specifications, Road Construction. This includes planing a minimum of 50 mm depth and placing new asphalt with a paver. Toplift paving must be completed by the end of the next construction season.

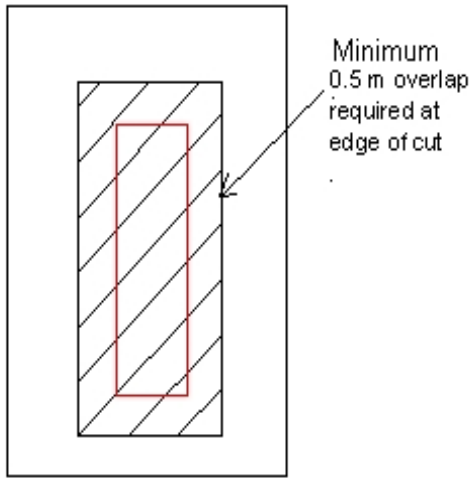
Permit holders that use The City of Calgary for excavation rehabilitation will see a billing code "R" on their excavation permit where toplift paving is required. The fee for toplift paving is \$49 per square metre. Permit holders that do not use The City of Calgary for pavement rehabilitation will not see code "3", "3A", "3B", "3C", "A", "C" and/or "E" on their excavation permit, however, toplift paving may be required. It is the permit holder's responsibility to check if a permit location requires toplift paving.

Toplift Paving Measurements

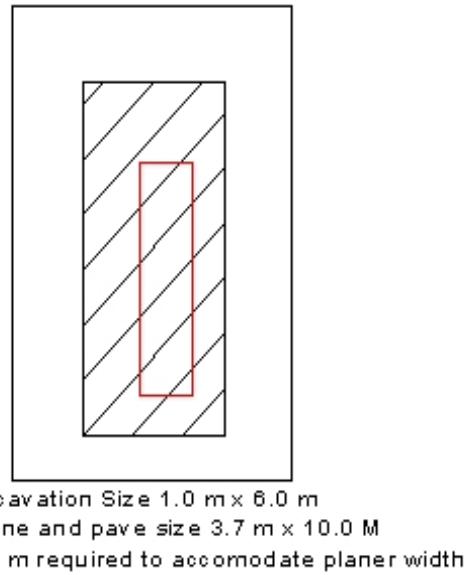
The actual dimensions of a toplift paving are larger than the excavation dimensions. Examples of excavation and toplift paving measurements are shown on the following page. The planed area must extend 0.5 metres beyond the outermost edges of the excavated area and there is a minimum dimension of 3.7 metres x 10.0 meters to accommodate the planing and paving equipment. Multiple cuts with less than 20 metres between them must be grouped together for toplift paving.

*Toplift paving is previously referred to as surface restoration.

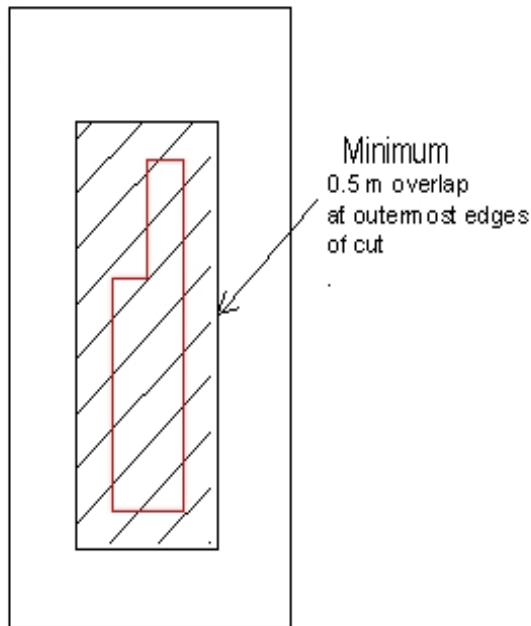
Examples of Excavation and Surface Restoration Dimensions



Excavation size 3.0 m x 6.0m
Plane and pave size 10.0 M x 4.0 M

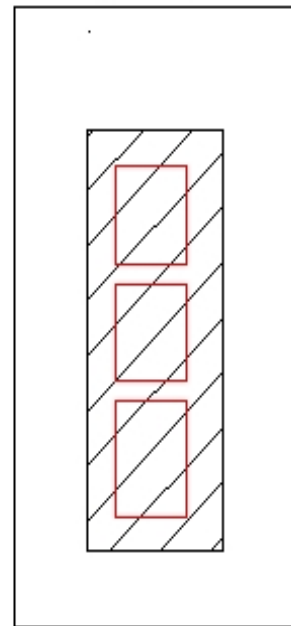


← 3.7 m min. →



← 3.7 m min. →

Irregular shape cut
3.7 M x 10.0 M



multiple cuts less than 20 m apart. combine as one cut.
add 0.5 m overlap at edge of outside cuts
minimum width of 3.7 m.

* Not to scale



Concrete Sidewalk and Curb & Gutter Repairs

Utility excavations in concrete sidewalks and curb and gutter must be repaired in accordance with The City of Calgary Standard Specifications, Roads Construction.

A hot asphalt temporary surface repair, or cold mix in the winter season, must be provided for in any excavated concrete sidewalk, curb and gutter permit location. Temporary repairs shall be made between contraction joints that bound the area removed or damaged by the excavation work. Adjacent concrete damaged by utility work must be included in the repair.

The City of Calgary inspects concrete utility cut repairs for completion acceptance. Permit holders will be notified of compaction failures or improper surface rehabilitation and be asked to repair them. If repairs are not completed by the permit holder, The City may complete the repairs and charge the permit holder. In all cases, the permit holder is responsible for the maintenance of the trench for a two year period as specified in the Excavation Permit, Bylaw 20M88 and The City of Calgary Standard Specifications, Road Constructions. See link below:

<http://www.calgary.ca/Transportation/Roads/Documents/Contractors-and-Consultants/Roads-Construction-2015-Standard-Specifications.pdf>

Driveways

Development Permit performance security deposits will not be used to pay for excavation permit fees. Estimates for the construction of a new driveway crossing or closure of existing driveway do not include the costs associated with the excavation permit repairs. Excavation permit holders must capture all costs of repairing concrete sidewalks, curb and gutter including repairs within driveways when returning the permit



5: TRAFFIC SIGNAL VEHICLE DETECTION LOOPS

REFER TO DRAWING TS-28B

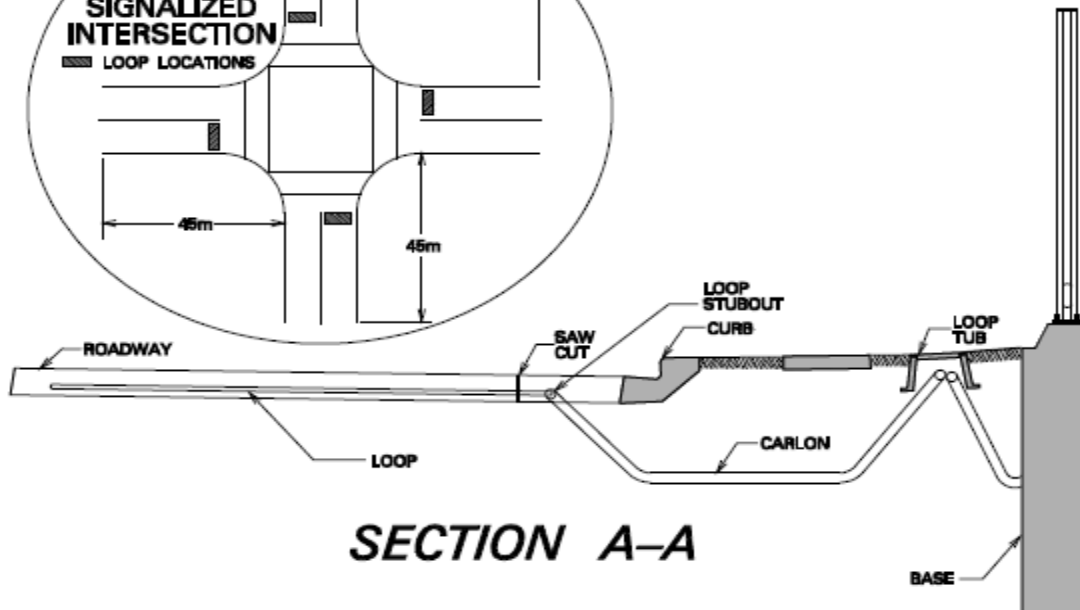
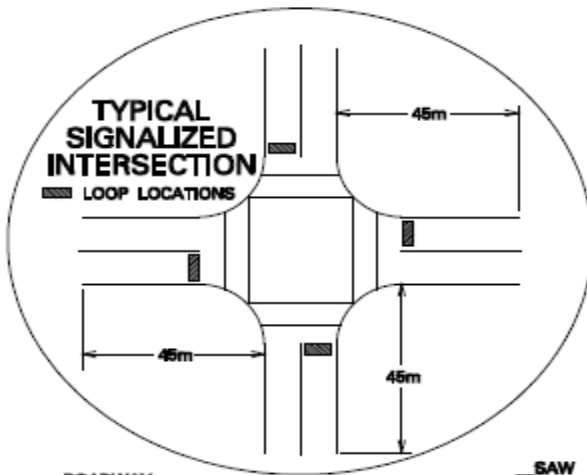
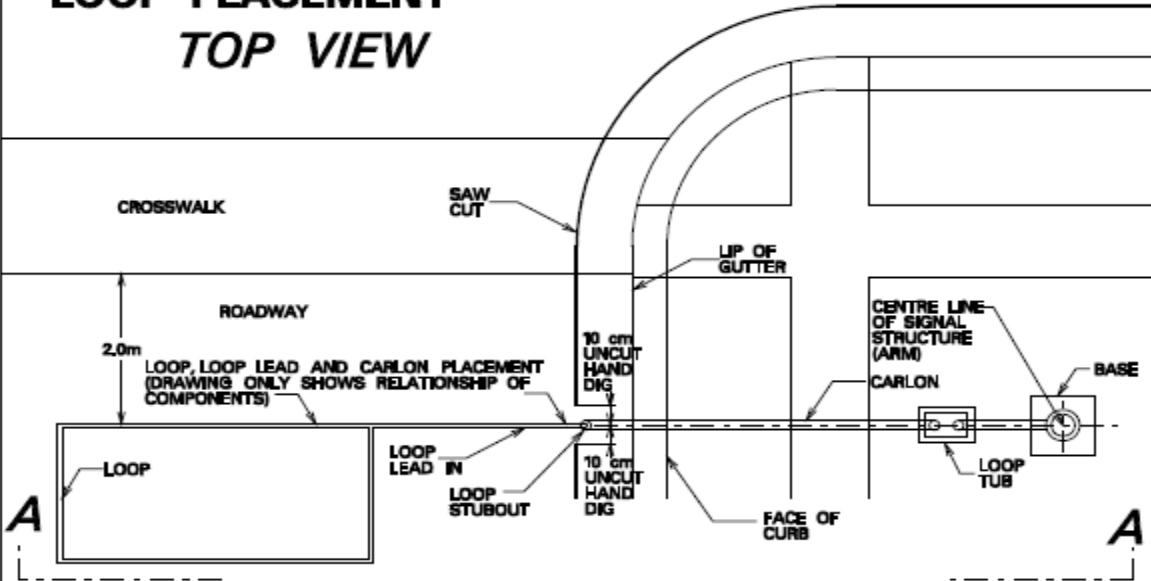
NOTE: This drawing is an example of a signalized intersection with loop placements. The drawing only shows the relationship of components and the placements are not necessarily as shown.

When working within 45 meters of a signalized intersection, the following procedures **MUST** be followed.

- A. Whenever doing work at or near a signalized intersection, notify Signals Services to determine if a conflict with a loop or Red Light Camera might exist.
- B. Notify Signals Services two days prior to any work commencing so that loops and camera's can be located and marked.
- C. On the day preceding the excavation, notify Signals Services so that Signals personnel can be available to co-ordinate and assist in exposing the loop or camera.
- D. When saw cutting, leave 10cm. of uncut pavement on either side of loop or loop lead-in to be hand exposed
- E. Any and all utilities responsible for the damage of any Traffic Signal equipment, duct work, cable, traffic loops or Red Light Camera equipment will be charged directly for the repairs.



**TYPICAL LAYOUT OF SIGNALIZED INTERSECTION
LOOP PLACEMENT
TOP VIEW**



SECTION A-A

DATE:
14-FEB-2007

DRAWN
M. Behringer

APPROVED:
S. FICACCIO, KW