



Installation of a Driveway Entrance Policy

1.0 Policy Objective

The purpose of this policy is to outline the requirements for the installation of driveway entrances on existing streets within the municipal boundaries of the Town of Mahone Bay.

2.0 Existing Driveway Entrances

- 2.1 The Town accepts responsibility for all portions of existing driveway entrances, which are located on Town property, and will maintain them in a manner consistent with the content of this policy document.
- 2.2 The Town will not reimburse any property owners, which may have incurred expenses related to maintaining their driveway entrances (including culverts) prior to adoption of this policy document.

3.0 Application Process

- 3.1 No driveway entrance shall be installed on an existing street without first obtaining a Town of Mahone Bay Street Excavation Permit {refer to Town of Mahone Bay - Streets and Sidewalks ByLaw #41, Sections 3 & 4}. The permit application must be completed by the applicant and approved by the Town. If a driveway entrance is installed without having obtained a permit it may be removed by the Town at the property owner's expense.
- 3.2 The Town's Director of Operations will assess the proposed entrance for adequate sight distance and determine the size of drainage culvert, if required. The applicant is required to identify the location of the proposed driveway entrance with stakes marking the proposed location and width prior to filing an application in order that it may visually assessed.
- 3.3 The applicant will be notified once the application/permit has been approved. Notification will include the size of culvert to be installed, if required.
- 3.4 The applicant is responsible for all aspects of construction, including but not limited to; removal and replacement of any sidewalk, curb/gutter, supply of a new culvert, backfill material, rip rap, labour, and traffic control. Work may be done by the applicant or a contractor engaged by the applicant; however, ultimate

responsibility for installation rests with the applicant. Unsatisfactory installation of a driveway entrance may result in removal by the Town at the property owner's expense. In the event the Town is required to take action to satisfactorily complete the work all costs associated will be at the property owner's expense.

- 3.5 The applicant subject to agreement by the Director of Operations may hire the Town to install the driveway entrance upon satisfactory Work Order and payment process being made with the Town.
- 3.6 The applicant must notify the Director of Operations a minimum of 48 hours prior to beginning the installation of a driveway entrance.

4.0 Environmental Protection

Every effort must be made to expose as little soil to the elements as possible during the construction process. If the culvert is within 30 meters of a watercourse, or there is any chance sediment may enter a watercourse, erosion and sedimentation control measures must be employed in accordance with regulations established by the Province of Nova Scotia.

5.0 Driveway Width

The driveway top (i.e. traveled portion) shall be a minimum of 3 m (10 ft.) wide; the rip-rap end portions of a driveway requiring a culvert are in addition to the traveled portion. The maximum width of the driveway top shall be 8 m (26 ft.).

6.0 Materials

- 6.1 Concrete and Asphalt: New driveway entrances requiring the reinstatement of any sidewalk, curb or gutter must match the existing. Concrete used for sidewalks, curb and gutter to be 35 MPa (5000 psi). Asphalt must be hot mix asphalt properly installed by a qualified contractor.
- 6.2 Culvert: Unless warranted by specific conditions, as determined by the Director of Operations, pipe size for a new culvert installation shall be a minimum of 400mm (16 in.) inside diameter {refer to Town of Mahone Bay Municipal Specifications, May 14, 2002, Section 6.5}. Culvert pipe may be aluminized corrugated steel or aluminum alloy; or smooth inside wall diameter Class 65D concrete; or double walled smooth interior High Density Polyethylene (HDPE) pipe.

In the case of open top culverts, new treated wood may be used, however, the design and materials proposed for use in building the structure must be approved by the Director of Operations.

The use of used culvert pipe or wood will not be approved.

- 6.3 Backfill: Backfill material shall be 20-25mm ($\frac{3}{4}$ -1 in.) gravel or good native soil with no stones over 75mm (3 in.) in the largest dimension. Slate may be used only if it is from a source approved by the NS Department of Environment and Labour.
- 6.4 Top Material: Top material shall be 100-150mm (4-6 in.) of Class A (20mm or $\frac{3}{4}$ in.) gravel, sloped to prevent water from running onto the roadway; minimum slope requirement is 2%. If pavement is desired, it should consist of a minimum of 75mm (3 in.) of hot mix asphalt on a bed of 100-150mm (4-6 in.) of Class A gravel.
- 6.5 Rip-Rap: Minimum wall thickness shall be 400mm (16 in.); therefore, material shall be 400-500mm (16-18 in.) flat stones. Slate may be used only if it is from a source approved by the NS Department of Environment and Labour.

7.0 Sidewalk, Curb and Gutter Replacement

- 7.1 Any necessary replacement of concrete sidewalk, curb and/or gutter will be completed in accordance with the specifications contained in the most recent edition of the Standard Specification for Municipal Services, as published by the NS Road Builders Association & Consulting Engineers of NS.
- 7.2 Any necessary replacement of asphalt sidewalk or curb will be conducted in a manner to match the existing site conditions, unless otherwise determined by the Director of Operations.
- 7.3 Prior to pouring any concrete or placing asphalt, an inspection, by the Director of Operations, must be completed. It is the applicant's responsibility to schedule such inspection.

8.0 Bed Excavation for Culverts

- 8.1 Prepare an area for the pipe in the lowest point of the ditch, aligned with the direction of flow.
- 8.2 All organic material (grass, bushes, etc.) under the length of the pipe shall be removed before placing pipe.
- 8.3 Excavate ditch to a depth of 150mm (6 in.) below existing flow line of ditch.
- 8.4 Fill excavated area with 125mm (5 in.) of Class A or B gravel.

9.0 Pipe Installation for Culverts

- 9.1 The pipe shall be placed on the prepared bed of gravel, following the natural slope of the ditch allowing the pipe flow line to be approximately 25 mm (1 inch) below the flow line of the ditch and shall be aligned to maintain the direction of flow.

- 9.2 If two or more lengths of pipe are required they shall be joined with approved couplers, available from the pipe manufacturer. The couplers shall be joined as per manufacturer's instructions.
- 9.3 Prior to back filling, an inspection, by the Director of Operations, must be completed. It is the applicant's responsibility to schedule such inspection.
- 9.4 Backfill material shall be a minimum of 150 mm (6 inches) deep on each side of the pipe and compact with a vibrating compactor. Continue to place backfill material in 150 mm (6 inch) layers and compact on each side of the pipe before adding more material. Compacted material must be kept even on both sides of the pipe and must extend the width of the pipe. When backfill material is very granular, clay material shall be used to seal the ends to prevent water from flowing through the backfill material.
- 9.5 The backfill material plus top material shall extend a minimum of 300 mm (12 inches) above the top of the pipe unless otherwise approved by the Director of Operations.
- 9.6 The permit holder shall remove all surplus excavated material from Town property (i.e. the street right-of-way).
- 9.7 Rip-rap shall be placed across the upstream and downstream ends of the pipe. Concrete end walls may only be used on the installation with the approval of the Director of Operations.

10.0 Final Inspection

- 10.1 Once the driveway entrance is completely installed, the Director of Operations shall be notified to arrange for final inspection. In the event the inspection determines deficiencies in the work the applicant will be notified and asked to correct them. Following corrective action, the applicant is required to notify the Director of Operations for a re-inspection.
- 10.2 If the driveway entrance is not satisfactorily installed after two final inspections, the Town reserves the right to remove the driveway entrance, and take any other action it deems necessary to remediate the site at the Property Owners expense.

11.0 Responsibilities

- 11.1 After the driveway entrance is installed and approved, should the culvert deteriorate from age or normal use, the entrance will be replaced as follows:

Residential Entrance: Culvert piping up to a maximum of an 8-meter top width. All costs to be borne by the Town.

Churches, Cemeteries & Other Non-Profit Agencies: Culvert piping up to a maximum of an 8-meter top width. All costs to be borne by the Town.

Commercial or Combined Commercial & Residential: All costs at the Property Owners expense.

- 11.2 When replacing an existing driveway entrance the Town reserves the right to conduct the work using its own employees and equipment, or to utilize the resources of a competent contractor.
- 11.3 When replacing an existing driveway entrance, culvert pipe and any end treatments removed by the Town shall be replaced with rip-rap. Replacement pipe shall be of the type commonly used by the Town at the time of replacement.
- 11.4 The Town will not maintain the driveway top, with the exception of normal shouldering operations and in that case only to the extent of the shoulder and not the entire street limit. The Town will only correct frost heave of a culvert if it is causing a problem with water flow in the ditch.
- 11.5 In the event any portion of a paved driveway is excavated in order to replace a culvert, it will be the responsibility of the property owner to reinstate the paved portion if they so choose.
- 11.6 The property owner is expected to keep the culvert free from obstructions, maintain the rip-rap on the culvert ends, and to keep the top grade of the driveway at an elevation as to prevent water flow onto the road.

Clerk's Annotation for Official Policy Book	
Date of notice to Council Members of Intent to Consider	
[minimum 7 days notice]	
Date of Passage of Policy	
_____	_____
Town Clerk	Date