

Section: <b>Public Works</b>	Policy number: <b>G-1</b>
Subject: <b>Road Construction Minimum Standards</b>	Effective Date: March 21, 2007
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## **Corporation of the Municipality of French River Road Construction Minimum Standards Policy**

### **1. PURPOSE**

This policy establishes minimum standards for the construction of new and existing municipal highways within the Municipality of French River. The goals of this policy are:

- a) to ensure consistency in the construction of new and existing municipal highways;
- b) to ensure adherence to the official plan;
- c) to ensure that proponents build new municipal highways to a minimum municipal standard;
- d) to avoid passing any new development costs to ratepayers of the municipality;
- e) to ensure that proponents upgrading existing seasonal or private roads to municipal highways abide by a minimum municipal standard.

### **2. DEFINITIONS**

- a) Municipal Highways – Roads and streets that have been assumed by the municipality, and are maintained year round by the municipality.
- b) Seasonal Roads – Roads and streets that have been assumed by the municipality, and are maintained only during the summer usually for cottage access.
- c) Private Roads - Roads and streets that have **not** been assumed by the municipality, and are maintained privately or under contract with the municipality, and are the responsibility of the abutting land owners.
- d) Proponents – Developers, residents, associations who are building a new road or street under a subdivision agreement, or land severance or are upgrading or requesting the municipality to upgrade an existing seasonal or private road to a municipal highway.

### **3. POLICY**

It is the policy of the Corporation of The Municipality of French River

- a) To provide minimum construction standards for all municipal highways within the Municipality of French River.
- b) To apply consistently the minimum standard to ensure quality of new road construction and the upgrading of existing roads to municipal highways.
- c) To ensure that all proponents are held to the same standard of quality.

### **4. SCOPE**

This road construction minimum standard policy applies to all streets/roads within the Municipality of French River that are Municipal highways as per the Municipal Act, 2001, S.O. 2001, c. 25 as amended, section (26) (31). The policy applies to all new subdivision roads. All subdivision agreements will include conditions that will ensure new roads meet the construction minimum standard. The policy also applies to the upgrading of seasonal roads and private roads to municipal highways. The cost of such upgrades will be borne by the abutting land owners.

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## 5. RATIONAL

The Municipality of French River is a rural municipality with many roads accessing waterfront properties. There is an increasing demand for waterfront and water view development. Many of the current roads are seasonal and private roads, and as development continues, there will be a continuous demand for the municipality to upgrade these roads. The construction minimum standard will establish how the municipality will control road construction standards as well as determine who will be responsible for the costs associated with achieving these standards. It is the intent of the Council of the Municipality of French River to protect the municipality and its residents from incurring tax increases to finance road construction and upgrades that are the responsibility of developers, and in some cases residents whose properties are abutting seasonal and private roads.

## 6. ROAD CLASSIFICATION

- a) The class of roads will be determined by MTO standards for Highway Maintenance Priority Class Categories by using a traffic volume count and applicable speed limits. The assumed speed limit for all municipal roads is 50 km per hour unless otherwise posted.
- b) Traffic volume count will be determined by applying trip generating factors to the applicable residential, commercial, industrial or other uses.
- c) Average Annual Daily Traffic

Traffic Volume	Class
0-49	6
50-199	5
200-399	5
400-999	4
1000-plus	4

## 7. APPROVAL OF CONSTRUCTION

Before commencement of any works, the proponent shall show proof that the Contractor is qualified, experienced and has the equipment and personnel to successfully complete the works. Furthermore, the proponent shall obtain all necessary permits and approvals as required. Construction or installation of services shall not take place until the proponent has obtained all necessary permits and approvals, and has complied with all requirements as outlined by the Superintendent of Public Works or his designate.

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## 8. PLANNING

### a) Plan and Profile Drawings

Plan and profile drawings are required for all roads, blocks, easements, and reserves. All road allowances, lots, blocks, easements and reserves are to be shown and identified in the same manner as the Registered Plan. Drawings are to be prepared so that each street or road can be filed separately. Street or road names are to be identified on the plan. The proponent shall provide a geotechnical report prepared by a qualified geotechnical engineering firm indicating road construction details for the road. All engineering drawings shall be dated and stamped by a Professional Engineer.

### b) Drainage

The proponent agrees to carry out all drainage and grading works necessary in the opinion of the Superintendent of Public Works or any agents for the Municipality to provide for proper drainage of all lands included in the workplan. A drainage study may be required depending on the length of road in question, soil conditions and the topography of the land. Requirement for a drainage study is at the discretion of the Superintendent of Public Works or his designate.

### c) As Constructed Plans

The proponent shall provide immediately upon completion of the works an acceptable original final set of as constructed plans of those works conforming to the Municipal standards to the Clerk of the Municipality.

## 9. SUPERVISION OF CONSTRUCTION AND INSPECTION OF WORK

The proponent's contractor will be responsible for the construction of all works and the Municipality shall have the right to inspect any phases of the work as it deems necessary. When deemed necessary by the Municipality, road and drainage works shall be constructed and installed under the observation of inspectors employed by or acting as agents for the Municipality and the proponent agrees to pay all accounts incurred by the Municipality within thirty (30) days of being rendered. In the event that the municipal inspectors are unable to observe the construction or installation of the road and drainage works, the Municipality reserves the right to commission a study to ascertain adherence to Municipal standard as specified in this policy.

## 10. MINIMUM STANDARDS FOR ROADS AND STREETS

### a) Right of Way

The road right of way is to be properly surveyed and dedicated to, or owned by the Municipality of French River, and is to be a continuous minimum width of 20.0 meters (66 ft). The Municipality will advise the developer whether a vehicle turn-around is required at the terminus of the road. The minimum clearance width shall be 12 meters (40 ft).

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b) Platform Width

The overall width of the road is the sum of the surface width and twice the shoulder width. The platform width of the road is 5.5 meters (18 ft) plus 2 – 1 meter (3 ft) shoulders, or 7.5 meters (24.5 ft).

c) Surface Width

The surface width is considered the driven portion of the road which does not include the width of the shoulder. The surface is to be covered by a minimum depth of 100 mm (4 in) after compaction of granular “A” crushed gravel measured at all points on the roadway.

d) Shoulder Width

Each shoulder shall be a minimum width of 1 meter (3 ft). These shoulders shall be covered by a minimum depth of 100 mm after compaction of granular “A” crushed gravel measured at all points on the shoulder.

e) Depth of Granular Base

The depth of granular base material, which is the material below the surface course of crushed gravel, shall be placed to a minimum depth of 200 mm (8 in) of pit run gravel depending on the subgrade material, which is the original ground in its natural state. The Municipality reserves the right to increase the depth of granular base after consideration of the subgrade material in the proposed road construction site.

f) Ditches

The depth of the ditch in a cut section is determined by measuring the difference from the crown or center of the road to the bottom of the ditch using a level and the minimum depth is to be .5 meters (19.5 in) including sections of roads on the crests of vertical curves. Minimum width between the center of the ditches shall be 9 meters (30 ft)  
All ditches are to be carried to a sufficient outlet. The depth of the ditch may be required to be greater than .5 meters (19.5 in) to carry the drainage to a sufficient outlet.  
A drainage easement will be required for all drainage ditches outletted across private property regardless if a natural drain exists.

g) Culverts

The culverts are to be approved corrugated steel pipe, concrete or plastic and are to be a minimum diameter of 400 mm (15 in) or larger as required and directed by the Superintendent of Public Works. Culverts shall be covered with a minimum of 450 mm (16 in) of appropriate cover. Culverts shall extend 300 mm (1 ft) beyond the toe of the slope (minimum slope of 1.5:1)

h) Entrances

Any entrance placed on the road right of way by the proponents or anyone else is to be a minimum of 400 mm (15 in) in diameter or larger as required, minimum entrance width is 5 meters (16 ft) and directed by the Superintendent of Public Works.

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The culvert must be of sufficient diameter to maintain free flow of water in the ditch and must be properly installed in order to avoid future maintenance problems. When the upstream culvert is larger than the minimum standard, the entrance culvert must be at least the same diameter in order to avoid “bottlenecks”. The length of the entrance pipe will be determined by the Superintendent of Public Works; a minimum slope of 2:1 will be accommodated at the end of the pipes. Each entrance must be designed, constructed and maintained in a manner that will prevent surface water from being discharged from the property onto the road.

i) Alignment

The horizontal and vertical alignment of the road is to be such that a grader and other equipment can operate effectively. The maximum grade of the road at any point is 12%

j) Guardrails

Guardrails will be installed where the distance from the bottom of the ditch or drop-off immediately adjacent to the shoulder of the roadway exceeds 3 meters (10 ft). The length of the guardrail will be determined at the discretion of the Superintendent of Public Works or his designate.

k) Turn-arounds

- i. 13 meter (43 ft) minimum radius (including 1 meter (39 in) shoulder)
- ii. “No Parking” advisory signs
- iii. Proper ditches as required (schedule “a” attached)
- iv. 35 meter (115 ft) right of way
- v. Center of turn-around filled in
- vi. Minimum base of granular base same as roadway base

l) Specifications

The foregoing works shall be in accordance with the Ontario Provincial Standard Specifications, on a properly prepared subgrade within the limits of the 20 meter road allowance shown on the approved plans.

m) Surface Type

All roads with a classification of 5 or 6 (less than 200 vehicles per day) will be gravel surface. All roads with classification of 4 or better (200 or more vehicles per day) will be hard surfaced with low-cost bituminous surface.

n) Street Lighting

Street lighting is determined by the municipal street lighting policy.

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## 11. AUTHORITY

Authority to control street/road minimum standards is derived from section 26, 31, and 44 of the Municipal Act, 2001, S.O. 2001, c. 25 as amended.

This policy is approved by Resolution No. 2007-131 of the Council of The Municipality of French River, this 21<sup>st</sup> day of March, 2007.

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SCHEDULE 'A'  
MUNICIPALITY OF FRENCH RIVER  
MINIMUM ROAD STANDARD

In the interest of uniformity, it is hereby advised that the minimum standard to which any road must be built before it can be absorbed into the Municipal Highway system as shown below. There is a minimum for a very small area, but the standards will increase as the traffic, for instance in subdivision roads, increases. Proponents prior to entering into an agreement with private interests and before construction of roads, should consult the municipality as to what standards are applicable to each particular area before the road is taken over.

Right-of-Way (ROW) of at least 20m (66') dedicated to public use (10 m (33') each side from center line of road)	20m (66')
Width of Clearing	12m (40')
Width of traveled portion (incl. Shoulder & rounding) –	7.5m (24.5')
Width between ditches-	9m (30')
Depth from Crown of road to ditch bottom	0.5m (1½')
Minimum depth of granular surface (4"cr. Gr/ Plus 8" pit run gravel) –	300mm (12")
Culverts, either corrugated iron, plastic or concrete, minimum-	400mm (15")
All ditches carried to a sufficient outlet	
Alignment-Such that Maint. Equipment can work effectively.	
Turnarounds - 13m (42') Minimum Radius (including 1.0m (3.0'0 shoulder)	
- "No parking" Advisory Signs	
- Ditch if required	
- 35m (115') Right of Way	
- Center of turnarounds filled in	

