

THE CORPORATION OF THE TOWNSHIP OF NORTH FRONTENAC

**BY-LAW #104-13**

**BEING A BY-LAW TO AUTHORIZE THE MAYOR OR DEPUTY MAYOR AND THE CLERK OR DEPUTY CLERK TO SIGN A POLICY TO REGULATE AND CONTROL ANY ALTERATION, PIPING AND/OR FILLING OF A MUNICIPAL ROADSIDE DITCH, INCLUDING THE CONNECTION OF ANY PIPE INSTALLED TO DRAIN A FOUNDATION OR SUMP PUMP FROM A PRIVATE RESIDENCE.**

**WHEREAS** the Corporation of the Township of North Frontenac has the responsibility for the maintenance and repair for highways under municipal jurisdiction by virtue of clause 44 (3) (c) of the *Municipal Act, S.O. 2001, c.25*. In addition, a lower-tier municipality may pass by-laws with respect to Highways, under clause 11 (3) (1), and with respect to Drainage and Flood Control under clause 11 (3) (6) of the *Municipal Act, S.O. 2001, c.25*.

**NOW THEREFORE** the Council of The Corporation of the Township of North Frontenac enacts that the Mayor or Deputy Mayor and the Clerk or Deputy Clerk are authorized to the Policy Roadside Ditch Alteration Policy on behalf of The Corporation of the Township of North Frontenac and that said Policy shall be attached heretofore as Schedule A;

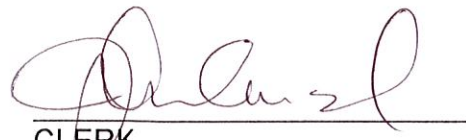
**AND THAT** all resolutions, by-laws or parts of by-laws, which are contrary to or inconsistent with this by-law, are hereby repealed;

**AND THAT** this by-law shall come into full force and effect from and after its passing.

**READ** a first and second time this 25<sup>th</sup> day of November, 2013.

**READ** a third time and passed this 25<sup>th</sup> day of November, 2013.

  
MAYOR

  
CLERK

**TOWNSHIP OF NORTH FRONTENAC  
ROADSIDE DITCH ALTERATION POLICY – NOVEMBER 2013**

**PURPOSE**

The Township of North Frontenac has the responsibility for the maintenance and repair for highways under municipal jurisdiction by virtue of clause 44 (3) (c) of the *Municipal Act, S.O. 2001, c.25*. In addition, a lower-tier municipality may pass by-laws with respect to Highways, under clause 11 (3) (1), and with respect to Drainage and Flood Control under clause 11 (3) (6) of the *Municipal Act, S.O. 2001, c.25*. Therefore, the Township of North Frontenac has complete ownership of its highways and road allowances and authority over features placed and activities conducted within it.

The purpose of this policy is to establish criteria to be applied when evaluating requests from the public and private landowners abutting a Township road to pipe and/or fill a roadside ditch, connect a stormwater or groundwater pipe, or otherwise alter or obstruct a roadside ditch.

The provisions of this policy shall apply to all road allowances, including; open and maintained; and unopened or unmaintained, under the jurisdiction of the Corporation of the Township of North Frontenac.

In the evaluation of a request to pipe and/or fill a ditch, connect a drainage pipe or otherwise alter a roadside ditch, the benefits gained by the Township must be evident.

**DEFINITIONS**

These definitions are included solely for the purpose of understanding the Roadside Ditch Alteration Policy.

- "Council" shall mean the municipal Council of The Corporation of the Township of North Frontenac.
- "Manager" shall mean the Public Works Manager of the Township of North Frontenac, or his/her designate.
- "Ditch" shall mean a natural or artificial watercourse ranging from a depression, or swale, to an open channel that conveys storm water runoff from both public and private properties and has the same conveyance function as a piped sewer system.
- "Ditch Alteration" shall mean the addition of earthworks, landscaping works and pipes to a ditch system to eliminate a defined ditch conveyance system for storm water.
- "Ditch Infill" shall mean the replacement of a ditch with a culvert covered by earth and sod.
- "Easement" shall mean a right of use over private property for the Township to maintain and operate storm water infrastructure as defined under provisions of the *Municipal Act, 2001*.
- "Foundation Drainage" shall mean groundwater collected by the weeping tiles installed around the footings of a dwelling, collected in an internal sump pit and discharged to the surface by a sump pump to drain overland or conveyed in a pipe underground to discharge into the ditch system.
- "Municipal Road Allowance" shall mean the property dedicated as public road allowance by authority of the Township of North Frontenac, and including:
  1. All highways that existed on December 31, 2002.
  2. All highways established by by-law of a municipality on or after January 1, 2003.
  3. All highways transferred to a municipality under the *Public Transportation and Highway Improvement Act*.

4. All road allowances made by the Crown surveyors that are located in municipalities.
5. All road allowances, highways, streets and lanes shown on a registered plan of subdivision.

which have not been permanently closed by by-law pursuant to the *Municipal Act, 2001*, as amended from time to time, or its predecessor legislation.

- "Owner" shall mean the registered owner of land abutting a Municipal Road Allowance.
- "Proponent" shall mean the Owner of the land that is subject to the application for altering a roadside ditch.
- "Right-of-Way" shall mean that portion of the Municipal Road Allowance ordinarily used for the location of roads, sewers, watermains, sidewalks and walkways.
- "Roadside Ditch" shall mean the open channel within the Municipal Road Allowance and installed for the purpose of collecting and channelling road and adjacent surface drainage runoff or snowmelt.
- "Storm Drainage System" shall mean a storm water conveyance system of ditches and storm sewers.
- "Sub-grade Drainage" shall mean the groundwater collected by the granular road base structure.
- "Swale" shall mean shallow grassed drainage channels with gently sloping sides.
- "Tile Drainage" shall mean the draining of neighbouring lands into roadside ditches.
- "Township" shall mean the Township of North Frontenac.
- "Township Forces" shall mean employees of the Township of North Frontenac, or its authorized contractors or agents.
- "Work" shall mean the removal of a ditch alteration and/or reinstatement of an open-channel roadside ditch.

#### **GENERAL – ROADSIDE DITCH FUNCTION**

A Roadside Ditch is intended to serve three primary functions:

1. To drain the road base and sub-grade (original ground under the road base). These features are constructed and shaped with a crossfall to drain stormwater across the road surface and shoulders to a roadside ditch. Poorly drained granular road base materials advance the deterioration of roadway surfaces resulting in the costly maintenance and/or replacement of hardtop roads.
2. To collect and channel roadway surface water and groundwater within the road allowance to an intended outlet and intercept surface water drainage which may flow onto the road, thereby reducing ponding and icing on the road.
3. To provide a roadside snow storage area below the elevation of the road surface thereby reducing the potential for snow drifting over the road and providing a snow stockpile area.

The road drainage principle for a rural road is to elevate the road platform to allow road surface runoff to drain off and road base and sub-grade water to weep out to a roadside ditch at a lower elevation. The roadside ditch should also be low enough to accept surface drainage from the balance of the road allowance. In some situations, the roadside ditch can also accommodate and receive sump pump foundation drainage and roof leader discharges from adjacent private property.

In contrast, the drainage principle for urban or some Hamlet roads is to lower the road platform to collect and channel adjacent roadside, private property and road surface drainage by means of concrete curb and gutters, catchbasins and a storm sewer drainage system.

When a ditch is filled, altered or replaced with a pipe, the stormwater management benefits are compromised and contradict accepted stormwater drainage practice. Open ditching is acknowledged to be an efficient method of accommodating a significantly greater quantity of drainage than a pipe under storm conditions. Open ditching also serves a dual purpose of allowing stormwater to infiltrate back into the ground providing recharge to our lakes and streams and the vegetative cover of ditches assist with the natural filtering and settlement of particulates from runoff, thus improving the quality of stormwater and snowmelt.

**Therefore, the piping or filling of ditches on Township rural roads is generally not recommended; however, some candidate sites may be suitable for consideration and therefore, the following policy will apply:**

#### **PART A – POLICY CRITERIA**

1. The basic form of drainage for a Township road with a rural cross-section will be by open roadside ditches within the Township road allowance and with culverts installed only at permitted and required locations within and parallel to the direction of the roadside ditch.
2. The Township may consider permitting the piping or filling of certain portions or sections of a roadside ditch only if it has been determined to be beneficial to the operation or maintenance of the Township road.
3. The Township will not permit the piping or filling of a roadside ditch if the basis of the request is:
  - a) for aesthetic purposes to suit the abutting private property owner's current or proposed landscaping; or
  - b) to be of benefit to the abutting private property owner only (i.e., ease of lawn mowing)
4. The Township may require the proponent of a ditch alteration proposal to undertake a hydraulic assessment to determine ditch piping and filling impacts on the drainage system area. This assessment is to be undertaken by a qualified and experienced professional engineer, at the expense of the proponent.
5. The adjacent property owner that has been granted permission to alter the roadside ditch with piping and/or filling, or the connection of a foundation drain, does not have ownership of the affected area of the road allowance. The private property owner has no rights to claim the alteration, piping and/or filling of the roadside ditch is permanent, should the Township require that the drainage system be returned to an open ditch.
6. If the Township has granted a private property owner permission, by issuing a permit, to alter, pipe or fill the adjacent roadside ditch, all the installation and material costs are the responsibility of the proponent.
7. If the Manager determines that additional work, such as ditch regrading, rock removal or brushing is required to properly convey stormwater to a sufficient outlet as a result of the proposed ditch alteration, all costs for the work by Township Forces will be borne by the proponent.
8. Where a proposed piping or filling of a Township roadside ditch crosses or is located above an existing underground utility;

- a) the proponent must (at their expense) obtain a clearance letter or certificate from the owner of the underground utility that provides satisfactory evidence that the proposal will not be detrimental to the existing utility; and
  - b) obtain a locate for the underground utility; and
  - c) any required extensions or modifications to the existing utility to accommodate the grades of the proposed piping or filling of the ditch will be provided at the expense of the proponent.
9. Piping and/or filling of a roadside ditch will only be permitted with the approval of the Township by issue of a permit and if designed and installed in accordance with the following criteria:
- a) pipe installations shall be completed in accordance with the requirements of the latest version of the Ontario Provincial Standard Specification No. 421 (OPSS 421) and all related specifications;
  - b) the minimum cover over the pipe obvert shall be 0.15 metres;
  - c) the minimum grade of the pipe exceeds 1% to provide sufficient cleaning velocity;
  - d) the finished elevation of fill material in the ditch must be shaped to form a swale, provide a minimum positive grade of 0.5% and remain a minimum of 0.45 metres below the elevation of the edge of the road surface;
  - e) a sufficient outlet is available and is permitted to receive the new pipe's outlet flows; and
  - f) if required, interim cleanout/access structures will be installed.
10. Connection of tile drainage, a foundation drainage pipe or a roof leader pipe will only be permitted with the approval of the Township by issue of a permit and if designed and installed in accordance with the following criteria:
- a) the drainage pipe shall terminate with a minimum of 2.0 metres setback from the roadside ditch invert;
  - b) to accommodate the setback, a 'V' shaped flow channel shall be put in place below the outlet pipe to allow water to drain purposely into the roadside ditch. A splash pad or the placement of coarse stone or rock rubble may also be required to prevent washout on the ditch side slopes;
  - c) the pipe outlet shall be appropriately rodent protected;
  - d) if the outlet pipe is connected to a foundation drain or sump pump discharge, a 'backflow check valve' shall be installed in accordance with Part C of this policy; and
  - e) the outlets shall be well marked and the property owner shall provide a plan or sketch and photo to the Township showing the location of each drain pipe.

## **PART B – APPLICATION AND APPROVAL PROCESS**

1. The proponent of a proposal to alter, pipe and/or fill a Township roadside ditch or outlet water into the roadside ditch via a tile drain or foundation drain will be advised of the policy's criteria by obtaining the information from the Township's website, the Township Office or discussing the proposal with the Manager.
2. The proponent will then prepare a design and submit a plan of the proposed works by completing the Roadside Ditch Alteration Permit Form and submitting it to the Manager along with the application fees.
3. The proponent will be required to submit a \$100 Application fee and a Security Deposit of \$500 to ensure that the works are carried out in accordance with this policy and any conditions on the Permit.

4. The Manager will conduct a site inspection and field review of the proposal and meet with the proponent if necessary.
5. If the Manager is satisfied that the ditch alteration, piping and/or filling can be completed in accordance with this policy, the Permit will be approved, but may be subject to conditions specific to the application.
6. If the Manager determines that an engineering study is required to assess the impact of the alteration or pipe connection, the proponent will be advised of this requirement and the application will be held until that assessment can be completed to the satisfaction of the Manager.
7. If the Manager determines that the proposal should be denied, the proponent will be advised in writing and the Security Deposit of \$500 will be returned to the proponent.
8. If the proposal is approved and upon completion of the installation, the proponent will contact the Manager for a final inspection. If the Manager is satisfied that all the requirements of the permit have been met, and no corrective measures are required, the proponent's Security Deposit of \$500 will be returned.
9. In the event that the Manager determines there are deficiencies to the installation or damage to Township property and corrective action is required the Manager will provide written notice to the proponent. If the proponent fails to correct any identified deficiencies or repairs within 30 days of receiving the written notice, the Township may draw from the proponent's Security Deposit to recover its cost to correct the deficiencies. The balance of the Security Deposit will then be returned to the proponent.
10. Any alteration, piping and/or ditch filling installed in a Township roadside ditch without permit authorization from the Township will be considered trespassing. The Township may remove the alteration, piping and/or fill placed and re-instate the open ditch. The cost of the removal and restoration will be invoiced directly to the abutting owner.
11. The Township will not be held responsible for any liability arising from any works done in relation to roadside ditches including piping or filling of roadside ditches or draining into (outletting into) roadside ditches and any backup occurring from pipes outletting to a Township owned sub-drain/storm sewer (see Part C – Private Drains).
12. In the event that a situation or condition arises which requires the Township to remove, either in whole or in part, the piping and/or fill materials, the drainage system will be reinstated to an open ditch condition. No compensation for the previously installed works will be provided.

#### **PART C – PRIVATE DRAINS OUTLETTING INTO A TOWNSHIP ROADSIDE DITCH**

1. Upon submission of an application for a Roadside Ditch Alteration Permit and approval by the Manager, private stormwater drains carrying clean stormwater originating from the foundation drainage tile, a sump pump discharge pipe or a roof leader are permitted to outlet into a Township roadside ditch.
2. All private drain pipes must include a check valve to reduce the risk of potential "backflow" from any high water in the roadside ditch surcharging into the drain pipe and entering the private building where the drainage originated. The check valve must be

installed in the private drain at the building's foundation and its presence must be verified and approved by the Township's Chief Building Official.

3. It shall be the responsibility of the owner of the private drain which outlets or drains into a Township roadside ditch to ensure that the check valve is in good working order and repair. The Township does not assume any responsibility for private property damages resulting from a malfunctioning check valve.
4. Private drains must outlet into the open roadside ditch at an elevation sufficiently above the ditch invert to protect the outlet pipe from being submerged under normal flow conditions.
5. An owner will not be permitted to connect a private drain to a Township stormwater system without approval from the Township and completing the required application form. Depending on the quantity of water to be discharged into the stormwater system, an engineering assessment of the capacity of the existing stormwater system may be required. The costs for such an engineering assessment shall be borne by the proponent.

#### **PART D – EXCEPTIONS**

This policy does not apply to the following:

- a) Municipal Drains, or any other proposed works, which are governed by the *Drainage Act*.
- b) Ditches that have permanent water and are considered having fish habitat using criteria regulated by the local Conservation Authorities and the Department of Fisheries and Oceans.
- c) Ditches located in or near Provincially Significant Wetlands, or any other areas regulated by the local Conservation Authorities.

#### **PART E – CONTRAVENTIONS**

1. Non-compliant or unauthorized ditch alteration, piping and/or filling that has taken place before the adoption of the Roadside Ditch Alteration Policy will be managed through a progressive approach. Initially, only those alterations that are identified, at Township discretion, as either; i) contributing to a drainage or road maintenance issue, or ii) within the project limits of a capital works or ditching project, shall be considered for removal.
2. Non-compliant or unauthorized ditch alteration, piping and/or filling that has taken place before the adoption of the Roadside Ditch Alteration Policy that is not contributing to a drainage or road maintenance issue shall not be considered for removal.
3. Non-compliant or unauthorized ditch alteration, piping and/or filling that takes place after the adoption of the Roadside Ditch Alteration Policy will be enforced in accordance with this policy. In some situations, the Owner or Proponent may apply for a Roadside Ditch Alteration Permit, pay the required fees and have the works inspected by the Manager. If the Manager determines that the ditch alteration can remain, the proponent will be required to provide plans and photos to be kept on file. If the Manager determines that the ditch alteration must be removed because of a potential drainage or road maintenance issue, the cost of removal shall be borne by the responsible property owner.

## **PART F – DELEGATED AUTHORITY**

The Public Works Manager (and his/her designates) shall have delegated authority to:

- a) interpret the procedures identified in this policy to their satisfaction; and
- b) make revisions, additions and amendments of a technical or administrative nature to this policy.

## **PART G – VALIDITY**

In any section, clause or provision of this policy is declared invalid by a Court of competent jurisdiction, the same declaration shall not be affected by the validity of the policy as a whole, other than the section, clause or provision declared to be invalid.

All remaining sections, clauses or provisions of this policy are intended to remain in full force and effect until repealed or amended, notwithstanding that one or more sections, clauses or provisions shall be declared invalid.