



**MUNICIPAL CONSENT GUIDELINES**  
**SECTION 1 – CONSTRUCTION SPECIFICATION**  
**For UTILITY CUTS and RESTORATION**

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# 1.0 - MUNICIPAL CONSENT GUIDELINES – CONSTRUCTION SPECIFICATIONS for UTILITY CUTS and RESTORATION

## 1.0 Scope

This Specification covers the requirements for utility cutting, excavating, backfilling, and repair to Town of Ingersoll streets.

## 1.1 References

This specification refers to the latest version of the following standards, specifications or publications:

MCR Municipal Consent Requirements  
Ontario Provincial Standard Specifications  
OPSS 180 - Management and Disposal of Excess Material  
Ontario Traffic Manual  
Book 7 Temporary Conditions

## 1.2 Definitions

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

**Applicant:** means a person applying for a permit or other consent to cut a street. This shall be extended, where applicable, to include the Applicant's direct employees and its agents, consultants and contractors.

**Boulevard:** means that part of a public street that is not used, or intended to be used, for vehicle travel by the general public, and that is situated between the travelled portion of the road and the adjoining Property line.

**Contraction Joint:** means a cut or formed joint to regulate the location and degree of cracking in the plane of the pavement.

**Deep trench:** means a trench deeper than 1.2 m

**Emergency Work:** means work within a street that must be completed immediately due to health or safety concerns or because the provision of essential services is endangered.

**Essential Services:** means energy (including, but not limited to, natural gas and electricity), water, sanitary sewage, traffic control, and the following communication services: 911 service, communications for financial transactions, business networks, and Internet.

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**1.2 Definitions (cont'd)**

**Excavating:** means the breaking, digging up, tearing up, tunneling, boring, coring, cutting into or removing any portion of the surface or subsurface of the street, including pavement, sidewalk, curb and gutter or landscaping.

**Expansion Joint:** means a physical separation between the concrete and appurtenances, or between parts of the sidewalk or raised median, which allows both horizontal and vertical movement.

**Narrow trench:** means the width of a trench is less than or equal to 350 mm

**Native Material:** means excavated material for placement into the exact location from which it was removed.

**Permanent Repair:** means the process whereby a cut and/or excavation is reinstated to a condition which requires no further repair.

**Plant:** means any poles, cables, pipes, conduits, ducts, pedestals, regulators, towers, wires, vaults, maintenance holes, hand holes, support structures and or other appurtenances or ancillary facilities or structures used for the provision of telecommunications, internet, energy, water, waste water, fuel and/or other materials. Any encasement, steel plating or other non-excavatable material shall be considered to be part of the plant.

**Road:** means the portion of the street designed, improved and ordinarily used by vehicle traffic. The terms pavement and roadway shall have the same meaning as road.

**Shallow trench:** means the depth of trench is less than or equal to 1.2 m

**Sidewalk:** means that part of a public street located within the boulevard that is improved for the exclusive use of pedestrians.

**Street:** means a common and public highway, street, avenue, parkway, driveway, bridge, any part of which is intended for or used by the general public for the passage of vehicle and includes the area between the lateral property lines thereof. The term Town's public road allowance or right-of-way shall have the same meaning as street.

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**1.2 Definitions (cont'd)**

**Suitable Backfill Material:** means the native materials or imported granular materials that can be used as utility trench backfill materials in lieu of unshrinkable fill as defined in this specification.

**Temporary Repair:** means the process whereby a cut and/or excavation is reinstated as a temporary measure pending completion of a permanent repair.

**Town:** means the Town of Ingersoll

**Unshrinkable Fill:** means a mixture of aggregates, cementing material and water, with or without chemical admixtures.

**Utility Company:** means a company owning, operating and maintaining plant in the public Right-of- Way.

**Wide trench:** means a trench wider than 350 mm

**1.3 Submission and Permit Requirements**

For submission and permit requirements to make an installation within the Town of Ingersoll streets please refer to the Town's current Municipal Consent policy.

**1.4 Materials**

**Supply of Materials**

Unless otherwise specified, the Applicant / Contractor shall supply all materials necessary for the execution and completion of the work.

**Unshrinkable Fill**

The materials for the production of Unshrinkable Fill shall meet the Town's minimum standards and may be tested, and any material that does not meet the requirements will be removed and replaced at the Contractor's expense. All costs associated with the removal and replacement of deficient Unshrinkable Fill shall be borne by the Applicant / Contractor, including the cost of administration and retesting.

Traffic shall not be permitted to travel directly onto the surface of the Unshrinkable Fill. Detours must be set up until the fill has cured.

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## 1.4 Materials (cont'd)

### Suitable Backfill Materials

#### Imported Granular Materials

Granular materials may be imported for use as trench backfill provided the imported materials meet the requirements of OPSS MUNI 1010.

#### Existing Material in Trench

Materials excavated during trench construction may be considered for reuse as trench backfill where permitted by the Town Engineer. The materials shall have suitable physical and environmental properties; and the materials should be properly managed during construction. The excavated materials that may be considered for reuse as backfill include either a suitable existing granular material or a suitable existing cohesive material. The physical properties of the materials shall meet the following requirements:

- the material is free of any obvious objectionable or deleterious materials such as topsoil, organics, wood chips and metal pieces if the material is to be used in trenches located under a pavement  
Note: material containing topsoil or organics, is acceptable when backfilling within sodded or soil surfaces in the boulevard.
- the material is free of large pieces of rock or boulders
- the material is free of shale pieces
- the compaction equipment deployed on site is able to compact the material to its required density
- the material is not considered to be frost susceptible
- the material is not wet, frozen or lumpy

All excavated materials to be reused as trench backfill shall be managed to prevent contamination, and shall be protected to preserve or maintain its moisture condition.

Where the excavated material has been identified to be contaminated, the Contractor shall comply with all applicable legislation. Contaminated soil must not be used as backfill and must be disposed of off-site according to the applicable requirements.

When the suitability of excavated material for reuse is in dispute, the Town, in its sole discretion, shall determine the suitability of the material based on the physical properties mentioned in this section and as recommended in a report, submitted by the Applicant, from a geotechnical consultant for Unshrinkable Fill.

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**1.5 Construction**

Repair Responsibility According to Surface Types

Surface Type	Material	Repair Responsibility	
		Temporary Repair	Permanent Repair
Road Pavement	Asphalt	Applicant	Town
	Concrete	Applicant	Town
Sidewalk	Asphalt	Applicant	Town
	Concrete	Applicant	Town
Curb	Asphalt	Applicant	Town
	Concrete	Applicant	Town
Boulevard	Asphalt	Applicant	Town
	Concrete	Applicant	Town
	Interlock Brick/Stone	Applicant	Applicant
	Sod	Applicant	Applicant
	Landscaped	Applicant	Applicant
Driveway	Asphalt	Applicant	Town
	Concrete	Applicant	Town
	Pressed / Colour Concrete	Applicant	Applicant
	Interlock Brick/Stone	Applicant	Applicant
	Sod	Applicant	Applicant

Notes:

Any repairs on private property shall be the responsibility of the Applicant, unless directed by the Town.

All work performed by the Applicant or its contractor shall be carried out in accordance with the Town's standards and applicable specifications.

Restoration of areas with decorative or specialized surfaces, landscaping, and subsurface treatments such as snow melting systems, sprinkler systems, granite pavers, etc. shall be the responsibility of the Applicant.

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**1.6 Installation of Plant**

**Sawcutting of Pavement, Sidewalk, Curb and Driveway**

Unless judged unfeasible, the sawcut area shall have a maximum of four sides that are all parallel or perpendicular to the direction of travel. Saw cuts shall be straight and vertical to the full depth of the asphalt and concrete layers of the pavement.

Sawcutting operations shall be performed with suitable equipment and methods and not with heavy machinery or jackhammers that may cause damage to the surrounding road.

Saw cutting shall stop at, or just short of, corners to avoid overcutting. After saw cutting the edges, removal of pavement materials shall be performed with care to avoid lifting and breaking the road pavement beyond the sawcut borders.

**Excavation**

During the installation of any Plant, excavation equipment with stabilizers shall be suitably outfitted to prevent damage to the pavement surface or else wood or rubber pads shall be placed on the road to support the stabilizers. Any damage to the street attributable to the Applicant's work shall be repaired, at the Applicant's expense, in conjunction with the utility cut.

Excavation shall not extend beyond the limits of the sawcut area. Care is to be taken to ensure that undermining of the adjacent pavement, curb and sidewalk is minimized. Where the pavement, curb and/or sidewalk are undermined by construction activities or from other causes, these undermined areas shall be filled and the settled structures shall be restored to their original grades at the expense of the Applicant.

Where necessary, bracing, shoring and/or sheeting shall be used in accordance with the Occupational Health and Safety Regulations, to support the sides of the excavation and to prevent any movement that could damage other services, adjacent pavements, sidewalks, etc. This excavation support system shall be removed as backfilling proceeds to eliminate voids between the fill and adjacent soils. Appropriate restoration of all displaced services to their original positions is the responsibility of the Applicant. The Applicant / Contractor shall, at its own expense, provide adequate support and protection of the underground and above ground plant and structures that exist inside the excavation and in the vicinity of the excavated area. Any damage to plant or structures attributable to the Applicant / Contractor's work shall be repaired to the satisfaction of the Town and/or the

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## 1.6 Installation of Plant (cont'd)

owner(s) of the damaged plant or structures, at the Applicant / Contractor's expense, in conjunction with the utility cut.

Except where native cohesive material is to be used for backfill, as permitted by the Town and/or under the conditions of this specification, stockpiling of excavated material within Town Streets is not permitted under any circumstances for any length of time. All excavated material shall be loaded directly into appropriate haulage trucks and disposed of off-site immediately upon removal. The Applicant shall remove, transport and dispose of all excavated materials in accordance with the latest Ontario Environment Protection Acts and, where appropriate, the Occupational Health and Safety Act.

### Inspection of Excavation

Prior to backfilling, the Applicant shall inspect the utility cut excavation to ensure the following minimum requirements are met:

- the edges of the pavement have been saw cut in a straight line and to the full depth of the pavement, or if permitted, to partial depth in composite pavement
- the bottom of the trench has been compacted and is free of water before the bedding material is placed
- all loose or wet material at the bottom of the trench has been removed and replaced with suitable bedding materials
- pipe bedding, pipe cover and compaction to the bedding and cover have been carried out to Town's or utility agency's requirements
- necessary shoring/bracing meeting Ontario Health and Safety Acts and Regulations has been used to prevent the trench from cave-in and to protect adjacent services, pavement and sidewalk
- undermining of the adjacent pavement and sidewalk has been prevented /repaired

### Protection of Excavation

All excavations must be backfilled to match the adjacent grade or properly protected at the end of each working day.

This will include all signage, fencing and delineation required if not completely backfilled for overnight or more than a 24hr period, and supplied by the Applicant.

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## 1.6 Installation of Plant (cont'd)

The Town of Ingersoll will not supply protection for the Applicant or their contractors. If the Town deems the protection unsafe or not to Town standards, the Applicant will be notified and given proper time to rectify.

If the Town is unable to contact the Applicant or the Applicant denies the requested work, the Town will complete the required work and the Applicant will be charged accordingly.

### **Backfilling**

Bedding and covering material shall be compacted to at least 95% of its Standard Proctor Maximum Dry Density, or in accordance with the Applicant's installation requirements, whichever is greater.

If Unshrinkable Fill is used, backfill trench with Unshrinkable Fill to within 75 mm of the top of the existing surface.

If temporary shoring/bracing has been used to support adjacent infrastructure, it shall be removed in a safe manner continuously as backfilling proceeds.

### **Backfilling in Pavements**

If suitable backfill material is to be used, backfilling shall be carried out in uniform lifts not exceeding 150 mm loose thickness.

Each lift of suitable backfill material shall be compacted to a minimum of 95% of its Standard Proctor Maximum Dry Density, or in accordance with the Applicant's utility agency installation requirements, whichever is greater.

For temporary restoration of pavements, suitable backfill materials shall be brought to within 75 mm of the top of the existing surface.

The type of backfilling required in utility cuts made in road pavements shall be as follows:

- Where suitable native backfill is used, compacted to 95% of its Standard Proctor maximum dry density, shall be placed immediately to existing sub-grade level. The sub-grade material must be replaced in thicknesses that meet existing conditions. The Applicant is to contact the Town to verify sub-grade thickness pertaining to cut.
- The use of Unshrinkable Fill shall be used in roadways where deemed necessary by the Town.

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**1.6 Installation of Plant (cont'd)**

**Backfilling in Boulevards**

For all boulevard areas, only suitable native material or Granular B shall be used. Backfill material shall be placed in lifts not exceeding 200 mm loose thickness and each lift shall be compacted to 95% of its Standard Proctor Maximum Dry Density.

**1.7 Temporary Repair**

Unless otherwise specified, backfill material shall be brought to within 50mm below the existing surface. The remainder of the trench shall be filled with compacted cold mix asphalt meeting OPSS 309.04.01 as a mean for temporary pavement restoration.

Unless otherwise specified, all temporary repairs shall be CL mix asphalt. The mix shall be mechanically compacted and neatly match the finished grade of the existing pavement or sidewalk.

It is the Applicant's or their Contractor's responsibility to maintain the temporary repair until a permanent repair can be made.

**1.8 Permanent Repair**

**Extent of Permanent Restoration**

Notwithstanding the following, the nature and extent of the required reinstatement of the cuts will be at the sole discretion of the Town based upon field assessment of the section of roadway prior to the permanent reinstatement.

**Pavement**

Wherever a utility cut is parallel to and coincides with a wheel path, the cut shall be extended to include the wheel path.

If a utility cut is located within 1.0 m of a curb or construction joint, such that the integrity of the adjacent pavement/base may be compromised, the permanent restoration will include the removal of the adjacent road base to the edge of the curb or construction joint. In all cases, the permanent repairs shall match the cross-section of the adjacent pavement.

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### 1.8 Permanent Repair (cont'd)

Pavements with extensive trenching or numerous cuts may require milling and paving to address one or more of the following issues: to restore the quality of the driving surface; to eliminate visual impact of significant road cutting; and/or to better preserve the service-life of a pavement that has experienced excessive cutting.

For longitudinal trenches, whether in the wheel path or otherwise, the affected lane will be milled and paved for the length of the trench plus an additional 1.5 metres at either end of the trench. If however, the total length of all trenches within a street block is: equal to or greater than 75% of the block's length (*for block lengths exceeding 250 metres*) or equal to or greater than 60% (*for block lengths less than or equal to 250 metres*), then the total length of the block will be milled and paved (i.e., between block intersections).

Milling of the surface course, in any of the aforementioned cases, will be a minimum of 3.0 metre width in order to accommodate the placement of the asphalt surface course with a mechanical spreader.

If the longitudinal trench affects two lanes, then both lanes will be milled and paved for lengths defined above.

Where a series of transverse cuts, pits or shafts occur in close proximity along a roadway (i.e., within 12 metres of each other or less) with a flexible pavement structure, the permanent restoration will include milling of the asphalt surface to a depth of 50mm for the full width of the lane (or to a minimum width of 3.0 metres) to accommodate the placement of hot-mix asphalt using a mechanical spreader.

Where a series of transverse cuts, pits or shafts occur in close proximity along a roadway (i.e., within 12 metres of each other or less) with a composite pavement structure, the concrete road base shall be restored and the asphalt surface shall be milled to a depth of 50mm for the full width of the lane or lanes, as the case may be, (or to a minimum width of 3.0 metres) to accommodate the placement of hot-mix asphalt using a mechanical spreader.

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**1.8 Permanent Repair (cont'd)**

**Sidewalk and Curb**

Wherever a side of a cut falls between expansion joints, the removal and subsequent restoration shall be extended to the nearest expansion joint.

Where the concrete sidewalk is monolithic with the curb, the sidewalk and the curb shall be cut and removed as a unit.

Wherever space for concrete forms are required to perform sidewalk or curb repairs adjacent to an existing driveway or pavement, the Contractor shall sawcut the driveway or pavement neatly parallel to the sidewalk or curb.

**Driveway**

Whenever a cut of any size is made in an existing driveway, the Applicant must cut the entire width of the driveway parallel to either existing sidewalk or curb and gutter and repave the entire area.

The surface asphalt restoration shall be extended 300mm beyond the repair area.

Whenever a cut of any size is made in a driveway apron – the entire apron area is to be removed and repaved from the back of curb to the sidewalk.

The Applicant may request an exemption from either requirement by demonstrating that site-specific existing conditions warrant a reduced level of restoration. Any exemption shall be at the sole discretion of the Town

**Utility Cut Surfaces**

All permanent repairs to utility cut surfaces that include sidewalks, curbs, boulevards, and driveways shall be constructed to meet the current Town standards and to match the material and thickness design of the structure.

The permanent reinstatement for a roadway pavement structure that consists of asphalt over granular base/sub-base (flexible pavement structure) and asphalt over concrete road base (composite pavement structure) shall also be constructed to match the material and thickness design of the structure.

All hot-mix asphalt materials shall be supplied and placed in accordance with OPSS 310, OPSS 1150, OPSS.MUNI 1101, OPSS.PROV 313 and Section 15 of the Town Specifications.

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**1.8 Permanent Repair (cont'd)**

**Placing Asphalt for Permanent Repair**

Prior to placement of any Hot Mix Asphalt, the following shall be adhered to:

Before asphalt is laid, the aggregate base shall be inspected and locations with loose material shall be re-compacted to the recommended density level. Whenever space permits, a steel roller with vibration capability shall be used on the final surface of the aggregate base. Caution shall be exercised in moving the equipment into the trench to avoid damage to the edges of the road.

Prior to placement of the asphalt, the vertical faces of the saw cut shall be tack coated using emulsified asphalt or equivalent.

The hot mix asphalt delivered to site shall be visually inspected.

The temperature of the hot mix asphalt delivered to site shall be checked with an appropriate temperature measuring device. Any hot mix asphalt with temperature that has fallen below 130 degree C at the point of discharge before spreading shall be rejected.

Asphalt shall be laid in lifts of a minimum 75mm. Each lift shall be thoroughly compacted by the suitable compaction method and allowed to cool to 50 degree C before the next lift is laid on top.

At the request of the Town, sampling and a Density check shall be carried out using a nuclear gauge device. Coring is to be used only in case of doubt and/or disagreement about the accuracy of measurements made by the nuclear gauge.

After compaction, the hot asphalt surface shall be protected from the potential for accumulating excessive deformation. Cuts restored using hot mix asphalt should be protected from direct traffic for enough time to gain adequate strength before allowing traffic on the restored cut.

Lanes affected by the cut are kept closed to traffic until the temperature of the air-cooled asphalt drops below 40 degree C.

Regardless of the thickness of the asphalt found in the existing road, proper asphalt thickness shall be re-laid without compromising drainage requirements of the road.

All construction joints of the cut shall be lap jointed and taped as per Town Standard S-32.

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**1.8 Permanent Repair (cont'd)**

Where there is the presence of existing maintenance hole lid, catchbasin and/or watervalve jacket the Applicant must use the Town Standard S-33.

**Restoration of Cuts in Sodded Areas**

All topsoiling and sodding shall take place in accordance to OPSS 802 and OPSS803.

Sod shall not be laid when ground is in a frozen condition or when the site is in adverse conditions such as high wind, frozen soil or soil covered with snow, ice or standing water.

All surface areas designated for sodding shall be fine graded to a uniform surface.

The Applicant or its Contractor shall:

Be responsible for the watering of the sod for 30 days from placement.

Warranty any public or private cut where topsoil and sod has been placed for a period of one (1) year.

Immediately correct any and all settlements during the 1-year maintenance warranty period.

At the end of the 1-year warranty period, all sod placed by the Applicant shall be in as good, or better, health and at the same grade as the surrounding sodded area.

The Town shall:

Periodically monitor the utility cut areas and notify the Applicant of any such warranty issues.

**1.9 Traffic Control**

Compliance with the latest editions of the Ontario Traffic Manual (OTM) Book 7 and the Municipal Consent Requirements is required.

**1.10 Management and Disposal of Excess**

Management and disposal of excess material shall be according to OPSS 180.

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**1.11 Warranty**

The Applicant will warrant the utility cut repairs it undertakes in with the Town's Policy of 12 months. The Town will keep the Road Allowance Excavation Permit open for the same 12 month period, and do a final inspection on the utility cut and notify the Applicant prior to closing permit.

The Applicant shall maintain a rigorous control and assurance program such that each utility cut repair will be inspected once every 12 months.

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