

# Highway Corridor Management **Manual**



**Corridor Management Office**  
Ministry of Transportation

**April 2025**

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## Highway Corridor Management Manual Ministry of Transportation

### **Note to User**

This manual provides guidance on how the Minister of Transportation exercises discretion when issuing permits under the *Public Transportation and Highway Improvement Act* (PTHIA). Final interpretation and application of the principles in this manual lies with the Ministry. Use of this manual does not exempt the user from the need for a permit under the PTHIA, nor from the requirements of any other applicable legislation, regulations, and/or by-laws.

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## ***Abstract***

The Highway Corridor Management Manual (HCMM) contains policies, guidelines, best practices and specifications for managing building and land use, encroachments, access and signs within the Ministry's controlled area under the *Public Transportation and Highway Improvement Act* (PTHIA). The HCMM provides guidance to Ministry staff, stakeholders, the public, municipalities and other agencies, to be used in combination with other applicable Ministry guidelines and specifications, for the planning and design of works within the Ministry's controlled area. The purpose of the Ministry's Highway Corridor Management function is to protect provincial highway corridors for future expansion needs, preserve and improve highway safety and operations, and improve the movement of people and goods in Ontario.

## ***Contents of the Manual***

### **Chapter 1: Permit Administration**

Provides an introduction of the legislation that forms the premise for the MTO Highway Corridor Management function, the types of Highway Corridor Management Permits, the MTO Permit Control Areas, the permit application process, general application requirements, review considerations, general policies and permit administration topics which relate to all, or more than one chapter, and contact information.

### **Chapter 2: Building and Land Use**

Provides the Ministry's processes for the review of land development applications; and the policies, classifications, setbacks, requirements, and review process of Building and Land Use Permit applications.

### **Chapter 3: Encroachments**

Provides the Ministry's policies and procedures related to encroachments within the highway right-of-way, including utilities, utility relocations, classifications, and cost responsibilities.

### **Chapter 4: Access Management**

Provides policies, standards, requirements, and best practices for access management, specific to the Ontario provincial highway transportation system. Outlines access connection types, stakeholder responsibilities, Entrance Permit requirements, classification systems, review processes, Highway Access Management Plans, and includes background information linking land use planning and development policies with Access Management principles.

### **Chapter 5: Signs**

Provides the policies, standards, and requirements for Sign Permit applications. Outlines sign types and classifications, setbacks, fee calculations, and other permit procedures related to Signs.

### **Glossary**

Contains definitions for key terms which are found within the HCMM.

### **Revisions Table**

Tracking sheet with information on amendments made to the manual, including date, section and a brief summary description of the change.

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# Highway Corridor Management **Manual**



## **Chapter 1: Permit Administration**

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## 1.1 Introduction

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### 1.1.1 Premise for Highway Corridor Management

The Ministry of Transportation of Ontario (the Ministry) is responsible for managing the Provincial Highway corridor network. Through the application of legislation, policies, and guidelines, the Ministry supports economic growth while ensuring the safe and efficient movement of people and goods across the province.

Responsible growth is supported by the two primary functions of Highway Corridor Management:

- Highway Corridor Management permit administration
- Review of land use planning matters (municipal planning, development applications). Refer to Chapter 2 for more information on Land Development Review

The authority for controls is prepared under the authority of the *Public Transportation and Highway Improvement Act*. This Act establishes that the Ministry may issue permits for the purpose of controlling and regulating buildings, land use, business establishments, encroachments, entrances, plantings, signs, and miscellaneous structures and installations on or within the Ministry's area of control, adjacent to a Provincial Highway. The Ministry may attach conditions to these permits as it deems necessary to achieve the intent of the Act. These controls are the responsibility of the Highway Corridor Management function.

When a construction project is being planned on or near a Provincial Highway, a Highway Corridor Management Permit may be required from the Ministry. A permit must be obtained before commencing any works within the Ministry's Permit Control Area. Permits are issued by the Ministry's Regional Highway Corridor Management Sections.

This chapter outlines permit administration with respect to buildings, land use, encroachments, entrances and signs, etc. within the Ministry's legislated area of control.

Procedures which apply generally to more than one chapter of this manual are outlined in this chapter. These procedures, in some cases, are common to all chapters. In other cases, they are common to more than one, but not to all chapters.

### 1.1.2 Highway Corridor Management Permit Types

There are four types of highway corridor management permits:

## **Building and Land Use**

An MTO Building and Land Use Permit is required for commercial or residential development, construction or renovation (e.g. house / barn / shed, well, swimming pool, above or below ground storage tanks, etc.) within the Ministry's Permit Control Area. Refer to Chapter 2 for more information on MTO Building and Land Use Permits.

## **Encroachment**

An encroachment is any installation or works, upon, under or within the limits of a Provincial Highway right-of-way placed by someone other than MTO. Encroachments may include signs, survey work, banners, acceleration and deceleration lanes, curbs, gutters, sidewalks, safety islands, sewers, pipelines, coaxial or fibre optic cable, or other works or structures that may during the construction, installation, or maintenance thereof, obstruct, cause material to be deposited upon, enter upon, take up, bridge over, tunnel under or in any way interfere with the land within the limits of a highway or the roadway or any structure forming a part of the highway.

Refer to Chapter 3 for more information on MTO Encroachment Permits.

## **Entrance**

An MTO Entrance Permit is required for the construction of an entrance to a Provincial Highway, a change in use of an existing entrance to a Provincial Highway, a change in property ownership, and/ or modification /alteration of an existing entrance to a highway. All entrances must be constructed to ministry standards. An entrance to a Provincial Highway must not be constructed or altered without an MTO Entrance Permit.

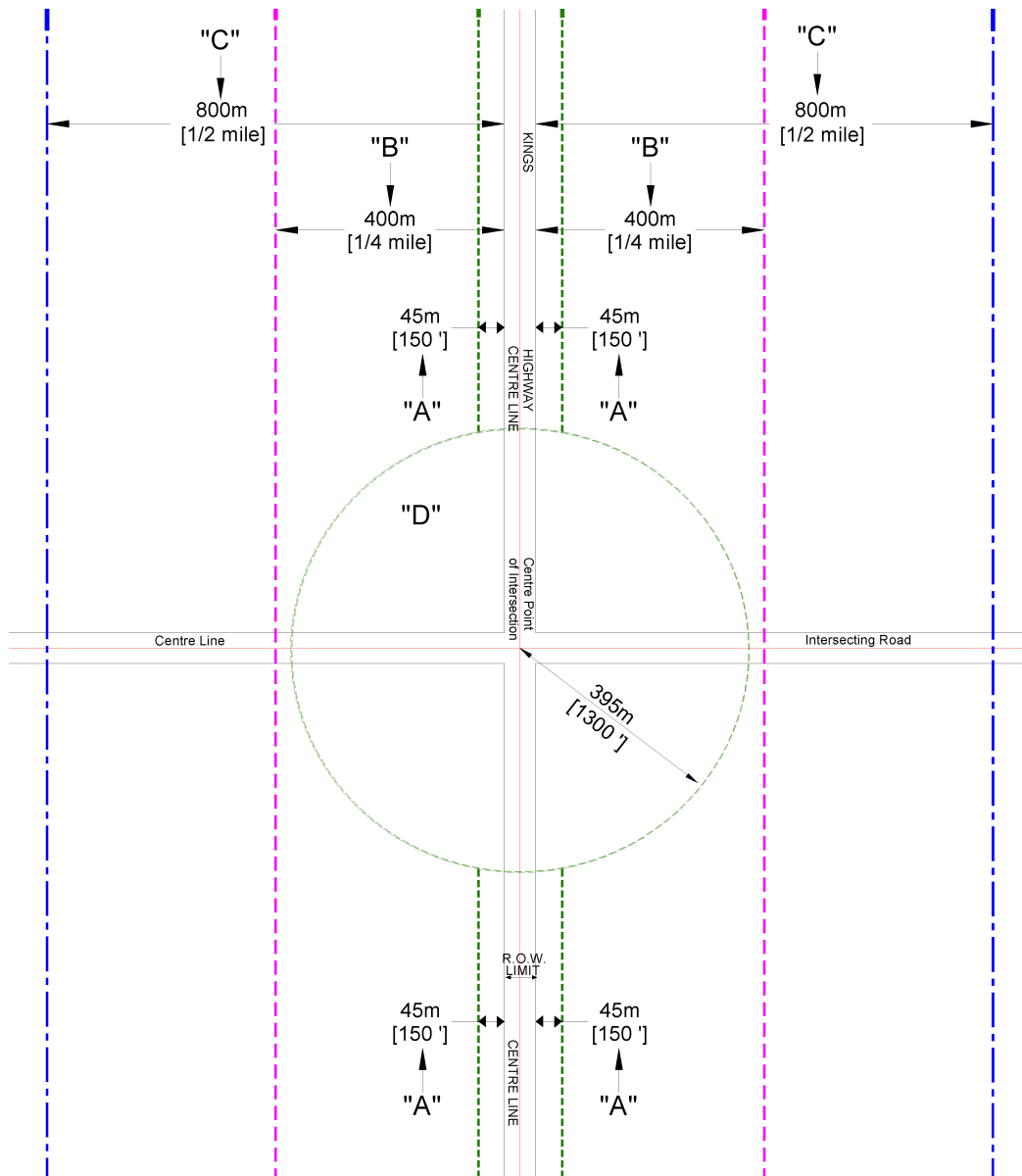
Refer to Chapter 4 for more information on MTO Entrance Permits.

## **Sign**

An MTO Sign Permit is required for construction or alteration of any sign or advertising device within the Ministry's Permit Control Area. There are certain restrictions as to setback, size and location, that are considered when issuing sign permits. Refer to Chapter 5 for more information on MTO Sign Permits.

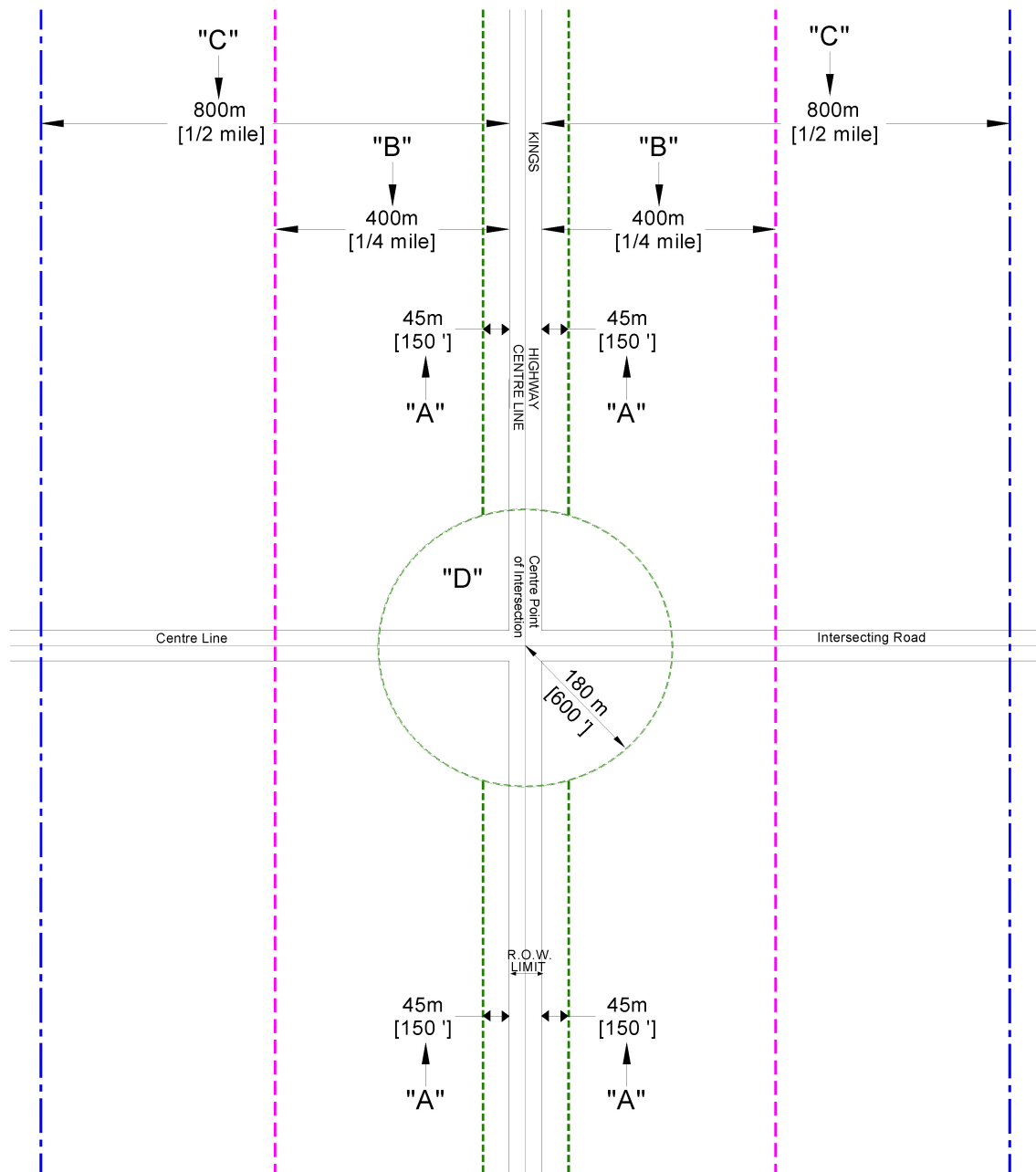


### 1.1.3 Permit Control Areas



- "A" – 45 m Control Area - placement of buildings or other structures, entrances or any road
- "B" – 400 m Control Area - placement of signs
- "C" – 800 m Control Area - use of any land for the purpose of large traffic generators
- "D" – 395 m Control Area - placement of buildings or other structures, entrances or any road within 395 metres of the centre point of an interchange / intersection

**Figure 1.1.1: Permit Control Area – Controlled Access Highway (CAH)**



- "A" – 45 m Control Area - placement of buildings or other structures, entrances or any road
- "B" – 400 m Control Area - placement of signs
- "C" – 800 m Control Area - use of any land for the purpose of large traffic generators
- "D" – 180 m Control Area - placement of buildings or other structures, entrances or any road within 180 metres of the centre point of an interchange / intersection

**Figure 1.1.2: Permit Control Area – King's Highway (KH)**

#### **1.1.4 Permit Application Process**

The Ministry's Highway Corridor Management System (HCMS) provides a streamlined service, including the following on-line features:

- Permit Application - for each of the four MTO Highway Corridor Management Permits. Drawings, plans, and other submission documents may be uploaded with the application
- Tracking a Permit Application – viewing the progress and status
- Payment of billing statement by credit card (Visa or MasterCard) or by Interac Online
- Receive a Permit electronically (pdf.)

HCMS can be accessed via the Ministry's public website. A paper-based version of the application form is available upon request from the Ministry.

Processing times vary based on the type and complexity of application. The Ministry's Highway Corridor Management Public Service Commitment standards are available on the Ministry's public website.

Permit Fees are determined according to the Ministry's annual fee schedule, which is also available on the Ministry's public website.

#### **1.1.5 Permit Application Requirements**

Applications from developers, municipalities, utility companies and the general public are reviewed to ensure they follow all Ministry policies, guidelines, and specifications.

When submitting applications for Highway Corridor Management permits, applicants should provide relevant drawings, plans, photos, supporting reports (i.e. Storm-water Management, Traffic Impact Study), or other related documents.

#### **1.1.6 Municipal Bylaws must not be Contravened**

If an MTO Permit contravenes a municipal bylaw or other legislation, the MTO Permit is void. Any such permit issued by the Ministry shall not relieve the owner of their obligations to meet the requirements of local bylaws, local zoning regulations and/or other legislation.

## 1.2 General Procedures

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### 1.2.1 Application Review

#### Application Authorization

An application made on behalf of a municipality, firm, or other organization must be signed by the officer responsible. The full name and address of the municipality, firm, or organization must appear on the application.

#### Review Considerations

The Regional Highway Corridor Management Sections review applications for works within the MTO Permit Control Area, including those of a complex nature or within the limits of an active work project, or when the land is (or will be) required by the Ministry. The Regional Highway Corridor Management Section shall consider each application, having full regard to this manual.

Ministry staff responsible for the review of an application must give full consideration to engineering factors, drainage, previous applications, planned or probable changes in highway alignment, grade, or designation before making a recommendation regarding permit approval.

Each applicant must be advised of the recommended and the approved changes in the right-of-way or in the grade of a highway. This ensures that the applicant may consider the effect of the proposed changes and/or the proposed limits on their proposed development.

When delay is anticipated or occurs in the processing of an application, the Regional Highway Corridor Management Section shall advise the applicant.

Standard Conditions are applied to each permit. Where the Regional Highway Corridor Management Section considers it advisable, they may apply supplementary conditions to a permit as they deem necessary, to specify additional responsibilities of the permit holder. The permit package, including the permit and permit conditions shall govern the intent and purpose of the works to which it applies.

In certain cases, a Regional Highway Corridor Management Section may advise that a separate agreement, or an addendum to a permit or agreement, be developed. In these cases, they shall prepare the document and consult with the Legal Services Office for recommendations.

#### Multiple Works

When the development of a property consists of work of more than one type, a separate application must be made for each type. For example, an applicant planning

to erect a building, construct an entrance, and erect a sign must submit three separate applications. The detailed information required for the proper consideration of each type of work must be listed on the respective applications. This is done to avoid confusion and delaying a project because one part does not meet the requirements of the Ministry.

However, in the case of a Building and Land Use Application, if an applicant plans to erect a building, garage and fence all related to one project, the applicant may submit one Building and Land Use Application, with an attached detailed plan of all the related works.

### **Multiple Highways or Geographic Areas**

The review of permit applications for works which are: adjacent to an intersection of two Provincial Highways: on different Provincial Highways in separate locations, or; spanning more than one MTO Region or geographic area, should be coordinated between the applicable Regional Highway Corridor Management Sections according to geographic area responsibility. If the applications are to be approved, separate permits may be issued for different locations or dates, or a single permit may be used to cover more than one location or date, based on the preferences of the respective regional specialty offices (i.e. Maintenance, Operations, Traffic, etc.).

### **Complex or Special Application Referral**

When the Regional Highway Corridor Management Section considers it advisable (due to the complex or special nature of an application), they may refer the application, accompanied by the plans, specifications and other information necessary to allow proper consideration of the application, with their recommendations to the Provincial Highway Corridor Management Section. Following this review, the Regional Highway Corridor Management Section shall process the application with due regard to the recommendations and instructions from the Provincial Highway Corridor Management Section.

#### **1.2.2 Property**

##### **Land Required by Ministry**

The Regional Highway Corridor Management Section shall, as a primary part of their investigation, determine whether the land involved is (or will be) required by the Ministry. If the land is required, they shall bring it to the attention of the Regional Property Office.

A permit shall be issued to the registered owner only if the acquisition of the land by the Ministry will be delayed indefinitely. In those cases, when it is decided to issue a permit pending acquisition of the land by the Ministry, the permit shall contain supplementary conditions which are considered necessary to properly protect the interests of the Ministry.



## Property Acquisition by Ministry

As part of the property acquisition procedure, it is recommended that Real Estate Officers maintain a liaison with Regional Highway Corridor Management Sections. Before land is purchased on behalf of the Ministry, the Real Estate Officer should discuss potential issues with the Regional Highway Corridor Management Section with respect to MTO Permit requirements. This will ensure that no agreements are made contrary to the *Public Transportation and Highway Improvement Act* or this manual. Through this consultation, the Real Estate Officer should review any valid permits, to ensure that any Property Purchase Agreement reflects the conditions of these permits. Any potential conflicts should be discussed prior to any final offer being presented to an Owner.

## Review of Property Purchase Agreements

Following execution, Regional Highway Corridor Management Section staff shall review the commitments from the Property Purchase Agreement, review the associated permit applications, and issue permits as required. Any special conditions required by the Ministry must form part of the conditions of the applicable permit(s) when issued.

### 1.2.3 Permit Approval and Validity

#### Permit Approval

The Ministry's Delegated Authority shall make the final decision on permit approval. When an application is denied, the applicant shall be advised of the reason for the denial.

#### Statute and Regulation Changes

If during the life of a permit any Acts are passed or Regulations adopted which affect the rights and privileges granted by that permit, those Acts and Regulations shall apply to that permit from the date they come into force.

#### Work To Start Within Six Months

Work on an installation or development for which a permit is granted must be started within six months of the date of issue of the permit, or the permit shall be void and cancelled by the Ministry.

When a permit is cancelled in accordance with this condition, the Regional Highway Corridor Management Section must notify the permit holder that the permit has been cancelled. Extensions may be granted on a case-by-case basis, if requested, based on site-specific circumstances.

## Changes to Existing Works

A new permit is required for any change to works under an existing permit. Any change to an existing installation must meet the current requirements of the Ministry. The permit application may be approved or denied at the discretion of the Ministry.

## Permit Expiry

Each permit shall continue in force until the date of expiry shown on the permit, unless an extension is authorized via correspondence from the Ministry to the permit holder.

If a valid permit is due to expire and no changes are proposed to the existing works, a new permit must be applied for, approved and issued prior to the original permit expiry date to ensure continuous validity.

## Permit Cancellation

When a permit has expired or been cancelled, and the owner wishes to maintain the existing works, they must submit an application for a new permit. The permit application is reviewed according to the current requirements of the Ministry, and may be approved or denied at the discretion of the Ministry. If those existing works remain in place for 30 days after the permit expiry date without a new permit, the original permit shall be declared void and cancelled, and the Ministry may take corrective action in accordance with the *Public Transportation and Highway Improvement Act*.

### 1.2.4 Legal Agreements

When the Regional Highway Corridor Management Section recommends that a legal agreement be executed in connection with a permit, or as a stand-alone agreement, they may forward the application, a legal description of the property, a list of supplementary conditions, and any other pertinent documents and information to the Legal Services Office. Legal Services shall advise of their recommendations, and of the execution, registration and other matters regarding the agreement, before the application is approved.

Each agreement is a complete document when executed and no additional permit is required. Failure to adhere to the conditions of an agreement may result in prosecution of the permit holder.

Each addendum must be executed before the Regional Highway Corridor Management Section issues a permit. Each such addendum, when executed, forms a part of the conditions of the permit. Failure to adhere to the conditions of a permit may result in prosecution of the owner and/or cancellation of the permit.

The Regional Highway Corridor Management Section shall retain a copy of the application and any pertinent reports, recommendations, agreements, or addendum.

## Legal Agreement Distribution List

One copy of any executed legal agreement, or addendum to such agreement, between an applicant and the Ministry, shall be distributed to the:

- Director, Legal Services
- Director, Internal Audit Services
- Head, Regional Highway Corridor Management Section
- Applicant

Additional distribution is optional, depending on the contents and the nature of the agreement.

### 1.2.5 Works Removal

The Ministry may, under Section 34 and Section 38 of the *Public Transportation and Highway Improvement Act*, give notice to the owner of land within the controlled area of a Provincial Highway requiring them to remove or alter any building, fence, gasoline pump, or other structure, or any road, tree, shrub, hedge, power line, pole line, transmission line, or other utility, sign, notice, advertising device which has been placed, erected, or altered in contravention of the *Public Transportation and Highway Improvement Act*.

Each such notice must be approved and signed by the Ministry's Delegated Authority.

## Compensation

The authority to settle claims for compensation is contained in Sections 12 and 14 of the *Public Transportation and Highway Improvement Act*.

When it is necessary to move, remove, or alter a building, fence, gasoline pump, sign or other structure, or a road, tree, shrub, or hedge, due to a change in the right-of-way limits of a highway, or for any other reason for which the Ministry is responsible and liable to the payment of compensation, the amount of the compensation to be paid to the owner shall be assessed by the Regional Property Section and/or Ontario Municipal Board. This shall be done in accordance with the provisions of Section 12 and 14 of the *Public Transportation and Highway Improvement Act* and the *Expropriations Act*.

When the object is not on a property purchased because of a change in the right-of-way of a highway, but is affected by the purchase of a property or a change in the right-of-way limits, or when it is necessary to move, remove, or alter the object for any reason for which the Ministry is responsible and liable to the payment of compensation, the amount of compensation shall be assessed by the Regional

Property Section and/or Ontario Municipal Board in accordance with the provisions of the *Public Transportation and Highway Improvement Act*.

### **Objects Interfering With Highway**

Subject to the payment of such compensation as agreed upon between the Ministry and the owner, or as is determined by the Ontario Municipal Board, the Ministry may direct the owner of any tree, shrub, bush, hedge, fence, signboard, gasoline pump, building or other object growing or standing on lands adjacent to the King's Highway, to remove it, where in the Ministry's opinion it might cause the drifting or accumulation of snow or be injurious.

## **1.3 General Policies**

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Applicants seeking information must be fully advised of the restrictions regarding buildings, land use, entrances, encroachments, and signs. Applicants considering the development of property within the controlled area must complete the applicable application forms for the proposed work, and submit these to the Ministry. The applicant shall be provided with an official decision regarding their proposal. The action taken on each application shall be recorded in the files.

### **Location of Building/Structures**

The Ministry must inform each applicant of the setback distances and other restrictions regarding the location of buildings, signs, or other works. It shall be the sole responsibility of the applicant to properly locate the building, sign or other works, in accordance with the approved setback distance and the permit conditions. The works should not be staked out or located by a Ministry employee.

### **Permit Required before Work Starts**

In accordance with sections 31, 34 and 38 of the *Public Transportation and Highway Improvement Act*, each person, firm or municipality must obtain a permit issued by the Minister before work commences.

### **Permit Conditions Must not be Contravened**

The Delegated Authority should take whatever action they consider necessary, according to the *Public Transportation and Highway Improvement Act*, when the conditions of a permit or an agreement have been contravened.

### 1.3.1 Parking and Stopping Requirements

#### Parking on Highway Restricted

The *Highway Traffic Act* makes it an offence to park a vehicle (attended or unattended) or leave it standing upon the traveled portion of a highway in a manner that may interfere with the movement of traffic, or the clearing of snow from the highway. The parking of a vehicle on the right-of-way of a highway by reason of habit or convenience when it is practical to park it elsewhere is not desirable. Persistent violators may be reported to the proper police authority for appropriate action.

#### Parking Accommodation

It shall be a consideration of Building and Land Use Permits that a parking area be provided and maintained, which is of sufficient size to accommodate the number of vehicles expected to visit a premises. The parking area must be off the right-of-way of the highway.

It is also a condition of each Building and Land Use Permit that parking and stopping facilities must be provided and maintained, which are entirely off the right-of-way, for vehicles loading or unloading, waiting to load or unload, entering or leaving, or waiting to enter or leave a building or property.

A permit must not be issued for a building or other development that will reduce the parking area on a property, or the clear vision at an entrance to a property or at an entrance to an adjacent property, below the minimum required by the Ministry.



## Parking Area Requirements

The following table shows the approximate number of cars that can be parked on the areas shown:

**Table 1.3.1: Parking Area Requirements**

Approximate Area	Single Row Parking	Double Row Parking	No. of Cars
914m / 3000 sq. ft.	11m x 26m (35' x 86')	21m x 13m (70' x 42')	10
1829m / 6000 sq. ft.	11m x 52m (35' x 171')	21m x 26m (70' x 84')	20
2743m / 9000 sq. ft.	11m x 78m (35' x 257')	21m x 39m (70' x 128')	30
3658m/12000 sq. ft.	11m x 105m (35' x 343')	21m x 52m (70' x 172')	40
4572m /1500 sq. ft.	11m x 131m (35' x 430')	21m x 64m (70' x 210')	50
9144m/30000 sq. ft.	11m x 262m (35' x 860')	21m x 128m (70' x 420')	100

One acre parks approximately 143 cars. One acre is equal to a lot 209' x 209'.

Parking requirements normally equal one-third (1/3) of the population capacity of a building or enterprise. For example, a theatre seating 600 persons requires not fewer than 200 parking spaces. A restaurant serving 300 persons during a peak period requires not fewer than 100 parking spaces, etc.

Approximate parking requirements for a dance hall, clubhouse, or similar establishment may be estimated by providing a parking space for one car for every 4 sq. ft. of floor space used for entertainment purposes.

### **1.3.2 School Bus Passenger Shelter**

The placing of private bus passenger or private school bus passenger shelters upon the right-of-way of a highway shall be prohibited. Private shelters may be erected

adjacent to the right-of-way of a highway, provided they do not encroach upon the right-of-way.

The placing of municipal or public bus shelters on the right-of-way of a highway (excepting staged freeways, staged expressways, freeways and expressways) shall be permitted, subject to the approval of the Ministry and the issuance of an Encroachment Permit.

Where shelters are erected, ample parking space must be provided entirely off of the traveled portion of the highway. Each shelter must be securely anchored to a foundation.

### **1.3.3 Newspaper Container or Receptacle - Individual Customer**

Newspaper receptacles or containers, such as a tube attached to a post, placed by a newspaper publisher or distributor for use of an individual customer, will be allowed on the right-of-way of all highways except staged freeways, staged expressways, freeways or expressways, providing that no message, other than the name of the newspaper appears on the receptacle or box. The receptacle or container shall not be restricted as to type or material. However, they should not be larger than 51 cm X 23 cm X 18 cm. The newspaper receptacle shall be set back from the pavement at least as far as the normal setback for rural postal boxes in the immediate area. Where there are no existing rural postal boxes in the immediate area, the newspaper receptacle shall be set back to the outside edge of the shoulder (beginning of shoulder rounding).

The Ministry shall assume no responsibility for any damage that may occur to these units. Each residence, farm, or business shall have no more than one receptacle or container.

### **1.3.4 Newspaper Dispenser**

Newspaper dispensing boxes shall not be permitted upon the right-of-way of a highway. They may be erected adjacent to the right-of-way of a highway, provided they do not encroach upon the right-of-way. Ample parking space must be provided entirely off the traveled portion of the highway. No message other than the name of the newspaper shall be affixed to or painted upon the above-mentioned newspaper dispenser.

### **1.3.5 Newspaper Box - Bulk Delivery**

Boxes or receptacles placed by a newspaper publisher or distributor for use as a bulk delivery point shall be prohibited upon the right-of-way of a highway. The restrictions regarding newspaper dispensers apply to bulk delivery boxes. Each such box must be securely anchored.

#### **1.3.6 Rural Mailbox - Individual**

The placing of individual rural mailboxes on a Provincial Highway is governed by the "Regulations for Rural Mail Delivery" as approved by the Postmaster General of Canada. The Ministry recommends a setback distance of 2 m for the standard wooden post from the edge of pavement, to enable maintenance and snow clearing of the highway. Anything other than the standard wooden post (i.e., steel posts, etc.) must be back 3 m from the edge of pavement. Anything less than 3 m must be on a wooden post.

#### **1.3.7 Rural Mailbox - Group**

The Ministry recommends a minimum setback distance for group mailboxes of 3 m back from edge of pavement, to provide adequate safe parking and pick-up of mail, and to enable maintenance and snow clearing of the highway. This setback shall not apply in the area of group mailboxes located on sidewalks adjacent to highways.

#### **1.3.8 Mailbox Receiver**

The Ministry requires mailbox receivers to be set back 3 m from the edge of highway pavement, except if the mailbox receiver is located on a sidewalk adjacent to a highway.

#### **1.3.9 Mailbox Identification and Enhancements**

The maximum signage allowed on the mailbox is one square foot. Any type of silhouette profile (e.g. bear, people) is not permitted.

## 1.4 Contact Information

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### 1.4.1 Corridor Management Office

Ministry of Transportation  
Corridor Management Office  
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301 St. Paul Street, 2nd Floor  
St. Catharines, ON L2R 7R4

Web: <https://www.ontario.ca/page/highway-corridor-management>

### 1.4.2 Regional Highway Corridor Management Sections

#### Central Region

##### Downsview Office

Ministry of Transportation  
Corridor Management  
159 Sir William Hearst Avenue, 7th Floor  
Downsview, ON M3M 1J8  
Phone: 416-235-5385  
Toll Free: 1-866-636-0663 (for area codes 905, 705, 519)  
Fax: 416-235-4267

#### East Region

##### Bancroft Office

Ministry of Transportation  
Corridor Management  
50 Monck Road  
P.O. Box 300  
Bancroft, ON K0L 1C0  
Phone: 613-332-3220 Ext. 214  
Toll Free: 1-800-554-0487  
Fax: 613-332-3751

##### Kingston Office

Ministry of Transportation  
Corridor Management  
1355 John Counter Boulevard  
Kingston, ON K7L 5A3  
Phone: 613-544-2220 Ext. 4107  
Toll Free: 1-800-267-0295  
Fax: 613-540-5106

Ottawa Office

Ministry of Transportation  
Corridor Management  
347 Preston Street, 4th Floor  
Ottawa, ON K1S 3J4  
Phone: 613-745-6841  
Toll Free: 1-888-362-1770  
Fax: 613-748-5297

Peterborough Office

Ministry of Transportation  
Corridor Management  
300 Water Street, South Tower, 1st  
Floor Peterborough, ON K9J 3C7  
Phone: 705-755-1318

Port Hope Office

Ministry of Transportation  
Corridor Management  
138 Hope Street North  
Port Hope, ON L1A 2P1  
Phone: 905-885-6381  
Toll Free: 1-866-224-0622  
Fax: 905-885-9273

**Northeast Region**

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# Highway Corridor Management **Manual**



## **Chapter 2: Building and Land Use**

**Corridor Management Office**  
Ministry of Transportation

**April 2025**

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## 2.1 Introduction

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### 2.1.1 Legislation

The Ministry of Transportation (the Ministry) reviews development applications under two sets of legislation, the *Planning Act* and the *Public Transportation and Highway Improvement Act*.

#### 2.1.1.1 The Planning Act

The *Planning Act* controls land use planning throughout Ontario and is administered by the Ministry of Municipal Affairs and Housing (MMAH). The Ministry is a commenting agency only on land development applications. Under the *Planning Act*, the Ministry only makes recommendations to the approval authority. The Ministry has no approval authority itself for *Planning Act* matters.

Frequently, land use changes under the *Planning Act* require a permit from the Ministry. Since land use and transportation are closely related, Ministry requirements can have a significant impact on land development decisions.

#### 2.1.1.2 Public Transportation and Highway Improvement Act

The Ministry administers the Provincial Highway system by the authority of this Act. This Act provides for the Ministry to issue building and land use permits for the placement or alteration of buildings, structures, and fences within the Ministry's Permit Control Area.

The Ministry is the final authority in the issuance of these permits. There is no appeal of Ministry decisions nor is the Ministry's decision subject to the review of any other agency or the Ontario Municipal Board (OMB) under this Act.

This control is designed to reduce the likelihood of relocating buildings or other structures due to future changes in a highway's right-of-way. Important considerations include the elimination of unnecessary expense and inconvenience to property owners and the public.

Applicants are encouraged to locate buildings to reduce the possibility of creating highway maintenance problems. They are also advised of the advantages of locating buildings and structures away from traffic noise and vibrations.

The legal basis for building and land use control is established in Sections 34 (King's Highway) and 38 (Controlled Access Highway) of the *Public Transportation and Highway Improvement Act*.

- 34(2) Despite any general or special Act, regulation, by-law or other authority, no person shall, except under a permit therefor from the Minister,
- (a) place, erect or alter any building, fence, gasoline pump or other structure or any road upon or within 45 metres of any limit of the King's Highway or upon or within 180 metres of the centre point of an intersection;
  - (b) place any tree, shrub or hedge within 45 metres of any limit of the King's Highway or within 180 metres of the centre point of an intersection;
  - (d) use any land, any part of which lies within 800 metres of any limit of the King's Highway, for the purposes of a shopping centre, stadium, fair ground, race track, drive-in theatre or any other purpose that causes persons to congregate in large numbers;
  - (e) sell, offer for sale, or display produce, goods, or merchandise upon the King's Highway.

- 38(2) Despite any general or special Act, regulation, by-law or other authority, no person shall, except under a permit therefor from the Minister,
- (a) place, erect or alter any building, fence, gasoline pump or other structure or any road upon or within 45 metres of any limit of a controlled-access highway or upon or within 395 metres of the centre point of an intersection;
  - (b) place any tree, shrub or hedge within 45 metres of any limit of a controlled-access highway or within 395 metres of the centre point of an intersection;
  - (c) sell, offer or expose for sale any vegetables, fruit or other produce or any goods or merchandise upon or within 45 metres of any limit of a controlled-access highway or within 395 metres of the centre point of an intersection;
  - (d) place, erect or alter any power line, pole line or other transmission line within 400 metres of any limit of a controlled-access highway;
  - (f) use any land, any part of which lies within 800 metres of any limit of a controlled-access highway, for the purposes of a shopping centre, stadium, fair ground, race track, drive-in theatre or any other purpose that causes persons to congregate in large numbers.



### **2.1.2 Provincial Review**

The Provincial Highway Corridor Management Section co-ordinates the review of applications which are circulated under the Ministry of Municipal Affairs and Housing (MMAH) One Window Planning Service. Applications include official plans, secondary plans, official plan amendments related to policy, and Niagara Escarpment and Parkway Belt West applications.

Refer to Chapter 1 for Provincial Office contact information.

### **2.1.3 Regional Review**

All site-specific zoning by-laws and Official Plan amendments, along with site plans, subdivisions and consents. are handled by the Ministry's Regional Highway Corridor Management Sections.

Refer to Chapter 1 for Regional Office contact information.

## **2.2 Official Plans**

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### **2.2.1 Function**

Official plans (OP) are prepared by local and regional municipalities pursuant to the provisions of Section 16 of the *Planning Act*. They are a statement of municipal land use policy, and usually set out strategies that the municipality intends to pursue for a period of approximately 20 years, with a review every five years. Official plans generally cover the entire municipality, and provide general land use designations such as residential, commercial, industrial, rural, etc. Municipal official plans shall be consistent with Provincial Policy Statements. Municipal zoning bylaws must conform to the municipal official plan.

The Ministry has produced a guideline for municipalities and other stakeholders entitled "MTO Guideline for Municipal Official Plan Preparation and Review". This guideline is a helpful tool in understanding the Ministry's interests in municipal official plan review. A copy of the guideline is available upon request.

### **2.2.2 Pre-consultation Circulation Process**

The draft official plan is circulated from the planning approval authority (the municipality, planning board and/or the MMAH) to the Ministry for review and consideration. It gives the Ministry the opportunity to review the document, to ensure that the policies contained within the OP do not conflict with the plans, mandate, and policy direction of the Ministry as it relates to land use planning. There is a legislated 60-day time frame for reviewing all official plans, and the Ministry is committed to replying within that time as signatories of the One-

Window Protocol with the MMAH.

An official plan can be circulated from a number of sources, including the local planning approval authority, a consultant working on behalf of a municipality (Municipal Plan Review – MPR) or the MMAH (One-Window Planning Service – OW). The origin of the official plan document can be dependent upon where the plan is in the approval process. For instance, in its first draft stage, it can originate from a consultant or the local planning approval authority (i.e. municipality), while in later stages, when the local municipal council or planning board has approved it, the MMAH will circulate the council- approved OP to all One-Window partner ministries.

If the local planning approval authority sends the preliminary draft OP plan directly to the regional office rather than to Head Office, the plan should be directed to the Corridor Management and Property Office (Head Office) for formal review. The Head Office Corridor Management and Property Office is responsible for providing the official response on all Official Plans.

### **2.2.3 Circulation Process**

Under the One-Window Planning service, MMAH circulates the plan (two copies) to all the partner ministries including the Ministry's Head Office (Corridor Management and Property Office) and the Ministry's Regional Office to ensure that the plan complies with all provincial interests and concerns. Head Office staff enter the plan in their database. Upon receipt of a plan, the Regional Highway Corridor Management staff decides what offices in their region should review the plan. Head office will circulate to other head offices (i.e. Urban Planning Office) if necessary. Once the circulation is completed and the regional offices have provided their response to the regional corridor management office, a letter is prepared by regional corridor management staff. It is sent back to head office where staff review the plan in detail and prepare the Ministry's official position on the plan.

MMAH staff receive all the comments from the various agencies and partner ministries and prepare a "One-Window" provincial response to the municipality. The response summarizes all of the modifications that are required to the OP, based on the concerns received from the circulation. A copy of the MMAH response letter is sent to all of the agencies and ministries to ensure that all concerns have been addressed appropriately by MMAH. If the Ministry has concerns with their response, it will notify MMAH staff immediately.

## **2.2.4 The Ministry's Interests for Official Plans**

### **2.2.4.1 Impact of Development on Highways**

At an early stage, the local planning approval authority, in co-operation with the Ministry, should assess whether the existing Provincial Highways and intersections/interchanges within their planning area can adequately accommodate any anticipated growth, particularly in areas that are slated for new development.

It is the Ministry's practice to advise municipalities that prior to the approval of official plans, major official plan amendments (secondary plans), and subdivisions, the Ministry may require them, as part of the transportation component of their official plan review, to address the need for highway improvements and the impacts of developments on both the provincial and the local road network. It is advisable that the Ministry be involved in the early stages of the development of the overall transportation plan, commencing with the preparation of the terms of reference.

It is imperative that the municipality and the Ministry discuss the implications of any future development on Provincial Highway infrastructure, and come to a mutually acceptable strategy.

If highway improvements are required to accommodate the growth, arrangements for financing must be discussed with the Ministry to avoid future problems.

### **2.2.4.2 Reference to Provincial Highways in Official Plan Text and Schedules**

All existing highways and interchanges/intersections under the jurisdiction of the Ministry must be accurately shown on all land use schedules of the official plan. All highway routes and their numbers must be legible and clearly visible.

All highways must be clearly identified as Provincial Highways (and not as arterials) on the legends of all schedules in the official plan. Regardless of the function of the Ministry's highways, they should be referred to on all schedules as well as in the text of an official plan as Provincial Highways. In the document, it must be clear to the public that these routes are under the jurisdiction of the Province of Ontario, and that the requirements of the Ministry will apply.

All schedules must accurately reflect the transfer of Provincial Highways from the Province's jurisdiction to other jurisdictions.

All proposed Provincial Highways and intersections, whether initiated by the Ministry or by another jurisdiction, must be shown on all land use schedules. The schedules must clearly indicate the exact location of proposed routes that have received an environmental assessment approval.

In some cases, municipalities propose interchanges along Provincial Highway routes that are not planned by the Ministry. In these cases, the municipality becomes the proponent of the interchange, and these interchanges must be identified on the legend as proposed by the municipality and not the Ministry. The legend should indicate that the location as shown has not been approved by the Ministry or finalized, by using the word "possible". The municipality should also show the Ministry study areas where new routes and/or by-passes for Provincial Highways are underway. These study areas provide notification in the official plan that new routes are contemplated, and that details can be obtained from the Ministry.

If a Provincial Highway is known locally by another name, the Ministry suggests that both the local name and the highway number be shown.

Since Provincial Highways are under the jurisdiction of the Ministry and not the local municipality, highway geometrics such as right-of-way (R.O.W.) width, number of lanes, etc. should not be addressed or mentioned in official plans. Rather, the plan should indicate that the R.O.W. widths for a Provincial Highway are determined by the Ministry.

Each official plan should include the following policy under "General Provisions" Section of the Plan to notify landowners adjacent to a Provincial Highway of the mandate of the Ministry:

"In addition to all the applicable municipal requirements, all development located in proximity of a Provincial Highway within the Ministry's permit control area, is also subject to approvals of the Ministry of Transportation".

Direct access to a Provincial Highway will be restricted. Development is encouraged to utilize local roads and service roads wherever possible. Where access is a possibility, it will only be considered to those properties that meet the minimum safety and geometric requirements of the Ministry.

Any new areas in the municipality identified for future development that are located in proximity of a Provincial Highway and/or interchange area will be subject to the access policies of the Ministry, and Ministry requirements for access to a highway. Direct access will be discouraged and often prohibited.

Any new proposed street entrances to a Provincial Highway must meet the minimum spacing requirements of the Ministry. Any new roads shown on schedules of the official plan must meet these spacing requirements. The

municipality should be aware that proposed street locations are conceptual only. Exact locations of new roads must be approved by the Ministry at the time of their submission, on a plan of subdivision or secondary plan.

Refer to Chapter 4 for more information on Access Management and intersection spacing requirements.

#### **2.2.4.3 Subdivisions**

In the section of the official plan dealing with plans of subdivision, the Ministry requests a policy indicating that, where land is being developed by a plan of subdivision abutting a Provincial Highway, the layout of the subdivision should be designed such that the lots back onto the Provincial Highway, and front onto an internal street. Subdivision layouts where a local road runs parallel to a Provincial Highway with no lots between the local road and highway often restrict the Province from effectively acquiring land for future highway purposes. Ideally, any lots that back onto a Provincial Highway should be rear yards.

#### **2.2.4.4 Outdoor Storage**

The Ministry is generally concerned with the appearance of outdoor storage and loading areas, usually associated with commercial and industrial land uses located adjacent to Provincial Highways. Policies should ensure that outdoor storage and loading areas are visually screened, or appropriately located so as to not distract the travelling public.

#### **2.2.4.5 Home Occupations, Home Industries, Home Businesses**

For those lands adjacent to Provincial Highways, home-based businesses (home occupations, home professions and home industries) should not be permitted if they are commercial in nature. The Ministry is concerned with the amount of traffic that could potentially be generated from a use that would be considered a commercial use that should rightfully be located on lands zoned commercial.

A statement should be included in the section of the official plan dealing with home-based businesses, indicating that there shall be no exception to prohibiting the conversion of home-based businesses to future commercial zoning for such uses.

#### **2.2.4.6 Highway Access from Lakefront Properties**

The Ministry's policy is to allow only one highway entrance for each lot of record. The Ministry will not allow a second entrance for a property owner whose land lies beyond the permit control area, and who seeks access to a

Provincial Highway via another property owner's entrance.

All municipalities with lakefront properties should be aware that the Ministry will restrict back lots from using other property owners' entrances, and will require that new cottages or developments only be permitted to access the Provincial Highway from existing public roads, or new public roads that meet the Ministry's access management practices and principles.

Refer to Chapter 4 for more information on Access Management.

#### **2.2.4.7 Wayside Pits and Quarries and Portable Asphalt Plants**

In keeping with the applicable sections of the Provincial Policy Statement (PPS) pertaining to Wayside Pits and Quarries, Portable Asphalt Plants and Portable Concrete Plants, every official plan with a rural component, and those urban official plans with large rural/agricultural areas, must contain the following general statement from the PPS:

"Wayside pits and quarries, portable asphalt plants and portable concrete plants used on public authority contracts will be permitted, without the need for official plan amendment, rezoning, or development permit under the *Planning Act* in all areas, except those areas of existing development or particular environmental sensitivity which have been determined to be incompatible with extraction and associated activities."

The municipality should be aware that the Ministry requests that wayside pits, quarries and portable asphalt plants be identified as permitted uses in any rural and/or agricultural designation.

The provisions of the *Aggregate Resources Act* apply to Crown land and any lands designated under this Act.

#### **2.2.4.8 Alternative Modes of Transportation**

In keeping with the PPS, the official plan should provide for alternative modes of transportation, such as public transit, cycling, and walking. In addition to a comprehensive transit policy, the plan should outline how the alternative modes will be supported.

The implementation guidelines of the PPS and the Ministry's "Transit-Supportive Guidelines" outline a variety of support measures, including higher densities, compact development, mixed uses, supportive subdivision design, appropriate spacing of arterial and collector roads, and integration of transportation modes, etc. These documents should be consulted in the preparation of the official plan, and can be found on the Ministry's public website.

The plan should not contain policies that commit the Ministry to providing provincial transit services (such as GO service) or to the use of provincial facilities for transit and other uses (e.g. exclusive bus lanes, HOV lanes, or bicycle lanes on the highways), unless these works have been approved by the Ministry.

Since the bicycle is recognized as an alternative mode of transportation, official plans for urban areas and selected tourist corridors must contain policies in support of cycling. The extent and level of detail of such policies will vary from one community to another, and would depend on local circumstances and commitment. The official plan should contain a general statement, such as the following:

“Bicycling is recognized as an alternative mode of transportation that can play a positive role in improving mobility and a quality of life as part of a balanced transportation system.”

Additional provisions may include:

“Cycling considerations will be incorporated into the land use and transportation plan for this community. A comprehensive community bicycle plan will be developed. New development proposals will be required to incorporate bicycle facilities.”

The main effort towards successful integration of the bicycle into the overall transportation system must come from the municipalities.

## 2.3 Secondary Plans and Major Official Plan Amendments

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### 2.3.1 Function

Secondary plans are official plans for a specific area of a municipality. Most often, secondary plans are prepared to provide land use details for a newly developing area of the municipality. A series of background studies will normally have been completed to document the various constraints and opportunities of developing the subject area. A secondary plan is incorporated into the official plan as an official plan amendment.

A major official plan amendment is one that changes policy for the entire municipality, or has a widespread impact on land development.

### 2.3.2 Process

A secondary plan can be received from a municipality that has approval



authority (MPR) or from MMAH through the One-Window Planning System.

When a secondary plan amendment for an area or a major official plan amendment is undertaken, the municipality (without approval authority) must pre-consult with the approval authority (MMAH) in order to determine provincial requirements. The municipality then prepares and adopts the document. The approval authority then approves the document. Where the municipality has been exempted, no approval is required. The approval authority may consult with interested agencies prior to the approval of the amendment. The approval authority has the right to modify the amendment if necessary.

The Corridor Management and Property Office is the Ministry lead in the review of secondary plans and major official plan amendments. When a plan is received it is circulated to the Regional Office for input before a response is provided to the municipality or MMAH. If the Regional Office is circulated directly by the approval authority, comments and the document should be forwarded to Head Office for a formal Ministry reply.

### **2.3.3 Ministry Interests**

For a secondary plan associated with a proposed new area for development, the Ministry requires that adequate transportation background is provided so that the impact of the developing community on the Provincial Highway system can be measured and the cost of required improvements can be identified. A traffic impact study is normally requested by the Ministry to determine the impact on the Provincial Highway system.

The secondary plan should make provisions to ensure that road improvements required as a result of growth are constructed.

Major official plan amendments should be reviewed with respect to their impact on Ministry interests such as wayside pits and quarries, portable asphalt plants, access management and highway capacity. Conditions cannot be attached to the approval of official plan amendments (Secondary Plans). It is appropriate to request modifications of an official plan amendment if necessary.

## **2.4 Site-Specific Official Plan Amendments**

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### **2.4.1 Function**

Site-specific official plan amendments are prepared by municipalities to permit the development of individual properties usually at the request of the landowner. These amendments are needed when the official plan designates the subject property for another use or applies other standards for the land. Site-specific official plan amendments tend to be highly development specific and are usually combined with or followed by a rezoning and a site plan



application.

#### **2.4.2 Process**

A site-specific official plan amendment is adopted by the municipality and is usually approved by an upper tier municipality unless the municipality is exempt from approval. Municipalities are encouraged to consult with affected agencies before undertaking an amendment and must pre-consult with the approval authority.

Site-specific official plan amendments are directed to the Regional Highway Corridor Management sections of the Ministry for review and response to the municipality. The Regional Highway Corridor Management Section will circulate official plan amendments to the Area Office and to their Traffic and Planning and Design offices if required in order to fully evaluate the proposal and its effect on the Provincial Highway system.

While the Ministry normally would not object to a site-specific land use change proposed by a municipality, the Ministry's response should indicate:

- whether access to the highway is available for the proposed use
- whether a traffic impact or drainage study is required in order to assess the impact of the proposal and identify required improvements
- what permits are required from the Ministry before the development can proceed
- what setbacks are required for any proposed new structures.

#### **2.4.3 Ministry Interests**

The Ministry's interest in a site-specific official plan amendment is limited to whether or the not access can be provided and what, if any, highway improvements are required. The Ministry will also wish to verify whether the proposed development will conflict with any future expansion plans of the Ministry.

Additional comments regarding drainage and permit requirements are for information only. Conditions cannot be applied to official plan amendments. It may be appropriate to request modifications to the official plan amendment, or if necessary, the amendment can be appealed by MMAH to the Ontario Municipal Board at the request of the Ministry. All appeals to the Board must be discussed with the Corridor Management and Property Office before proceeding with the appeal process and prior approval must be obtained from the Ministry's Assistant Deputy Minister (ADM).

## 2.5 Zoning By-Laws

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### 2.5.1 Function

Local municipalities adopt zoning by-laws pursuant to Section 34 of the *Planning Act*. A zoning by-law may be a comprehensive by-law, which covers the entire municipality or may be an amendment that alters a requirement for the entire municipality. It may also be site-specific by-law affecting one property only.

Zoning by-laws are very specific, detailing permitted uses, lot sizes, setbacks, frontages, building sizes, parking requirements, etc.

Zoning by-laws come into force on the day that they are adopted unless they are appealed to the Ontario Municipal Board. All land uses must conform to the zoning by-law unless they existed legally prior to the enactment of the by-law.

While the official plan sets out the municipality's policies for future development, the zoning by-law is the tool for putting the official plan into place. The requirements and standards laid out in the by-law are specific and enforceable. Construction or new development that does not comply with a zoning by-law is not allowed, and the municipality will refuse to issue a building permit. Those developments that proceed without obtaining the necessary municipal zoning and if applicable, site plan approvals will not be issued a Ministry Building and Land Use permit. Ministry permits must be granted before the issuance of all municipal permits to ensure compliance with the PTHIA. The Ministry will not issue permits for lands that have not received municipal approval in principle first.

A comprehensive zoning by-law divides the municipality into different land use zones with detailed maps. The by-law then specifies what land uses will be permitted in each zone and the required standards in each zone. The zoning by-law not only implements the objectives and policies of the official plan, but also provides a legal avenue of managing land and future development within the municipality.

### 2.5.2 Process

The comprehensive zoning by-law is prepared by the municipality or their consultant and circulated to the affected agencies and ministries for their review. In most cases, the Ministry will have an opportunity to review the by-law in the draft stage before Council has adopted it. There is no regulation in the *Planning Act* that requires a municipality to circulate their zoning-by-law to the Ministry. However, if the Minister of Municipal Affairs provides the municipalities with a request in writing, the by-law will be circulated to the

Ministry.

On occasion, the comprehensive zoning by-law is circulated in conjunction with the official plan. The Province is usually given 20 days from adoption to provide comments back to the municipality on comprehensive zoning by-laws.

Comprehensive zoning by-laws must be forwarded to the Corridor Management and Property Office. Only those offices within the Ministry that have an interest should be circulated (i.e. Property, P&D, etc.) for their review.

The Regional Property Section should review the by-law to ensure that all Ministry lands are zoned appropriately. Once the Regional Highway Corridor Management Sections' circulation process is completed, the comments are forwarded to the Corridor Management and Property Office. The Ministry's comments are sent to the MMAH so that they can prepare their "One-Window" provincial response to the by-law. Refer to the Citizens' Guides to Land-use Planning on the MMAH public website for further information on the One-Window Provincial Planning Service. The by-law is then revised accordingly, and forwarded to Council for their consideration and subsequent adoption.

### **2.5.3 Ministry Interests**

The following outlines some general areas of interest to the Ministry in the comprehensive zoning By-law:

- All mapping and schedules included in the by-law should clearly identify all Provincial Highways and interchanges. Highway numbers should be clearly visible and legible.
- The zoning categories and their provisions of the lands located adjacent to Provincial Highways and the zoning categories of the by-law.
- Any new areas zoned for commercial or industrial along highways where development has not occurred, and where Ministry access policies will apply as they relate to the classification of the highway.
- Provisions in the by-law that deal with home based businesses (home occupations, home industries and home professions) to determine whether any of the permitted uses listed are considered commercial and may conflict with Ministry requirements permitted adjacent to the highway. For instance, home occupations are generally permitted in the RU zones. If a wood working shop, for example, is considered a home occupation, the Ministry may have a concern with this use, particularly with the types of slow moving vehicles that deliver the wood and are accessing the site from the highway.
- Provisions in the by-law for loading and outdoor storage areas (usually associated with commercial and industrial zones) to determine if the by-

law protects these areas visually from our highways.

- Under “General Provisions” the following provisions should be included: “in addition to all applicable municipal requirements, all proposed developments located in proximity of a Provincial Highway, within the Ministry’s permit control area will be subject to the approval of the Ministry. In addition, owners should be aware that Ministry permits must be obtained prior to any construction being undertaken.”
- Provisions in the by-law for wayside pits and quarries as well as portable asphalt plants and portable concrete plants, and the zones in which these facilities are permitted. The by-law should be consistent with the official plan policies and applicable sections of the Provincial Policy Statement that require these facilities to be permitted in all zones except built-up areas and environmentally sensitive areas, without amendment to the zoning by-law or local official plan.
- All setback and frontage requirements in all zones abutting a Provincial Highway are to be consistent with those of the Ministry’s requirements. A request that a general statement be included in the by-law indicating that properties located adjacent to a highway will be subject to the requirements of the Ministry, will serve as a notice that the requirements of the Ministry supersede those of the municipality.
- A provision ensuring that Ministry’s expropriations do not impact upon the conformity of a property to existing zoning standards. The provision should read as follows:

“Notwithstanding any other regulations of this By-law, where a use, building or structure was legally established on a lot, and such lot was subsequently altered as a result of a project of a public authority (such as a road construction project) or by expropriation of municipal, provincial or federal acquisition thereby causing the use, building or structure to contravene any regulations of the By-law, the said use, building or structure shall be deemed to comply with the By-law and may be enlarged, extended, reconstructed, repaired or renovated provided that any regulations which are currently not met, are not further contravened and that all regulations which are complied with, are not contravened by any works undertaken.”

## 2.6 Subdivisions

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### 2.6.1 Function

An applicant submits a draft plan of subdivision pursuant to Section 50 of the *Planning Act* in order to subdivide land into smaller parcels. The draft plan of subdivision is submitted to the approval authority. The approval authority may consult with the affected agencies for comment prior to approval. Where there

is no municipal approval authority, a subdivision would be circulated by MMAH. Municipalities are aware that Ministry approvals are required for any development located within our area of permit control.

### **2.6.2 Process**

All draft plans of subdivisions that abut Provincial Highways or are located within the Ministry's area of permit control are forwarded to the Regions from the approval authorities for their review and comment. The Ministry's "A Guideline For Highway Improvements Associated With Development" gives clear direction on who is responsible for highway improvement costs. This guideline can be found on the Ministry's public website.

### **2.6.3 Subdivision Definition**

When a parcel of land is divided into two or more lots, the property is being subdivided. A plan of subdivision or a consent/severance are the two processes that can divide property. Generally (but not always), approval of a plan of subdivision is required to subdivide land into more than four parcels, from either the Ministry of Municipal Affairs and Housing or a municipality that has been assigned or delegated the minister's approval powers under the *Planning Act*. The approval authority will be the ultimate authority for deciding the process to be followed for the division of property. The Ministry is not the approval authority, but a commenting agency. Sections 50-57 of the *Planning Act* deal with subdivisions.

Subdivision approval assures that:

- the land is suitable for the proposed use
- the proposal conforms to the municipal official plan as well as to provincial legislation
- the community is protected from inappropriate development.

The proponent (owner or consultant) submits the draft plan of subdivision, along with accompanying material and information for a complete application to the approval authority. The approval authority is all regional/district municipalities. In certain counties in southern Ontario and towns/cities that do not form part of a county for municipal purposes, the councils are the approval authority for draft plans of subdivision. Upper-tier municipalities (counties, regional or district municipalities) may further delegate the approval authority to the local municipalities.

In all other areas, the Ministry of Municipal Affairs and Housing is the approval authority, but may delegate its approval authority to municipalities, municipal planning authorities, or planning boards in northern Ontario. Staff of the

approval authority analyzes the plan to determine whether it is acceptable or suitable for processing. The applicant, under Section 51 (24) of the *Planning Act* provides the approval authority with certain prescribed information and material. The plan must show boundaries, location, width and names of highways, a key plan, proposed use of lots, existing use of adjoining lands and contours, etc.

Once the municipal planning staff has determined the plan's acceptability, the approval authority may consult with agencies, boards, authorities, and the Ministry before making a decision. It is important to remember that there is no legislative base in the *Planning Act* that requires an approval authority to consult with the Ministry, even for those developments abutting a Provincial Highway. Municipalities are encouraged to circulate any draft plans of subdivision, which are within the Ministry's Permit Control Area, to the Ministry for review to ensure consistency with Ministry Permit requirements early in the planning process.

Once the approval authority accepts a plan, a decision on the plan must be made within 180 days (under the *Planning Act*). The 180-day timeframe is legislated, with no extensions permitted beyond that time. If the approval authority cannot reach a decision within 180 days, the plan may be referred to the Ontario Municipal Board.

The review time for the Ministry may be limited to 30 days. The approving authority will make that determination, not the Ministry. The Ministry will adhere to the time lines given in the circulation letter.

#### **2.6.4 Draft Approval**

The approval authority gives consideration to all of the comments received from the various agencies, and decides whether to "draft approve" or refuse the plan of subdivision. The approval authority must provide a written notice of its decision to the applicant and any person requesting notification, within 15 days of that decision. When a notice of decision is given, a 20-day appeal period follows.

The conditions of draft approval will be forwarded to the Ministry. The conditions must be checked to ensure that the wording of the conditions is correct and in keeping with what the Ministry requested. The conditions should clearly reflect those stated in the Ministry's initial response letter to the approval authority. If the conditions have been reworded or if conditions that do not reflect the position of the Ministry have been added, the approval authority must be notified immediately to request that the conditions be revised. Once the conditions have been revised, the revised copy should be forwarded to the Ministry.

Once the plan has been draft approved, the conditions of draft approval will accompany the decision. The conditions of draft approval outline all of the requirements the applicant must complete before the plan can receive final approval. A draft plan cannot be partially approved. All of the conditions must be completed to the satisfaction of each of the agencies.

Draft approval amounts to a commitment to proceed with the approval of the subdivision once all the conditions of draft approval have been met. Lots may be offered for sale after draft approval, but can only be sold after the plan of subdivision has been registered.

Upon draft approval, it is incumbent upon the owner to satisfy the requirements of the Ministry. Ministry staff must work with the proponent of the plan to ensure that the process is proceeding as expeditiously as possible.

#### **2.6.5 Submissions of Revised Plans**

The Ministry's request for revisions to the draft plan may not result in a revised draft plan being submitted to the Ministry for its review. However, the Ministry's requirements (e.g. highway widenings and 0.3 m reserves) must be shown on the draft final M-Plan. This must be submitted to the Ministry before it issues a clearance letter to the approving authority.

If a revised draft plan does not indicate the changes that the Ministry requested, the consultant will be asked to submit a further revised plan, showing the Ministry's revisions. This would only be done if the Ministry requests that property be shown for future highway purposes. The draft M-Plan must accurately reflect all of the Ministry's requirements.

Once the plan is received, it must be dealt with in a timely fashion. Day one of the 180 day approval period begins on the day when the approval authority makes the decision to process the plan.

#### **2.6.6 Common Ministry Interests**

- Property Requirements
  - New Rights-of-Way (new designated routes from Highway Planning)
  - Widening of Existing Highways
  - 0.3 m Reserves
  - Daylighting Triangles
- Drainage/Stormwater Management Plans
- Traffic Impact Studies/Highway Improvements



- Access Management
- Geotechnical Requirements
- Legal Agreements
- E.A. Requirements

### **2.6.7 Standard Conditions of Draft Approval**

#### **1. Dedication of New ROW/Highway Widening**

The circulation of subdivisions and consents to our Ministry allows the Ministry the opportunity, under the *Planning Act*, to obtain property required for future highway purposes. This is the Ministry's one opportunity to carefully assess its future requirements for property. It is very important that the Ministry determine its future property needs, and define the limits of the required property at this opportunity. Land for future property requirements could include a widening on an existing highway or land required for a new highway.

If available, future property requirements will be clearly identified on the plan by the P&D project manager/engineer responsible for that stretch of highway. The plan delineating the future property requirements must accompany the response letter to the approval authority.

Should the Ministry's requirements for future property change within the course of the processing of the plan, every effort must be made to inform the approval authority of these changes. Technically, any revisions to the Ministry's property requirements can be submitted to the approval authority up until final approval of the plan of subdivision. Every effort will be made to ensure that the Ministry's property requirements are correctly identified at the beginning of the process.

If the Ministry is undertaking a highway planning study and the future requirements cannot be determined upon receipt of the subdivision, it is incumbent upon Ministry staff to advise the municipality of the study and give the municipality an estimated time of when the study will be completed.

#### **2. Visibility Triangles**

When a draft plan of subdivision shows a proposed street entering a Provincial Highway, visibility triangles must be shown at the intersection to the highway, to ensure that the appropriate visibility can be achieved. If they are not shown on the draft plan, the Ministry will advise of the requirements of the sight triangles that are to be shown on the final plan and be dedicated.



### **3. 0.3 m Reserve**

The request for a 0.3 m reserve is made when the Ministry needs to restrict direct access from the subject lands to the highway.

A 0.3 m reserve is never requested or taken on a Class 1 and 2 (CAH) or on ramp areas where access would never be granted.

If it is the intention of the Ministry to permit access from a commercial/ industrial block on a subdivision to the highway, a 0.3 m reserve can be placed on either side of the approved entrance location to prevent future access to the highway. MTO will often place a 0.3 m reserve on a commercial block of land (with the exception of an entrance) that is part of a subdivision.

### **4. Stormwater Management Plan/Report**

Stormwater management plans/reports are generally required by a number of agencies and therefore are prepared for most subdivisions. The Ministry's interest in reviewing such plans is when it is evident that post development flows could directly impact the highway.

### **5. Traffic Impact Study**

Traffic studies are necessary to determine the extent to which highway improvements are required as a direct result of the development. The traffic study will identify those improvements. Generally, a Traffic Impact Study, according to the latest Ministry Traffic Impact Study Guideline, will always be required when the development proposes a new street location that intersects a Provincial Highway. Costs associated with improvements are outlined in the Ministry's "A Guideline For Highway Improvements Associated With Development". This guideline can be found on the Ministry's public website.

### **6. Legal Agreement**

The cost of constructing a street entrance and any associated highway improvements will require the owner to enter into a legal agreement with the Ministry. The legal agreement ensures that the owner agrees to assume full responsibility for all costs associated with these works along with the appropriate letters of credit.

If it is determined that the costs for constructing the entrance and associated works are minimal (less than \$50,000.00), then a legal agreement would not be necessary. A Letter of Credit for the estimated costs along with a Letter of Undertaking could be used instead. A Letter of Credit and a Letter of Undertaking should not be used for works that exceed \$50,000.00.

### **2.6.8 Non-Standard Conditions of Draft Approval**

Examples of Non-Standard Conditions of Draft Approval may include:

- Prior to final approval, arrangements shall be made to the satisfaction of the Ministry for the erection of a security fence along the "X" boundary of the plan.
- Prior to final approval, the owner shall submit an illumination plan indicating the intended treatment of the headlight glare from traffic on Street A directed toward Highway X.
- Prior to final approval, arrangements shall be made to the satisfaction of the Ministry for the owner to enter into a Temporary Limited Interest Agreement with the Ministry.

Additional Non-Standard Conditions may be added where necessary, based on site-specific circumstances.

### **2.6.9 Clearance of Conditions of Draft Approval**

A clearance letter can be issued for two situations: when the entire plan (the original submission) is being considered for final approval, or when the plan is being released in phases.

All conditions of Draft Approval must be completed to the satisfaction of the Ministry before a clearance letter can be issued. A clearance letter will not be issued for one condition at a time.

### **2.6.10 Releasing of Conditions**

#### **1. Dedication of New ROW/Highway Widening**

The lands required by the Ministry for future highway purposes must be shown correctly as a Block(s) on the draft M-Plan.

In the owner's certificate on the draft M-Plan, Part 1 should identify the Block(s) as "Block X, Highway Widening, and in Part 2~ of the owner's certificate the widening should mention, "Block X is hereby dedicated as public highway". The Registry Office will not accept any other wording.

The widening must not read, "Block X is hereby dedicated to the Ministry of Transportation". The Registrar will not accept the incorrect wording. Any incorrect wording should be pointed out to the proponent or surveyor immediately and resubmitted for the Ministry's review and approval.

## 2. Visibility Triangles

The draft M-Plan is reviewed to ensure that the visibility triangles are shown correctly. The dimensions of the triangles should be checked to ensure that they are the size the Ministry requested. The preferred method of obtaining the triangles is to have the area shown as part of the public road allowance and dedicated as public highway. The less preferred and more complicated method is to have the area of the triangles shown as a separate blocks and conveyed by deed to the Ministry.

### 3. 0.3 m Reserve

A copy of the draft deed and draft M-Plan must be forwarded to the Ministry for its review before this condition can be cleared. As stated in Sec. 33 (7) of the PTHIA, the deed must state under "The Transferee" of the deed:

"Her Majesty the Queen, in right of the Province of Ontario, represented by the Minister of Transportation for the Province of Ontario".

## 4. Stormwater Management Plan/Report

Once a written confirmation has been received from the Drainage Office, stating they are satisfied that all the drainage issues have been addressed and the plan is acceptable, the condition is ready to be cleared.

## 5. Traffic Impact Study

Upon a written confirmation from the Traffic Office that all the traffic issues have been addressed and there are no outstanding traffic concerns, the condition is ready to be cleared.

## 6. Legal Agreement

The draft legal agreement should be prepared well in advance of final clearance. Once the legal agreement has been prepared, reviewed and executed by the parties, the condition can be cleared.

## 2.7 Consents

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### 2.7.1 Function

Section 50 of the *Planning Act* permits the creation of lots by consent. Although there is no formal limit to the number of lots that can be created at one time by this process, most official plans permit consents only when there are three lots

or fewer involved, and there is no new road allowance created.

#### **2.7.1.1 Process**

A municipality will normally circulate a severance (consent) application to the Ministry's regional offices for comment before hearing the application. The Regional Highway Corridor Management Section reviews the application and provides a response to the municipality.

#### **2.7.1.2 Ministry Interests**

The Ministry's interests with respect to consents are:

- the availability of access
- required road widenings and 0.3 m reserves
- any other permit requirements.

#### **2.7.2 Access Requirements**

In all cases, Ministry access policies and any controlled access highway criteria must be met. No direct access is permitted to Class 1 and most Class 2 highways.

Class 3 highways are special controlled access roads on which limited access may be granted subject to individual highway criteria. Public road access will be permitted at appropriate locations, and some direct access within an urban area (e.g. hamlet in a reduced speed zone) or for extensive frontages on low volume highways may be permitted. Criteria for Class 3 highways normally allow one residential entrance to each ownership, which was established prior to the Controlled Access Highway designation date. New accesses to land severances may also be considered for the separation of whole township lots, when several lots are under the same ownership or for other large holdings.

Severances can be supported on Class 4 highways provided all of the Ministry's access standards can be met and one of the following is met:

- a. the owner has a minimum frontage of 300 m so that, following severance, an average minimum spacing of one entrance per 150 m will be achieved
- b. where the parcels can obtain access from an existing local road, the Ministry will not object to consent provided access is restricted to the local road
- c. the section of highway is built-up to the point that it will be by-passed in the near future (i.e. the speed limit is less than 80 km/h due to the

amount of existing development) and no other means of access is available. The proposed parcel should not extend the built-up area or increase the hazards associated with entrances on a high volume road,

- d. both the proposed and retained parcels contain existing buildings and entrances constructed under Ministry permits or prior to permit control.

Class 5 highways can tolerate a higher level of access than the other classes of highway. As a result, the Ministry would not object to severance applications fronting on Class 5 highways provided Ministry safety requirements are met.

In the event that a municipal Committee of Adjustment approves a lot where they have been advised by the Ministry that access is not available, the Ministry will not issue an entrance permit. Common entrances for two or more separately owned properties, or entrances serving more than one use, are generally discouraged.

## 2.8 Variances

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### 2.8.1 Function

Section 44 of the *Planning Act* permits the establishment of Committees of Adjustment to consider applications for minor changes to zoning bylaws for specific properties. To be approved, a variance must meet four criteria:

- Minor
- Conforms with the official plan
- Meets with the intent of the zoning bylaw
- Desirable for the appropriate use of the land

#### 2.8.1.1 Process

Minor variance applications abutting Provincial Highways are circulated by the municipality directly to the Ministry's regional offices. After appropriate consultation, the Regional Highway Corridor Management Section responds directly to the municipality.

#### 2.8.1.2 Ministry Interests

Minor variances are unlikely to affect Ministry interests, except where the intensity of the land use will result in significantly increased traffic movements, or front yard setbacks are reduced. Municipalities should be advised that the approval of such variances should be conditional on permits being obtained

from the Ministry.

## 2.9 Site Plans

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### 2.9.1 Function

Site plans are authorized by Section 41 of the *Planning Act*, and are used to control such details as parking, landscaping, grading, and services. Site plan control permits a municipality to enter into a Site Plan Control Agreement with a property owner, to ensure that the development takes place in accordance with approved plans. Site plan approval occurs before the issuance of a building permit.

### 2.9.2 Process

While the Ministry is not formally involved in the site plan process, it often receives a request to comment. Only the municipality and the developer are signatories to the agreement. However, before the municipality can issue a building permit, the Ministry's permits must be obtained by the proponent.

Before permits can be issued, traffic studies and drainage reports may be required. In this manner, the Ministry's requirements with respect to drainage and entrances are included in the site plan agreement. Frequently the Ministry is involved in the negotiation process required to conclude a site plan agreement. Any widenings required for Provincial Highways must be included on the Ministry issued permit, since the municipality cannot require widening for the provincial system.

### 2.9.3 Ministry Interests

Before building permits are issued, the Ministry confirms that entrance approvals are available, and that Building and Land Use permits can be issued. Before these permits can be issued, the Ministry must be satisfied that drainage is appropriate, entrances conform to standards, and any required highway improvements (including widenings and 0.3 m reserves) are secured.

## 2.10 Condominiums

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### 2.10.1 Function

The condominium process is governed by the *Condominium Act*. A draft plan of the condominium is submitted to the Ministry of Government and Consumer Services for approval, before a final plan of condominium can be registered. By this time, the site plan agreement has been finalized, and the buildings have been built. The condominium plan is concerned with the transfer of ownership

from one entity to a number of ownerships.

#### **2.10.1.1 Process**

The draft plan of condominium is received by the Regional Highway Corridor Management Section, which circulates it to the Area Offices and any other technical office as required. After making the appropriate consultations, the Regional Highway Corridor Management Section drafts the appropriate conditions and advises the approval authority.

#### **2.10.1.2 Ministry Interests**

Since the Ministry will usually have commented on the site plan, it will not normally have any concerns at the plan of condominium stage.

There is the opportunity to require entrance improvements, widenings, 0.3 m reserves, if the development was built some time ago and there are deficiencies. However, as the buildings are built at this stage, practical opportunities to achieve changes will be limited.

## **2.11 Other Provincial Initiatives**

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#### **2.11.1 Provincial Plans and Policy**

Input to amendments of other provincial initiatives such as the Parkway Belt Plan or the Niagara Escarpment Plan is handled by the Corridor Management and Property Office. These are usually broad-based, long-range planning issues, having provincial or regional impact. Normally, the Corridor Management and Property Office will consult with the regional offices affected in its review of these matters.

The Corridor Management and Property Office, in conjunction with other offices at the Ministry (i.e. Urban Planning Office) is also responsible for providing input to MMAH with respect to Provincial Policy Statements issued under Section 3 of the *Planning Act*. All official plans must have regard to the current Provincial Policy Statement.

#### **2.11.2 Niagara Escarpment Commission**

Within the Area of Development Control of the Niagara Escarpment Commission, Ministry permits should not be issued until the Commission has approved the development. The Commission's approval should be subject to the issuance of Ministry permits if required.

### **2.11.3 National Capital Commission**

The National Capital Commission in the Ottawa / Gatineau area controls development on federal lands. It also has a significant commenting role on all development within its area of jurisdiction. A high degree of co-operation with the Commission is encouraged.

### **2.11.4 Ontario Municipal Board**

Appeals to the Ontario Municipal Board initiated by the Ministry will be rare. Any potential referrals to the Ontario Municipal Board must receive the prior approval of the ADM of Provincial Highways Management. Where such appeals are necessary, the regions must contact the Corridor Management and Property Office for advice and direction. The Ministry of Municipal Affairs and Housing is the lead agency in the Province's One Window approach for appeals to the Ontario Municipal Board. MMAH is the only ministry that can appeal a planning matter to the Ontario Municipal Board.

## **2.12 Classifications Defined**

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Each development proposal (e.g. building, land use, planting, structure, fence, etc.) shall be classified as Commercial or Residential / Farm, according to the following definitions:

- a. Commercial - a building or structure, including one operated by and for the good and welfare of the public, other than a building or structure used solely for a personal residence, for personal recreational use or for farming operations.
- b. Residential/ Farm - a building or structure used solely for a personal residence, for personal recreational use or for farming operations.

The various types of development in this chapter are listed in table form according to type, classification, and setback distance in Appendix "2A" to this chapter. This table shall be used as a guide.

Each permit must state the classification of the development authorized by the permit. A proposed change in classification shall be subject to the approval of the Ministry.

## **2.13 Setbacks**

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### **2.13.1 Basic Setback Distances**

The distances shown on the "Types, Classification and Setback Distance Table" in (Appendix "2A") shall be the basic setback distances where buildings shall be



placed from the highway property line.

In built-up urban areas, where the right-of-way is less than 30 m wide, the basic setback distance is the building line established by the local by-law or the Field Services Engineer. This is based on the location of existing buildings. For an unlisted type of building, the setback is 14 m.

Certain minor types of developments (private bus passenger shelters, temporary contractor buildings, parking lots, equipment storage yards, etc.) that are readily movable may be located at less than the basic distance.

Development proposed along highways that are scheduled for construction on the Ministry's Multi-Year Capital Construction Program may require referral to the Regional Director.

In all instances, the Ministry may permit development to proceed with certain conditions being applied regarding setbacks.

The basic setback distances which shall apply to buildings/structures are outlined in Appendix "2A". The controlled-access criteria for each highway, where applicable, must be consulted. This may supersede the setbacks established in Appendix "2A".

The minimum setback for all buildings and structures adjacent to a Class 1 or 2 highway or a 400 series highway is 14 m.

Development classified as minor land use or municipal/private road may be located at less than the basic setback of 14 m for class 1 or 2 highways provided the developer can prove to the satisfaction of the Ministry that the land use/ road is not essential to the overall viability of the development, and can therefore be removed or relocated in the future.

### **2.13.2 Established Building Line**

Within the limits of a city, town, village, or within a built-up or urban area, the building line shall be the line established by municipal bylaw. If there is no municipal by-law, the Field Services Engineer may establish the building line, based on the location of existing buildings.

In areas within the limits of a city or town where the density of the buildings is less than the density of an urban area and where there is no municipal by-law, the basic setback distances shall apply.

In cases where the existing buildings are closer to the highway property line than the basic setback distance and less than 152 m apart, the building line may be established by the Field Services Engineer, based on the location of the

existing buildings.

### **2.13.3 Setbacks for Intersecting Streets in Unorganized Areas**

Where a road or street intersects a Provincial Highway, the basic setback distance for a development adjacent to the road or street (and within the controlled area) shall be the same as the setback for a similar development adjacent to the highway. The Field Services Engineer can make exceptions if the building line is established at a lesser distance.

### **2.13.4 Setback Distance from Nearest Extremity**

The setback distance for buildings and fences shall be measured from the nearest extremity to the highway property line. The nearest extremity is the wall of the building, including support, but not the eave, deck, veranda, porch, outside stairway, or canopy. These setback distances must not be less than recommended for each type of building/development being considered. Where an eave or overhang is greater than 1 m, the setback will be measured from that extremity.

### **2.13.5 Service Roads**

In areas where a service road exists, the minimum setback for buildings/structures shall coincide with Ministry requirements. In unorganized areas, an 8 m setback should be used. If a service road is planned (route planning study, municipal), the setback distance for buildings/structures must be increased to reflect these future requirements.

In the case of existing, privately-owned service roads, the basic building setback distance must be increased accordingly. A field review may be necessary to determine the appropriate setback distance.

### **2.13.6 Municipal Roads**

The setback distance between a Ministry property limit and the edge of pavement of an abutting municipal street or private road shall not be less than 8 m. This setback may be increased or decreased by the Field Services Engineer, based on future requirements, grades, and other site-specific considerations.

Setbacks on any highway - "On any Provincial Highway, if any part of a development is integral to the operation of the business (i.e. compliance with zoning by-law standards, conditions of site plan approval including minimum parking requirement by-laws, fire lanes, drive-through lanes, delivery areas and loading dock areas) those parts of the development must be set back a

minimum of 14 m from our existing/future right-of-way."

When a new road access to an existing municipal road is proposed, the Ministry encourages the normal side road spacing, and/or the side road spacing set out in the highway CAH criteria. This ensures that the new municipal road intersection and the highway continue to operate safely and efficiently. While side road access requires the approval of the appropriate road authority, the Ministry may exercise its control (through the permit system) if the new road adversely impacts the highway intersection.

Refer to Chapter 4 for more information on side road access connection spacing.

## 2.14 Building and Land Use Permit Requirements

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### 2.14.1 Permit Required

A building and land use permit must be obtained from the Ministry to carry out any work within the controlled area, including:

- a. the construction or alteration of a building, structure or road/entrance
- b. changing the use of a property, building or structure, temporarily or permanently
- c. the construction and/or paving of a parking lot
- d. the installation of a well, septic system, retaining walls, illumination, or landscaping (including trees, shrubs, and hedges)
- e. erection of a fence or wall (except a standard farm fence)
- f. placement, erection, or alteration of any power line, pole line or other transmission line within 400 m of controlled-access highway
- g. grading of a property
- h. moving a building or structure
- i. development of a golf course or cemetery
- j. construction of a fruit or produce stand
- k. placement of stockpiled materials
- l. installation of telecommunication towers or facilities
- m. seasonal / temporary structures including mobile food trucks or similar vending stands
- n. construction of utilities

A separate permit must be issued for each individual lot under development.

Refer to Chapter 1 for information regarding the permit application process.

A permit is *not* required for an addition to a legally existing residential building (5 units or fewer) or agricultural building, where the addition is not closer to the highway than the existing building, and where there are no changes to the grading, access or parking associated with the construction.

#### **2.14.2 Other Jurisdictions**

A permit will not be issued for the erection of a building or any other development that is known to contravene a municipal by-law, local zoning regulation, the requirements of the *Planning Act*, or any requirement of a local, regional or provincial agency.

A Ministry building and land use permit must be obtained before a municipal building permit can be issued.

If a development permit is required from the Niagara Escarpment Commission, it must be issued before a Ministry building and land use permit will be issued.

#### **2.14.3 Additions and Alterations**

When an addition or alteration which would change the footprint size of existing buildings, structures, or fences is proposed, the owner shall submit an application for a building and land use permit to the Ministry. The application must indicate the extent of the proposed changes. Work must not start until the Ministry has issued a permit.

An application to add a building or make alterations to a building must not be approved when the:

- proposed alterations or additions contravene the current requirements of the Ministry
- existing development contravened the requirements of the Ministry at the time it was placed or erected
- proposed changes will reduce the parking area for the building below the minimum requirements as set out in Chapter 1
- proposed changes affect the entrance so that it fails to meet the minimum requirements.

The Field Services Engineer may issue a permit to build an addition or make alterations to a building when it is located closer than the basic setback

distance. The building must not be likely to become a traffic hazard, and future development of the highway must not be affected by the proposed alteration.

The nearest extremity of the addition must not be nearer to the centre line of the highway than the nearest extremity of the existing building. Additions to a building which does not meet current standards may be permitted, as long as future highway development plans are considered.

#### **2.14.4 Cemeteries**

The Ministry's control over the location of cemeteries adjacent to Provincial Highways is limited to buildings, graves, fences, plantings, and objects which could inconvenience or endanger the safety of the travelling public, or cause drifting or accumulation of snow.

The *Cemeteries Act* is administered by the Ministry of Government and Consumer Services. Each applicant must be advised to contact the local municipality and the Ministry of Government and Consumer Services to ensure that the proposed cemetery complies with the Regulations under the *Cemeteries Act (Revised)*.

#### **2.14.5 Change of Design and/or Classification**

If it is proposed to change the design or use of a building in a manner that will change the classification after a permit has been issued, the owner must apply for a new permit. Any change of design, classification or location after a permit has been issued shall be subject to the current requirements of the Ministry. Applications for such changes shall be considered in the same manner as the original application and may be approved or refused by the Ministry.

When, after a permit has been issued, the applicant proposes to change the design, classification or location of a building, the original permit shall be cancelled and a new permit shall be issued.

When the applicant proposes to change the design, classification or location of a building and is refused after a permit has been issued, the applicant may proceed according to the conditions of the original permit. In these cases, the original permit shall remain in force.

#### **2.14.6 Daylighting Area**

Obstructions or access across a daylighting triangle, or parking within a daylighting area, is not permitted.

### **2.14.7 Detention/Retention Ponds**

A detention or retention pond is considered a structure for the purpose of this manual, and requires a building and land use permit. If the pond has an overflow outlet, the applicant will be required to submit a detailed drainage report for Ministry review/approval. Further assistance may be obtained from the Regional Office of the Ministry. The setback distance shall be measured from the closest edge of the facility. If a berm forms part of the facility, the setback shall be taken from the toe of slope of the pond in fill areas, or from the top of berm in cut areas.

### **2.14.8 Fences**

The Ministry exercises general control over the placing and erection of fences (other than standard farm fences) within the controlled area.

The purpose of this control is to ensure clear vision (curves, intersections, entrances), prevent maintenance problems, and minimize damage to the highway. Security fencing is required at all residential and commercial uses adjacent to all series 400 highways. (Refer to Ministry Property Directive B-3).

A fence must not be placed where it will:

- a. reduce the clear vision or sight distance at an intersection or an entrance to a highway, below the Ministry's minimum clear vision requirements
- b. reduce the clear vision or sight distance on a sharp turn, hill or curve, below the Ministry's minimum clear vision requirements
- c. cause drifting or accumulation of snow on a highway, or cause damage to a highway.

A permit must not be issued for a fence that interferes with either the view of a business establishment or of a sign located on an adjacent property. The Field Services Engineer shall make the decisions in these cases.

When a service road adjoins a highway, the Ministry shall enforce the restrictions regarding fences in the area between the highway and the road. These restrictions will not apply to those fences in the area behind the service road, unless the Ministry maintains the service road.

When it is necessary to move, remove, rebuild, or replace a fence because of a change in a highway's right-of-way (or for any reason which is the responsibility of the Ministry), any compensation shall be determined by the Regional Property Office.

#### **2.14.9 Food Trucks**

Food truck stands or other similar vending stands must be located on commercially zoned property, with sufficient off-highway parking for customers. These stands are approved by permit, in accordance with the requirements in Chapter 5. Setback distance is to be as set out in Appendix "2A". In unorganized areas, these stands may be considered, as long as they comply with the Ministry's home occupation signing policy.

Sufficient on-site parking must be available, and a commercial entrance is required.

#### **2.14.10 Fruit and Produce/Vending Stands**

The owner of a property, or the operator of a fruit, produce or vending stand, must obtain a building and land use permit before any fruit or produce is displayed or offered for sale. These fruit/produce stands are intended for fruit/produce grown only on the site. Seasonal operations up to a maximum of 4 months shall require a letter of approval only.

The applicant must provide and maintain sufficient parking area, entirely off the highway right-of-way, and meet the Ministry's clear vision requirements.

A fruit or produce stand must not be placed:

- where it may reduce the clear vision or sight distance at an intersection
- prior to obtaining any permits /approval required by the Ministry or the municipality.

#### **2.14.11 Greenbelt Areas**

##### **Niagara Escarpment Planning Area**

Any development within lands designated as an area of development control under the Niagara Escarpment Planning Area requires a development permit from the Niagara Escarpment Commission. Applicants must provide proof of compliance prior to Ministry approval.

##### **Parkway Belt Planning Area**

Any development within lands designated as a restricted area under the *Parkway Belt Planning and Development Act* must meet the principles governing the Parkway Belt prior to Ministry approval.

#### **2.14.12 Home Industries**

Some municipalities permit small industrial or commercial uses on residential or

farm properties without rezoning. These activities include wood working shops, welding or fabricating shops, food trucks, craft sales, etc. These uses usually employ only one or two people (including the owner) and are relatively modest in scale and impact. However, these businesses have the potential to expand, which increases the impact on the highway.

Municipalities should be discouraged from permitting home industries on properties that front onto a Class 3 controlled-access highway. The Ministry will not support any rezoning where the criteria specify that no commercial rezoning is permitted, nor will permits be issued. Home industries should clearly be a secondary use on the property, and should not change its character.

A location sign identifying the business may be permitted in accordance with the commercial sign policies. The use must meet the setback requirements.

A home industrial use must have a safe entrance and sufficient parking on site to accommodate the use. Where necessary, modification to the residential/farm entrance may be required to ensure safety. The owner may be required to submit a traffic study identifying the modifications required to ensure access safety. If the business ceases, the entrance improvements should be removed.

Since the establishment of home-type industrial uses may not require municipal approval, the Ministry may not be notified. When Ministry staff become aware that a home industry has been established, they should discuss the best approach to bring it into conformity with the owner.

#### **2.14.13 Illumination Facilities**

Flood lights, spot lights, search lights or illumination facilities of any kind that cause a direct or indirect glare on the highway, or that may interfere with traffic safety or create a hazard are not permitted in the controlled area.

When the Field Services Engineer considers lights or illumination of any kind to be a hazard (within or outside the controlled area), the property owner shall be contacted to resolve the matter. Assistance may be obtained from the Regional Traffic Office, the municipality, or the local police authority.

#### **Red or Green Illumination**

Unless approved by the Field Services Engineer, red or green illumination is not permitted within 100 m of a signalized highway intersection.

#### **2.14.14 Large Traffic Generators**

The Ministry has authority to control the development of land within 800 m of any limit of a Provincial Highway for any purpose that causes persons to congregate in large numbers. Examples include a shopping centre, stadium, fair



ground, race track, drive-in theatre, and commercial development.

### **Amusement Parks/Recreational Attraction Sites**

Any event or development located within 800 m of a Provincial Highway, including but not limited to those listed below, that may cause persons to congregate in large numbers, cause traffic congestion, or create a traffic hazard shall be subject to the Ministry's control. Examples include circuses, carnivals, rides, trampolines, etc.

### **Temporary Attractions**

The conditions for permanent sites generally apply to temporary installations.

The owner/operator of the attraction shall be responsible for all costs associated with any conditions of approval (e.g. traffic control, parking facilities).

Large traffic generators frequently require improvements to the highway. Refer to the Ministry's "A Guideline For Highway Improvements Associated With Development".

Buildings may not be moved along or across a highway without approval from the appropriate agencies and/or ministries.

#### **2.14.15 Parking Area to be Provided and Maintained**

The building and land use permit mandates that a parking area shall be provided and maintained to accommodate the maximum number of vehicles per peak hour that visit the premises. The parking area must be entirely off the highway right-of-way. For details of space requirements for parking, refer to Chapter 1.

Each building and land use permit shall require that all parking, stopping, waiting, loading and unloading of vehicles shall be off the highway right-of-way. Vision must not be restricted at the entrance to the property or an adjacent property.

#### **2.14.16 Permit Applications for Building at Intersections**

When future plans for an intersection are not known, the Field Services Engineer may forward the application for building and land use permit to the Regional Director. Any impact from the development proposal will be identified and returned to the Field Services Engineer.

#### 2.14.17 Pits and Quarries

The control of clay, sand and gravel pits, quarries, and mining operations is vested in the Minister of Natural Resources, under authority of the *Aggregate Resources Act*. Control of staking a mining claim for exploration is vested in the Minister of Northern Development and Mines, under the authority of the *Mining Act*.

Applicants must be referred to the appropriate authority, and must provide proof of compliance prior to Ministry approval. If direct access to the highway is required, an application for an entrance permit shall be considered simultaneously. The location of the entrance shall meet Ministry standards.

The *Aggregates Resources Act* requires that excavation of aggregates may not normally occur within a 30 m setback bordering a road or road right-of-way.

Where a mining claim adjoins or is adjacent to a highway or road maintained by the Ministry, no surface mining operations shall be carried out within 45 m of the limits of the highway or road, except with the written consent of the Minister.

#### 2.14.18 Plantings

The Ministry exercises control over the planting of hedges, shrubs, and trees or landscaping.

A hedge, shrub, tree, landscaping or other planting must not be placed where it may:

- reduce the clear vision or sight distance at an intersection
- cause the drifting or accumulation of snow on a highway or cause damage to a highway.

A permit must not be issued for a hedge, shrub, tree or other planting that interferes with the view of a business establishment or of a sign located on an adjacent highway. The Field Services Engineer shall make the decision in these cases.

When a service road adjoins a highway, these restrictions regarding plantings in the area between the highway and the service road shall be applied by the Ministry. Restrictions shall not apply to those plantings in the area behind the service road unless the service road is maintained by the Ministry.

If it becomes necessary to move or remove a planting because of a change in the right-of-way of a highway (or for any other reason under Ministry

responsibility), compensation to be paid, if any, shall be determined by the Regional Property Office.

#### **2.14.19 Pole and Transmission Lines**

An applicant proposing to place, erect, or alter a power line must apply for a building and land use permit. Each application will be considered with due regard to the future plans for the development of the highway.

Chapter 3 (Encroachments) sets out the requirements of the Ministry respecting the placement and maintenance of public utilities within the limits of the right-of-way of a highway.

#### **2.14.20 Recreational Facilities/Golf Courses/Driving Ranges/Ball Diamonds**

The Ministry controls the layouts associated with the construction of recreational facilities (tees, greens, baselines).

The Ministry requires that the following items be explicitly addressed to the satisfaction of the Field Services Engineer:

- prevention of errant balls reaching the right-of-way
- height of baseball backstop
- illumination (prevention of glare, distraction)
- access
- drainage
- parking

#### **2.14.21 Retaining Walls**

All retaining walls along Provincial Highways are subject to the Ministry's approval.

The Ministry may require the submission of detailed construction drawings. In some instances, the Ministry may require the drawings to be stamped by a professional engineer licensed to practice in Ontario.

Where the Field Services Engineer deems it necessary, the drawings may be referred to the Regional Director.

#### **2.14.22 Service Stations**

An applicant proposing to construct or remodel a service station within the controlled area adjacent to a Provincial Highway requires a building and land use permit.

##### **Pump Island/Attendant Booth**

An attendant booth located within the pump island limits is permitted.

##### **Pump Area Weather Shelter/Canopy**

If the applicant wishes to construct new pumps with a weather shelter/canopy, a setback distance for the weather shelter of 3 m behind the property line shall be maintained. If an applicant wishes to erect a weather shelter/canopy over existing pumps, this 3 m setback shall also apply.

#### **2.14.23 Site Plans**

Each building and land use application must be accompanied by a site plan and must include the following detail:

- a. plan title
- b. name of the applicant
- c. scale
- d. north point
- e. highway number
- f. lot and concession numbers and the limits of the property
- g. location of existing and proposed buildings, structures
- h. proposed parking area layout with the maximum number of vehicles to be accommodated at one time
- i. elevation of the area adjoining the highway and the proposed drainage system for the development
- j. location of existing and proposed entrances
- k. location and names of adjacent roads.

Other information that may be useful in arriving at a decision on the application may include:

## Traffic

- a. expected peak hour number of vehicles entering and leaving the property
- b. estimated percentage of vehicles expected to enter or leave the property from each direction
- c. times of the peak hour(s)
- d. number of days per week and the specific days of the week the development is expected to be open to the public
- e. number of weeks per year and the specific weeks of the year the development is expected to be open to the public.
- f. A complete Traffic Impact Study, which may be requested if deemed necessary by the Ministry.

## Drainage

- a. a preliminary stormwater drainage report/plan shall be submitted
- b. a complete stormwater management plan may be required if deemed necessary by the Ministry.

**Note:** The applicant shall be fully responsible for all costs associated with the preparation of the necessary reports / studies.

Additional information regarding the requirements for drainage reports is available on the Ministry's public website.

### 2.14.24 Stockpiling

The Ministry exercises certain controls over the stockpiling of material (e.g. Earth, Slag, Ore, Stone, Lumber, etc.) adjacent to a Provincial Highway. The owner of any stockpile may be required to remove or relocate it, if it adversely affects the Provincial Highway corridor.

An applicant proposing to establish a stockpile storage area must apply for a building and land use permit. Approval from all other affected agencies must be obtained before the Ministry permit is issued, with a copy retained on file.

### 2.14.25 Storage Tanks

The Ministry exercises control over the location of storage tanks on sites adjacent to Provincial Highways. Tanks are classified as "structures", whether above or below ground.

#### **2.14.26 Subdivisions**

Once the Ministry has cleared any conditions of draft approval, and the plan of subdivision has been registered, the applicant must obtain all necessary permits from the Ministry before any construction or grading commences. Municipal permits and approvals must also be obtained.

#### **2.14.27 Wells**

The required setback of a well may be reduced, provided that the property owner acknowledges in writing that they have accepted the conditions as noted on the permit, and that the ministry will not be responsible for any reduction in the quality or quantity of the water supply. A condition to this effect will be included on the permit as outlined here:

Purpose: To construct or install a well within 30 m setback from the property line which defines the highway.

- a. The property owner acknowledges that under Ministry policy, the normal setback required for wells is 30 m.
- b. The property owner acknowledges that there may be a risk that wells located less than 30 m from the highway property line may be affected by road salt or by other highway related substances that may impact water quality.
- c. The property owner acknowledges that there may be a risk that wells located less than 30 m from the highway property line may also be affected by highway construction or re-construction activities, such as blasting or movement of heavy equipment, and that such activities may affect water quality and/or quantity.
- d. The property owner acknowledges that the request is exceptional, and agrees that the Ministry has granted this exception on the basis that locating a well within the 30 m setback shall be at the property owner's own risk.
- e. If the property owner sells the property or transfers an interest in the property to a third party, the property owner agrees to ensure that this permit and its conditions shall be made known to the third party.

Copies of the permit and acknowledgement letter from the property owner should be forwarded to the Regional Property Office and Claims Office for their information and possible registration on title.

Below is a sample of the acknowledgement letter:

I \_\_\_\_\_, acknowledge receipt of Building and Land Use Permit # \_\_\_\_\_. I have read the permit and I accept and agree to the conditions set out therein.

Dated \_\_\_\_\_ Signed \_\_\_\_\_

#### **2.14.28 Wireless Telecommunication Facilities**

Ministry approval is required for all types of installations adjacent to the Provincial Highway right-of-way. An application for a building and land use permit shall be accompanied by a relevant site plan, showing the location and dimensions of the proposed installation.

A typical micro-cell site, consisting of a concrete pad approximately 3 m x 3 m, may be permitted at a minimum setback of 3 m from the property line.

The typical cell site, consisting of a self-support tower, facilities shed, and compound area of approximately 12 m x 20 m, may be permitted at a minimum setback of 8 m from the property line, to the limit of the compound area.

The same relocation requirements in the Telecommunications Industry Master Agreement must apply to any of these installations proposed to be placed at the reduced setbacks noted above.

All other types, including both guyed and self-supporting towers, shall be set back a minimum of 14 m. This setback shall be to the nearest part of the installation, whether above or below ground (e.g. guy wire concrete anchors). Where there is any concern for the safety and operational integrity of the Provincial Highway due to the size or height of the installation proposed, the Ministry may request a report prepared by a professional engineer certified in the Province of Ontario.

All telecommunication towers must be designed to collapse within themselves, to prevent them from falling onto the highway right-of-way.

#### **2.14.29 Wrecking Yards**

Under the authority of the *Public Transportation and Highway Improvement Act* and the *Highway Traffic Act*, the Ministry exercises control over wrecking yards located within the controlled area adjacent to Provincial Highways.

Wrecking yards require permits for building and land use, entrances, and signs. The applicant must comply with all requirements of the Ministry's Vehicle Licensing Office.

The Ministry will require the following:

- a. the wrecking operations and equipment shall be screened from the highway by natural means or by a fence at least 2 m in height, and shall be maintained in a manner satisfactory to the Ministry. Wrecking yards must not be located in low spots, valleys, or adjacent to a fill where they are not screened from view
- b. the location and operation of the wrecking yard shall be carried out in accordance with all municipal by-laws and restrictions
- c. drains from the wrecking yard or buildings shall not be directed to a highway drainage system.

## 2.15 Building and Land Use Permit Administration

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### 2.15.1 Change of Ownership

If the ownership of a building or property changes after a building and land use permit is issued and before work begins, the permit shall be void. The new owner or other party concerned must apply for a new permit before work starts. The permit remains in force if work has started.

When an application for a building and land permit is recommended for approval, the Corridor Management Officer shall forward the application to the Field Services Engineer for signature. The Field Services Engineer will consider each request for approval as recommended by the Corridor Management Officer.

### 2.15.2 Field Inspection

Once work under a permit starts, it is the responsibility of the Corridor Management Officer to ensure that the construction of any buildings and/or structures is in the location approved by the Ministry. Ministry staff (including Maintenance Coordinators and Superintendents) must report any variations from the permit conditions to the Corridor Management Officer. When a variation has been identified, the Field Services Engineer shall follow current procedures regarding infractions, according to the *Public Transportation and Highway Improvement Act*.



## Appendix 2A - Type, Classification and Setback Distance Table

(\* to be referred to the Regional Director)

Type of Use	Classification	Setback from Highway P/L	
		Other Classes	Class 1 and 2
*Amusement Park	Land Use - Commercial	14 m	14 m
Arena	Building - Commercial	14 m	14 m
Ball Park	Land Use - Commercial	14 m	14 m
Band Stand	Building - Commercial	14 m	14 m
Barn - Private	Building - Residential	14 m	14 m
Barn - Public Sale	Building - Commercial	14 m	14 m
Booster Station - telephone, gas, oil, etc	Structure - Commercial	14 m	14 m
Bleachers	Building - Commercial	14 m	14 m
Bowling Alley	Building - Commercial	14 m	14 m
Bowling Green	Land Use - Commercial	14 m	14 m
Bus Passenger Shelter	Structure - Commercial/Residential	1 m	1 m
Bus Terminal	Building - Commercial	20 m	14 m
Car Sales	Building - Commercial	14 m	14 m
Cemetery (including pets)	Building - Commercial	14 m	14 m
Cemetery (Graves)	Land Use - Commercial	27 m	27 m
Church	Building - Commercial	14 m	14 m
Community Building	Building - Commercial	14 m	14 m
Dog Kennel	Building - Commercial	14 m	14 m
*Drive-In Theatre	Structure - Commercial	14 m	14 m
Driving Range Tee	Structure - Commercial	14 m	14 m
Earth Berm (toe of slope)	Land Use - Commercial/Residential	0.3 m	0.3 m
Explosive, storage	Building – Commercial	As required by Legislation	As required by Legislation
Factory	Building - Commercial	14 m	14 m
*Fair Ground - Building, rides	Land Use - Commercial	14 m	14 m

Type of Use	Classification	Setback from Highway P/L	
		Other Classes	Class 1 and 2
Fence	Structure	0.3 m	0.3 m
Fire Hall	Building - Commercial	14 m	14 m
Food Truck Stand	Building - Commercial	14 m	14 m
Foundation	Building - Residential	8 m	14 m
	Building - Commercial	14 m	14 m
Fruit/Produce Stand	Building - Commercial	14 m	14 m
Funeral Home	Building - Commercial	14 m	14 m
Garage	Building - Residential	8 m	14 m
	Building - Commercial	14 m	14 m
Gasoline Pump Island and Attendant Booth	Structure - Commercial	6m	14 m
Gasoline Canopy / Shelter	Structure - Commercial	3 m	14 m
Gates	Structure	0.3 m	14 m
Golf Course Green	Land Use - Commercial	20 m	14 m
Golf Course Tee	Land Use - Commercial	8 m	14 m
Grand Stand	Building - Commercial	14 m	14 m
Greenhouse	Building - Commercial	14 m	14 m
Hedge/Planting	Land Use	0.3 m	0.3 m
Heliport	Land Use - Commercial	14 m	14 m
Hospital	Building - Commercial	14 m	14 m
Hotel	Building - Commercial	14 m	14 m
Hydro Sub Station	Structure - Commercial	14 m	14 m
Illumination-Light Standard	Structure - Commercial	0.3 m	0.3 m
Implement Sales / Service	Building - Commercial	14 m	14 m
Junk Yard	Land Use - Commercial	45 m	45 m
Landfill Site	Land Use - Commercial	45 m	45 m
Library	Building - Commercial	14 m	14 m
Lumber Yard	Building - Commercial	14 m	14 m
Mail Box (Super / Group)	Structure	0.3 m	0.3 m

Type of Use	Classification	Setback from Highway P/L	
		Other Classes	Class 1 and 2
Manure Pit	Land Use	14 m	14 m
Marquee	Structure - Commercial	14 m	14 m
Mausoleum	Structure - Commercial	14 m	14 m
Meter Station - pipe line, gas, oil	Structure - Commercial	14 m	14 m
Monument	Structure - Commercial/	14 m	14 m
Motel	Building - Commercial	14 m	14 m
Newspaper Dispenser	Structure - Commercial	0.3 m	0.3 m
Noise Attenuation Structure	Structure	0.3 m	0.3 m
Parking Lot	Land Use - Commercial	3 m	3 m
Pipe Line	Structure - Commercial	3 m	14 m
*Pit and Quarries	Land Use	30 m	30 m
Pond -Detention/ Retention	Land Use	14 m	14 m
Pond - Other	Land Use - Residential	8 m	14 m
	Land Use - Commercial	14 m	14 m
Power / Transmission Line	Structure - Commercial	0.3 m	14 m
Pumping Station	Building - Commercial	14 m	14 m
*Race Track	Land Use - Commercial	14 m	14 m
Radio/Television Station/ Tower	Structure - Commercial	14 m	14 m
Residential Dwelling	Building - Residential	8 m	14 m
Residential Dwelling - more than 5 units	Building - Commercial	14 m	14 m
Residential Dwelling - Class 1 and 2 highways	Building - Commercial	14 m	14 m
Restaurant	Building - Commercial	14 m	14 m
Retaining wall	Structure – Residential/ Commercial	0.3 m	14 m

Type of Use	Classification	Setback from Highway P/L	
		Other Classes	Class 1 and 2
Roads - not essential to future viability of development	Private	8 m	14 m
Road - essential to future viability of development	Private	8 m	14 m
Road - ROW wide enough to permit road relocation outside 14 m setback in future	Municipal	8 m	14 m
Road - ROW not wide enough to permit road relocation outside 14 m setback in future	Municipal	8 m	14 m
Satellite Dish	Structure - Residential	8 m	8 m
	Structure - Commercial	14 m	14 m
School	Building - Commercial	14 m	14 m
Septic Tank	Structure - Residential/Commercial	8 m	14 m
Septic Bed	Structure - Residential/Commercial	3 m	14 m
Service Station	Building - Commercial	14 m	14 m
Sewage Plant	Structure - Commercial	14 m	14 m
*Shopping Centre	Building - Commercial	14 m	14 m
*Stadium	Building - Commercial	14 m	14 m
Stockpile	Land Use - Commercial	8 m	8 m
Stockyard	Building - Commercial	14 m	14 m
Storage Tank (Bulk)	Structure - Commercial	27 m	27 m
Storage Tank Above or Below Ground	Structure - Commercial	14 m	14 m
Store	Building - Commercial	14 m	14 m
Swimming Pool	Structure - Residential/Commercial	8 m	14 m
Telephone Booth	Structure - Commercial	0.3 m	0.3 m
Tennis Court	Land Use - Residential	0.3 m	0.3 m
	Land Use - Commercial	3 m	14 m

Type of Use	Classification	Setback from Highway P/L	
		Other Classes	Class 1 and 2
Theatre	Building - Commercial	14 m	14 m
Trees	Land Use	0.3 m	0.3 m
Wall, Masonry	Structure - Residential	0.3 m	0.3 m
Warehouse	Building - Commercial	14 m	14 m
Water Tower	Structure - Commercial	14 m	14 m
Well	Structure - Residential/ Commercial	30 m	30 m
Wireless Telecommunication Facility	Structure - Commercial	14 m	14 m
Winery	Building - Commercial	14 m	14 m
Wrecking Yard	Land Use - Commercial	45 m	45 m

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# Highway Corridor Management **Manual**



## **Chapter 3: Encroachments**

**Corridor Management Office**  
Ministry of Transportation

**April 2025**

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## 3.1 Introduction

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### 3.1.1 Purpose

This chapter outlines the Ministry's policies and procedures related to encroachments within the highway right-of-way.

The Ministry of Transportation controls all encroachments within Provincial Highway rights-of-way. The Ministry's control of encroachments is intended to maximize highway safety, maintain the free flow of traffic, and minimize the likelihood that an encroachment (or related works) interferes with a highway or creates a highway maintenance problem.

The Ministry will ensure that the installation or alteration of encroachments, the construction of works associated with them, and the restoration of the right-of-way is carried out in a manner that is satisfactory to the Ministry. The cost of this work is borne by the encroaching party.

### 3.1.2 Definition of Encroachment

An encroachment includes any installation, stockpile, or other work, that is upon, over, under, or within the limits of a Provincial Highway right-of-way (excluding entrances).

Encroachments may include accelerating and decelerating lanes, curbs, gutters, sidewalks, safety islands, sewers, water pipelines, fibre optic cable, gas pipelines, oil pipelines, conveyors or other works or structures that may during the construction, installation, or maintenance thereof obstruct, cause material to be deposited upon, enter upon, take up, bridge over, tunnel under, or in any way interfere with the land within the limits of a highway, or the roadway, or any structure forming a part of the highway. Under certain circumstances, pulpwood, logs or other material piled on the right-of-way to await loading on trucks may be considered an encroachment.

### 3.1.3 Public Utility

A Public Utility shall include: - poles, wires, conduits, transformers, pipes, pipelines and any other works, structures, etc. belonging to a municipal corporation, commission or company operating under a federal, provincial or municipal franchise to provide a public service.

## 3.2 General

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All encroachments within the limits of a highway shall be subject to the approval of the Ministry. An Encroachment Permit or other Permit or approval required by the Ministry must be obtained for each encroachment before work commences.

The construction or operation of works within the limits of the right-of-way of a highway by other than the Ministry or its agent shall be considered an encroachment. Entrances are dealt with in Chapter 4 (Access Management). Mailboxes and newspaper containers are also dealt with in Chapter 1 (Permit Administration).

### **3.2.1 Classification of Encroachment**

The various types of encroachments listed below are typical, and may be used as a guide in classifying other encroachments. The classification of an encroachment shall be stated on the applicable permit, and shall be a condition of that permit.

#### **3.2.1.1 Commercial Encroachment**

A Commercial Encroachment shall be an encroachment made by or on behalf of a commercial firm or establishment. A Commercial Encroachment may include oil pipelines, gas pipelines, fibre optic cable, overhead or underground conveyor systems, sewers, drainage or waste disposal pipes, curbs, gutters, accelerating and decelerating lanes and other installations upon, over or under the right-of-way of a highway, or landscaping within the limits of the right-of-way of a highway. Private power lines or railways without federal statutory authority shall be classified as commercial encroachments.

#### **3.2.1.2 Residential Encroachment**

A Residential Encroachment shall be an encroachment by or on behalf of a private individual or private farm, or pertaining to a private dwelling. A residential encroachment may include a water pipeline, gas pipeline or other installation upon, under, or over the right-of-way of a highway, or landscaping carried out within the limits of the right-of-way of a highway.

#### **3.2.1.3 Municipal Encroachment**

A Municipal Encroachment shall be an encroachment made by or on behalf of a municipality. A municipal encroachment may include a sewer, water pipeline, sidewalk, curb and other installation, upon, under, or over the right-of-way of a highway.

#### **3.2.1.4 Statutory Encroachment**

A Statutory Encroachment shall be an encroachment for which legal authority exists by right of federal or provincial legislation. These encroachments are not controlled by the *Public Transportation and Highway Improvement Act*. A statutory encroachment may include a railway, power and telephone line, gas pipeline, etc. A railroad with federal statutory authority shall be a statutory encroachment.

### **3.2.2 Forms of Approval**

Approval for encroachments may take various forms, including an Encroachment Permit, Municipal Encroachment, Legal Agreement, or letter of approval.

Permits are not issued for Statutory Encroachments. Refer to the appropriate section for specific approval procedures to be followed for the various statutory encroachments.

Refer to Chapter 1 for information regarding the permit application process.

### **3.2.3 Other Authorities Or Other Regulations**

All installations on the highway right-of-way are to conform to the regulations of other authorities having jurisdiction over them. It is the responsibility of the encroaching party to ensure conformance with all applicable regulations.

If during the life of a permit any Acts or Regulations are enacted which affect the rights and privileges granted by a permit or agreement, these Acts and Regulations shall apply to each permit, from the date they come into force.

### **3.2.4 Municipal Bylaws**

All approvals given for encroachments on the right-of-way are subject to prevailing municipal bylaws.

These other authorities and their areas of jurisdiction include:

- National Energy Board - Federally chartered oil and gas pipelines
- Ontario Energy Board - Provincially chartered oil and gas pipelines.
- Canadian Transport Commission - Federally chartered railways
- Ontario Ministry of the Environment - Watermains and sewers
- Ontario Ministry of Labor - Enforcement of the *Occupational Health and Safety Act*.
- Canadian Radio-Television and Telecommunications Commission - Bell Canada

### **3.2.5 Plans**

Each Encroachment Permit Application must be accompanied by a plan or drawing, showing the location and extent of the proposed installation as it relates to the highway. Each plan or drawing for an installation which crosses under a highway shall include a key plan, a detail plan, and a profile.

Submitted plans and profiles should be to the following scales, unless otherwise requested.

- a. Key Plan: 1:100 000, 1:250 000, or as necessary for orientation
- b. Detail Plan: 1:1000 in rural areas and 1:500 in urban areas
- c. Profile: 1:1000 horizontally and 1:100 vertically in rural areas;  
1:500 horizontally and 1:50 vertically in urban areas

### **As-Constructed Plans**

After construction of any utility, as-constructed plans are to be prepared by the encroaching party, and must be filed with the Field Services Engineer.

#### **3.2.6 Costs of Encroachment**

The work of installing, maintaining and operating an encroachment must be performed by the encroaching party, in accordance with the requirements of the Field Services Engineer. The full cost shall be borne by the encroaching party.

When the conditions of a permit are not fulfilled by the applicant, the Field Services Engineer may do any work required to put the right-of-way in a condition satisfactory to the Ministry. The cost of this work performed by the Ministry may be charged against the encroaching party.

When any work performed by the Ministry in connection with an encroachment is to be charged against the owner of the encroachment, the Field Services Engineer shall prepare an itemized statement of the work performed, and invoice the owner for the cost. If the owner of the encroachment fails to pay an invoice for this work within 60 days, the permit for the encroachment may be cancelled. The Ministry may also take action to remove the works if this is considered advisable by the Field Services Engineer.

#### **3.2.7 Conditions**

Any conditions regarding encroachments shall apply to all highways where the Ministry has authority under the *Public Transportation and Highway Improvement Act*.

An Encroachment Permit is subject to the conditions printed on the back of the permit. The Ministry may also attach any additional terms and conditions to the approval of an encroachment, as it deems appropriate.

##### **3.2.7.1 Conditions Binding upon Applicant, Heirs, etc.**

The conditions of an Encroachment Permit or Agreement shall be binding upon the applicant, their heirs, executors, administrators, successors and assigns. Each permit

shall continue in force until the expiry date, or until notice of cancellation of the permit by the Ministry is received.

### **3.2.7.2 Safety Measures**

The owner of an encroachment must comply with all safety measures outlined in Ontario Traffic Book 7. The following safety considerations are to be taken by the owner of an encroachment.

#### **Occupational Health and Safety Act**

The owner of an encroachment, any contractor, or any worker performing work related to an encroachment, must comply with all regulations and requirements of the *Occupational Health and Safety Act*.

#### **Portable Lane Control Signals**

A portable lane control signal system shall not be located at an intersection or pedestrian crossover, and shall not be located in any place or manner that conflicts with any signal-light traffic control system. (Ontario Regulation 478/80, *Highway Traffic Act*).

Portable lane control signals, associated signing, and the layout must be in accordance with the Traffic Control Manual for Roadway Work Operations.

#### **Work Outside the Highway Shoulder**

Where the work for an encroachment is outside the shoulders, the applicant should ensure that, where at all possible, vehicles and equipment must be parked clear of the shoulders. Prolonged parking on the shoulders will not be permitted in any circumstances. Vehicles and equipment may not be parked on the shoulders at night, except in an emergency, where they must be suitably illuminated or barricaded.

#### **Clear Vision**

Encroachments which will interfere with the clear vision of the travelling public (e.g. restricting visibility at an intersection) will not be approved.

#### **Interference with Traffic**

The permanent works of an encroachment must be located in a manner that does not interfere with traffic and does not create a traffic hazard.

It has been Ministry practice to maintain encroachment structures at a minimum distance of 10 m from edge of pavement of a highway. For further information, refer to Traffic Office for Traffic Barriers, Energy Attenuators, Light Poles.

#### **3.2.7.3 Right-of-Way must be Restored**

When it is necessary during the construction, maintenance, operation or alteration of works with respect to an encroachment, to interfere in any way with a highway, or with the land or the roadway or any structure or other facility pertaining to a highway, the owner of the encroachment must maintain, restore or rebuild the highway, along with any other approved utility, land, roadway, building, structure, fence, lawn, garden, shrubbery, driveway, culvert, sidewalk, curb, gutter, municipal or other installation etc. This work must be done to the satisfaction of the Ministry. The works relevant to the encroachment located within the limits of the right-of-way of a highway must meet the standards established or adopted by the Ministry.

All work must be completed at the expense of the applicant, and within the time limits established by the Ministry. If a property owner complains to the Ministry that his property etc. has been interfered with during the installation of the encroachment, the Ministry shall advise the owner of the encroachment of the complaint. If after 60 days the owner of the encroachment does not resolve the complaint, the Ministry may take steps to resolve it without further notification to the owner of the encroachment, and invoice them for the costs incurred in restoring the property or in settling the claim.

#### **3.2.7.4 Ontario Provincial Standards**

The Ontario Provincial Standards have been developed to provide common standards for road work, sewer, and watermain work for all provincial and municipal jurisdictions which carry out work in these fields. Ontario Provincial Standard Specifications (OPSS) and Ontario Provincial Standard Drawings (OPSD) have been published and issued.

The Ministry is committed to these Ontario Provincial Standards for contract design, award, and construction. However, in some cases MTO specifications and standard drawings will continue to be used. Consult the current issue of Directive PHY C-157 for information.

The appropriate specifications and standard drawings should be consulted for material requirements and acceptable construction procedures for installation of an encroachment.

#### **3.2.7.5 Construction Restrictions**

An applicant placing or altering an encroachment located within the limits of the right-of-way of a highway shall comply with the following restrictions and conditions, and with any other restrictions that may be established or adopted by the Ministry.

- a. The provisions of the *Public Transportation and Highway Improvement Act* and of the amendments thereto shall be observed at all times.
- b. The time(s) of day during which work shall be allowed to proceed shall be approved by the Field Services Engineer.



- c. Except in an emergency, or unless otherwise agreed to in writing between the company and the Field Services Engineer, where the company proposes to install or alter any works within the limits of the right-of-way of a highway, the company must give the Field Services Engineer at least 48 hours' notice prior to commencing work.
- d. Construction equipment shall not be allowed to work on the travelled portion or on the shoulder of a highway, except with the Field Services Engineer's written approval.
- e. Construction equipment shall not travel upon the travelled portion of a highway, except when it is being transported directly to a job site, or when it is crossing directly from one side of a highway to the other.
- f. Steel-tracked equipment shall not be allowed to travel upon or to cross a paved highway, except with the approval of the applicable Field Services Engineer, and then only after the pavement has been protected with planks, pads, or other devices acceptable to the Field Services Engineer.
- g. During construction, equipment, material, debris, etc. shall not be placed upon or left upon the shoulder or the travelled portion of a highway, in a manner which in the opinion of the Field Services Engineer may create a hazard or cause damage to the highway.
- h. All work shall be done in a manner that ensures a minimum of inconvenience to the owners of property adjoining the highway and to the travelling public.
- i. Prior to commencement of work, the company shall notify the owner of each property involved of the time of construction and of the methods to be used in crossing driveways.

#### **3.2.7.6 Cutting, Tunneling, Backfilling, etc.**

The cutting of pavement, tunneling, backfilling, compaction of fill, and repaving of a highway with respect to an encroachment must be carried out according to the standards established or adopted by the Ministry for this work. When it is necessary to backfill after tunneling or cutting the pavement or the roadbed, the material used as fill and any related work must be satisfactory to the Field Services Engineer. All work in this connection should be observed by the Corridor Management Officer or another official of the Ministry.

#### **3.2.8 Permit Expiry**

##### **3.2.8.1 Expiry Date**

All Encroachment Permits are issued with a fixed expiry date of 10 years from date of issue.

#### **3.2.8.2 Expiry of Permit**

An application for a new Encroachment Permit must be made at least sixty days before the expiry date of the current permit. A new application may be approved or refused by the Ministry, and any new approval is subject to the Ministry's current requirements. When a new application is approved, a new permit shall be issued by the Field Services Engineer.

When a permit for an encroachment expires and an application for a new permit has not been approved by the Ministry, the full cost of removing the encroaching works shall be borne by the owner. For municipal encroachments, the normal cost-sharing provisions of the permit apply, unless the encroachment was approved on a temporary basis. In this case, the cost of removal will be borne by the owners of the municipal encroachment. The works must be removed by the owner, if the Ministry so requires, within six months after the expiry date, and the right-of-way and any works related to the highway must be left in a condition that is satisfactory to the Field Services Engineer.

If the works which the Ministry requires the owner to remove have not been removed within six months of the expiry date, these said works and any works which are to be left in place shall become the property of the Ministry.

In certain cases, such as where the encroachment was a minor landscaping operation (e.g. placing topsoil and seeding) and no ongoing conditions were attached, the encroachment permit may be allowed to expire with no further action to be taken.

#### **3.2.9 Changes to Encroachments**

##### **3.2.9.1 Classification Change**

A change in the classification of an encroachment shall be subject to the approval of the Ministry. A new Encroachment Permit Application must be completed for any change in classification.

##### **3.2.9.2 Alterations, Additions or Tapping of Existing Encroachment**

When, after an encroachment has been placed, the owner proposes to alter, add to, or tap into the installation, an application must be made for an Encroachment Permit in the normal manner. A permit must be obtained before the work of altering etc. is commenced.

##### **3.2.9.3 Moving Existing Encroachments**

An application to move an existing encroachment to another location within the limits of the right-of-way of a highway must be approved by the Field Services Engineer. The encroachment in the new location must meet the current requirements of the

Ministry. The permit for the existing encroachment shall be cancelled, and a new permit for the encroachment in the new location shall be issued. The full cost of removing and relocating an encroachment shall be borne by the owner.

#### **3.2.9.4 Ownership Change**

When an encroachment permit holder changes, the new owner must apply for a new permit. When a new owner proposes a change of location or proposes to change the classification etc. of an encroachment, the proposal changes shall be subject to the approval and current requirements of the Ministry. They must not be made until the new permit has been issued, or approval has been granted by the Field Services Engineer.

#### **3.2.9.5 Changes Recommended by Field Services Engineer**

If the Field Services Engineer considers it advisable to make a change in the works of an existing encroachment to improve traffic movement or safety, or for any other reasons, they may recommend to the Regional Director or Manager of Operational Services that the change be made. When the work is to be done at the request of the Ministry, the Field Services Engineer may recommend that the work be executed by the owner, and that compensation be paid by the Ministry. The Field Services Engineer's letter of recommendation to the Regional Director or Manager of Operational Services must include a plan of the proposed work, the proposed method of performing the work and of sharing the cost, and an itemized estimate of the cost of completing the necessary work. (For Public Utilities, refer to the Utility Relocation Guidelines).

When the Regional Director or Manager of Operational Services agrees that a change in the works of an encroachment (excluding public utilities) as proposed by the Field Services Engineer is required and if the owner is entitled to compensation, the Regional Director or Manager of Operational Services shall contact the appropriate section to assess the amount of compensation to be paid. The Field Services Engineer shall then notify the owner of the encroachment of the proposed changes. This notice shall be in writing, and shall advise the owner of the plans, the estimated cost and the proposed method of completing the work and sharing the cost.

The Field Services Engineer's notice of the changes (approved by the Regional Director or Manager of Operational Services and indicating the requirements of the Ministry) shall be delivered to the owner or operator of the encroaching works by the Area Office Inspector, in person where practicable. If personal delivery is not feasible, the notice shall be sent by registered mail to the last known address of the owner or operator.

#### **3.2.10 Removal of Encroachment**

With the exception of a Statutory Encroachment, the Ministry on 30 days' notice may require the suspension of operations either temporarily or permanently, or the

removal, alteration, relocation or abandonment of works constructed, maintained or operated within the limits of a highway, regardless of the term of the applicable permit.

Upon receipt of a notice from the Ministry, the owner of an encroachment must make suitable arrangements to remove, alter, relocate or abandon the works, in accordance with the requirements of the notice. The highway right-of-way must be left in a condition that is satisfactory to the Field Services Engineer.

#### **3.2.11 Abandoned Encroachment**

When the owner of an encroachment ceases operations or abandons an encroachment and the encroachment will not be used in the future, the Field Services Engineer may recommend to the Regional Director or Manager of Operational Services that the works be removed.

In certain cases it may be advisable to abandon the works which are located underground, particularly those located under the roadway. At the discretion of the Ministry, the owner of the encroachment may be required to bear the cost of the removal of the works.

If the Regional Director or Manager of Operational Services approves a Field Services Engineer's recommendation, any existing permits for the encroachment involved shall be cancelled.

Whether or not a permit was issued by the Ministry for the encroachment, the Field Services Engineer shall notify the owner of the encroachment by letter of the action the Ministry proposes to take. For distribution of the letter, refer to the Cancellation of Permits section below.

#### **3.2.12 Cancellation of Permits**

When the conditions of a permit or of an agreement have been violated, the permit or agreement may be cancelled by the Ministry. The Ministry may establish a time limit for the removal of the works from the right-of-way of a highway of not less than 30 days and not more than six months from the date of cancellation of the permit.

In certain cases, it may be advisable to leave the works in the ground, particularly when these are located under the roadway. In these cases, the Field Services Engineer shall advise the Regional Director or Manager of Operational Services of their recommendations. The Regional Director or Manager of Operational Services shall recommend to the Minister the action to be taken. At the discretion of the Ministry, the owner of the encroachment may be required to bear the cost of the removal of the works.

The right-of-way of the highway and any works related to the highway must be left in a condition that is satisfactory to the Field Services Engineer.

If the works which the Ministry requires the owner to remove have not been removed within six months of the expiry date, the Ministry may elect to assume ownership of any such works which are left in place.

The letter notifying the owner of an encroachment of the Ministry's intention to cancel the permit or agreement or remove the works shall be prepared in five copies and shall be distributed as follows:

- original to the applicant
- copy to the Regional Director or Manager of Operational Services
- copy to the Section Head, Corridor Management and Property Office
- copy to the Area Office file.

### **3.2.13 Temporary Encroachments on New Designated Right-Of-Way**

When the Ministry acquires a new right-of-way a number of years in advance of construction, there may be requests from the public for permission to lease, or in some way encroach upon such property. Since such right-of-way is obtained for a specific purpose and designated as a King's Highway, it cannot be considered surplus property in the ordinary sense.

The Ministry may permit use of this right-of-way for an encroachment of a temporary nature in certain circumstances.

#### **3.2.13.1 Forms of Approval**

##### **Lease**

If no physical change in the property will result (other than tilling the soil or harvesting) a lease with the Field Services Engineer's clearance may be issued.

The Regional Property Section will be responsible for the preparation and administration of the leases.

##### **Lease and Encroachment Permit**

When the construction of any improvement or other physical alteration is involved, whether temporary or not (e.g., erection of a building, grading or paving of a parking lot, the installation of agricultural drainage tiles or pipes, etc.) an Encroachment Permit is required in addition to the lease.

##### **Encroachment Permit**

When a lease is not required (e.g., the placement of a utility line or a drainage ditch) an Encroachment Permit will be issued. The Regional Director or Manager, Operational

Services shall determine the terms and establish the schedule of conditions that will apply.

#### **3.2.13.2 Procedure**

The following procedure will be followed in issuing the required permits.

- a. The applicant shall be requested to write to the Field Services Engineer, giving full details.
- b. The Field Services Engineer shall forward the request to the Regional Director or Manager, Operational Services, who shall then contact the Planning and Design Section for the latest information regarding the timing of construction.
- c. The Regional Director or Manager of Operational Services shall review the submission and approve or refuse the request. If applicable, they shall arrange for the Field Services Engineer to issue an Encroachment Permit modified by any restrictions that shall apply.
- d. The Field Services Engineer shall process the permit in the normal manner.

#### **3.2.13.3 Term of Temporary Encroachment**

Each permit issued for an encroachment of a temporary nature shall be for a fixed period of time. This temporary encroachment must be removed from the highway right-of-way before the expiry date of the permit. In addition, before the expiry date of the permit, the owner of the encroachment must restore the right-of-way to a condition that is satisfactory to the Ministry.

#### **3.2.13.4 Temporary Permit not Renewed**

A permit for an encroachment of a temporary nature shall not be renewed. However, under exceptional circumstances, the Field Services Engineer may issue a second permit for a temporary encroachment. An application for a new permit must be submitted before the original permit for the encroachment expires. The term of the second Encroachment Permit is determined by the Field Services Engineer.

#### **3.2.13.5 Agreement for Temporary Encroachment**

Due to the nature of the temporary encroachments, the Field Services Engineer or Regional Director or Manager of Operational Services may feel an agreement should be executed between the applicant and the Ministry in place of an Encroachment Permit. This agreement shall set out:

- a. the extent of the works
- b. the expiry date

- c. that the Ministry will not be liable for any costs or damages arising from the removal of the works or failure to remove the works on or before the expiry date
- d. the restoration of the right-of-way to a condition satisfactory to the Field Services Engineer
- e. any other special conditions the Field Services Engineer or the Regional Director or Manager of Operational Services may deem necessary or advisable.

#### **3.2.13.6 Easement - Surplus Lands**

When an encroachment provided by a permit involves adjacent surplus lands held by the Ministry that are not designated as future rights-of-way, the applicant must be informed that an easement is required to cross surplus lands. Inquiries should be directed to the Land Management Supervisor of the Regional Property Section.

### **3.3 Banners**

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Banners may be placed across 2-lane Provincial Highways to mark occasions such as jubilees, anniversaries, or other special occasions, when sponsored by reliable groups such as town councils, service clubs, chambers of commerce, etc. Banners will not be permitted over or across Class 1 or Class 2 Highways.

#### **3.3.1 Conditions for Approval of Banners**

The Ministry will allow banners to be placed under the following conditions:

- a. An application to place a banner over or across a 2-lane highway shall be made on an Application for Encroachment Permit. The appropriate fee shall be collected.
- b. An approved banner shall be allowed for a period of time not exceeding four weeks. At the end of that time the banner is to be removed by the applicant.
- c. The applicant shall be responsible for ensuring that the banner is kept in good repair at all times while it is in use.
- d. The applicant shall be responsible for obtaining any and all other required approvals, which relate to the erection of the banner, such as, Hydro One, Bell Canada, etc.
- e. Approved banners must be placed a minimum of 7.6 m or 25 ft. in height from the centre line of the Highway.
- f. Approved banners must be supported at the top and bottom by a cable not less than 6 mm (1/4 in.) in diameter or a rope not less than 12 mm (1/2 in.) in diameter.

- g. Approved banners must be placed as close as possible to the limits or built-up area of the city, town or village in question.
- h. Banners must be constructed or manufactured so that they can withstand the elements.
- i. Banners must not be attached to any part of a bridge or other highway facility.
- j. Banners will not be permitted over or across Class 1 and 2 highways

For further information, refer to Chapter 5.

### 3.4 Bicycle Facilities

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It is not the policy of the Ministry to provide paved shoulders on highways for bicycle use. A Municipal Encroachment Permit may be issued to a municipality for the provision of bicycle facilities on MTO right-of-way, but only after all of the following requirements have been fulfilled:

- a. The municipality agrees to pay 100% of construction and maintenance costs.
- b. There is no suitable municipal land available that could be used to achieve the same purpose.
- c. The Ministry is satisfied those future route requirements on the right-of-way are not unduly jeopardized, and that the facilities can be located such that the Ministry's safety requirements are met.
- d. The municipality is made aware of and agrees with the cancellation and removal powers of the Ministry as set out in the permit.

### 3.5 Blasting Operations on Provincial Highways

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#### 3.5.1 Compliance with Statutes, etc.

When blasting operations are necessary in connection with work on an encroachment or public utility, the encroaching party, utility company or their assigned agents must comply with all statutes, regulations, by-laws, and orders, relating to the supply, hauling, handling, storage, and use of explosives.

#### 3.5.2 Special Conditions or Agreement

At the discretion of the Field Services Engineer, special conditions may be included in the Encroachment Permit or approval concerning blasting operations.

If the blasting operation is extensive, it may be considered necessary to enter into a legal agreement.



### **3.5.3 Written Notice**

Before any blasting operations are carried out, the encroaching party (utility, etc.) shall give written notice to any department or agency of government and to any person, partnership or corporation, including a municipal corporation and any board or commission affected by these operations. These notices shall be distributed by hand or by mail at least fourteen days in advance of the date blasting will commence. When blasting will be carried out on several dates (or more than one time), the encroaching party shall notify those persons concerned of each date and time.

A copy of each notice of the date and time of commencement of blasting operations must be delivered by hand or sent by registered mail to the Field Services Engineer. These copies of notices shall be delivered at least 14 days in advance of the date blasting will commence.

### **3.5.4 Time Of Blasting**

All blasting shall be performed between 0700 and 1900 hours. Additional time restrictions may be imposed at the discretion of the Field Services Engineer.

### **3.5.5 Blasting Control Specialist**

If so directed by the Field Services Engineer, the encroaching party may be required to employ the services of a blasting control specialist.

All bidders, regardless of the information shown on the contract, should carry out a full survey to determine the possible effect on the utility line of their proposed operation.

In the event of damage to a utility, the utility may submit a claim to the Highway and Municipal Services Section of the Ministry.

### **3.5.6 Type of Explosives**

The type of explosives, detonators, drilling, and method of blasting to be used shall be submitted for the information of the Field Services Engineer.

### **3.5.7 Safety Precautions**

The blast area shall be cleared of all residents, vehicular and pedestrian traffic prior to blasting. Flaggers shall be posted on each road entering the blast area to control traffic during blasting operations. Blasting mats or other approved methods shall be used to control fly rock.

Notwithstanding any direction of the Field Services Engineer in regard to explosives, the encroaching party shall take all precautions necessary to ensure that persons are

not injured, and that adjoining property and structures, including public utilities, are not damaged.

### **3.5.8 Responsibility for Claims**

The encroaching party shall be responsible for all claims whatsoever arising from the hauling, handling, use and storing of explosives, and all effects direct or indirect of the blasting operation.

### **3.5.9 Damage**

In the case of damage to, or interference with any utilities, pole lines, pipelines, farm tiles or other public or other privately owned works, the encroaching party shall immediately notify the owner and the Field Services Engineer of the location and details of such damage or interference.

### **3.5.10 Blasting Operations - Ministry Contracts**

The contractor shall be charged 100% of costs involved for protective measures.

All damages to utility lines caused by the contractor's operations are the responsibility of the contractor, and the contractor will be billed by the utility company for 100% of the costs to repair in all cases. Utility Authority Inspectors should advise contractors (and sub-contractors) of their liability for damages, regardless of precautions taken or any other circumstances.

If in the opinion of the Utility Authority and the Ministry, the required blasting cannot be carried out without damage to utility lines, certain minimum protective measures shall be agreed upon during the design stage of the contract, and shown on the contract drawings.

## **3.6 Drainage**

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Construction or alteration of a drainage system or any part of a drainage system within the limits of the right-of-way of a highway other than by the Ministry must not commence until an Encroachment Permit or Municipal Encroachment Permit is obtained. The Ministry may specify such conditions as it deems necessary for the granting of the permit.

The placing of a drainage structure outside the limits of the right-of-way but within the Ministry permit control area may require the issuance of a Building and Land Use Permit.

### **3.6.1 Clear Water Drains**

Proposed clear water piped drains (field tile drainage, foundation drainage, roof drainage, etc.) may be allowed, subject to the approval of the Field Services Engineer if a King's Highway is involved, or the Regional Director or Manager of Operational Services if a controlled-access highway is involved. An Encroachment Permit with appropriate conditions is issued to the applicant subject to the approval noted.

Existing clear water piped drains for uses as above, found outletting into highway ditches and/or storm sewers, may be allowed to continue subject to the approval of the Field Services Engineer (King's Highway) or the Regional Director or Manager of Operational Services (controlled-access highway). When such pipe drains are found, an Encroachment Permit with appropriate conditions should be issued to the owner, if approved by the Ministry. If there is any doubt of the piped drain water being clear, refer to section 3.6.3 titled "Pollutants Entering Highway Drainage System".

### **3.6.2 Clear Water Drainage Problems**

Clear water drainage problems associated with or purported to be caused by the King's Highway, or drainage problems identified by a municipality, but not associated with a King's Highway, for which assistance is requested, are usually forwarded to the Ministry at the Area Office level.

The Area Office shall receive such complaints from the public. It will make full use of available Area Office expertise and the Ministry of the Environment if necessary, to determine the proper course of action necessary to answer the complaint.

When additional expertise is required, the Area Office shall forward the complaint to the Regional Manager of Engineering, who will cause the complaint to be considered by appropriate staff. A recommendation will be prepared and returned to the Field Services Engineer from the Regional Manager of Engineering.

Technical assistance and advice will be provided by the Highway Standard Branch of the Provincial Highway Management Division upon request.

### **3.6.3 Pollutants Entering Highway Drainage System**

A drain or ditch carrying household or factory waste, sewage, or pollutants is prohibited from entering a highway. It must not be constructed in a manner where it opens upon a highway or is connected to a highway drainage system. Permits shall not be issued for such encroachments.

The owner of a property who allows pollutant waste or sewage to be carried onto a highway or into a highway drainage system contravenes the *Public Transportation and Highway Improvement Act*, the *Drainage Act*, the *Environmental Protection Act*, and in certain cases, the *Public Health Act* and could be prosecuted for such an offence under the applicable Acts.

### **3.6.3.1 Pollutant-Carrying Drains not within Ministry Work Project**

When a drain has been located emitting household or factory waste or sewage upon or into the highway drainage system and the source is known, the Area Office Inspector shall contact the owner and ask him to cease and desist. If the owner fails to remove the household or factory waste or sewage connection, the Inspector shall advise the Field Services Engineer who in turn, if unable to resolve the problem, shall take either of the following actions as deemed appropriate.

#### **Procedure 1**

The Field Services Engineer contacts the Regional Manager of Engineering for a recommendation. The Regional Manager of Engineering may contact the Manager of the Abatement Section of the Ministry of the Environment at the appropriate office and if they deem necessary, shall contact the local Health Unit, to arrive at an acceptable method of removing such piped drains from the highway.

The above procedure shall also be followed if the source of the household or factory waste is not detectable and the owner of the drain is therefore unknown.

#### **Procedure 2**

The Field Services Engineer shall advise the owner of the drain, in writing, of the controls which are exercised by the Ministry in respect of such drains. The advice to the owner regarding the prohibition of a drain carrying pollutant waste or sewage onto highway property shall be prepared in five copies and distributed as follows:

- original to the property owner or his representative
- copy to the Regional Director or Manager of Operational Services
- copy to the Section Head, Corridor Management and Property Office
- copy to the Area Office file.

The notice of the requirements of the Ministry shall be delivered by hand, if practicable, by the appropriate representative of the Ministry to the owner of the property or their personal representative. When personal delivery is not feasible because of the inaccessibility of the owner or his personal representative or for other reasons, the notice shall be sent by registered mail to the last known address of the owner or personal representative. In the event the title to a property is known to rest in an estate, the notice shall be delivered or sent to the personal representative of the deceased owner.

If, after an owner has been advised by the Field Services Engineer of the requirements of the Ministry with respect to a drain which carries sewage, waste, etc., the owner does not correct the violation within 30 days, the Field Services Engineer must provide the Regional Director or Manager of Operational Services and the Section Head, Corridor Management and Property Office with detailed information

about the violation and the action taken. The Regional Director or Manager of Operational Services shall arrange preparation of a second notice in five copies for transmission to the property owner and distribution as listed above.

If a violation is not corrected within 30 days after delivery of the second notice, the Regional Director or Manager of Operational Services shall advise the Regional Solicitor of the circumstances. The Regional Solicitor shall recommend the action to be taken.

#### **3.6.3.2 Pollutant-Carrying Drains within Ministry Work Project**

Where the Ministry has a Work Project on a highway which contains a hamlet or settlement, and as a consequence the likelihood of some pollutant being directed to the highway is great, the Regional Manager, Engineering and Right-of-Way Office, will contact the Manager of the Abatement Section in the applicable office of the Ministry of the Environment. Joint arrangements will be made to carry out a field survey to determine the source of any pollution entering the highway. This contact and the resulting survey should be carried out very early in the preliminary design phase, to ensure adequate time to make the necessary corrections. Any pipes found by the pollution survey to carry pollutants shall not be allowed to continue entering the highway ditch or storm sewer. An acceptable method of removing such piped drains from entering the highway shall be found jointly by this Ministry, the Ministry of the Environment, and if required, the local Health Unit.

If as a result of a field survey it is determined that the advice and assistance of the local Health Unit is required, the Ministry of the Environment will make the necessary arrangements.

All costs of the "pollution survey" will be absorbed by the Ministry carrying out their portion of it. No branch transfer of costs will be made between the MTO, the Ministry of Environment or the local Health Unit for such work.

There is no single solution or series of alternatives suggested for the problem of piped drains carrying pollutants found on highways. It is expected that the MTO, Ministry of Environment and the Ministry of Health will jointly be able to find, within their respective policies and legislation, a proper solution and method of implementing that solution, particularly if the investigation is carried out early in the preliminary design phase.

#### **3.6.4 Pipe Culverts and Sewers**

All pipe culverts and sewers placed within the limits of the right-of-way of a highway must conform to the requirements of Ontario Provincial Standard Specifications (OPSS) Form 421. Details of culvert construction including minimum wall thickness and minimum depth of cover are contained in the 800 series of the Ontario Provincial Standard Drawings (OPSD).

#### **3.6.4.1 Plastic Pipe Culverts and Sewers**

Polyethylene pipe and polyvinyl chloride (PVC) pipe are permitted for use in sewers and culvert construction. On MTO contracts, when flexible sewer or culvert pipes are specified, the contractor may supply corrugated steel pipe, polyethylene pipe or polyvinyl chloride (PVC) pipe. When rigid sewer or culvert pipes are specified, the Contractor may supply concrete, clay, asbestos cement, smooth inside wall polyethylene pipe, or smooth inside wall polyvinyl chloride (PVC) pipe.

Polyethylene pipe may be of the following types:

- a. Spiralene Polyethylene Pipe
- b. Corlene Polyethylene Pipe
- c. Big "O" Polyethylene Pipe

Polyvinyl chloride (PVC) pipe may be of the following types:

- a. Perma Loc
- b. Plas Tyton

Provincial Highways Directive C-46, revised 83-10-03, introduced the use of polyethylene pipe, and polyvinyl chloride (PVC) pipe for use in sewers and culvert construction by stating the following policy:

- To permit the use of polyethylene pipe with smooth inside walls as an alternative to concrete, asbestos cement and vitrified clay sewers and culverts.
- To permit the use of polyethylene pipe with smooth or corrugated inside walls as an alternative to corrugated steel culverts and sewers up to and including 1200 mm (48 in.) diameter pipe.
- To permit the use of polyvinyl chloride (PVC) pipe with smooth inside and outside walls or smooth inside walls with ribbed outside walls as an alternative to concrete, asbestos walls, sewers and culverts.
- To permit the use of polyvinyl chloride (PVC) pipe with smooth inside and outside walls or smooth inside with ribbed outside walls as an alternative to polyethylene pipe with smooth or corrugated inside walls, or corrugated steel pipe culverts and sewers.

#### **3.6.5 Pipe Subdrains**

Subdrains are small diameter pipes (100 mm, 150 mm and 200 mm dia.), perforated or non-perforated, which are placed in strategic sub-surface locations to collect sub-surface water and convey it to a proper outlet.

For highway drainage, steel and plastic (polyethylene) are the preferred pipe materials. For field drains, plastic, clay, and concrete are more commonly used. Perforated plastic subdrain pipes are factory-wrapped with geotextile.

Details of the construction of pipe subdrains are contained in Ontario Provincial Standard Specifications (OPSS) Form 405. Details of subdrain installation are contained in the 200 series for grading and 800 series for sewers of the Ontario Provincial Standard Drawings (OPSD).

#### **3.6.5.1 Subdrain Outlets**

Where plastic subdrain pipe outlets directly to a highway ditch, a galvanized steel CSP outlet shall be installed at the end of the plastic pipe subdrain outlet. The corrugated steel pipe section shall be a minimum length of 1.5 m and shall be fitted with a galvanized rodent grate. A condition to require placement of the outlet pipe at a minimum 0.3 m above the ditch grade may be considered advisable.

#### **3.6.5.2 Subdrain Outlet Problems**

An application to outlet a subdrain system onto the highway right-of-way should be examined to determine the potential downstream effect on ditches and drainage structures. If a pump is to be placed outside the right-of-way but within the control area of a highway to convey water from a subdrain system to the highway drainage system, a Building and Land Use Permit is also required.

The Regional Manager of Engineering should be consulted to determine if additional conditions such as construction of a retention pond, rip rap, gabions, etc., may be required. If there is a possibility of downstream capacity problems with runoff as a result of the pumping operation, the Ministry may advise the applicant to apply for improvements under the *Drainage Act*.

### **3.6.6 Drainage Policy for King's Highway (Per Circular 63-15)**

#### **3.6.6.1 Current Work Projects**

##### **Drainage Studies**

On current work projects, the Ministry will carry out drainage studies considering how existing and expected developments of adjacent lands will affect the King's Highways. It will also endeavour to coordinate Ministry and Municipal drainage works to the best advantage of all.

##### **Highway Culverts**

The Ministry (at its own expense) will construct culverts of adequate capacity to provide for the present and future run-off.



## **Storm Sewer Agreements**

On the subsection (a) above, the Ministry will invite the municipality concerned to enter into an agreement to construct joint sewer systems to the benefit of both agencies.

- a. The Ministry will contribute to the cost of a joint storm sewer an amount equal to the cost of adequately providing for storm run-off accepted by the existing highway drainage system.
- b. Where the municipality agrees to participate in a joint system, the municipality shall be asked to assume all additional costs of deepening and enlarging the storm sewer over and above that cost provided for in sub-paragraph (a).
- c. The Ministry shall assume the maintenance of all storm sewer systems within the rights-of-way except for municipal connections and the outlet, where the outlet is off the King's Highway right-of-way.
- d. If the municipality does not enter into a joint participating sewer agreement, the Ministry will proceed with the construction of a storm sewer system which provides for storm runoff accepted by the existing King's Highway drainage system.

### **3.6.6.2 Municipal Drainage Projects**

The following considerations apply to municipalities undertaking drainage projects in areas affecting highways, but where no highway work is anticipated.

## **Municipal Drainage Policy**

The Ministry will encourage municipalities to establish clearly-defined drainage policies in areas under urban development.

## **Drainage Studies**

The Ministry will offer to enter into agreements with the municipalities for joint construction of storm sewers, as they affect King's Highways or other drainage works, on condition that these Municipalities carry out comprehensive drainage studies of the total drainage areas affected. The Ministry will contribute to the cost of such drainage studies in developed areas, in direct proportion to the amount of the Ministry contribution to the total cost of the drainage work.

## **Drainage Agreements**

The Ministry will contribute to the cost of these drainage works on the following basis:

- a. Culverts

The Ministry will pay the total cost of culverts on King's Highways, provided the municipality undertakes all other works necessary for adequate outlet.



#### b. Storm Sewers

- i. In a municipality where no sewer exists and the municipality has initiated the proposal, the Ministry will assume only the additional costs of modifying and enlarging a new municipal storm sewer system sufficiently to accommodate the runoff from the King's Highway's right-of-way. This would be calculated on a relative area run-off coefficient basis.
- ii. Where the Ministry has an existing storm sewer that is inadequate for highway purposes, the Ministry will enter into an agreement and pay all additional costs as in (b)(i) above.
- iii. Where the existing storm sewer is adequate for King's Highway purposes, the Ministry will not contribute to a municipal storm drainage system.

### 3.6.6.3 Drainage Regulations Regarding Developments

The following policies concern the conditions of approval of draft plans of subdivisions, and the Ministry's Building and Land Use Permit and Entrance Permit regulations for commercial and industrial developments.

#### Draft Plans of Subdivision

Where the development of an area of land may affect the drainage characteristics of a watershed crossing the King's Highway right-of-way, the Ministry shall request from the subdivider a drainage plan of the area to be developed. As a condition of approval of draft plans of subdivisions, the Ministry may require alterations to such drainage proposals or construction of such drainage works as may be necessary to safeguard the interests of the King's Highways.

#### Building and Entrance Permit Regulations

Any development which involves the construction of buildings or paving, covering an area in excess of 0.4 ha or 4000 m<sup>2</sup> (one acre), shall submit full details of the storm drainage provisions for the development.

### 3.6.7 Drainage Works Initiated Under the *Drainage Act*

The following is excerpted from MTO Directive PHY B-63 (revised 82-03-04) and outlines the Ministry's policies and procedures for drainage works implemented under the *Drainage Act*. For further information refer to Directive PHY B-63 (revised 82-03-04); MTO Drainage Manual; the *Drainage Act*, R.S.O., 1980.

The Field Services Engineer shall not issue a Municipal Encroachment Permit for the construction of drainage works within the right-of-way pursuant to the *Drainage Act*, which does not conform to the engineering standards and practices of the Ministry. The Field Services Engineer may refer the application and/or report of the Drainage Engineer appointed under the *Drainage Act*, to the Regional Director or Manager of Operational Services for recommendations.

### 3.6.7.1 Organized Territory

#### Policies

Although not bound by the *Drainage Act*, this Ministry will cooperate with municipalities in support of any reasonable works under the Act including initial construction, regular maintenance and future improvements.

The Ministry will continue to make use of provisions of the *Drainage Act* for the purpose of procuring drainage of Provincial Highways or other property under the control of the Ministry.

The term "Ministry" may be interpreted to mean the Field Services Engineer or the Regional Head, Planning and Design Section, at the discretion of the Regional Director or Manager of Operational Services.

It is the responsibility of Regional and Area Office staff to initiate or sign petitions for drainage.

The following considerations will apply.

#### Petitions initiated by others.

- a. The Field Services Engineer may sign such petitions only if the proposed drainage works would be of tangible benefit to the Ministry, and, even then, only as a last resort. For example, if the Ministry has advised an owner to proceed under the *Drainage Act* when no other outlet was available, and the owner cannot get sufficient signatures from other owners, the Field Services Engineer may sign if the Ministry can benefit from the proposed works.

It should be noted that, by signing a petition, the Ministry might be responsible for part of the cost of the engineer's report, even if the drain is not built (s.40) of the *Drainage Act*.

- b. Petition for a drainage works for a highway where no current work project exists. Where the initiation of a petition may rectify a problem that affects a highway, the Field Services Engineer has the authority to raise such a petition.
- c. Petition for a drainage works for a highway where a current work project exists. Where the initiation of a petition may rectify a problem that affects a highway and is encountered during the design of a work project, such a petition may be raised by the Regional Director or Manager of Operational Services.
- d. The Head, Drainage and Hydrology Section, Highway Design Office, Highway Standards Branch, has the authority to sign petitions as in a, b, and c above when so requested.

It is the policy of the Ministry not to initiate Requisition Drains, under section 3 of the Act. However, Mutual Agreement Drains, section 2, may be considered provided the agreement is between the Ministry and a municipality.

Where the Ministry wishes to relocate drainage works within a highway right-of-way, the Ministry may request the municipality to initiate such relocation.

This Ministry will not make use of appeal procedures provided by the Act. Where there is concern over such items as location, relocation of works off the highway right-of-way, design timing and assessments, MTO will confer with the Ministry of Municipal Affairs and Housing (MMAH) and the municipality to achieve solutions which are satisfactory to all.

This Ministry will assist MMAH in an advisory capacity on technical matters and on questionable assessments.

## **Procedure**

### **Upon Engineer's Report**

- a. Upon written notification, and where the highway may be affected or assessed, a Ministry representative may attend the site meeting with the engineer appointed by the council, to offer suggestions and advise on special problems this Ministry may have. Ministry attendance at site meetings may be restricted to occasions when the effect or assessment on the highway is likely to be substantial.

At the time of the meeting, or as soon as possible thereafter, the Ministry will forward an application for an encroachment permit to the clerk of the municipality. The need for an early application by the municipality should be emphasized.

- b. Upon receipt, the engineer's report will be examined by the Ministry to determine whether consent in the form of a municipal encroachment permit should be given.

The following aspects of the proposed drainage works deserve special attention:

- feasibility of the overall scheme as it relates to the highway (the engineering)
- design details (culvert end area, obvert and invert elevations, specifications, standards, etc.)
- construction method
- restoration of roadway and right-of-way
- scheduling (timing of highway projects and encroachment work)
- costs assessed to the Ministry for benefit, outlet liability, injuring liability crossing or special benefit
- benefit/cost with regard to highway needs.

- c. The Ministry will bring to the attention of the municipality any major deviations from the procedures of the Act, doubtful assessments levied against the highway, or omission of MTO requirements, and request appropriate amendments. In certain cases it may be advisable to discuss the problem first with MMAH and/or the Ministry of Agriculture Food and Rural Affairs (OMAFRA).
- d. Immediately upon completion of the above review, the Ministry will forward a memorandum to the Subsidies Branch, MMAH, to notify that ministry of the project. By this means MTO will formally advise MMAH of its agreement with, or concerns about the proposed works and the assessments against the highway. In the event of potential problems, MTO will brief MMAH of issues of contention and, when possible, provide recommendations on engineering matters, bearing in mind that the technical services are primarily the responsibility of the engineer appointed under the Act. (Often the engineer's report arrives late at MTO and in that event the Ministry should communicate with MMAH via e-mail). This correspondence is directed to MMAH since it is MMAH that will eventually notify the municipality of the provincial response to its request for a grant (refer to step h). A copy of this correspondence should be mailed to the Drainage Coordinator, OMAFRA (Food Land Development Branch, Drainage Section).
- e. If the Ministry and the municipality fail to reach agreement on some major aspect of the report, the Ministry will alert the Subsidies Branch of MMAH and request that they make direct contact with the municipality in an effort to achieve a satisfactory solution.

Since assessments levied against lands of the Crown (which are paid for by the municipality that levied the assessments) are subject to a grant under the *Municipal Tax Assistance Act* administered by MMAH, that ministry may choose to press for a solution prior to construction of the drain or consideration of the grant.

- f. When the Ministry is in agreement with the proposed works and associated details, the Field Services Engineer will approve the municipal encroachment permit application, and issue a permit which will contain the following stipulation.  
  
"Notwithstanding any other provision of this permit, the Ministry may carry out such maintenance or alterations of the encroachment as may be required for the safe or proper operation of the highway as determined by the Ministry".
- g. During and after construction of a drainage works within the right-of-way, the site will be examined by the Field Services Engineer to ensure that:
  - the facility has been built in accordance with the original design approved by the Ministry
  - the work was carried out in conformity with Ministry standards and specifications, and
  - the roadway and right-of-way have been restored to their original condition to the satisfaction of the Ministry.

- h. Assuming that all concerns have been resolved via steps (c), (d), and (e), the form "Application for Payment of Drainage Assessments" (refer to attachment #2) received from the municipality will be endorsed by the Field Services Engineer and forwarded to the Subsidies Branch, MMAH. A copy of the endorsed application will also be sent to the municipality.

### **Procedure upon Engineer's Written Opinion**

The Ministry may relocate a drainage works within the highway right-of-way upon an engineer's written opinion rather than a report, in accordance with the *Drainage Act*. The Ministry will bear the full cost of the work.

If the engineer's written opinion recommends against the Ministry's proposal, and the Ministry cannot meet the engineer's objections but still wishes to relocate the drain, the Ministry may approach the municipality to initiate relocation under the *Drainage Act*.

### **3.6.7.2 Unorganized Territory**

#### **Background**

To assist the construction of agricultural drains in areas without municipal organization by the payment of grants for road crossings, an Order-in-Council was approved June 11, 1980 by the Lieutenant Governor to establish the "Northern Ontario Drainage Assistance Program".

Item #2 of the Order-in-Council states that MTO will supply plans, specifications, contracting and supervision of the work on road crossings. Based on the expectation that such drainage works will not occur frequently and will not cause a high demand on MTO staff, MTO will absorb its own contract preparation and inspection costs.

Item #4 sets out the payment of the grant by OMAFRA upon satisfactory completion of the work within the highway right-of-way.

#### **Policy and Procedure**

1. Although not bound by the Drainage Act, the Ministry will cooperate with OMAFRA in support of any reasonable drainage works under the Act in unorganized territory.
2. Upon being notified by OMAFRA of an application for drainage works crossing or encroaching upon a highway right-of-way in an unorganized territory, this Ministry will review the proposed project (either with or without OMAFRA representatives) to assess MTO's requirements.
3. MTO will arrange for construction of the portion of the drain within the highway right-of-way. Work outside the right-of-way will be done by others. The work can be carried out by day labour, under a small contract prepared and administered by MTO (e.g. invitational bid contract), or other suitable means.

4. Since the work must be completed to OMAFRA's satisfaction, the Ministry shall consult the Drainage Co-ordinator of OMAFRA prior to contract award (or start of work, in the case of day labour) and again prior to acceptance of the completed work.
5. The method of payment for the work is optional. The Ministry may endorse the contractor's billing and forward it to OMAFRA's Drainage Coordinator for direct payment to the Contractor. Alternatively, the Ministry may pay the contractor and be reimbursed by OMAFRA. If the work was done by day labour, the Ministry may bill OMAFRA for a reasonable amount.

Further information may be obtained from the Ministry's public website.

## 3.7 Highway Works Initiated by Other Parties

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### 3.7.1 Work Performed by the Ministry for Other Parties

It has been Ministry policy to undertake work on behalf of others in conjunction with a Ministry project, where there are some obvious advantages to one or both parties. For example, there may be some cost savings as a result of the work being undertaken as one large contract, or the work may be so interrelated that one part cannot be logically separated from the other. Also, where the work required by another party is being carried out on the operating right-of-way of the highway, the Ministry may wish to retain direct control over the contractor and their operations.

The following information, from Administration Finance Directive A-1, revised June 7, 1985, sets out guidelines for the preparation of Cost-Sharing Agreements with other parties for work to be carried out in conjunction with Ministry projects, whether by contract or by day labour.

#### 3.7.1.1 Types of Agreements

Agreements of some form or other are usually undertaken for cost-shared work with one of the following:

- private individuals and companies
- Ontario ministries and their agencies - for example, conservation authorities
- organized municipalities and their agencies - such as the local hydro commission
- chartered utility companies, such as Bell, Enbridge
- railway companies
- federal ministries and their agencies
- other provincial governments

- Crown corporations, such as Hydro One

These agreements may be handled in one of two ways:

- a formal agreement executed by both parties which, in some cases, may be registered on title, or
- a Letter of Intent initiated by one party and accepted by the other parties or exchange of letters by persons at a level authorized to make such commitments.

### **3.7.1.2 Guidelines for Agreements**

In determining whether a formal agreement or an exchange of correspondence (letters of intent) at an appropriate level is desirable, several factors must be taken into consideration:

- the magnitude and value of the work involved
- the status of the second party - that is, corporations, private individuals, government agency, etc.
- long-term commitments that may be involved
- urgency of the work.

It is generally accepted that the terms and conditions of the agreement should be the same, regardless of the form of agreement used. The principal advantage of a Letter of Intent is the relatively short time and costs involved in the preparation of the "Agreement". On the other hand, Letters of Intent sometimes do not receive a full distribution, which can create problems when the final invoices are being prepared. They are also not as readily legally enforceable.

The following guidelines are provided as a basis for determining which of these two types of agreements should be used.

#### **Letters of Intent**

Where the total cost of the work is relatively small (less than \$50,000) and there are no long-term commitments (e.g., three years or more), implied or otherwise, a Letter of Intent or exchange of correspondence at a level authorized to make such commitments is satisfactory when dealing with:

- municipalities (council resolution required) and their agencies, such as local hydro, school boards - other Ontario government ministries and their agencies - for example, conservation authorities
- Crown corporations, such as Hydro One
- public utility companies, such as Bell and gas companies



- federal ministries and their agencies, such as the Trent Canal Authority
- other provincial governments.

### **Formal Agreement**

Where the cost of the work exceeds \$50,000 or long-term commitments are involved, or both apply, then a formal agreement executed by the Minister is required in most cases.

When dealing with a private individual or corporation, a formal agreement is required in all cases. Where long term commitments are involved (e.g. traffic signal maintenance at shopping centres), consideration should be given to having the agreement registered on title.

Based on past experience, it is preferable to use a formal agreement when dealing with any railway company.

### **Exceptions**

This procedure does not apply to agreements dealing with:

- the provision for general maintenance services, such as snow plowing and sanding of roads for Townships and Local Roads Boards
- construction and maintenance of Connecting Links
- provision of specialized design services to municipalities (e.g. hydrology reports, geotechnical reports)
- property conveyance and temporary limited interests
- detour leases or easements;
- building and land use permits (where cost-shared work on the highway right-of-way is not involved).

Therefore existing procedures will continue to be followed.

#### **3.7.1.3 Cost Sharing Agreements**

The Regional Director or Manager of Operational Services have been delegated the authority to negotiate cost- sharing agreements with other parties when the Ministry's share of the cost is \$50,000 or less. Any expenditure of MTO funds exceeding this amount will require the specific approval of the Assistant Deputy Minister (Provincial Highway Management).

The Regional Director or Manager of Operational Services may delegate this authority to Field Services Engineer, where the agreement form is a Letter of Intent between the two concerned parties. The suggested guideline before a formal agreement



(executed by the ADM) should be considered is approximately \$50,000, regardless of the value of the share being paid by the Ministry.

#### **3.7.1.4 Responsibility for Preparation of Agreement**

The Ministry unit responsible for negotiating the cost-shared work will ensure that the most appropriate agreement form is used and, in the case of the Regions or Area Offices, will be responsible for the actual preparation of the agreement. The Director of Legal Services will provide legal assistance upon request, and must approve and process all formal legal agreements prepared for execution by the ADM.

#### **3.7.1.5 Preparation of Cost Estimates**

##### **Definable Costs**

Definable costs of the work include Services (Sundry), supplies and equipment (materials and engineering), acquisition and construction of physical assets (tender, force account, contingencies, utilities, work by others, etc.). The initiating office will be responsible for preparing preliminary estimates which will be used as a basis for negotiation. Once the design is complete, the initiator will arrange for a final estimate (based on D-4 document - refer to ED-77-04) to be prepared by the Estimating Office.

##### **Claims**

Claims directly attributable to the cost-shared work will be included as part of the direct costs when preparing the final invoice.

##### **Property Costs**

Where appropriate, property costs should be detailed separately and the land survey charges and appraisal and legal fees identified and included.

##### **Final Estimate**

The final estimate will be reviewed, and if necessary, updated to reflect the latest estimated costs about 60 days before the advertising of the work. The initiating office will notify the Second Party of the final estimated cost, including such markups, surcharges, etc., as contained in the agreement or Letter of Intent, and, if requested, meet with the Second Party. A letter of acknowledgement of the final estimated cost will be requested prior to award of the contract.

##### **Guaranteed Costs**

The actual billed costs are to be based on the bid or negotiated prices and "as constructed" quantities, but they are not to differ from the final estimated costs (as presented to the Second Party prior to advertising) by more or less than 15 percent, where the work is being incorporated as part of a Ministry contract. The intent of this clause is to protect the Second Party from possible imbalanced bidding by the contractor. Any additional costs beyond the 15% guarantee that may be absorbed by

the Ministry will more than likely be offset by lower unit prices on other contract items that are not cost shared. Similarly, the Second Party would be billed an amount not less than 85% of the final estimated costs. Where the total work being constructed is paid entirely by the Second Party (common with private developers) the 15% guarantee on estimated cost will not apply. Claims paid by the Ministry and attributable to the cost-shared work are not included in the guarantee.

### **Determination and Assessment of Other Costs**

Certain costs such as design and field engineering as outlined below and administration surcharges and overheads, etc. as outlined in Administration Finance Directive B-48 must be added to the estimated cost of work. Refer to Section 3.7.1.8 for example billing, and Section 3.7.1.9 for explanation of the billing based on an agreement relating to a capital contract.

Field engineering and design engineering will be calculated in the following manner:

- a. If the agreement is the total or part of capital, contract field engineering will be added at the rate of 9.8% of the total contract costs exclusive of any surcharges or overheads.

Design engineering will be added at the rate of 8.56% of the total direct contract costs, inclusive of field engineering but exclusive of any surcharges or overheads.

- b. If the agreement is for a recoverable project outside the boundaries of a capital contract, then the Regional Director or Manager of Operational Services will negotiate a reasonable rate to cover field and design engineering and at no time will these rates exceed the rates as outlined in (a) above.

Notwithstanding the use of estimates as described above for field and design engineering, it may be more appropriate to use actual costs on large cost sharing projects.

Where reciprocal cost-sharing of construction work between the Ministry and a municipality is common (e.g., City of Toronto) the Regions may negotiate an appropriate reciprocal arrangement for charging of design, contract administration, and overhead costs/surcharges.

On complex cost-sharing agreements where the applicability of certain surcharges and overheads is questionable, financial advice should be obtained from the Controllershship Office.

#### **3.7.1.6 Cancellation or Termination of Agreements**

Each agreement or Letter of Intent shall contain clauses defining the conditions under which one or both parties may terminate the arrangement, and the manner in which the cost settlement is to be based. To a certain extent, these conditions will depend

on the method used to construct the work (public tender, day labour, etc.) and the manner in which the work is designed for construction.

If the work is paid for entirely (100%) by the other party (common with developers, private concerns, etc.) notification by the Regional Office of the actual bid prices shall be provided prior to the award of the contract. The Second Party may exercise its option to cancel the work at this point, subject to the conditions set out in the agreement.

Where the cost-shared work is part of a Ministry contract and the Ministry has guaranteed the estimate to within plus or minus 15%, the Ministry alone shall retain the right to cancel the award of the contract if, in its opinion, the bid prices are excessive.

In the case of a completely separate contract for the cost-shared work which has been cancelled, only the original engineering design costs are involved. The Ministry should recover 10% of the estimated cost of the work (excluding field engineering), unless actual records are available of design staff time (planning and design, surveys & plans, geotechnical, etc.) spent on the work.

Where the project must be redesigned by the Ministry to separate out the cancelled portion of the cost-shared work, the additional design time to carry out this alteration must be recorded, and included in the costs chargeable to the Second Party.

#### **3.7.1.7 Distribution of Agreements**

Frequently, the agreement is executed several years before the final billing is sent out. As a result, the accounting office preparing the invoice is sometimes unaware that a written agreement exists. Lacking any other instructions, standard billing procedures are applied as outlined in the Accounting Manual. To minimize this problem, a mandatory distribution list for all types of agreements has been developed as follows:

- Director, Contract Management and Operations Branch
- one original to Information Management Office
- Regional Director or Manager of Operational Services
- Field Services Engineer
- Director, Transportation Capital Branch
- Head, Contract Preparation and Control Office
- Director, Internal Audit Branch
- Financial Comptroller (two- including one original)
- appropriate Accounting Offices (Area Office or Region)

- Director of Legal Services
- Manager, Contract Management Office

Additional distribution is optional depending on the content and nature of the agreement.

### 3.7.1.8 Example Billing

			<u>Level</u>
<u>Estimated Project Costs</u>		\$100,000	(1)
Includes:			
Services	\$10,000		
Supplies & Materials	\$15,000		
Equipment	\$5,000		
Tender, Force Accounts etc.	\$60,000		
Utilities	\$10,000		
<u>Field Engineering &amp; Supervision</u>	9.8% of (1)	<u>\$9,800</u>	
	Subtotal	\$109,800	(2)
<u>Design Engineering</u>	8.56% of (2)	\$9,399	
Includes:			
Highway Design Geotechnical Engineering Surveys, etc.			
	Subtotal	<u>\$119,199</u>	(3)
<u>Material Handling Costs</u>			
Direct Purchases	3% of \$5,000	\$150	
Stock Issues	15% of \$10,000	<u>\$1,500</u>	
	Total Direct Costs	\$120,849	(4)
<u>Ministry Administrative Overhead</u>			
Tender	3% on \$50,000	\$1,500	
	2% on \$10,000	\$200	
Hydro One 3rd Party invoice			
	5% of \$10,000	\$500	
General Overhead on remainder of Direct Costs			
	10% of \$50,849	<u>\$5,085</u>	
	Total Costs	<u>\$128,134</u>	(5)

### 3.7.1.9 Explanation of Billing Percentage Markups

1. For field engineering (where applicable) apply a factor of 9.8% to the total contract costs as outlined in Section 3.7.1.5.
2. For design engineering (includes highway design, geotechnical, surveys, preparation of survey plans, etc.) apply a factor of 8.5% to the sum of the contract costs as outlined in Section 3.7.1.5.
3. Material Handling charge should be applied as follows:

Direct Purchases @ stockpile materials 3%

Stock Issues 15%

4. The sum as shown at Level (4) may now be deemed the total direct costs.
5. Administrative Overhead associated with the Provincial Roads Program will be applied in the following manner:
  - a. Tender, Force Accounts & Contract Claims
    - o 3% on the first 50,000
    - o 2% on the next 50,000
    - o 1% on the balance
  - b. Third Party Invoices 5%
  - c. All remaining direct costs 10%

The percentage factors stated above are based on 1984/85 financial data. These will be updated periodically by the Financial Planning & Administration Branch when significant changes occur.

In cases where the other party undertakes the design, contract administration, or both, the applicable percentage should be adjusted accordingly.

### 3.8 Landscaping and Roadside Vegetation

All landscaping operations (including roadside vegetation management activities such as tree pruning or tree removal) performed within the right-of-way of a Provincial Highway, are subject to the Ministry's approval.

An Encroachment Permit is required for landscaping operations such as placing fill for earth berms, grading material on the right-of-way, placing topsoil, or planting trees or other vegetation.

#### 3.8.1 Conditions of Approvals for Landscaping

Landscape plans shall be forwarded to the Area Office Landscape Supervisor, or Area Office Services Supervisor, as applicable, for review and approval before permission is granted to commence work.

Where the landscaping is to include tree planting, species shall be chosen which are suitable for the area, i.e., those that are hardy and can tolerate roadside conditions. All plantings must be completed to current MTO planting specifications.

Planting layout should be random and natural in appearance avoiding linear, straight line planting.

### **3.8.2 Major Landscaping**

Where the landscaping (or the resulting maintenance requirements) will be extensive, it may be considered necessary to enter into a legal agreement with the encroaching party. One example would be in a case where a developer will be grading a considerable part of the right-of-way, or placing extensive plantings.

When a legal agreement covering landscaping is being prepared, the following are some of the items which should be addressed:

- Responsibility for maintenance of the ground cover and plant material
- Grass mowing and weed control requirements
- tree maintenance including watering, fertilizing, pruning, insect control (if needed), disease control (if needed) and replacement of dead trees

### **3.8.3 Minor Landscaping**

Some landscaping operations may be of a very minor nature, such as the placing of topsoil over a small area of the right-of-way and spreading of grass seed. In these cases, it may be considered appropriate to waive the Encroachment Permit fee, with the express approval of the Field Services Engineer.

### **3.8.4 Tree Pruning and Tree Removal**

An application for any permit which will require the pruning or removal of trees within the right-of-way shall be referred to the Area Office Landscape Supervisor or Area Office Services Supervisor as applicable. Trees shall not be pruned or removed until a Tree Pruning permit is issued.

### **3.8.5 Brush Spraying Permit**

Brush Spraying Permits are issued to utility companies to clear brush near utility lines, and are issued by the Area Office Landscape Supervisor or Area Office Services Supervisor as applicable.

### **3.8.6 Landscape Grading**

Approvals for grading revisions to existing ground should ensure that the new grade will be gradual and natural in appearance. Slopes should be no steeper than 2:1 and preferably should be 3:1 or 4:1, to permit mowing and other maintenance activities.

When an application to place an earth berm on the right-of-way is received, it should first be determined if the berm could be placed on private property. A second option to accepting all of the berm on the right-of-way may be to place the berm at the

property limit, with the fill area extending both onto private property and the right-of-way.

When part or all of an earth berm is to be placed on the right-of-way, the contours should be variable, and the ends of berm should taper gradually to existing ground.

### **3.8.7 Memorandum of Understanding (MOU) with Hydro One Networks**

The attached Memorandum of Understanding (MOU) between Hydro One Networks Inc. (Hydro One) and Her Majesty the Queen in right of Ontario, represented by the Minister of Transportation (MTO) relates to vegetation management operations associated with Hydro One's Transmission and Distribution facilities located within the MTO's highway rights-of-way. It is a framework for communication, cooperation, and understanding regarding vegetation management.

The Parties have developed this MOU as a means to better work together in order to ensure the efficient use of resources in order to meet the needs of MTO to issue the permits required for the work.

In this regard, the Parties confirm and acknowledge their respective commitment to the successful management of vegetation affecting Hydro One's electrical transmission and distribution facilities along MTO's highway rights-of-way and hereby recognize that the achievement of this objective shall, in turn, be largely dependent on the implementation of, or adherence to, the following general principles:

- the creation and maintenance by the Parties of an effective working relationship based on a shared sense of common purpose, cooperation and commitment to the successful achievement of the control and removal of vegetation in a non-adversarial atmosphere; and,
- the joint development of shared strategies and good planning for better assuring the completion of the objective, including the periodic assessment and re-assessment of these strategies and objectives to ensure that they are appropriate for the achievement of the objective.

In the course of all discussions on the matter, it is understood that the priorities for all work shall be:

- the safety of the travelling public
- worker safety in regards to electrical hazards
- electricity delivery reliability
- minimizing adverse environmental/social impacts and the uninterrupted flow of traffic.

By this MOU, the Parties wish to confirm their respective commitments, being:



MTO is committed to an MOU whereby others working on the Ministry's rights-of-way are subject to the same terms, conditions and legislation as MTO.

Hydro One is committed to working within the framework of this MOU while planning and completing all vegetation management activities on MTO rights-of-way as necessary to maintain Hydro One facilities in a safe and reliable condition.

A copy of this MOU is attached as Appendix "3A" at the end of this chapter.

## 3.9 Noise Control Devices

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Where feasible, noise barriers are provided by MTO for new construction work on major freeways through existing residential areas.

Where residential development is proposed adjacent to an existing or proposed freeway, the Ministry of Municipal Affairs and Housing or other delegated approving agency may require the implementation of sound attenuation measures as a condition of approval.

### 3.9.1 Noise Barriers

An Application for Encroachment Permit to place a noise barrier within the right-of-way of a highway should be referred to the Regional Planning and Design Office for recommendations.

### 3.9.2 Earth Berms

An application to place an earth berm on the right-of-way of a highway may be referred to the Regional Planning and Design Office for comments, and also should be referred to the Area Office Landscape Supervisor or Area Office Technical Services Supervisor, as appropriate for review.

## 3.10 Pedestrian Grade Crossing

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The following policy applies to pedestrian grade separations that have been designated as controlled access roads or highways in accordance with Section 33 or 88 of the *Public Transportation and Highway Improvement Act*:

- King's Highways
- freeways or expressways designated pursuant to Section 91(2) of the *Public Transportation and Highway Improvement Act*
- connecting links designated pursuant to Section 19 of the *Public Transportation and Highway Improvement Act*, and
- other municipal roads and streets

### 3.10.1 Criteria

A grade separated pedestrian crossing will be considered on:

- new four-lane (or more) controlled access highways
- existing non-controlled access highways that are being upgraded to full CAH standards
- two-lane staged freeways or expressways where no other feasible alternative is possible

When the following criteria are met:

- a. The proposed highway will intersect an existing pedestrian route such as those used by:
  - school children on their way to and from school
  - people attending social or recreational functions, such as those held at a community centre or church
  - employees of large industrial plants on their way to and from work
  - people desiring access to major commercial developments, such as shopping centres, etc.
- b. The general conditions which require the crossing are sufficiently permanent to justify such a structure.
- c. Possible less costly alternatives, such as changing school boundaries, revised school bus routes or public transit routes, etc., have been fully explored and rejected as not feasible.
- d. The physical characteristics of the location make such a structure economically feasible from an engineering standpoint.
- e. The local municipality concurs with the need for the pedestrian grade separation and is agreeable to accept future liability for the facility.

### 3.10.2 Warrants

Where the criteria stipulated above have been met, a pedestrian structure will be constructed or in the case of a municipal road will be eligible for assistance from the Ministry, provided that the following warrants are satisfied:

- a. There is a minimum of 300 person trips on the pedestrian route during an eight hour period, on an average week day
- b. in areas of low population density (single family dwellings) the barrier length exceeds 0.8 km, or in area of higher population density (numerous high-rises and town houses) the barrier length exceeds 300 m. It is to be noted that the

term "barrier" as used here, is defined as the distance between controlled pedestrian crossings, such as at grade signalized intersections or grade separations.

### **3.10.3 Financial Arrangements for King's Highways, Freeways and Expressways**

When the criteria stipulated above have been met, and the warrants satisfied, financial arrangements between the municipality and the Ministry will be as follows:

- a. The Ministry will be responsible for the cost of design and construction of the structure of a pedestrian facility which crosses a highway under the jurisdiction of the Ministry.
- b. The local municipality will be responsible for the costs of all structure maintenance, construction and maintenance of all illumination, and pedestrian walkways approaching the structures (including acquisition for rights-of-way for pedestrians across privately owned lands, where applicable). Maintenance will include the concept of "repair".
- c. The municipality will also be responsible for the provision and cost of all service maintenance operations, such as snow removal, debris removal.
- d. The municipality must accept legal liability for the pedestrian grade separation and approaches, and provide necessary policing to protect the public from vandalism and other criminal acts.
- e. A legal agreement between the municipality and the Ministry must be entered into with respect to (b), (c), and (d) proceeding.

### **3.10.4 Existing King's Highways**

Generally, on existing Controlled Access Highways, pedestrian routes have been established at or reoriented to controlled crossings, such as signalized intersections or grade separations. Situations may occur where there is a recognized pedestrian crossing (less than 300 person trips during an eight hour day) at the time of designation of the highway. However, if there is a significant lapse of time between the date of designation and the commencement of construction, the above warrants and criteria are fulfilled prior to the commencement of construction. In these cases, the Ministry will consider a request from the appropriate municipality for a contribution of 50% towards the costs of design and construction of the pedestrian structure only.

The local municipality will be responsible for all structure maintenance, construction and maintenance of approaches, etc., as defined in Financial Arrangements (b) and (c) above.

Where there was no pedestrian activity at the time of designation, and a pedestrian crossing has subsequently been established due to the manner in which the local

municipality has allowed development to occur adjacent to the designated right-of-way, the Ministry will not contribute financially towards the cost of such a facility. However, the Ministry will enter into an agreement to allow Municipalities or developers to construct and maintain (at their cost) a pedestrian overpass or underpass on the highway right-of-way, provided it does not interfere with present and future highway needs.

Whenever a municipality requests a contribution towards pedestrian grade separation across an existing King's Highway, a report should be prepared and forwarded to the Assistant Deputy Minister, Provincial Highway Management, for consideration as to whether the Ministry should contribute to these works.

### 3.11 Sidewalks

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Section 106(4) of the *Public Transportation and Highway Improvement Act* provides that with the approval of the Minister, a township may receive from the Ministry 50% of the cost of constructing a sidewalk or reconstructing an existing sidewalk along a portion of King's Highway, Secondary Highway or County Road.

The following outlines of procedures apply to sidewalks along King's Highways or Secondary Highways. For procedures regarding a sidewalk along a County Road refer to Municipal Transportation - Roads Directive B-41.

#### 3.11.1 Application Procedure

A township council may, by resolution, apply to the Field Services Engineer for approval to construct or reconstruct a sidewalk along a King's Highway. The application shall indicate the location, type, length, width and estimated cost. The township shall submit a completed Encroachment Permit Application to the Ministry.

After inspecting the site of the proposed sidewalk, the Field Services Engineer shall consult with the Manager, Engineering Office, to ensure that the proposed work does not interfere with future highway construction.

The Field Services Engineer shall submit an estimate form (OB-CC-52) to the Regional Municipal Engineer with details of the proposed construction. The estimate shall show the estimated shareable cost, which shall be based on the low bid if the work is by contract.

The cost estimate and resolution will be submitted to the Manager, Municipal Roads Office, for approval and issuance of the work order to the Area Office. In turn, the Area Office will issue the Encroachment Permit, noting the terms of the Ministry's contribution and listing any specific conditions. The permit is the township's authority to proceed with the work.

### **3.11.2 Payment Procedure**

When the Field Services Engineer is satisfied with the completion of the work, the township shall submit a detailed invoice in triplicate, showing the total cost and the amount being claimed. Since the accounts for this work will be charged to cost centre 7221, they will be submitted through the Regional/ Area Office Administrative Services to Accounts Payable at Head Office. Local improvement assessments for this work need not be deducted from the statement of expenditures submitted by the township.

The funds for this program are limited, and the townships are advised to submit their requests for approval by March 31. As with normal subsidy work, the 50% payment will only be made in the year of the actual expenditure. Expenditures from previous years will not be allowed for the 50% grant in the current year.

## **3.12 Signs Approved by Encroachment Permit**

### **3.12.1 Service Clubs Sign Support**

Sign standard G-5, Service Clubs (King's Highway Guide Signing Policy Manual, sign support) may be used by a municipality to inform travelling members of Clubs of existing local branches located in that municipality. The Service Club sign support may be used on a King's Highway, and is to be located within the limits of a city, town or village, and only within the actual urban area of the municipality. On an assumed King's Highway, it is necessary for the municipality to obtain a Municipal Encroachment Permit.

Refer to the "Manual of Uniform Traffic Control Devices" for information regarding policy and procedures.

### **3.12.2 Neighbourhood Watch Program**

Sign standards G-25A and G-25B have been adopted for use by municipalities that have adopted a Neighbourhood Watch Program. The Neighbourhood Watch Community sign may be erected on major highways and other sections of the King's Highways within the limits of a municipality. Where the sign is to be erected on an assumed section of a King's Highway, the municipality must obtain a Municipal Encroachment Permit.

Refer to the King's Highway Guide Signing Policy Manual and the Manual of Uniform Traffic Control Devices for information regarding policy and procedures.

### **3.12.3 Block Parent Program**

Sign standards G-26A and G-26B have been adopted for use by municipalities that have adopted a Block Parent Program. The Block Parent sign may be erected within

the limits of a municipality on major highways and other sections at the King's Highway. An Encroachment Permit is required when the sign is to be erected on an assumed section of a King's Highway.

Refer to Directive C-43 (Provincial Roads) founded into "Policy Manual - Traffic Control Devices for the King's Highway" and the "Manual of Uniform Traffic Control Devices" for information regarding policy and procedures.

### 3.13 Traffic

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Requests to place illumination or traffic signals within the limits of a highway should be referred to the Regional Traffic Section.

#### 3.13.1 Illumination

Illumination should be considered when conditions required by current MTO illumination policy have been met. However, each location examined for illumination is evaluated on its own particular needs. The fulfillment of conditions outlined in the policy may not be regarded as justification to install lighting in every case. When it is determined by the Ministry that the need for illumination is justified, the Ministry will absorb the costs for installation, maintenance, operation, and energy.

Recommendations for illumination may be approved by the Regional Traffic Section, the Regional Director or Manager of Operational Services, or the Design Criteria Committee according to current procedures.

#### 3.13.2 Traffic Signals

As a general principle, traffic signals within the limits of a highway are under the jurisdiction of the Ministry. The initial cost and the cost of maintenance and operation are paid from the funds of the Ministry, unless other provisions are made by an agreement executed by the Minister.

#### 3.13.3 Commercial Development

In certain circumstances, existing or proposed commercial development may cause a need for illumination or traffic signals to be placed within the limits of a highway. In such cases, the initial cost of the illumination and/or traffic signals and the subsequent maintenance and operating costs must be assumed by the developer.

Because of difficulties associated with ongoing billings to the developer for maintenance and operating costs, a policy has been developed (refer to Provincial Highways Directive B-169) where a "lump sum" payment is received from the developer for future maintenance and operating costs. These costs are to be obtained through a legal agreement between MTO and the developer.

#### **3.13.4 Municipalities**

##### **3.13.4.1 Illumination**

On King's Highways, where the warrants are not met for illumination, but the municipality sees sufficient benefit and is prepared to pay the cost of installation and the energy, operating and maintenance costs, partial or full illumination may be installed under an Encroachment Permit or agreement as deemed appropriate.

##### **3.13.4.2 Traffic Signals**

When traffic signals are requested by a municipality and the minimum warrants are fulfilled, these traffic signals may be placed under a legal agreement between MTO and the municipality.

When a municipality indicates that it wishes to control the operation of the signals, provide power, perform the necessary maintenance and pay part or all of the resulting cost, a proposal in this regard should be forwarded to Regional Director or Manager of Operational Services.

The Ministry will consider acceptance of such proposals where there is a valid reason for municipal involvement, provided there is no conflict with public interest. There may be a significant saving to the Ministry in staffing requirements (e.g. servicing an isolated signal location) even if the Ministry pays the municipality for power and maintenance costs.

A special agreement with the City of Toronto provides that it can integrate the timing and progression of certain signals to the advantage of the motoring public. In return, the city will conduct the physical maintenance and absorb the cost. One example is the signals at the ramp terminals on Highway 401, where the cost of maintenance is borne by the City of Toronto.

An offer to make a similar agreement should be made to any interested municipality wanting to time and control signals for the mutual benefit of users of the municipal streets and users of the highway. Sample forms of agreement may be obtained from the Regional Solicitor.

#### **3.13.5 Hydro One Lighting**

Hydro One has reintroduced a program where Sentinel Lighting units may be installed on utility poles within the right-of-way of a highway.

##### **3.13.6 Illumination Outside the Right-Of-Way**

When vehicular operations of the highway are affected by direct glare from the illumination of private or commercial establishments, the Area Office should eliminate

the problem by negotiating with the establishment to relocate, adjust or remove the source of glare illumination, at the owner's expense.

## 3.14 Miscellaneous

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### 3.14.1 Control Survey Markers

In the past, the Ministry did not regulate the placement of control survey monuments by other agencies within highway corridors. However, after a number of requests from municipalities for compensation for control points destroyed or disturbed during highway reconstruction, a more formal approach to the use of Ministry right-of-way for control survey monument purposes was adopted.

The Surveyor General of Ontario was subsequently requested to advise all consultant surveyors for the Ministry of Natural Resources that MTO approval is required prior to setting monuments on highway right-of-way.

#### 3.14.1.1 Procedure

The surveyor shall approach the appropriate Head of the Regional Surveys and Plans Section who will have the proposed placement of monuments reviewed. The Regional Surveys and Plans Section, when reviewing the surveyor's proposals, will consider any potential operating problems and any future pending corridor reconstruction likely to have an adverse effect on the control monuments. The Regional Head will then direct the surveyor to the Ministry's Field Services Engineer.

The final approval for the placement of monuments within the highway right-of-way is the responsibility of the Field Services Engineer. The Area Office will issue, when appropriate, an Encroachment Permit for their placement, considering the advice and recommendations provided by the Head, Surveys and Plans Section.

#### 3.14.1.2 Conditions

The surveyor is to be instructed to:

- remain clear of highway pavements, shoulders, side slopes, drainage ditches and buried facilities
- set monuments below grade, particularly where there will be an obvious hazard to maintenance crews and machinery performing routine operations
- place monument markers well clear of grass cutting areas, preferably at the corridor fence lines
- provide copies of the final position sketches for Surveys and Plans, and Area Office use.



#### **3.14.2 Mailbox Posts**

An Encroachment Permit is not required for the installation of a mailbox on the right-of-way.

The installation of mailboxes shall be in accordance with Provincial Highways Directive PHY C-136 and the instructions in Chapter 1 for Rural Mail.

#### **3.14.3 Oil and Gas Exploration Rights**

Requests for oil and gas exploration rights on Ministry lands, including operating right-of-way, shall be dealt with according to Administration Property Directive B-18.

#### **3.14.4 Other Installations**

Refer to Chapter 1 regarding procedures for the placing of the following items:

- bus passenger shelter
- school bus passenger shelter
- newspaper container
- receptacle for an individual customer
- newspaper dispenser
- newspaper box for bulk delivery
- telephone booth.

### **3.15 Utilities – General**

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#### **3.15.1 Public Utility Restrictions**

When a person, municipality, or company operating a public utility or a Statutory Encroachment that intersects or is operated within the limits of a highway, plans to do work that may in any way interfere with or impede the movement of traffic or require the relocation or alteration of any highway or highway installation or structure, they shall send a plan or description giving the location and extent of the proposed work to the Ministry.

The Field Services Engineer shall assign a representative of the Ministry to negotiate satisfactory arrangements with the representatives of the organization, to ensure the safety of the public and that changes do not conflict with the requirements of the Ministry. Municipalities and private companies operating services other than those specifically exempt by federal or provincial statute or by this manual shall be required to obtain a permit before entering the right-of-way of a highway for the purpose of

placing works necessary to the operation of these services upon, under or over the right-of-way of a highway.

### **3.15.2 Class I And Class II Highways**

The placing of a utility within the limits of the right-of-way of Class I and Class II Highways shall be prohibited, unless in the opinion of the Ministry it is the only route available or a utility corridor has been established by the Ministry.

Any request to place a utility along the right-of-way of a Class I or Class II Highway shall be referred to the Regional Director or Manager of Operational Services. The Regional Director or Manager of Operational Services shall then forward the application to the Director, Contract Management and Operations Branch. If approved, all future relocation cost shall be at the expense of the Utility Company.

A utility may cross a Class I or Class II Highway subject to the approval of the Regional Director or Manager of Operational Services and issuance by the Area Office of the appropriate approval, permit, or agreement.

### **3.15.3 Class III Highways**

Utilities are permitted on Class III, Special Controlled-Access Highways, using the same procedures that apply to Class IV and Class V portions of the King's Highways. However, the Regional Director or Manager of Operational Services, at his/her discretion, may direct the Area Office to refer utility applications on any or all Class III Highways to the Region.

### **3.15.4 New Highway Right-Of-Way**

The installation of utilities on an entirely new highway right-of-way shall be subject to the approval of the Regional Director or Manager of Operational Services.

Applications to place utilities on new right-of-way for Class I or Class II Highways shall be referred by the Regional Director or Manager of Operational Services to the Director, Contract Management and Operations Branch.

### **3.15.5 Referral to Region**

Any application to place or alter a utility within the area of a Work Project shall be referred to the Regional Director or Manager of Operational Services.

In any case where the Area Office requires additional expertise or information, an application may be referred to the appropriate Regional Section such as Planning and Design Section, Traffic Section, Geotechnical Section etc.

### **3.15.6 Utility Plans**

Plans submitted for approval of a utility installation must show the location and extent of the proposed installation as it relates to the highway. Plans for an installation which crosses under the highway shall include a key plan, a detail plan, and a profile.

After construction of any utility, as-constructed plans are to be prepared by the utility company. These plans must be filed with the Field Services Engineer, who will then forward them to the Regional Surveys and Plans Section.

The Field Services Engineer may elect to allow a utility company to confirm by letter that a utility was installed in accordance with the original approved drawing. In cases where there was any deviation from the original approved plan, an accurate and up-to-date as-constructed plan is required. The plan must clearly show any deviation from the original approved plan when it is beyond the accepted tolerance, or as outlined in any letter of understanding between the Ministry and the utility concerned.

### **3.15.7 Placing Of Utilities**

#### **3.15.7.1 Procedure**

Where a utility company has received approval to place a plant within the Ministry right-of-way, the utility is expected to conform to the approved location within the accepted tolerance as defined below. Any revisions to the approved location that are found to be necessary after approval must be approved by the Ministry prior to placing the plant.

#### **3.15.7.2 Location and Tolerance**

Any utility will normally be expected to adhere to the following:

- a. Confine the utility plant within a 2 m horizontal strip along the highway right-of-way where possible, but should not take up a width of more than 50% of the distance between the shoulder rounding and the right-of-way limits. The accepted tolerance shall mean 0.5 m on either side of the approved 2 m strip.
- b. The 2 m horizontal strip is to be parallel to and immediately adjacent to the right-of-way limit, unless that location is already occupied by another utility, trees, or other obstacles which preclude this location. The 2 m horizontal strip must be as close to the right-of-way limit as possible, and in all cases not closer to the roadway or pavement than the centre of the roadside ditch. Any exception must be negotiated between the parties involved before the start of construction.
- c. The utility company placing the proposed new facility shall be responsible for locating any other existing plant, as well as resolving any conflicts which could occur.

#### **3.15.7.3 Both Sides of Right-of-Way**

Where the utility provides local service to customers on each side of the highway (e.g. local telephone service, gas distribution lines) consideration should be given to allowing plant location on both sides of the right-of-way to reduce lateral crossings as much as possible. It shall be the responsibility of the utility to show the need or justification to use both sides of the highway right-of-way.

#### **3.15.7.4 Inspection**

Consideration should be given by the Area Offices to placing an MTO Construction Inspector on large or complicated utility projects. This would be at MTO costs, except where otherwise identified.

#### **3.15.7.5 Restoration**

The utility companies shall restore the Ministry right-of-way to its pre-project condition upon completion of the plant installation.

#### **3.15.7.6 Joint Meetings**

MTO and the utility companies shall hold joint meetings on an annual basis. This should help to ensure that there is as little disturbance as possible to the MTO rights-of-way. Where there are continuing projects or major projects, joint meetings should be held which should serve the following purposes:

- a. To give the designer an idea of the extent of utility relocation and to examine alternatives which would reduce costs.
- b. Assist MTO budgeting for utility compensation.
- c. Review of overpasses and bridge structures to allow the designer to accommodate required utility ducts, etc.

#### **3.15.7.7 Letters of Understanding**

All conditions as outlined in any letter of understanding between the Ministry and a utility shall apply as part of this policy.

#### **3.15.7.8 Consolidation of Facilities**

It is recommended that designated optimum locations for utility facilities be mutually established for any particular section of highway. It is important that the utility company is aware of and agrees with its designated location. Once the location has been mutually agreed upon, the understanding should be recorded. The utilities can then plan for the eventual consolidation of their existing facilities, not presently in the designated "ideal" location.

### **3.15.8 Aerial Crossings**

When overhead lines are used at crossings the minimum vertical clearances shall be in accordance with MTOD 2245.020.

For aerial crossings of Class I or Class II Highways, poles shall normally not be permitted within the limits of the right-of-way.

Ministry approval is required for all aerial crossings, regardless of whether poles are placed within the right-of-way.

Where an aerial crossing of a highway involves the placing of poles within the right-of-way, and that utility normally requires a permit, an Encroachment Permit shall be issued. In cases where no poles will be placed within the right-of-way and the company normally requires a permit from the Ministry, (e.g. municipal hydro company) a Building and Land Use Permit may be used for the plant outside the right-of-way, in order to exercise control over the crossing.

#### **3.15.8.1 Buried Crossings**

Underground conduits may be used for the crossing of all classes of highway. Prior to placing electrical or communication lines under a highway, a casing of steel pipe, fibre duct, or other suitable material must be pushed, tunnelled or bored beneath the roadway.

#### **3.15.8.2 Method of Crossing**

Highway crossings must be by pushing, meant in a manner that does not disturb crossing under the highway by using, shall in most cases be prohibited. Tunnelling or boring under the pavement of the traveled surface of the roadway can be done by a "torpedo" or such similar devices. However, if requested, the Field Services Engineer may consider approving the use of the torpedo when roadbed material and other conditions so indicate. When the use of the torpedo is approved, appropriate terms and conditions shall be attached to protect the Ministry against possible damage to the highway. It shall be required that if the torpedo becomes lodged in the roadbed, recovery by open cutting of the pavement will not be permitted and the unit may have to be abandoned.

Open cut or trenching shall not be permitted except, where in the opinion of the Field Services Engineer, other methods are not possible, because of the size of the pipe or the nature of the ground.

In the case of a divided highway where the median is wide enough to allow working on the median, open cut may be allowed in the median area at the discretion of the Field Services Engineer.

Major and minor jacking or boring pits should be located at the bottom of the ditchline and backslope of the ditch, or beyond the toe of slope in a fill area. Open cut or trenching operations, and jacking or boring pits, shall be prohibited within 3.0 m of the travelled portion of the highway, or within the shoulder area of the highway.

#### **3.15.8.3 Depth of Cover**

The depth of cover for any buried plant shall be as determined by the Field Services Engineer, based on the requirements of each individual situation.

The standard depth for buried plant shall be not less than 1.2 m below the traveled portion of the highway. Buried plant below the bottom of a highway ditch shall be not less than 0.75 m in southern Ontario and 1.0 m in northern Ontario. Where the buried plant located within the limits of the highway right-of-way runs parallel to the highway, the minimum depth of cover shall be 0.75 m except at crossings.

#### **3.15.9 Multiple Locations or Crossings**

When a pipeline, pole line or other transmission line leaves the right-of-way of a highway and re-enters the right-of-way at another location, these lines shall be considered separate encroachments, and a permit shall be required for each location.

#### **3.15.10 Marking of Underground Lines**

The Ministry requires that each underground electrical, transmission, and communication line be marked with approved marker signs, which must be located in accordance with the requirements of the Ministry.

#### **3.15.11 Identification of Buried Public Utilities**

##### **3.15.11.1 Uniform Colour Code System**

The Ministry has endorsed the uniform colour code system for the on-site identification of buried public utilities. This colour code system was developed by the Construction Safety Association of Ontario.

##### **3.15.11.2 Identification Procedure**

A person or company planning to do any excavation must first contact all of the public utility companies or municipal works departments for the area involved, at least 48 hours before the start of excavation.

The public utility company or municipal works field representatives will meet with the person or company or their representatives on the site of the proposed excavation. They will discuss the proposed work and will then mark out the location of their

individual underground services, either on stakes, pavement, sidewalks, etc. using the colours as outlined below.

#### **3.15.11.3 Recommended Colours**

<u>Utility or Type of Product</u>	<u>Colour</u>
Electric power, distribution and transmission, municipal electric systems, traffic systems.	Fluorescent Red
Gas distribution and transmission, oil distribution and transmission, dangerous materials product lines, steam lines.	Fluorescent Yellow
Telephone systems, telegraph systems, police and fire communications, cable television.	Fluorescent Orange
Water systems, slurry pipe systems.	Fluorescent Blue
Sewer systems sanitary, sewer systems storm	Fluorescent Green

#### **3.15.11.4 Colours used by the Ministry**

A flat red paint is used to identify MTO Construction survey control stakes, and flat yellow is used for Surveys and Plans identification markers. Fluorescent paints are not used to identify any MTO survey stakes, reference points, or markers.

#### **3.15.12 Utilities within Controlled Area**

All utilities placed within the controlled area of a highway are subject to the approval of the Ministry.

When a utility is to be placed adjacent to a highway within the controlled area of that highway, plans shall be submitted to the Ministry. Normal service connections are excepted, and need not be referred to the Ministry.

In most cases, a letter of approval may be issued. In cases where a future widening is anticipated, where a line is in close proximity to a controlled access highway, or in other cases as deemed necessary by the Ministry, the Ministry may require that the utility company apply for a Building and Land Use Permit.

The above requirement for approval applies to provincially regulated telephone companies, but Building and Land Use Permits will not be required.

## 3.16 Power Lines

### 3.16.1 Hydro One Statutory Authority

Hydro One was granted specific rights and privileges with regard to the placing of plant within the right-of-way of a highway, under the *Electricity Act*.

Hydro One is required to obtain an encroachment permit from the Ministry for installations or changes in installations within the limits of the right-of-way.

### 3.16.2 Hydro One Officials

When Hydro One Corporation proposes to place a new power line or proposes to alter or add to an existing power line within the limits of the right-of-way of a highway, the appropriate Hydro One Officer shall consult with the applicable Field Services Engineer of the Ministry of Transportation. The appropriate Hydro One Officers to discuss such plans are:

#### 3.16.2.1 For Transmission Lines (over 50 kV):

- a. New Lines - The Group Manager - Route and Site Selection or the Group Manager, Stations and Transmission Programs; Design & Development Division - Transmission (Head Office).
- b. Alterations to Existing Lines - The Manager - Distribution Systems (Region) or the Manager - Transmission Lines, Transmission Operations Division (Head Office).

#### 3.16.2.2 For Distribution Lines (50 kV and under):

- a. The Area Manager (Area)
- b. The Area Foreman (Area)
- c. The Manager - Distribution Systems (Region)

Hydro One will continue to advise the Regional Director or Manager of Operational Services of the location of all future transmission lines.

### 3.16.3 Privately-Owned Or Municipal Hydro Commissions

Privately-owned or municipal hydro commissions shall be required to obtain an Encroachment Permit from the Ministry prior to installations or changes in installations within the limits of the right-of-way of a highway.



#### **3.16.4 Buried Power Lines**

Where a power line is to be placed under a Provincial Highway, an Encroachment Permit will be required.

Hydro One will be exempt from the payment of the permit fee for same side service connections.

The Encroachment Permit will be issued with the normal 10-year expiry date.

#### **3.16.5 Approval Procedure**

##### **3.16.5.1 Work Initiated by Hydro One**

The following procedure shall be followed for new installations or changes to installations of power lines on the right-of-way of a highway, initiated by Hydro One.

- a. Hydro One
  - will contact MTO Field Services Engineer for a discussion of the proposed installation and hold a joint inspection trip if necessary.
- b. Field Services Engineer
  - will inform Hydro One if B-plans or E.T.R. plans are required or if some other form of location plan is acceptable. The Field Services Engineer will send four copies of B-plans or E.T.R. plans, free of charge, to Hydro One when requested.
- c. Hydro One
  - will indicate the proposed power line on the plans and return three copies to the Field Services Engineer together with a completed Application for Encroachment Permit and the current permit fee. Where aerial crossings are involved, the minimum clearance over the travelled portion of the highway will be shown in figures; no profile will be required.
- d. Field Services Engineer
  - upon receipt of the plans may refer the request to the Regional Director or Manager of Operational Services for consideration. All requests for installations located upon a Class I or Class II highway or within the area of a Work Project must be referred to the Regional Director or Manager of Operational Services for consideration.
  - will, if they approve of the location, or if approved by the Regional Director or Manager of Operational Services, sign the plans as approved and return one signed copy to Hydro One with any applicable conditions attached.

e. Hydro One

- will, upon completion of the installation, submit an accurate as constructed plan to the MTO Field Services Engineer. If no changes or deviations from the original approved location occur during construction, and if acceptable to the MTO Field Services Engineer, Hydro One may submit a written confirmation that the plant was placed according to the approved plan. If changes or deviations are necessary during construction, the procedure as outlined in Section 3.16.5.3 "Deviations from Approved Locations" shall be followed.

f. Field Services Engineer

- will, upon receipt of an as-constructed plan or letter of confirmation from Hydro One, send one copy of the as-constructed plan or original approved plan as applicable to the Regional Surveys and Plans Section.

Where Hydro One proposes to place cable which will cross under a highway, the procedure below shall be followed. An Encroachment Permit shall be issued together with a signed copy of the approved plan.

### **3.16.5.2 Privately-Owned or Municipal Hydro Commission**

The following procedure shall be followed for new installations or changes to installations on the right-of-way of a highway, initiated by a privately owned or municipal hydro commission.

a. Hydro Commission

- will contact MTO Field Services Engineer for a discussion of the proposed installation and hold a joint inspection trip if necessary.

b. Field Services Engineer

- will inform the company if B-plans or E.T.R. plans are required or if some other form of location plan is acceptable. Suitable arrangements shall be made for the Hydro Commission to obtain the MTO plans if required.

c. Hydro Commission

- will indicate the proposed power line on the plans and return three copies to the Field Services Engineer together with a completed Application for Encroachment Permit and the current permit fee for a Municipal Encroachment Permit.

Where aerial crossings are involved, a profile will not be required, and the minimum clearance over the travelled portion of the highway will be shown in figures. A profile shall be required for all buried plant.

d. Field Services Engineer

- upon receipt of the application and plans, may refer the application to the Regional Director or Manager of Operational Services for consideration. All applications for installations allocated upon a Class I or Class II highway or

within the area of a Work Project must be referred to the Regional Director or Manager of Operational Services for consideration.

- will, if they approve of the location, or if approved by the Regional Director or Manager of Operational Services, sign the plans as approved, issue an Encroachment Permit and send the Permit together with one signed copy of the plan to the hydro commission.
- e. Hydro Commission
- will, upon completion of the installation, submit an accurate as-constructed plan to the MTO Field Services Engineer.
  - if changes or deviations are necessary during construction, the procedure as outlined in Section 3.16.5.3 "Deviations from Approved Locations" shall be followed.
- f. Field Services Engineer
- will, upon receipt of an as-constructed plan from the hydro commission forward the plan to the Regional Surveys and Plans Section.

#### **3.16.5.3    Deviations from Approved Locations**

If changes or deviations from the approved location which are beyond the accepted tolerance become necessary, approval must be obtained from the MTO Field Services Engineer prior to any work on the change or deviation.

The following procedure shall be followed for any proposed changes to the original approved plan for plant on the right-of-way. References to Hydro One also apply to privately-owned or municipal hydro commissions in Ontario.

- a. Hydro One
- prepares a location plan for approval by the MTO Field Services Engineer and forwards the location plan with a letter of notification to the MTO Field Services Engineer. The plan will be a B-plan or E.T.R. plan print or other type as mutually agreed with the MTO Field Services Engineer.
- b. Field Services Engineer
- will, if in agreement with Hydro One's proposal as indicated on the location plan and covering letter, approve the work and notify Hydro One. If the Field Services Engineer does not agree with the proposal for any reason, he/she will contact Hydro One to resolve the situation.

#### **3.16.6       Forestry Operations**

For the policy regarding Hydro One forestry operations such as tree removals, tree pruning, brush spraying and tree planting; refer to Appendix "3A" "Memorandum of Agreement with Hydro One".

## 3.17 Telephone Companies (Bell Canada)

### 3.17.1 Statutory Authority

Under the provisions of the Bell Canada Special Act of Incorporation, Bell Canada was granted certain rights and privileges with regard to the placing of telephone plant within the right-of-way of a highway. The Federal Statutory authority granted by the Act applies only to Bell Canada, and does not extend to private and municipally-owned companies.

### 3.17.2 Regulatory Agencies

The operations of Bell Canada and private and municipally owned companies are registered by the Canadian Radio-Television (CRTC) and *Telecommunications Act*.

Refer to sections 42 and 43 of the *Telecommunications Act*.

### 3.17.3 Approval Required

Bell Canada shall not be required to obtain an Encroachment Permit from the Ministry for installations or changes in installations within the limits of the right-of-way of a highway. Bell Canada shall submit a request to the Ministry for approval of such work. The approval of the Ministry must be obtained before a telephone company may make any change in its equipment which is located within the limits of the right-of-way of a highway. Other telephone companies are required to obtain an Encroachment Permit.

Changes to existing plant which require prior approval of the Ministry shall include relocating existing poles, placing additional aerial wire or cable on an existing pole line, replacing aerial wire with aerial cable, or placing additional poles or anchors in existing pole lines.

### 3.17.4 Letter of Agreement

The content of a letter of common understanding and agreement between the Ministry and Bell Canada is outlined below and is also addressed in Section 3.15.7 Placing of Utilities.

- a. If the MTO Inspector considers that the work being carried out is beyond the approved tolerances, it will be their responsibility to question the Bell supervisor. If agreement is not reached, the MTO Inspector may, with the approval of the MTO Field Services Engineer, ask the utility to cease work temporarily.
- b. It is understood that the Company will restore the rights-of-way to the Ministry's satisfaction, at its expense, when damage occurs as a result of the installation of the Company Plant.

- c. It is further agreed that MTO B-Plans and/or Engineering and Title Record (E.T.R.) plans, will be supplied by MTO and used by Bell Canada for location permission plans of all works in excess of 1609.3 m (5280') when available. For works less than this length it is optional to use the MTO Plans or a simple Bell Canada location sketch.
- d. The need for security and/or diversity of telecommunication cables and also the safety of Bell Canada workmen, and the motoring public requirements to avoid unnecessary crossings of highways, will also dictate the need for a Bell Utility, 2 m Strip on both sides of the highway R.O.W.
- e. Where Bell Canada wishes to place two or more cables along a particular right-of-way, or, as security of service and route diversity requirements will sometimes dictate occupancy on both sides of the highway, subsequent cables and local lines should be consolidated within designated strips as soon as economically possible.

### **3.17.5 E.C.M. and D.M.S. units**

The various types of units installed by Bell Canada such as E.C.M.'s (Environmentally Controlled Manholes), DMS (Digital Modular System) Bell cabinets, cell towers and DMS Units are considered to be part of the telecommunications plant.

In cases where no concrete base or pad is required for the unit, the normal stamp of approval on submitted plans shall be required.

#### **3.17.5.1 Units with Concrete Base**

Where a concrete base or pad will be required for an E.C.M., D.M.S. or other unit, Bell Canada or other telephone company shall apply for an Encroachment Permit. No fee will be required.

#### **3.17.5.2 Location of Units**

When placement within the right-of-way of a highway is being considered for an E.C.M. or a D.M.S. Cabinet or Hut, special care must be taken to ensure that the location is suitable, as safe vehicle access and parking are required.

Four constraining criteria to be considered by the Ministry before granting permission are as follows:

- a. Sufficient space must be available on the right-of-way.
- b. The unit should not adversely affect right-of-way maintenance.
- c. There should be no plans to widen the highway in the future.
- d. Reasonable accessibility (sight distance etc.) must be available for work operations by Bell Canada.

### **3.17.5.3 Units Outside the Right-of-Way**

It is the preference of Bell Canada to place E.C.M.'s and D.M.S. Cabinets and Huts on private property (purchase, long term lease or easement).

When the location of a unit will be outside the right-of-way but within the controlled area of a highway, a Building and Land Use Permit shall be obtained prior to the placement of the plant. The normal fee shall be required.

### **3.17.6 Approval Procedure**

#### **3.17.6.1 Work Initiated by Bell Canada**

The following procedure shall be followed for new installations or changes to telephone plant on the right-of-way of a highway. References to Bell Canada shall be meant to apply also to privately-owned or municipal telephone companies in Ontario.

- a. Bell Canada
  - will contact MTO Field Services Engineer for a discussion on the proposed installation of Company plant and hold a joint inspection trip if necessary.
- b. Area Office
  - will inform Bell Canada if plans are required or if some other form of location plan is acceptable. The Field Services Engineer will send four copies of B-plans or E.T.R. plans free of charge, to the Supervising Engineer, Bell Canada, when requested.
- c. Bell Canada
  - will indicate in coloured pencil on all four copies of the MTO plans, the location and type of proposed plant. Where some other form of location plan is acceptable, a vellum or equivalent is normally used and prints are made.
  - assigns and posts a Municipal Consent Number and a Bell Canada work order number to all four copies of location plans. The MC number will relate to the municipality, County or Township in which the greater part of the proposed plant will be located. To assist the Records group in filing, both the MC number and the municipality shall be shown on the location plan; e.g., MC #67 - County of Oxford.
  - affixes an approval stamp to the lower right hand corner of the marked-up plans, retains one copy for files, and forwards three copies with Letter of Application requesting approval to the MTO Field Services Engineer.
- d. Field Services Engineer
  - upon receipt of the plans may refer the request to the Regional Director or Manager of Operational Services for consideration. All requests for telephone

installations located upon a Class I or Class II highway or within the area of a Work Project must be referred to the Regional Director or Manager of Operational Services for consideration. The Regional Director or Manager of Operational Services will notify the Field Services Engineer of the decision, who in turn will notify Bell Canada.

- will, if they approve of the location, or if it is approved by the Regional Director or Manager of Operational Services, sign on the stamp affixed to the plan and return one approved (signed) copy to the Supervising Engineer, Bell Canada with any applicable conditions attached.

e. Bell Canada

- will, if no significant changes or deviations from the original approved location during construction, sign and date a "Confirmation" postcard indicating MC number, date of MTO approval of associated location plan, Order Number and location and mail to MTO Field Services Engineer upon completion of the installation as approved by the MTO Field Services Engineer.

If changes or deviations are necessary during construction, procedure as outlined in Section 3.17.6.2 "Deviations from Approved Locations" shall be followed.

f. Field Services Engineer

- will upon receipt of a "Confirmation" post-card or as-constructed plan, send one copy of the as-constructed plan or original approved plan as applicable, to the Regional Surveys and Plans Section.

### **3.17.6.2    Deviations from Approved Locations**

If changes or deviations from the approved location which are beyond the accepted tolerance become necessary, approval must be obtained from the MTO Field Services Engineer prior to any work on the change or deviation.

a. Bell Canada

- prepares a location plan for approval by the MTO Field Services Engineer and forwards the location plan with a letter of Notification to the MTO Field Services Engineer. The plan will be a portion of a B-plan or E.T.R. plan print or other type as mutually agreed with the MTO Field Services Engineer.

b. Field Services Engineer

- will, if in agreement with Bell Canada's proposal as indicated on the location plans and covering letter, approve the work and notify Bell Canada. If the Field Services Engineer does not agree with the proposal for any reason, they will contact the Supervising Engineer, Bell Canada within ten calendar days to resolve the situation.

### 3.18 Fibre Optic Cable

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The Ministry will consider applications to place telecommunication systems such as fibre optics on the rights-of-way of freeways/expressways such as Hwy. 401 or the Q.E.W.

All requests for installations of this type shall be referred to the Section Head, Corridor Management and Property Office for review.

Approval shall be granted through a formal agreement signed by the Director, Contract Management and Operations Branch.

If approved, the application shall be returned to the Area Office concerned for final location and construction method approval.

Every installation of fibre optic cable on MTO rights-of-way, except crossings or subsequent service connections, either underground or aerial, must be authorized by an Encroachment Permit.

#### **3.18.1 Licence**

Every applicant must possess a relevant licence from the Federal regulatory authority (C.R.T.C.).

#### **3.18.2 New Installations (Except Crossings)**

The applicant shall submit an Encroachment Permit Application along with associated plans and/or drawings, to scale (plus profile if underground), showing the proposed installation, to the Area Office.

The Field Services Engineer shall then refer the application to the Regional Director or Manager of Operational Services. If the installation is approved by the Regional Director or Manager of Operational Services and the applicant's licence has been verified, the appropriate fee shall be collected. An Encroachment Permit shall be executed between the encroaching party and the Ministry. A copy of the plan shall be forwarded to Regional Surveys and Plans Section.

#### **3.18.3 Fibre Optic Cable Limits**

When fibre optic cable to be placed along the highway right-of-way leaves the right-of-way for a distance of less than 800 m (1/2 mile) and then re-enters the right-of-way, separate sections within the right-of-way may be included in one permit. This also applies to fibre optic cable which leaves and then re-enters highway right-of-way by being placed through a road not under the jurisdiction of the Ministry, such as a connecting link.



#### **3.18.4 Extension of Existing Fibre Optic Cable**

When an application is received to place fibre optic cable which will extend an existing line, a permit to cover both the existing cable and the proposed cable shall be executed. The permit covering the existing cable shall be cancelled.

The initial fee collected shall be for the new cable only.

#### **3.18.5 Initial Service Connections**

Service connections made initially in conjunction with an agreement/permit shall be deemed to be covered by that agreement, with no additional charge or a necessity for an individual permit.

Service connections not included in the agreement/permit or service connections included in the agreement but not installed within one year from the date the agreement was executed shall require an Encroachment Permit. These service connections, when installed, shall be deemed to become part of the agreement.

#### **3.18.6 Crossings or Individual Service Connections**

All fibre optic cable installations which cross the highway, whether aerial or underground, shall require an Encroachment Permit. All individual service connections, whether aerial or underground or across the highway in an area where a fibre optic cable agreement exists, require an Encroachment Permit. The applicant shall complete an Encroachment Permit Application, including a plan (plus profile if underground) to scale, and submit the application to the Ministry. When an Application for an Encroachment Permit is approved, and the applicant's licence has been verified, the Field Services Engineer shall arrange for an Encroachment Permit to be issued and forward one copy of the plan to Regional Surveys and Plans Section. When the work on an individual service connection is completed, this service shall become part of the permit which covers this portion of the highway.

#### **3.18.7 Fees (Fibre Optic Cable)**

The fee required with an application for a fibre optic cable installation shall be as established by the current fee schedule.

### **3.19 Pipelines**

The installation of any pipeline within MTO right-of-way is subject to the approval of the Ministry.

In most cases an Encroachment Permit with applicable conditions is issued.

A gas or oil pipeline of 1.6 km (1 mile) or over in length may be placed within the limits of a highway only after the execution of an agreement between the encroaching party and the Ministry.

Certain pipelines carrying oil, gas or other petroleum products may encroach upon the right-of-way by virtue of the federal statutory authority granted by legislation, such as the *National Energy Board Act*. Such encroachments do not require the issuance of an Encroachment Permit or the execution of an agreement. However, the encroaching party is required to submit plans to the Ministry and the Ministry may approve the plans, attaching any such conditions as deemed appropriate.

### **3.19.1 General**

#### **3.19.1.1 Above Ground Pipelines**

Pipelines or pipeline installations which are above ground shall not be permitted within the limits of the right-of-way of a highway, except where underground installation is not practicable, such as through a deep ravine or gully.

#### **3.19.1.2 Not Attached to Structures**

A pipeline carrying gas, gasoline, oil or other volatile substances shall not be attached to a bridge or other structure or facility which forms part of a highway, unless approval is given by the Regional Director or Manager of Operational Services.

#### **3.19.1.3 Location of Valves**

Any valves, etc. forming a part of a pipeline which is located on or adjacent to a Provincial Highway shall be clearly marked. These valves etc. must be located where practicable below ground and away from the travelled portion of the highway, intersections, entrances, etc. They shall also be located in a manner that will not interfere with maintenance of the highway. The location of each valve etc. shall be subject to the approval of the Field Services Engineer. Multiple valve or meter installations etc. shall not be located upon the right-of-way of a highway. Multiple valve and/or meter installations shall be subject to the same restrictions as those for a similar installation housed in a building.

#### **3.19.1.4 Marking of Underground Lines**

The Ministry requires that each underground pipeline must be marked with approved standard marker signs. These signs or markers must be placed at the property line, at both the point of entry and the point of exit of the line, and at such other places as the Field Services Engineer considers necessary to adequately mark the pipeline, vent pipes, etc. When the pipeline parallels the highway within the limits of the right-of-way, the Ministry may require that markers of approved design indicating the location of the pipeline be placed at specified intervals along the line.

#### **3.19.1.5 Location of Related Buildings**

Valve, meter and branch sales buildings which are related to a gas, oil or other pipeline must be located in accordance with the permit requirements and setback distances for these buildings as set out in Chapter 2.

### **3.19.2 Highway Crossings**

#### **3.19.2.1 Location of Crossings**

Crossings should be as close to right angles as practical. Conditions which are generally unsuitable or undesirable for pipeline crossings shall be avoided. These include locations such as: in deep cuts; near footings or bridges and retaining walls; across intersections or bull-nose areas; at cross drains where water flow might be obstructed; within basins or an underpass drained by a pump if the pipeline carries a liquid or liquefied gas; and in wet or rocky terrain where it might be difficult to attain minimum burying depth.

#### **3.19.2.2 Depth of Cover**

The pipeline shall be placed below the frost level when it crosses a highway. The grade of the top of the pipe or casing shall be not less than 1.2 m below the travelled portion of the highway. The depth of a pipeline or casing pipe below the bottom of a highway ditch shall be not less than 0.75 m in southern Ontario and 1.0 m in northern Ontario.

### **3.19.3 Parallel To Highway**

#### **3.19.3.1 Location**

Pipelines installed within the limits of the right-of-way of a Provincial Highway shall be installed as close as is practicable to the outside limits of the right-of-way. The pipeline should preferably be beyond the back slope of the highway ditch, but not closer to the travelled portion of the highway than 6.0 m beyond the outside shoulder.

The location of the pipelines within the right-of-way shall be reviewed to ensure that the proposed installation will not interfere with existing or planned highway facilities or with highway maintenance and operation processes.

#### **3.19.3.2 Depth of Cover**

Where a pipeline located within the limits of the highway right-of-way runs parallel to the highway, the minimum depth of cover shall be 0.75 m, with the exception of pipeline crossings of roadways.

### **3.19.4 Specifications**

#### **3.19.4.1 Gas Pipelines**

Gas pipeline installations must comply with the *Energy Act*, Ontario Regulations issued under the *Energy Act*, and with the current Canadian Standards Association standard Z184 "Gas Pipeline Systems".

#### **3.19.4.2 Oil Pipelines**

Oil pipeline installations must comply with the *Energy Act*, Ontario Regulations issued under the *Energy Act*, and with the current Canadian Standards Association standard Z183 "Oil Pipeline Transportation Systems".

### **3.19.5 New Installations**

The applicant shall submit an Encroachment Permit Application along with associated plan and profile drawings, to scale, showing the proposed installation, to the Ministry.

If the installation is approved, an Encroachment Permit is issued for installations of less than 1.6 km (1 mile) in length and an agreement executed for installations of 1.6 km or more in length.

#### **3.19.5.1 Information Required on Plans**

The plans or drawings for a gas pipeline 1.6 km (1 mile) or over in length which are submitted by the applicant must show the following:

- a. limits of the right-of-way and the centre line of the highway
- b. roads, streets, etc. which intersect the highway and all entrances to the highway
- c. position of the pipeline within the right-of-way
- d. sizes of the carrier pipes
- e. locations of the carrier pipes
- f. sizes of the casing pipes where this is installed
- g. proposed methods of construction, i.e., boring, tunneling, open cut, etc.

#### **3.19.6 Gas Pipeline Limits**

When gas pipeline is to be placed along the right-of-way such that it leaves the right-of-way for a distance of less than 800 m (1/2 mile) and then re-enters the right-of-way, these separate sections within the right-of-way may be included in one permit.

This may also be apply to a gas pipeline which leaves and then re-enters the highway right-of-way by reason of being placed through a road not under the jurisdiction of the Ministry, such as a connecting link.

### **3.19.7 Extension Of Existing Pipeline**

When an application is received to place a gas or oil pipeline which will extend an existing line, the Encroachment Permit or agreement for the existing line shall be cancelled. A new Encroachment Permit shall be prepared to cover both the existing and the proposed pipeline.

The initial fee collected shall be for the new pipeline only. The annual renewal fee shall be for the total length of the pipeline covered by the agreement.

### **3.19.8 Service Connections**

Service connections made in conjunction with a permit shall be deemed to be covered by that permit.

Service connections not included in the original approval, or service connections noted in the permit but not installed within one year from the date the pipeline was approved, shall require issuance of an Encroachment Permit. Same side service connections do not require a permit.

Permits for subsequent service connections shall become part of the approval for the main line, and shall be renewed as part of the permit for the main line.

### **3.19.9 Fees (Gas or Oil Pipeline)**

The fee required with an Application for Encroachment Permit for a gas or oil pipeline installation shall be as established by the current fee schedule.

As stated in the fee schedule, the initial fee collected for a permit for a gas pipeline 1.6 km (1 mile) or more in length shall be pro-rated for the period of time between the execution of the agreement and December 31 of that year. The annual renewal fee shall then be due January 1 of each subsequent year. This annual fee is fixed for the first five years of the agreement, and is then adjusted annually according to the current fee rates.

### **3.19.10 National Energy Board**

Companies operating pipelines for the transmission of oil, gas and other petroleum products across international or provincial boundaries are under the jurisdiction of the National Energy Board, which was established by the *National Energy Board Act*.

The approval of the National Energy Board is required before these companies may place new pipeline or alter existing pipeline.

Pipelines requiring approval of the National Energy Board may encroach on the right-of-way of a Provincial Highway by virtue of the federal statutory authority granted by the *National Energy Board Act*. The location of these pipelines within the limits of a highway shall be negotiated with the Ministry.

#### **3.19.10.1 Approval**

When a pipeline company under the jurisdiction of the National Energy Board proposes works within the right-of-way of a highway, appropriate plans shall be submitted to the Ministry. If the application is acceptable to the Ministry, one copy of the submitted plan may be stamped approved and returned to the company, with a letter of approval indicating any terms and conditions deemed appropriate by the Ministry.

When the National Energy Board approves an application to place or alter a pipeline under its jurisdiction, it will issue a Board Order confirming its approval. When a Board Order has been issued by the N.E.B., the pipeline company shall forward a copy of the Board Order to the Ministry.

#### **3.19.10.2 General Order No. 1**

The operations of pipeline companies operating under the jurisdiction of the National Energy Board are governed by the provisions of General Order No. 1 Respecting Standard Conditions for Crossings by Pipelines. The Order is generally referred to as General Order No. 1.

The following excerpts from General Order No. 1 are of particular interest to Ministry personnel.

##### **Section 8(7)**

The construction of the pipeline shall be carried out in a good and workmanlike manner, as quickly as possible, and with due precautions for the safety and convenience of the public.

##### **Section 8(8)**

All work in connection with the construction, maintenance, renewal and repair of the pipeline, and the continuing supervision of the same, shall be performed by the Applicant and, unless the renewal or repair is made necessary by reason of the negligence of others, all costs and expenses of such work shall be borne and paid by the Applicant, and no work at any time shall be done in such manner as unduly to interfere with, obstruct, delay or interrupt the operation of any highway or utility.

### **Section 8(9)**

The applicant shall at all times maintain the pipeline in good working order and condition, so that no damage is caused to any highway or utility, nor their usefulness or safety impaired, nor the full use and enjoyment thereof in any way interfered with.

### **Section 8(10)**

Before any work of constructing, renewing or repairing the pipeline is begun, the Applicant shall give to the authority having control over the highway or utility, or to the owner of the utility, as the case may be, at least 48 hours' notice thereof in writing; provided that in an emergency, the work of repairing the pipeline may be begun without giving notice, but in such case, notice shall be given so soon thereafter as is reasonably possible in order that in every case, the authority having control over the highway or utility, or the owner of the utility, as the case may be, may appoint an Inspector to ensure that the work is performed in a satisfactory manner.

### **Section 8(11)**

The amount of the wages and expenses of an Inspector appointed under subsection (10) hereof shall be paid by the Applicant upon receipt from the said authority or said owner whose highway or utility is being crossed of a statement showing in reasonable detail the particulars of such wages and expenses.

## **3.19.10.3 Companies under N.E.B. Jurisdiction**

The following companies operate pipelines in Ontario under the jurisdiction of the National Energy Board.

### **A. Natural Gas Pipelines**

- Niagara Gas Transmission Limited  
100 Simcoe Street Toronto, Ontario  
M5H 3G2

This company operates the following pipelines:

- a pipeline across the Ottawa River between Rockcliffe, Ontario and Gatineau, Quebec.
- a pipeline across the Ottawa River between Ottawa, Ontario and Hull, Quebec.
- a pipeline from Cornwall, Ontario to the Canadian/ U.S.A. border.

Niagara Gas Transmission Ltd. is a wholly owned subsidiary of Consumers Gas Company Ltd.

- TransCanada PipeLines Limited  
P.O. Box 54  
Commerce Court West  
Toronto, Ontario  
M5L 1C2

This company operates a pipeline from the Manitoba border near Kenora, Ontario to Montreal, Quebec. In addition the company has a lateral pipeline delivering to Niagara Falls, Ontario, a lateral pipeline to Ottawa, Ontario and a pipeline from North Bay to Morrisburg, Ontario.

- Union Gas Limited Box 2001  
50 Keil Drive North 5th Floor Tower  
Chatham, Ontario  
N7M 5M1

This company operates a pipeline across the Detroit River from Ojibway, Ontario to the Canadian/U.S.A. border. The company also owns other pipeline facilities which are not under the jurisdiction of the National Energy Board.

- ICG Transmission Holdings Limited  
1800 - 444 St. Mary Avenue  
Winnipeg, Manitoba  
R3C 3T7

This company operates a pipeline from Rainy River, Ontario to Fort Frances, Ontario.

- Champion Pipe Line Corporation Limited  
1717 du Havre  
Montreal, Quebec  
H2K 2X3

This company operates a pipeline from Earlton, Ontario to Rouyn, Quebec. The company is owned by Gaz Metropolitain at the above address.

## **B. Oil Pipelines**

- Interprovincial Pipe Line Limited  
P.O. Box 48  
1 First Canadian Place  
Toronto, Ontario  
M5X 1A9

This company operates pipelines from Sarnia to Port Credit and Sarnia to Oakville, Ontario and a pipeline from Sarnia to Montreal, Quebec. There is also a branch line from Westover, Ontario to the Canadian/U.S.A. border at Buffalo.

- Sun Pipe Line Company  
Glen Hardie Corporate Centre 1  
275 Drummers Lane, Suite 300  
Wayne, Pennsylvania, 19087 U.S.A.



This company operates a pipeline from Sarnia, Ontario to the Canadian/U.S.A. border.

### **C. Products Pipelines**

- Cochin Pipe Lines Ltd.  
c/o Dome Petroleum Ltd.  
1182 Plank Road P.O. Box 216  
Sarnia, Ontario  
N7T 7H9

This company operates a pipeline which extends from the Canadian/ U.S.A. border at Windsor and then to the Dow Chemical Plant at Sarnia.

- Dome NGL Pipeline Ltd. (and Dome/Amoco Pipeline)  
c/o Dome Petroleum Ltd.  
1182 Plank Road  
P.O. Box 216  
Sarnia, Ontario  
N7T 7H9

This company operates a pipeline from the Canadian/U.S.A. border to the Dome, Sarnia, Ontario plant which continues to Windsor, Ontario and then back to the Canadian/U.S.A. border. Under the company name of Dome/Amoco, two pipelines are operated from the Sarnia plant to the Canadian/U.S.A. border crossing at the St. Clair River.

- Trans-Northern Pipelines Inc. Manulife Centre  
Suite 1212  
55 Bloor St. West  
Toronto, Ontario  
M4W 3H3

This company operates a pipeline from Montreal, Quebec to Nanticoke, Ontario with a branch line to Ottawa, Ontario. The company also operates a double line from Oakville, Ontario to the Lester B. Pearson International Airport, Mississauga, Ontario.

#### **3.19.11 Watermains**

A watermain is an installation designed for the conveyance of potable water through pressure, using preformed or precast pipe sections, circular in cross-section, laid end to end, and using suitable jointing procedures.

Watermain construction must conform to the requirements of the applicable Ontario Provincial Standard Specifications, including OPSS 701 which deals specifically with watermain construction. For method of highway crossing refer to Section 3.15.8.2 "Method of Crossing"

Watermain pipe may be constructed of ductile iron, steel, concrete, cement, polyethylene, or polyvinyl chloride (PVC).

Watermains placed under controlled-access highways must be encased from ditchline of one side of the highway to ditchline at the other side of the highway. Watermains may be placed under other highways without encasement, provided they are equipped with mechanical joints or other suitable restrained joints.

## 3.20 Railways

### 3.20.1 Statutory Authority

The Ministry may not prohibit a railway with federal statutory authority from encroaching upon a highway. However, as a matter of mutual policy, the location at which a railway encroaches upon the right-of-way of a highway is in practice determined by negotiations between the railway company and the Ministry.

The Field Services Engineer will consult with the Regional Director or Manager of Operational Services on all Railway Board Orders.

### 3.20.2 Railway Grade Separations - Cost Sharing

Under Part II of the *Railway Relocation and Crossing Act* there is a Special Grant to meet part of the costs of construction or reconstruction of certain grade separations; that is, those estimated to exceed \$1,250,000 in cost and those required as a result of a new railway crossing. Application of such Special Grant may be made to the Canadian Transport Commission by the Province or by any municipality on behalf of the Province.

Application for a Special Grant for the proposed construction or reconstruction of a grade separation on a municipal road will be made to the Commission by the municipality involved. To obtain the authority to apply on behalf of the Province, a municipality will submit to the Field Services Engineer a general description, location, estimated cost, proposed schedule, and justification for the project, together with a preliminary plan. This data may be similar in form and detail as the preliminary applications that have been made in the past for grants from the old Grade Crossing Fund. Where a grade separation is required at the proposed new railway crossing, evidence is to be provided that application has been made to the Commission pursuant to Section 197 of the *Railway Act*. A request from a municipality must be authorized by a by-law of the Corporation that is to accompany the submission to the Field Services Engineer.

The Field Services Engineer will forward the by-law, application, and data to the Manager, Municipal Roads Office, together with an assessment and recommendations concerning the proposal. This will in turn be reviewed in Head Office and a

recommendation made to the Minister with respect to an Order in Council authorizing the municipality to apply to the Commission on behalf of the Province.

### **3.20.3 The Railway Relocation And Crossing Act**

Refer to Appendix "3D".

## **3.21 Relocation of Utilities**

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### **3.21.1 Guidelines**

A copy of the Utility Relocation Guidelines is found in Appendix "3B".

### **3.21.2 Ministry of the Environment**

When MTO is the proponent of a project, MTO must submit to the Ministry of the Environment an assessment of the project. Until the environmental assessment has been accepted and the project approved, MTO cannot proceed with the project. This includes property acquisition and utility relocation.

The "Moving of Utilities - Financial Breakdown" form shall include a note directing that no work shall commence before the environmental clearance date, where relevant.

### **3.21.3 Unexpected Utilities**

Where unexpected utilities are located and the standard procedure cannot be followed, the affected utility shall immediately be contacted directly, to make suitable arrangements for any required relocation.

Notice should be taken of the reason for the omission, such as a change in design or failure of the Operating Corporation to so inform the Ministry.

### **3.21.4 Claims**

When a claim for extra costs on a contract is received from an MTO contractor and the claim is due or partly due to obstruction by utilities not having been moved, it is the responsibility of the office settling the claim (either the Estimating and Engineering Claims Office or the Regional Office) to assess the damages done the Ministry by each of the utility authorities concerned. The same office will consider the circumstances and be satisfied that recovery is in order, and shall initiate the necessary measures to recover all or part of the claim paid to the contractor.

### **3.21.5 Clearing, Grubbing and Fencing Contracts**

As utility relocations and alterations are to be carried out in advance of a grading contract, clearing and/or grubbing and possibly fencing are to be performed as follows:

#### **3.21.5.1 Separate Clearing, Grubbing, Fencing Contract**

Contracts for clearing, clearing and fencing, clearing and grubbing, or clearing, grubbing and fencing are possible based on the following:

##### **a) Clearing**

Where utility relocations affect the major portion of clearing within the contract limits, a separate clearing contract is warranted for all clearing.

##### **b) Grubbing**

Grubbing is warranted for inclusion with a clearing contract if a buried plant is affected and the length of installation is substantial. All grubbing other than that required for utility relocation is to be included in the grading contract.

Where there is a clearing contract (above) and if there is minimal grubbing required for underground utility installation or relocation, such grubbing shall be performed in advance by the utility company or the "Clearing" Contractor under negotiated price or by Area Office Forces. The remainder of the grubbing is to be part of the grading contract.

##### **c) Fencing**

Fencing is warranted for inclusion in the clearing contract if a substantial portion of existing fence will be removed during the utility relocation and there is a need to contain cattle.

Consideration should be made for close cut clearing adjacent to fence lines which will preclude the necessity for grubbing under a follow-up contract, when clearing requirements extend to the fence line.

If fence disruption is minimal, either existing fence is to be protected or replaced temporarily, or new fence installed subsequent to the utility relocation by Area Office Forces.

#### **3.21.5.2 Clearing, Grubbing, Fencing by Area Office Forces**

Where utility relocation is either a lengthy or major undertaking with limited clearing required or utility relocation is minor with concentrated clearing, such clearing, grubbing or fencing, where required, may be performed in advance by Area Office Forces. The remainder is to be included in the grading contract.

#### **3.21.5.3 Clearing, Grubbing by Utility Company**

It is often feasible and agreeable that a utility company undertake clearing and/or grubbing to install or relocate a utility under the following conditions:

- a. where clearing and/or grubbing is carried out by a utility company to install or relocate a utility and the clearing and grubbing is a Ministry requirement for other construction or safety reasons, etc., then 100% of the actual cost of such work would be borne by the Ministry
- b. where the utility company installs a new plant or relocates a plant within the Ministry right-of-way and no clearing or grading is imminent, then the utility company will bear 100% of the cost of labour for clearing and/or grubbing
- c. where the Ministry desires relocation of an existing plant and the new location is beyond the limits of clearing proposed under the contract, then the utility company is to bear 50% of the cost of labour for such additional clearing and/or grubbing.

#### **3.21.5.4 Grading Contract Qualified for Advance Clearing, Grubbing, Fencing**

When there is insufficient lead time to have utilities relocated in advance of a grading contract, and the extent or timing of relocation may affect the Contractor's grading operations, clearing shall be performed by the contractor as one of the first operations in a grading contract. Special provision shall be inserted in the contract qualifying the time by which specific areas shall be cleared. Grubbing and fencing are to be equally considered. An additional contract special provision is required to advise the contractor at what time the utility company(s) will be expected to complete the utility installation or relocation.

#### **3.21.5.5 Declaration of Intent**

In order that the intent of rebuilding or constructing a highway be declared, the clearing portion of the contract only shall be separated from the main grading and called as an advance contract. Grubbing and fencing shall be reserved for the main contract.

### **3.22 Cost Sharing**

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#### **3.22.1 Introduction**

Where the Ministry requires the relocation or alteration of utility plant, the cost of such relocations will be shared in accordance with the formula set out in this section.

### 3.22.2 Definitions

For administrative purposes utilities have been arranged in three groups as follows:

#### Group 1

Utilities governed by the *Public Service Works on Highways Act* including all appliances and works placed on or under a highway by a municipal corporation or commission, or a company, or individual (excepting those in Group 2 below) operating or using:

- a telephone or telegraph service
- transmitting, distributing or supplying electricity or gas for light, heat or power.

#### Group 2

- utilities owned and operated by Hydro One
- Bell Canada
- provincially regulated telephone companies
- oil and gas pipeline companies operating under federal charter.

#### Group 3

- Utilities not mentioned in the *Public Service Works on Highways Act*, such as watermains and sewers, placed on or under the highway operated by municipal corporations or commissions.

### 3.22.3 Billings: General

The Ministry of Transportation recognizes three distinct situations affecting its contribution to utility relocation costs.

- Actual Costs
- 100% Labour and Material
- 50% or 100% of Labour

#### 3.22.3.1 Actual Costs

"Actual Costs" means all costs related to the relocation of the plant excepting costs such as preliminary meetings with Ministry personnel. "Actual Costs" may include the cost of planning; design; site supervision, inspection, easements, labour and materials. Credits are to be allowed for excess capacity for growth and the salvage value of plant removed.

### **3.22.3.2 Labour**

"Labour" means the actual wages paid to all workmen up to and including the foreman for time actually spent on the work and in travelling to and from the work, and the cost of food; lodging and transportation for such workmen where necessary for the proper carrying out of the work.

"Labour" also includes:

- a. the cost of using mechanical labour - saving equipment in the work,
- b. necessary transportation charges for equipment used in the work,
- c. the cost of explosives, and
- d. payroll burden as defined under Section 3.22.3.5 Payroll Burden.

### **3.22.3.3 Material**

"Material" means the actual material required to relocate the utility with the same capacity as that existing prior to relocation, less the salvage value of the material in the plant. No lump sum or percentage for administration or management is allowed. A reasonable percentage for material handling is acceptable.

### **3.22.3.4 Billings: Work by Third Parties**

#### **A. Actual Cost Situations**

Where relocation or alteration work is partially or completely performed by a third party for an Operating Corporation, the Ministry will accept a reasonable mark-up added by the Third Party, as Actual Costs.

#### **B. 100% Labour and Materials, and 50% or 100% Labour Situations**

Where relocations or alterations are performed by a Third Party, for an Operating Corporation, under these situations, the Ministry will accept a reasonable mark-up added by the Third Party to labour and materials.

The Ministry will only recognize labour and material costs for payment, and the rate of payment will be subject to percentages applicable to these situations, determined by Case A.

The Ministry considers labour saving equipment to be included in labour.

#### **C. Invoices**

The Ministry requests that proper and reasonable invoices be provided showing a list of principle plant materials, and costs, and labour and equipment costs.

#### **D. Surcharges added or apportioned to Third those operating corporations**

The Ministry will not accept surcharges, Party work, by the Operating Corporation.

**Note:** This guideline applies to all identified in Groups 1, 2 and 3.

##### **3.22.3.5 Payroll Burden**

Payroll burden is acceptable as a labour cost on workmen up to and including foreman. Administration costs are not an acceptable item.

Acceptable Items:

- Unemployment Insurance
- pensions (including Canada Pension Plan)
- Workmen's Compensation
- inclement weather or unproductive labour
- property damage insurance
- sick time
- hospital and P.S.I. contributions
- holiday and vacation
- life insurance contributions
- protective clothing

**Note:**

1. Certain Public Utility Companies (Operating Corporations) have a formal system of accounting which precludes them from providing a detailed breakdown of costs as outlined herein. In such cases the Area Offices will submit an explanation in this connection together with a request to the Director, Contract Management and Operations Branch for permission to accept billings from these particular Utility Companies (Operating Corporations) in a simplified form.
2. Cost overrun/under run if any costs differ from the original estimate by 10% an explanation must be provided with the invoice except if the amount of overrun or under run is \$1,000.00 or less.



#### **3.22.4 Case A: Utilities on Rights-of-Way Under the Jurisdiction and Control of the Ministry**

Where the Ministry requires the relocation or alteration of utilities which are located on rights-of-way under its jurisdiction and control, the following cost-sharing formula will apply.

In specific cases, variations to the basic formula have been determined.

##### **Group 1**

- a. Where no provision for cost sharing is provided for by prior agreement or permit:
  - 50% of the cost of Labour
- b. Where provision for cost sharing is provided for by prior agreement or permit:
  - as provided for in the agreement or permit

##### **Group 2**

- a. Where no provision for cost sharing is provided for by prior agreement or permit:
  - 50% of the cost of Labour
- b. Where provision for cost sharing is provided for by prior agreement or permit:
  - as provided for in the agreement or permit

##### **Group 3**

- a. Where no provision for cost sharing is provided for by prior agreement or permit:
  - the actual cost incurred less the salvage value of the materials in the plant
- b. Where provision for cost sharing is provided for by prior agreement or permit, the greatest of the following:
  - The Ministry's share under the terms of the agreement or permit.
  - 50% of the actual cost incurred less the salvage value of materials in the plant.
  - The actual cost incurred less the salvage value of other materials in the plant times the remaining useful life over useful life. Where the useful life is:
    - Watermains - 60 years
    - Sewers - 40 years

#### 3.22.4.1 Case A: Section 1 - Relocation of Utility Plant During the Guaranteed Time Period

When the Ministry has requested an operating corporation to relocate its plant, or has approved the location of new plant, the Ministry will guarantee that should a relocation of such plant be requested by the Ministry within a five-year period, the Ministry shall pay the "Actual Costs" of the plant relocation. Beyond the five-year period, the provisions of this cost sharing guide shall apply. The commencement date for the five-year period will be as follows:

- a. For plant relocations, the date on form PH-CC-759, Moving of Utilities;
- b. For new plant, the date of the Ministry's approval.

When exceptions to the 5-year guarantee period occur, the Ministry and Operating Corporation will mutually agree to the conditions of the exception, and written instructions will be either exchanged locally or appended to form PH-CC-759, Moving of Utilities.

**Note:**

1. There will be special cases which will be dealt with on their individual merits, e.g., new highway facilities required by unforeseen developments along a highway.
2. This policy applies to utilities in Groups 1, 2, and 3.
3. Where no agreement can be reached locally, the Area Office and/or Region shall forward the application to the Director, Contract Management and Operations Branch for comment and recommendation.

#### 3.22.4.2 Case A: Section 2 - Line Clearing and Tree Trimming on Projects Initiated by the Ministry

The compensation payable in the specific instance of line clearing and tree trimming for utilities located on MTO property shall be as follows:

- a. Where the removal of obstructions, above or below ground level, would be required for the physical construction of the roadway, the Ministry will pay the actual cost.
- b. Where the removal of obstructions, above or below ground level, on Ministry or private property is required for the relocation of the utility plant only, then the Ministry will pay 50% of the labour.

**Note:** This policy applies to utilities in Groups 1 and 2.

#### 3.22.4.3 Case A: Section 3 - Temporary Plant

Where utility plant located on MTO right-of-way has to be temporarily relocated to facilitate roadwork, the Ministry will pay according to the following:

- a. The Ministry will pay 50% of labour and 100% of material, minus the salvage credit required to move the plant to the temporary location, and
- b. The Ministry will pay 50% of the labour required to move the plant to the final location from the temporary location.

**Note:**

1. For temporary relocation for protection due to blasting refer to Case A: Section 4.
2. This policy applies to utilities in Groups 1 and 2.

#### 3.22.4.4 Case A: Section 4 - Protection of Plant Located on Ministry Rights-of-Way during Blasting Operations

The following cost sharing shall apply where utility plant protection is required during blasting operations.

- a. MTO Construction Contracts

Where temporary relocation, rearranging and shielding of the utility plant is required, the operating corporation will carry out the temporary relocation, rearranging and shielding. The cost of all these protective measures, together with the cost of restoring the lines to their original state and location, will be at the expense of the contractor engaged by the Ministry for road work, and will be billed at full actual cost by the operating corporation.

- b. Day Labour

Where MTO is carrying out the road work under day labour, and

- i. where temporary protection of the utility plant is required, and it is feasible to do so by rearranging or shielding, then the Ministry will pay the "Actual Cost" of the protection;
- ii. where temporary protection of the utility plant is required and temporary relocation is necessary, then the Ministry will pay in accordance with the terms described in Case A, Section 3.

**Note:** In both (i) and (ii) above, the manner of protection and cost sharing will be covered by Form PH-CC-759 for the moving of utilities only.

- c. This policy applies to utilities in Groups 1 and 2.

#### **3.22.4.5 Case A: Section 5 - Plant on Ministry Right-of-Way Relocated at the Ministry Request and Not Relocated "In Kind"**

The following cost sharing shall apply to those situations where a utility plant is relocated at the Ministry's request, and is not replaced "in-kind".

- a. On projects where the plant is not replaced "in-kind" by the operating corporation (e.g., aerial to subsurface, or changes resulting from technological development):
  - i. where the relocation is carried out and provides the equivalent capacity or size of existing plant, the Ministry will pay 50% of the labour;
  - ii. where the relocation is carried out and provides excess capacity or oversizing of the existing plant, the Ministry will pay 50% of labour. The excess capacity or oversizing is not to be included for cost sharing. An estimate of costs for "in-kind" relocation will be used.
- b. On projects where the plant is not replaced "in kind" due to design changes requested by the MTO:
  - i. where the request for design changes can be mutually agreed upon with the operating corporation, the Ministry will pay 50% of the labour;
  - ii. where the request for design changes results in an unreasonable increase in costs to the operating corporation, the Ministry will consider an increased contribution greater than (b)(i) above, subject to the approval of the Ontario Municipal Board. Head Office participation is required in these cases.

**Note:** This policy applies to utilities in Groups 1 and 2.

#### **3.22.4.6 Case A: Section 6 - Municipal Storm Sewer Carrying or Intended to Carry Highway Drainage**

Where the Ministry requires the relocation or alteration of a municipal storm sewer which carries or is intended to carry highway drainage, the Ministry will share the cost as follows:

- 100% of the cost of providing a sewer of the capacity to satisfy the drainage being carried by the existing facilities and the planned highway drainage.
- Where the municipality agrees to participate in a joint system at the time of construction or relocation by the Ministry, the municipality shall be asked to assume all additional costs of deepening and enlarging the storm sewer, over and above the cost provided for above.

### **3.22.5 Case B: Utilities on Private Property Acquired By the Ministry for Highway Purposes**

For utility plants located on private property which has been acquired by the Ministry for highway purposes, the Ministry will pay for relocation costs as follows:

- i. Where no utility plant relocation is required when the private property is acquired, an agreement for payment of the "Actual Costs" for relocation at a future date will be made.

In this case, a letter of agreement will be completed by the operating corporation which has been approved by the Ministry.

- ii. Where a utility plant is relocated onto private property, the Ministry will pay the "Actual Costs" for relocation at a future date.
- iii. Where a utility plant is relocated onto Ministry right-of-way at the time the private property is acquired, the Ministry will pay the "Actual Costs" of relocation and enter an agreement for payment of the "Actual Costs" for relocation at a future date.

**Note:**

1. "Actual Costs" include the cost of any required utility easement in items (i), (ii), and (iii), above.
2. The acquisition by the Ministry of any existing utility easement right will be for nil value. When the Ministry acquires property on which easements existed, the Operating Corporation will waive all claims of easement rights, for the easement or portion of easement affected by the property transfer.
3. This policy applies to utilities in Groups 1, 2 and 3.

### **3.22.6 CASE C: Utilities on a Road Allowance under The Jurisdiction and Control of Other Road Authorities**

#### **3.22.6.1 Intersecting other Roads**

Where, due to the construction by the Ministry of a new highway on a new right-of-way, or on a diversion of an existing highway but completely removed from the existing highway, the Ministry requires the relocation or alteration of utilities placed on a road allowance under the jurisdiction and control of another road authority, the Ministry will pay "100% Labour and Material Costs" as described under 'Billings', for situation No. 2.

#### **3.22.6.2 Working on Other Roads**

Where, due to construction by the Ministry on roads under the jurisdiction and control of other road authorities, the Ministry requires the relocation or alteration of utilities,

the Ministry will pay "100% labour and Materials Costs" as described under situation No. 2.

Current practice allows the Ministry to reconstruct roads under the jurisdiction and control of other road authorities. As a result, it is not necessary to "assume for construction", and utility relocations on roads assumed for construction should no longer be an issue.

**Note:**

1. This policy applies to utilities in Groups 1 and 2.
2. For utilities in Group 3, the Ministry will pay 100% of the actual cost incurred, less salvage value of materials.

### **3.22.7 Hydro-Electric Plant Relocation, Aerial To Buried, Class I And Class II Highways**

The following cost sharing policy shall apply to highway construction on Class I Highways (Freeway/Expressway) or Class II Highways (Staged Freeway/Staged Expressway) in urban locations, where hydro-electric aerial plant is being relocated to underground locations.

The Ontario Municipal Board under Section 3 of the *Public Service Works on Highways Act* established that:

- a. in the reconstruction of an expressway by-pass section, the relocation of aerial plant to an underground location is socially desirable in the interests of aesthetics and safety
- b. where, for these purposes, the Ministry recommends the relocation of a section of aerial plant to an underground location, the Ministry should bear one-half of the cost of labour and materials
- c. where temporary work related to the above is required because of the arrangement or sequencing of construction operations, the Ministry similarly should bear one-half of the cost of labour and materials required for such temporary work.

#### **3.22.7.1 Policy**

The following is the policy of the Ministry. The policy set out in paragraphs 1 and 2 below shall only apply when the approval of the Assistant Deputy Minister of Provincial Highway Management Division has been obtained:

- a. Where highway construction of the above nature requires the relocation of a section of hydro-electric aerial plant, and where for purposes of aesthetics or safety, or because of highway construction operations or physical

characteristics, the Ministry recommends that such section be relocated to an underground location, the Ministry may pay 50% of the cost of labour and materials for such section, including 50% of the cost of labour and materials used on any temporary relocation of any hydroelectric plant required by the arrangement or sequencing of constructing operations, subject to the approval of the Ontario Municipal Board as required under Section 3 of the *Public Service Works on Highways Act*.

- b. Where highway construction requires the relocation of a section of hydro-electric aerial plant and where the aesthetic, safety, operational or physical characteristics of the highway do not justify the Ministry recommending an underground installation, but other considerations related to the installation, operation or maintenance of an aerial line justify an underground installation, the Ministry may pay 50% of the actual labour costs of an underground installation, including labour costs on any temporary relocation of hydro-electric plant required. No payment will be made by the Ministry in respect of materials.
- c. Where highway construction requires the relocation of a section of hydro-electric aerial plant, and it is relocated to an underground installation, not by reason of any circumstance created by the highway construction, but rather as a matter of policy or convenience to the utility company, the Ministry shall pay 50% of the theoretical costs of labour for an aerial installation.
- d. Where in the course of any utility relocation to which this policy applies, the utility company installs greater capacity than was available on the aerial line being relocated, the cost of such additional capacity shall be paid entirely by the utility company.
- e. The cost of materials shall be the cost of materials necessary for the permanent or temporary plant installation less the value of materials salvaged from the existing or temporary plant.

#### **3.22.7.2 Application**

The application of the above stated policy may require that different sections of hydro-electric plant being relocated as a result of the same highway construction project be treated differently. This will depend on which of the above stated cases, if any, apply. These policy statements must, therefore, be carefully considered in the light of the nature of the Ministry's operations, and their effect upon existing hydro-electric plant.

Since Section 2 of the *Public Service Works on Highways Act* does not provide for the sharing of the cost of materials, the approval of the Ontario Municipal Board is necessary in each instance where the application of the above policies results in the Ministry sharing the cost of materials.

Where a hydro-electric company wishes to receive the benefit of the contribution of the Ministry toward the cost of materials provided for in the above policy statements, it shall, in collaboration with the Ministry, prepare and submit the required application to the Ontario Municipal Board. If the Ministry agrees with the application, it will

prepare and submit the necessary consents to expedite the Board's approval and issuance of an order covering the work.

### **3.22.8 Utility Unable to Assume Normal Cost Sharing**

Occasionally, a municipality (or a board or commission of a municipality) indicates in writing that they are unable to pay their normal share of the cost of the required movement of their utility. This usually involves either a local private rural telephone company or a small populated village (generally its hydro or public utilities commission).

#### **3.22.8.1 Policy**

When companies and authorities claim they are financially incapable of paying for their share of the relocation cost, the Ministry policy is to:

- a. ensure that the plant must be moved and, if so, that it is being done in the most economical manner
- b. obtain as much information as possible from such sources as MMAH and the Ontario Telephone Services Commission, as to the financial capability of the owner of the plant
- c. make a judgment decision on how great a share of the cost the Ministry must pay to ensure that the plant will be moved in time up to 100% of the labour costs
- d. if this share does not appear to meet the needs of the utility, the Ministry will allow the case to proceed to the Ontario Municipal Board for a decision on the share of the cost of materials which the Ministry must pay.

#### **3.22.8.2 Procedure**

The following procedures will provide a uniform treatment when the plants of this type of company or authority must be relocated.

- a. Regardless of which office receives the information from the utility company of its inability to pay its defined share of utility relocation costs, the request shall be forwarded to the appropriate Regional Director or Manager of Operational Services. They will arrange to have the following information submitted to the Director, Contract Management and Operations Branch:
  - information received from the utility owner, where an inability to pay its normal share is defined, and a request for relief is made
  - project location and description
  - project schedule



- statement that the utility must be moved in order to accommodate the required highway improvements
  - total cost estimate of utility relocation separated into labour and materials including salvage if applicable
  - normal division of cost in accordance with MTO policy and/or the *Public Service Works on Highway Act*;
  - any other pertinent information regarding the project;
  - a recommendation as to a solution to the problem.
- b. The Director, Contract Management and Operations Branch, will submit pertinent information to the Director, Financial Branch, with a request for an opinion from the Ministry of Treasury and Economics or the Ontario Telephone Services Commission as to the financial capability of the municipality to meet its normal obligations for utility relocation costs for the project.
  - c. Upon receipt of this information, the Director, Contract Management and Operations Branch, Financial Planning and Administration Branch and Office of Legal Services, will determine a recommendation as to cost sharing, and submit it to the Director, Contract Management and Operations Branch for a decision.
  - d. The Director, Contract Management and Operations Branch may approve payment of up to 100% of the labour cost only for hydro and telephone, and up to 100% of labour and materials for watermains and sanitary sewers.
  - e. In the event that material costs for telephone and hydro are involved, the Director, Contract Management and Operations Branch may approve a joint application by the Ministry and the municipality for a Consent Order of the Ontario Municipal Board for the Ministry to pay up to 100% of both labour and materials under Section 3 of the *Public Service Works on Highways Act*
  - f. Upon receipt of the decision from the Director, Contract Management and Operations Branch the Director, Maintenance Branch shall transmit this decision to the initiating region. That region will advise the municipality involved, and will take the necessary steps to carry out the decision.
  - g. If the decision is an approval to make joint application to the O.M.B. for a Consent Order, the initiating region shall consult with the Office of Legal Services regarding the required information. (The bulk, if not all of this information, required by the Office of Legal Services, will already be available within the information previously submitted to the Branch Director).

Utility relocation negotiations should be started well in advance of contract award, because of the time required to carry out the above requirements.

This policy is not intended to affect or change the normal cost sharing of utility for Bell Telephone, Hydro One or municipalities where financial ability is not in question.

### **3.22.9 Estimates and Invoices - Bell Canada**

A format is being established which is to be used by Bell Canada in preparing estimates and invoices when Bell Canada Utilities are to be relocated at the request of MTO. This format is identified in Administration Finance Directive B-65.

#### **3.22.9.1 Rates/Prices**

Included in Administration Finance Directive B-65 as Appendix A to Appendix D, are the current rates/prices used by Bell Canada.

On January 1 each year, Bell Canada revises their following rates/ prices: Labour Rates (Appendix A); Vehicle Rates (Appendix B); Material Loadings, Section 2 and 3 (Appendix D).

On March 1 of each year, Bell Canada revises their following rates/prices: Material Price List (Appendix C); Material Loadings, Section 1 (Appendix D).

The appropriate issue of Directive B-65 should be consulted for the rates/ prices in effect for each relocation.

#### **3.22.9.2 Policy**

When MTO requests Bell Canada to provide an estimate for a relocation of a utility, the Bell Canada estimate should include:

- description and location of the work performed
- labour cost
- material cost
- contract costs
- motor vehicle cost
- depreciation allowance/excess capacity allowance (credit)
- total billing to MTO

When MTO receives the Bell Canada invoice for the relocation of a utility, the Bell Canada invoice should include:

- location and description of the work performed - number of hours X the applicable labour rate
- description of material used, quantity used, unit price
- material handling cost

- minor material cost
- number of hours X material maintenance cost
- contract charges (to be supported by Contractor's invoices)
- motor vehicle description, number of hours used X the applicable vehicle rate
- depreciation allowance and/or excess capacity allowance

**Note:** All bills that are interim will be shown as "Interim", however, the final bill will not show "Final", but will be blank.

### 3.22.10 Estimates and Invoices - Hydro One

A format (refer to Appendix "3C") has been established which is to be used by Hydro One in preparing estimates and invoices for the relocation of Hydro One Utilities at the request of MTO.

#### 3.22.10.1 Rates/Prices

Annually during the months of April or May, Hydro One revises their Labour Rates plus applicable overheads and their Material Rates plus applicable overhead.

The appropriate issue of Administration Finance Directive B-14 should be consulted for the rates/prices in effect for each relocation.

When MTO requests Hydro One to provide an estimate for a relocation of a utility, the Hydro One estimate should include:

- a description and location of the work performed
- the type of billing:
  - 100% labour and material
  - 100% labour only
  - 50% labour only
- labour cost plus specific overhead and general overhead
- material cost plus general overhead
- total billing to MTO

When MTO receives a Hydro One invoice for the relocation of utility, the Hydro One invoice should include:

- description and location of the work performed
- type of billing

- 100% labour and material
- 100% labour only
- 50% labour only
- labour cost plus specific overhead and general overhead
- material cost plus general overhead
- total billing to MTO

MTO will accept any invoice from Hydro One that is within 10% of the estimate or \$500 for invoices less than \$5,000.

#### 3.22.10.2 Responsibilities

The utility coordinator will approve the acceptance of all estimates by MTO.

The accounting office will process all invoices from Hydro One that are within 10% of the estimate or \$500, for those invoices less than \$5,000. If the Hydro One invoice is greater than 10% of the estimate or \$500 for those invoices less than \$5,000, the accounting office will request the utility coordinator to obtain an explanation from Hydro One, which the utility coordinator must approve.

### 3.23 Administration

#### 3.23.1 Authority

The *Public Transportation and Highway Improvement Act* places the onus on the individual to secure a permit from the Ministry before they proceed to place, construct, reconstruct or alter any works upon the right-of-way of a highway, or to obstruct or deposit material upon or take up, or in any way interfere with a Provincial Highway, excepting only those with statutory authority.

The location of any works which encroach upon the right-of-way of a highway shall be subject to the approval of the Ministry.

#### 3.23.2 Permit Required

Each person, company or municipality planning to construct, alter or operate any works within the limits of the right-of-way of a highway, excepting only those works which are specifically exempted by federal or provincial statute, or by this manual, or by the terms of an agreement entered into between the applicant and the Ministry, shall be required to obtain an Encroachment Permit. The Encroachment Permit must be issued or the agreement must be executed between the Minister and the encroaching party before work on the encroachment is started.

An Encroachment Permit Application shall be made by each person, firm, organization or municipality planning to:

- a. place, construct, alter or repair sewers, water pipelines, oil pipelines, gas pipelines, etc. within the limits of the right-of-way of a highway
- b. place, construct or alter a conveyor or other works or structures, whether on, over or under the right-of-way of a highway
- c. place or erect a private railway, communications line, power line, or other works on the right-of-way of a highway
- d. stockpile material on the right-of-way of a highway;
- e. landscape any area within the limits of the right-of-way of a highway.

Each owner or applicant proposing to encroach upon the right-of-way of a highway must be fully advised by the Field Services Engineer of the conditions under which an encroachment may be made upon the right-of-way of a Provincial Highway.

#### **3.23.3 Applicant Action**

Each applicant applying for an Encroachment Permit shall prepare and send a completed Encroachment Permit Application to the Ministry. A copy of the application shall be retained by the applicant for record and reference purposes. The applicable plans required by the Ministry shall accompany each application.

#### **3.23.4 Plan or Drawing**

Each application for an Encroachment Permit must be accompanied by a plan or drawing showing the location and extent of the proposed installation as it relates to the highway. Each plan or drawing for an installation which crosses under a highway shall include a key plan, a detail plan, and a profile.

#### **3.23.5 Investigation**

The Area Office Corridor Management Officer, or applicable Area Office Official, shall arrange with the Field Services Engineer for the necessary technical investigation of the proposal and the site, with due regard to the nature of the proposed installation, previous applications, and proposed changes in the right-of-way grade of the highway. When it is advisable, a report of the findings and other information pertinent to an application shall be set out in a memorandum. The recommendation of either the Area Office Corridor Management Officer or of the other employee of the Ministry who makes the investigation shall be indicated on each copy of the application. The memorandum shall be signed by either the Officer or the other employee. Three copies of the application together with the memorandum shall be sent to the Field Services Engineer.

### 3.23.6 Recommendations to Field Services Engineer

When approval for an encroachment of an unusual nature is recommended, the reporting official must set out the reason for the recommendation in a memorandum. This memorandum shall be sent to the Field Services Engineer with the corresponding application.

A reporting official who does not approve an application must set out the reason for the disapproval in a memorandum, and send it to the Field Services Engineer with the application.

**Note:** The term "reporting official" is used in recognition of the fact that the Field Services Engineer may assign an engineer or other technical staff member (other than the Corridor Management Officer) to pursue the investigation in respect to an agreement.

The Field Services Engineer, having full regard to this manual, shall consider each application, the recommendation of the reporting official, and any other information which accompanies the application.

### 3.23.7 Referral to Region

In each of the following cases, the Field Services Engineer shall refer an encroachment permit application to the region.

1. Where the encroachment is to be placed within the right-of-way of a Class I or Class II highway.
2. Where the encroachment is to be placed within the right-of-way of a Class III highway and the Regional Director or Manager of Operational Services has requested that applications for encroachments on that highway be referred to the region.
3. Where the encroachment is to be placed within the limits of a work project.
4. In any case where the Area Office requires additional expertise or information.

### 3.23.8 Action by Regional Director or Manager of Operational Services

The Regional Director or Manager of Operational Services may recommend the action to be taken with respect to an application referred to them, or may refer the application to the Director, Contract Management and Operations Branch for further recommendation.

### **3.23.9 Issuance of Permit or Agreement**

When an application for an encroachment has been approved, the Field Services shall issue a permit with or without special conditions

### **3.23.10 Fees**

Refer to the Ministry's annual fee schedule.

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## Appendix 3A - Memorandum of Understanding MTO/Hydro One

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### Scope

This MOU relates to those activities described in Section 31(1) of the PTHIA and in particular the obstruction of and the interference with the removal and control of vegetation on the MTO highway corridors (rights-of-way) in the course of the removal and control of vegetation impacting existing electrical transmission and distribution lines, and the deposit of materials on the rights-of-way in relation thereto.

Hydro One agrees to make application for permits under the PTHIA on reasonable notice and to restore the highway to its original condition in so far as is practicable and to provide compensation for any damages caused by its entry.

This MOU is not to be used for Road Relocation projects or new Electrical distribution or new Transmission Lines/Plant.

For the purpose of this MOU and any discussion between the Parties, the following terms will apply:

Mechanical Grubbing and Burial means the scraping of incompatible vegetation above or below grade using mechanical equipment such as bulldozers and excavators. The scraped vegetation is gathered and buried on site. The treated area is then replanted with compatible low growing herbaceous vegetation. Conforms to Hydro One Forestry Practice FP-79R3.

Mechanical Grinding and Burial means the grinding of incompatible vegetation above or below grade using mechanical equipment such as a Meri-crusher or Lam-track. The ground up vegetation is either buried in-situ as part of the operation (i.e. Meri-crusher) or gathered and buried on site. The treated area is then replanted with compatible low growing herbaceous vegetation. Conforms to Hydro One Forestry Practice FP-79R3.

Manual Brush Control means the cutting of incompatible vegetation as flush as possible with ground level (maximum allowable height 100 mm) using hand tools. Cut vegetation will be disposed of in accordance with the permit. A follow up application of herbicide will be applied to the remaining stump. Conforms to Hydro One Forestry Practice FP-22R3.

Herbicide Application Brush Control means the application of herbicide to control incompatible vegetation. Conforms to Hydro One Forestry Practice FP-113R4.

Line Clearing means the pruning of branches away from conductors and/or the cutting of standing trees at ground level (maximum allowable height 100 mm). Cut vegetation will be disposed of in accordance with the permit. A follow up application of herbicide will be applied to the remaining stump. Conforms to Hydro One Forestry Practice FP-22R3.

## **Assumptions**

This MOU does not release either party from any federal, provincial, territorial or municipal approvals.

All work operations on MTO rights-of-way shall conform to all applicable legislation, regulations, technical standards and procedures.

## **Permitting Process**

Hydro One should apply for the necessary permits required by the PTHIA (Encroachment Permit) well in advance of the actual fieldwork. It is understood that it may take up to 60 days for MTO to process a permit.

The Hydro One Forestry Technician planning the operation shall submit an application for an Encroachment Permit (no permit fee) to the appropriate MTO Field Service Office.

A listing of all MTO Area Offices is shown in Appendix A to this MOU. The office closest to the work should be contacted firstly.

A listing of all Hydro One Superintendents, Managers and Technicians is shown in Appendix B to this MOU.

If either Party needs to make changes to their respective appendix and to ensure the currency of the respective appendix, then they may do so with a copy to the other.

An application for each highway is required, including a detailed plan. The Engineering Title Record (ETR) is available from MTO and is to be marked up and returned as the detailed plan. The detailed plan must identify the specific areas for maintenance, the type of work and equipment to be used at each location. The plan must also include a description of how Hydro One intends to comply with all environmental requirements, along with a signed letter documenting their commitment to do so and that they have received all necessary permits.

Other external agency approvals required by law must be obtained as a condition of the Encroachment Permit. These external agency approvals do NOT need to be submitted with the application.

## **Regional/Local Discretion**

This MOU shall be the umbrella protocol for controlling the work and provide for the discussion necessary to plan the work required to manage the vegetation.

Local considerations and specific site requirements may be added to the Encroachment Permit by local MTO field offices however MTO acknowledges having reviewed Hydro One's proposed grubbing and burial methods and found them acceptable for the purposes of vegetation management on the rights-of-way. All work

shall be performed in accordance with the terms and conditions of the Encroachment Permit. The MTO agrees that provided the protocol in this MOU is followed, Encroachment Permits will be issued on a 'no fee' basis.

### **Technical Considerations/Significant Issues/Legislation**

Where mechanical grinding and burial or mechanical grubbing and burial are the preferred methods of vegetation control, both parties shall agree on a maximum size of the wood waste and location for burial of the natural wood waste. Burial shall be in accordance with OPSS 180, Management and Disposal of Excess Material, and the burial locations shall be identified on the ETR plans. In general, the preferred location of buried wood waste is from the top of the ditch back slope to the property line.

Where herbicide application brush control is the preferred method of vegetation control, the maximum height of vegetation to be sprayed is 1 metre. Vegetation higher than this shall be cut prior to spraying.

It is understood that all work operations on MTO right-of-way shall conform to the most current version of:

*("includes, but are not limited to")*

- The Ontario Traffic Manual, Book 7
- The Ontario Drainage Manual
- The Ontario Drainage Standards Manual
- The *Ontario Pesticides Act*
- The *Migratory Birds Convention Act* (Canada)
- The *Federal Fisheries Act*
- *Endangered Species Act* (Ontario)

All work operations on MTO right-of-way shall conform to the most current versions of the following specifications:

*("includes, but are not limited to")*

- OPSS 180, Management and Disposal of Excess Material
- OPSS 201 Clearing
- OPSS 206, Construction Specification for Grading
- OPSS 570 Topsoil
- OPSS 572 Seed and Cover
- OPSS 577 Temporary Erosion and Sediment Control

Hydro One shall remove and control vegetation in accordance with its current policies and procedures as outlined in Hydro One Document System (HODS). This includes:

*("includes, but are not limited to")*

- FP 79 Mechanical Vegetation Control
- FP 85 Mechanical Harvesting Equipment
- FP 21 Manual Brush Control
- FP 22 Tree and Brush Cleanup Methods

In addition to the above requirements there are agreements MTO has made with third parties to ensure regulatory compliance with work performed on its property. Both parties shall be cognizant of, and bound by, these agreements that include:

*("includes, but are not limited to")*

- MTO/DFO/MNR Protocol for Protecting Fish and Fish Habitat on Provincial Transportation Undertakings
- MTO Environmental Standards and Practices User Guide
- MTO Environmental Reference for Design
- MTO Environmental Reference for Contract Preparation
- <http://www.mto.gov.on.ca/english/engineering/envirostandards/>
- C.F.I.A Regulations and Ministerial Orders governing the prevention of the spread of invasive insect species: Asian Long Horned Beetle and Emerald Ash Borer

If there are any changes to the above specifications or policies, then the party controlling the document will provide such document to the other.

### **Inspections and Quality Assurance**

At the completion of the work a joint inspection shall be carried out to ensure that all work meets the conditions of the permit.

Hydro One will correct all mutually agreed deficiencies within 30 days after the joint inspection.

A final inspection shall be carried out by MTO one year after the work has been completed to ensure that the conditions of the right-of-way are acceptable to MTO.

Hydro One will correct all mutually-agreed deficiencies. Hydro One will attempt to correct these deficiencies within 60 days of the final inspection.


Upon final inspection and completion of outstanding deficiencies, MTO will issue an email to the applicant, referencing the Encroachment Permit Number stating they are satisfied with the work.

### **Dispute Resolution**

In the event that the parties cannot reach agreement on substantial aspects of the work before the issuance of the permit, the issue in dispute is to be raised to the next level of management of each agency.

## Binding Agreement

This agreement is valid from the date of implementation for a period of five (5) years and is binding on both parties.

  
Mike Goodale  
Director  
Contract Management and Operations Branch  
Ontario Ministry of Transportation

Dated:  08-11-03

  
Per: George Juhn  
Manager, Distribution, Dev & Lines Sustainment  
Hydro One Networks Inc.

Dated: 08-11-28

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# Appendix 3B - Utility Relocation Guidelines

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## Introduction

This document has been prepared to provide a consistent approach in dealings with all utility companies including Bell Canada, Hydro One, Enbridge Gas, Union Gas, municipal utilities, and ministry staff and its consultants, relating to the relocation of utilities within MTO rights-of-way.

The procedures may be modified at the discretion of the region for individual circumstances, and depending on the role and responsibilities of the consultant. Significant deviations should be discussed with the Corridor Management and Property Office.

The Ministry's Technical Services Representative and the Ministry's Project Manager/Engineer shall keep each other informed of all communications throughout the entire utility relocation process.

Throughout this document, the term Technical Services Representatives refers to Technical Services Supervisor, Technical Services Officer, Corridor Management Officer or Utility Coordinator (Central Region). The text throughout refers to the Consultant, which is MTO's normal delivery method for preliminary and detailed design. In Central Region in house projects, both the Project Manager and the Utility Permit Officers will jointly handle the utility relocation activities typically done by a consultant on a TPM project.

## General Process

Annual meetings are to be held with the Ministry and all affected utilities to review the Ministry's proposed multi-year program. These meetings may be scheduled more frequently if required by the Technical Services Representatives. All information provided by the Ministry or its consultant is confidential and subject to change.

A flow chart illustrating the utility relocation process is attached below.

Letters 1 to 10 are the base letters for correspondence regarding utility relocation procedures. These are provided as a "guide" for the use of the Ministry and its Consultants. The letters may be edited to reflect the needs of each individual project. Reference to the *Public Service Works on Highways Act* may be mentioned and should be deleted when dealing with any utility not covered by the Act (i.e. watermains and sewers).

Letter 1	Consultant Notification Preliminary Design
Letter 2	Preliminary Design Initiation
Letter 3	Preliminary Design Completion
Letter 4	Consultant Notification Detail Design

Letter 5	Mark Up and Preliminary Cost Estimates
Letter 6	Final Cost Estimates
Letter 7	Relocation Notification & PSWH Act
Letter 8	Suffer a Loss or Expense
Letter 9	Notification of Intent to Claim
Letter 10	Final Payment minus Loss

## Preliminary Design Phase Process

1. At the start-up meeting, the Consultant shall meet with the Ministry's Project Manager /Engineer (PM/PE), Technical Services Representative and relevant ministry offices to discuss the project requirements. At this time, the Technical Services Representative or consultant will identify any potential conflicts that they or the Consultant are aware of within the project limits. The Project Manager/Engineer will introduce the Ministry's consultant by issuing Letter 1 to all affected utilities.

The following are the contact protocols for the province-wide utilities:

- Hydro One: Letter 1 to be faxed or e-mailed to Hydro One One-Call Centre
- Bell Canada: Letter 1 to be forwarded to Bell Canada local representative.
- Union Gas: Letter 1 to be forwarded to the Coordinator Permits Administration (Chatham), for initial contact. The Coordinator Permits Administration will contact appropriate Union Gas office to advise on the project. The Coordinator will then forward correspondence back to Consultant/MTO with the name and number of the specific Union Gas District representative for relocation dealings. This will be the contact for Letter 2 and throughout the project.
- Enbridge Gas: Letter 1 to be forwarded to the Manager Land Services (Toronto).

2. At the start of Preliminary Design, the Consultant will send Letter 2 to all utility companies to introduce the project and to determine any potential utility concerns. Utility companies will be asked to identify the primary owner, the type of plant, the approximate location, the awareness of other utilities, and the personnel assigned to the project.

The following are the contact protocols for the province-wide utilities:

- Hydro One: Letter 2 to be "faxed or e-mailed" to Hydro One One-Call Centre with their completed checklist. Hydro One contact may change after (Letter 5).
- Bell Canada: Letter 2 to be forwarded to Bell Canada local representative.
- Union Gas: Letter 2 to be forwarded to Union Gas representative.
- Enbridge Gas: Letter 2 to be forwarded to the Manager Land Services



The location information at this stage of Preliminary Design is to be approximate only. The Ministry's consultant may request more detailed utility location information as the design evolves.

**Note:** If there are no utilities within the work project limits, the utility company shall still provide written confirmation.

3. During the Preliminary Design phase, the Consultant will identify the location of utilities in sufficient detail to support preliminary design recommendations. This work may include marking up existing plans, undertaking field surveys, and meeting with utility companies on site if necessary. The amount of work by the Consultant will depend on available information and the type of project. Utility impacts are to be considered in the preliminary design process.
4. At the end of the Preliminary Design Stage, the Consultant will provide preliminary utility impacts (e.g. number of poles) to the Ministry's Project Manager/Engineer. The Project Manager/Engineer will forward this information to the Ministry's Technical Services Representative. The Technical Services Representative will provide this information to the utility companies by issuing Letter 3. The information is to be utilized only for budgeting and scheduling (*Utility companies often request a one year notice for larger projects, to set up budgets, to minimize higher costs, such as winter relocations, etc.*).

The following are the contact protocols for the province-wide utilities:

- Hydro One: Letter 3 to be faxed or e-mailed to Hydro One One-Call Centre
- Bell Canada: Letter 3 to be forwarded to Bell Canada local representative.
- Union Gas: Letter 3 to be forwarded to Union Gas representative.
- Enbridge Gas: Letter 3 to be forwarded to the Manager Land Services

**Note:** MTO should inform the utility companies if the project is accelerated or delayed.

### Detailed Design Phase Process

1. The tender documents (i.e. Request for Proposal/Quotation, TPM Agreement etc.) for the Consultant assignment should identify critical dates such as Environmental Clearance, Property Clearance, Utility Relocation Plans, and proposed Utility Relocation dates. The Ministry's Project Manager/Engineer shall discuss these dates with the Ministry's Technical Services Representative to confirm a proposed schedule.

In accordance with the *Public Services Works on Highways Act*, a minimum of 60 days must be allowed for utility relocation after the Moving of Utilities is issued. Additional time may be allotted if utility relocation is extensive, or if private easements are required. In addition, time must be allotted for each utility to work on their relocations at separate times to avoid MTO being designated the constructor under the *Occupational Health and Safety Act*.

2. Upon award of the Consultant assignment, the ministry's Project Manager/Engineer will send a Notification Letter (Letter 4) to advise the utility companies of the consulting firm that has been retained by the ministry to complete the Detail Design.

The following are the contact protocols for the province-wide utilities.

- Hydro One: Letter 4 to be "faxed or e-mailed" to Hydro One One-Call Centre
  - Bell Canada: Letter 4 to be forwarded to Bell Canada local representative.
  - Union Gas: Letter 4 to be forwarded to Union Gas representative.
  - Enbridge Gas: Letter 4 to be forwarded to the Manager of Special Projects.
3. The Ministry's Project Manager/Engineer is to make the Consultant aware of the name and telephone number of the Technical Services Representative. The Consultant is to contact this Representative to obtain a list of contact people for the utility companies. The contact list may not be current due to the high turnover of utility staff and is therefore for reference only. For Hydro One, the Consultant and MTO Staff are to use the Hydro One One-Call Centre. It will be the responsibility of the Consultant to verify the utility conflicts. The Technical Services Representative is to be invited to all progress meetings and copied on all utility relocation correspondence by the Consultant. The function of the Technical Services Representative is to represent the Ministry for all utility relocations during the project.
  4. During the Detail Design stage, the Consultant will prepare a Utility Mark-up for the entire project. This work will include verification of all existing and proposed utility information (aerial and underground) from the utility owners, attendance at any on-site meetings with utility companies, identification of all utility relocation requirements, determination of the most cost-effective relocation strategy, and all necessary arrangements, with respect to utility relocations required within the project limits. Any discussion with respect to cost sharing and test pits will be discussed with the Technical Services Representative (MTO) and the affected utility company.

Contact with the utility companies should occur to verify if existing plant detail has been updated since the initial contact with the utility company. Consultants should only make one request to the utility companies to mark-up or update plans to verify plant location during the detail design of the project. This plant detail should already have been determined either by the Ministry's surveys or Consultant surveys, and field checks during the preliminary design. If the plant detail was not determined during Preliminary Design, then the Consultant must complete this step by conducting the necessary field surveys.

5. The Consultant will forward three sets of plans with a letter (Letter 5) to each of the affected utilities, with a given time to respond. It is important that the Consultant update the plans to reflect current details. These plans are to show:

- A summary table of all conflicts with utilities including the rationale for the conflict

**Note:** When determining conflicts, issues such as constructability, traffic staging, possible impacts due to adjacent projects, property and environmental clearance, Ministry corridor management requirements for relocations and Occupational Health and Safety must be considered

- A complete set of plans indicating ownership and locations of utility conflicts
- A plan and cross section at each conflict location. (e.g. proposed top-of-cut and bottom-of-ditch, existing and proposed property lines, etc.);
- Offsets from existing property line of new centreline, where applicable. (New centreline is not always evident in the field)
- Key geodetic elevations in areas of conflict (e.g. sewer inverts, ditch grades etc.)
- Environmentally sensitive areas.

The following are the contact protocols for the province-wide utilities.

- Hydro One: Letter 5 to be “faxed or e-mailed” to Hydro One One-Call Centre (Within 48 hours Hydro One will then provide MTO Consultant a contact person to whom the plans will be mailed to and to arrange a site meeting. Also refer to “Hydro One Plant Relocation Guidelines”).
  - Bell Canada: Letter 5 to be forwarded to Bell Canada local representative.
  - Union Gas: Letter 5 to be forwarded to Union Gas representative.
  - Enbridge Gas: Letter 5 to be forwarded to the Manager of Special Projects. Enbridge will then assign a Project Manager and will notify MTO/Consultant.
6. The affected utility company will return a marked-up plan (full size drawings) with a proposed relocation strategy to the Consultant and copy the Technical Services Representative and Project Manager/Engineer. If there are problems or concerns with the proposed relocation, the Consultant will meet with the Technical Services Representative and the Ministry’s Project Manager/Engineer, to determine a compatible location. If necessary, the Consultant will arrange a site meeting with all the affected utility companies before finalizing the relocation plans. The Ministry’s Project Manager/Engineer and Technical Services Representative shall attend the meeting. The purpose of this meeting is to clarify the scope of work and to ensure the utility companies understand the engineering rationale for each conflict.
  7. The Consultant shall, in conjunction with the utility companies, develop Utility Relocation plans. The Consultant shall submit to the Ministry’s Technical Services Representative and Project Manager/Engineer the following information for Approval of the Utility Relocation Plan:

- The composite plan (digital and hard copy)
- The plan of proposed relocations (digital and hard copy)
- A letter stating that the Consultant has reviewed the proposed relocation in conjunction with the detail design, and that the proposal will not conflict with the proposed construction.

When agreement is reached on a relocation strategy, the Consultant will provide the Technical Services Representative through the Ministry's Project Manager/Engineer a composite Utility Relocation Plan. The plan will include how each conflict is to be mitigated.

The submission will include a confirmation from the Consultant that all utility conflicts have been mitigated. Relocation schedule will be included with the submission. A relocation schedule will address constructor issues between the utility companies.

The Technical Services Representative will send the final relocation plan to each utility company with a letter (Letter 6), requesting the utility to forward cost estimates within a specific time frame for relocation completion date. The utility company is to forward a detailed cost estimate with the proposed cost sharing to the Technical Services Representative.

**Note:** The Technical Services Representative should consult with the Project Manager/Engineer and Regional Contracts Office to ensure that funds are secured for the relocation prior to issuing the Moving of Utilities (MOU).

Additional time may be allotted if utility relocation is extensive or if private easements are required. Time must be allotted for each utility to work on their relocations at separate times.

The following are the contact protocols for the province-wide utilities.

- **Hydro One:** Letter 6 to be "faxed or e-mailed" to Hydro One One-Call Centre requesting that all property clearances be obtained prior to submitting a final estimate to MTO. If the property is not cleared, other arrangements will be made. The reason for this is that Hydro One stakes all new relocation work, which then determines their "final" estimate.

If the Moving of Utilities (pole moving order) is not issued within 120 days from the time of receiving Hydro One final detailed cost estimate, Hydro One will temporarily close the work order and invoice MTO for the Engineering Cost. Should the job be reactivated in the near future, Hydro One will credit MTO for the Engineering Cost in their final invoice. (Also refer to Hydro One "Hydro One Plant Relocation Guidelines").

- **Bell Canada:** Letter 6 to be forwarded to Bell Canada local representative.

- Union Gas: Letter 6 to be forwarded to Union Gas representative.
- Enbridge Gas: Letter 6 to be forwarded to the Project Manager

**Note:** The Ministry will not reimburse any utility company for engineering costs except if the work project is cancelled or postponed. In this case, the Ministry will compensate the utility company for any engineering costs. If the work project does proceed at a later date, the engineering cost will be deducted from the utility company final invoice.

The Ministry is responsible for extra engineering costs as a result of a highway design change subsequent to the original request.

8. If the Ministry is in agreement with the relocation strategy and cost estimate, the Technical Services Representative will forward the composite utility relocation plans and issue the "Moving of Utilities, Financial Breakdown" along with Letter 7 to the utility companies with copies to the Ministry's Project Manager/Engineer and the Consultant for their files.

The following are the contact protocols for the province-wide utilities.

- Hydro One: Letter 7 to be forwarded to the Project Manager
- Bell Canada: Letter 7 to be forwarded to Bell Canada local representative.
- Union Gas: Letter 7 to be forwarded to Union Gas representative.
- Enbridge Gas: Letter 7 to be forwarded to the Project Manager.

Consultant utility contact responsibilities have ended at this point, unless issues arise during relocation and/or construction.

9. The Technical Services Office will advise the utility companies to contact the Ministry's Maintenance Coordinator and Area Office Communications Centre one week before commencing the utility relocation within the right-of-way. The Technical Services Office will assign field staff to be available during the relocation of the utilities to resolve any field problems relating to the plant relocation. The utility is to inform the Technical Services Representative prior to making any changes to the final relocation proposal.
10. The Technical Services Representative will inform the Ministry's Project Manager/Engineer and Area Construction Engineer when each utility company completed the relocation. Failure to meet the completion date will require the utility company to provide a written explanation as to why the completion date was not met. The Technical Services Representative must contact the Project Manager/Engineer and Regional Program Planning Office as this may have an impact on the project award schedule.

The utility company shall provide the Technical Services Office with written confirmation that the utility work has been performed in accordance with the approved relocation plan.

11. If the Utility Company does not meet the completion date and sufficient explanation is not provided, a Letter 8 may be issued by the Technical Services Representative.
12. If the Ministry's contractor submits Intent to Claim due to delays caused by utility relocation, the Technical Services Representative will advise the utility company by issuance of Letter 9.
13. If an Intent to Claim is received by the Ministry, the Ministry will continue to pay the utility's invoice as required. However, this payment is made on the clear understanding that it is without prejudice to the ministry's rights to claim compensation from the utility company for the delay. A covering letter signed by the Field Services Engineer or Section Head (Central Region) Letter 10 will be attached to the white copy of the Remittance Invoice when the Transmittal Listing is being prepared for processing thereby accompanying the cheque to the Operating Corporation.
14. During Capital Construction work, the Contract Administrator must contact the Technical Services Representative prior to any changes to installation made during the construction of the project. If there are issues during the relocation and or construction, the Contract Administrator should not bypass the Technical Services Representative.

## Sample Letters

### LETTER (1) Consultant Notification Preliminary Design

Re: W.P. No.:  
Contract No.:  
Highway No.:  
Location:

RE:

Please be advised that ( *insert Consultant* ) is undertaking Preliminary Design on behalf of the Ministry for the identification of utility relocations involved with this project.

Your co-operation with this consulting firm in providing the information required is anticipated and appreciated.

If you have any questions, do not hesitate to call the undersigned.

Yours truly,

Project Manager/Engineer

c: Consultant  
Technical Services Representative

**LETTER (2)**  
**Preliminary Design Initiation**

CONFIDENTIAL

RE:

The Ministry of Transportation Ontario is initiating a Preliminary Design Study for the following project on Highway #.

WORK PROJECT:

PROJECT LOCATION:

REMARKS (e.g. schedule details, etc.):

Please provide the following preliminary information:

PRIMARY OWNER:

APPROXIMATE LOCATION:

AWARENESS OF OTHER UTILITIES:

PERSONNEL ASSIGNED TO THE PROJECT:

The above information is required so that utility impacts may be considered when reviewing potential highway improvements. The timing and details of this highway project are strictly **CONFIDENTIAL**.

Yours truly,

MTO Consultant

c:        Technical Services Representative  
            Project Manager



**LETTER (3)**  
**Preliminary Design Completion**

(Insert Date)

RE:

CONFIDENTIAL:

The ministry has completed a Preliminary Design Study for the following project on Highway #:

WORK PROJECT:

PROJECT LOCATION:

TYPE OF WORK:

PRELIMINARY UTILITY IMPACTS AND APPROXIMATE LOCATIONS:

REMARKS (e.g. schedule details, etc.):\_

This advance information is forwarded to you in order that your Company may plan accordingly (e.g. budgeting and scheduling). This project information is strictly **CONFIDENTIAL**. Exact utility impacts will be confirmed during the Detail Design Stage.

Yours truly,

Technical Services Representative

c:        Project Manager

**LETTER (4)**  
**Consultant Notification Detail Design**

(Insert Address)  
(Insert Date)

Re:       W.P. No.:  
          Contract No.:  
          Highway No.:  
          Location:

Please be advised that ( *Name of Consultant* ) is undertaking Detail Design on behalf of the Ministry for the identification of utility relocations involved with this project.

Your co-operation with this Consultant in providing the information required is anticipated and appreciated.

If you have any questions, do not hesitate to call the undersigned.

Yours truly,

Project Manager/Engineer

c:       Consultant  
          Technical Services Representative

**LETTER (5)**  
**Mark Up and Preliminary Cost Estimate**

(Insert Utility Address)

(Insert Date)

REGISTERED

Re:        W.P. No.:  
             Contract No.:  
             Highway No.:  
             Location:

We are mailing, under separate cover, ( ) sets of plans of the above described work project, with existing utilities and anticipated conflicts based on our initial preliminary design review.

We propose to hold a site meeting at *(insert time)* on *(date)* meeting at *(location)*. *(insert other utility companies)* have also been requested to attend this meeting.

Please examine the attached plans for corrections or omissions, and conflicts with proposed construction. After the site meeting, you will be requested to plot your proposed relocation and return sets of plans to this office by ( *insert date – allow \_\_\_ weeks* ) giving existing and proposed depth of plant, where applicable.

Include in your submission, a preliminary cost estimate in order that we may establish a cost effective relocation strategy. It is anticipated a Moving of Utilities (MOU) will be issued on ( *insert date* ) and the utility relocation is to be completed by ( *insert date* ). Please advise if these dates are attainable.

Other utility companies notified are:

*(Insert Other Utility Companies)*

Yours truly,

MTO Consultant

c:        Technical Services Representative  
             Project Manager

**LETTER (6)**  
**Final Cost Estimates**

(Insert Address)

(Insert Date)

REGISTERED

Re:      W.P. No.:  
         Contract No.:  
         Highway No.:  
         Location:

The ministry has accepted your relocations as indicated on the plans submitted. Please note, any deviation from these plans that cause conflicts during construction could result in further costs to your company.

Please submit a final detailed cost estimate by \_\_\_\_\_ so that the ministry can issue a Moving of Utilities, Financial Breakdown for you to proceed with the work. This relocation work is to be completed by (*insert date*).

Yours truly,

Technical Services Representative

c:      Property Section  
         Environmental Unit  
         Project Manager  
         Head of Construction Admin

**LETTER (7)**  
**Relocation Notification and PSWH Act**

THE *PUBLIC SERVICE WORKS ON HIGHWAYS ACT* 1990 R.S.O. Chapter P.49 and Amendments thereto

Notice to Take-Up, Remove or Change the Location of Appliances or Works

REGISTERED MAIL

Date:

TO:

Dear Sir:

Re:       W.P. No.:  
              Contract No.:  
              Highway No.:  
              Location:

Pursuant to the above Act you, are hereby notified to take-up, remove or change the location of your appliances or work on or before the (    ) day of (    year ).

If you fail to take-up, remove or change the location of your appliances or works by the above date, the Ministry shall claim compensation, according to the Act, for any loss or expense that it incurs as a result of your default.

In order to avoid any misunderstanding in the future, the Ministry intends to strictly enforce the provisions of the above Act. If you fail to take up, remove or change the location of your appliances or works by the date specified in the notice dated (insert date) that was given to you, and the Ministry incurs a loss or expense by reason thereof, then the Ministry will claim due compensation from you.

Your co-operation is anticipated and appreciated.

Yours truly,

Technical Services Representative

c:       Project Manager  
          Head of Construction Admin

## LETTER (8)

(Insert Address)

(Insert Date)

REGISTERED MAIL

Re:       W.P. No.:  
          Contract No.:  
          Highway No.:  
          Location:

You are hereby notified that the Ministry has suffered a loss or expense and will continue to suffer a loss or expense so long as you continue to be in default with not meeting the deadline in taking up, removing or changing the location of your appliances or works.

Kindly govern yourselves accordingly,

Yours truly,

Technical Services Representative

c:       Project Manager

## LETTER (9)

(Insert Address)

(Insert Date)

Re:      W.P. No.:  
         Contract No.:  
         Highway No.:  
         Location:

This is to advise you that the Contractor has now filed a Notification of Intent to Claim with the Ministry based on your default in taking up, removing or changing the location of your appliances or works by the required date.

We shall be in touch with you once the amount of the claim has been determined.

Yours truly,

Technical Services Representative

c:          Field Services Engineer

## LETTER (10)

(Insert Address)

(Insert Date)

Re:      W.P. No.:  
         Contract No.:  
         Highway No.:  
         Location:

Enclosed please find a copy of your payment certificate confirming payment in the amount of (\$ ) in accordance with your invoice.

Please note that since you did not take-up, remove or change the location of your appliances or works by the required date, this payment is made on the clear understanding that it is without prejudice to the Ministry's rights to claim compensation from you for the delay. Your endorsement of the cheque shall constitute acceptance of this condition.

Yours truly,

Field Services Engineer or Section Head (Central Region)

c:      Technical Services Representative





## MOVING OF UTILITIES

### **Financial Breakdown**

**REGION:**

**INVOICES IN DUPLICATE  
MUST SHOW THIS NUMBER**

**«Moving\_Order #»**

**TO:** «Company»  
«Address»  
«Address1»

**Attention:** «Attention»

WORK PROJECT NO. «Work\_Project\_Number» CONTRACT NO. «Contract\_Number»  
HWY.NO. «Highway\_Number»

LOCATION: «Location»

This ministry acknowledges receipt of your estimate dated «Date\_of\_Estimate» in the amount of «Amount\_of» to make the following alterations to your plant:

«Job»

Subject to audit by the ministry's auditors, the ministry approves paying according to GROUP «Group» CASE - «Case», «AutoMergeField»% of «of\_Costs» COSTS.

Estimated M.T.O. share to be «Estimated\_Amount» upon completion of the work, on or before, «On\_or\_Before» please submit invoices in duplicate and details to:

Ministry of Transportation

ATTENTION: «TS\_Representative»  
Technical Services Representative

---

**Date**

---

**Field Services Engineer /Section Head**

DISTRIBUTION:

1. ORIGINAL
2. FILE COPY
3. REGIONAL CONSTRUCTION ADMINISTRATOR
4. OPERATIONS, Attention: - Doug Peeling
5. REGIONAL DIRECTOR
6. AREA OFFICE COPY
7. FINANCIAL OFFICE

## Utility Relocation Flow Chart

This chart may be modified by the region for individual circumstances as roles and responsibilities may vary from region to region.

### Preliminary Design

**Start Up Meeting, Consultant, MTO PM/PE & TSR to discuss any known potential conflicts MTO PM/PE to issue Letter 1 to all utilities**



Consultant to send Letter 2 to utility to identify owner, type, location, other utilities, and personnel



Consultant to perform Preliminary Design including all necessary work



Consultant to provide MTO with preliminary utility impacts MTO PM/PE to forward to TSR. TSR to issue Letter 3

### Detail Design

RFP to provide critical dates for Environmental and property Clearance and Utility Relocation Plans and Relocation Dates MTO PM/PE and TSR confirm a proposed schedule (normally 4 – 6 months)



MTO PM/PE to send Letter 4 to utilities



MTO PM/PE to advise consultant of TSR name and telephone number

Consultant to contact TSR and obtain the current utility contact list

TSR to attend all progress meetings and copied on all utility correspondence



Consultant to complete detail design and all necessary utility relocation tasks

Consultant to ensure TSR attends all discussions with the utility relating to cost sharing



Consultant to forward 3 Utility Relocation Plan and Letter 5 to utilities



Utility to return marked-up proposed relocation plan to Consultant and TSR

If there are concerns with proposed relocation, the consultant shall meet with MTO PE/PE and TSR to find a solution



If necessary, Consultant will arrange a site meeting with affected utilities prior to finalizing a strategy MTO PM/PE, TSR, Consultant and affected utility company to attend



The utility company to return to return marked-up relocation plans to consultant relocation strategy



Consultant to prepare a composite Utility relocation Plan  
Consultant to submit these plans to the MTO PM/PE and TSR:  
Composite plan, relocation plans and a letter stating that the relocations will not conflict with construction



Consultant to provide MTO PM/PE with approved relocation strategy cost estimate and relocation schedule to be included TSR will send approved plan to each utility company with Letter 6



If the Ministry agrees with strategy and cost estimate, TSR will forward the plans and issues "MOU" Financial Breakdown along with Letter 7 to utilities and copy MTO PM/PE and Consultant

**Consultant Responsibilities completed at this time**  
**(Unless problems arise during relocation or construction)**

TSR to advise utilities to contact the Ministry's Maintenance Coordinator and Communication center one week before commencement of utility relocation within right-of-way TSR to assign field staff for relocation



TSR to inform MTO PM/PE when each relocation is complete written explanation is required from utility if deadline is not met



Letter 8 will be issued by TSR if sufficient explanation is not presented



If contractor submits an Intent to Claim due to delays caused by utility relocation TSR will advise the utility company by issuance of Letter 9



If intent to claim is filed, ministry will continue to pay utility invoices as required. This payment is made on the clear understanding that it is without prejudice to the ministry's rights to claim compensation from the utility Letter 10 will be attached to the white copy of the Remittance Advice



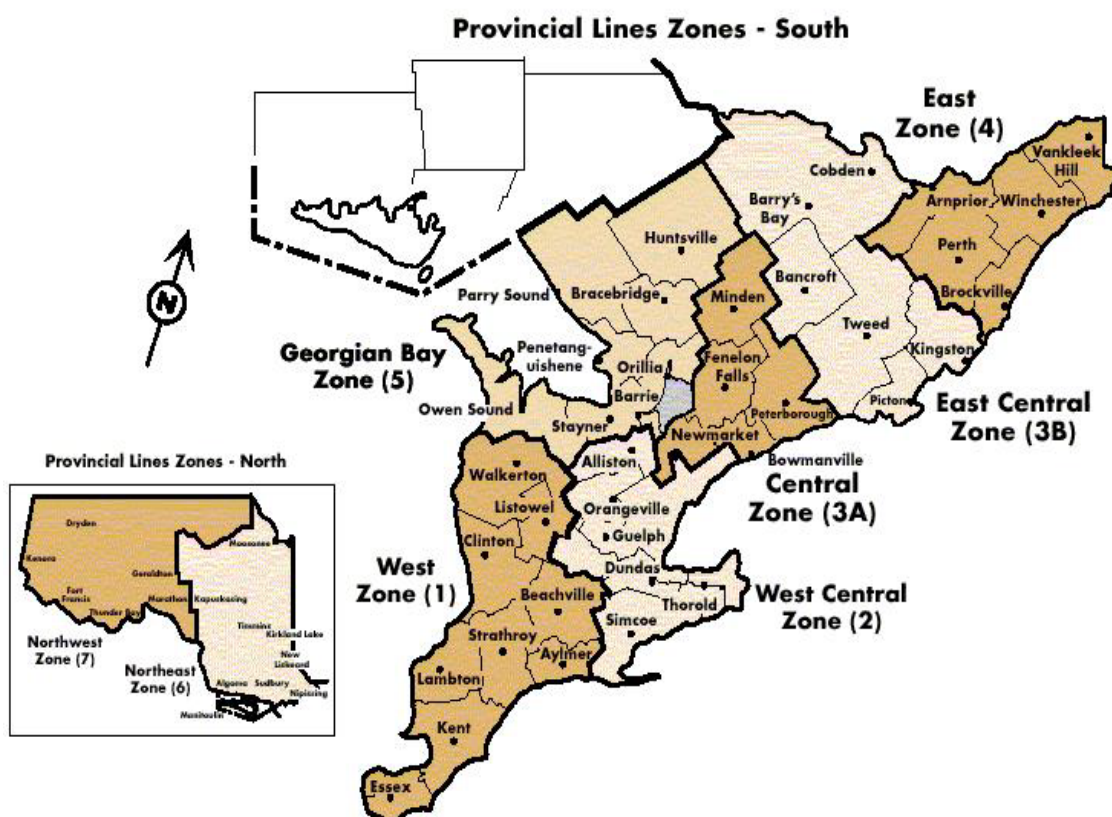
Utility to provide the TSR with As Constructed Drawings



During Capital Construction work, the CA Consultant must contact the Technical Services Representative prior to **any** changes to installation made during the construction of the project.

# ONE-Call Contact List

Zone #	Zone Name	Telephone #	Fax #	E-mail Address
1	West	1-800-957-7756 x 3252	519-423-6971	<a href="mailto:zone1scheduling@HydroOne.com">zone1scheduling@HydroOne.com</a>
2	West Central	905-627-6050	905-627-6059	<a href="mailto:WestCentralZoneScheduling@HydroOne.com">WestCentralZoneScheduling@HydroOne.com</a>
3A	Central	1-888-871-3514 x 3341	705-743-9890	<a href="mailto:zone3scheduling@HydroOne.com">zone3scheduling@HydroOne.com</a>
3B	East Central	1-866-646-4619	613-967-3582	<a href="mailto:EastCentralZoneScheduling@HydroOne.com">EastCentralZoneScheduling@HydroOne.com</a>
4	East	1-866-288-8874 or 613-267-2154	613-267-7248	<a href="mailto:EastZoneScheduling@HydroOne.com">EastZoneScheduling@HydroOne.com</a>
5	Georgian Bay	1-888-238-2398 and press 2	705-727-4803	<a href="mailto:zone5scheduling@hydroOne.com">zone5scheduling@hydroOne.com</a>
6	Northeast	1-888-835-9444 x 309	705-566-8093	<a href="mailto:zone6scheduling@hydroOne.com">zone6scheduling@hydroOne.com</a>
7	Northwest	807-346-3823	800-932-6171	<a href="mailto:NorthwestZoneScheduling@HydroOne.com">NorthwestZoneScheduling@HydroOne.com</a>



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## Appendix 3C - Estimates and Invoices - Hydro One

### Letter 2 to MTO



(sent with completed cost estimates)  
(replace with the local FBC mailing address)

date

Ministry of Transportation Ontario

address

Attention: name and title

Dear Sir:

Re: (Hwy. #, etc. inserted here) Road Improvement Project

Hydro One line relocation design and cost estimate(s) for the aforementioned project are as follows;

The Ministry will be responsible for labour, material and/or actual costs for work within the MTO corridor and private property (including actual costs of acquiring property rights) as per the MTO Highway Corridor Management Manual as detailed below:

<b>50% Labour costs</b>		
<b>Description of Work</b>	<b>% of Costs to MTO</b>	<b>Estimated Cost***</b>
<b>From point A to Point B....</b>	Labour Hours = "X" hrs	\$ XXX.XX
	TWE costs	\$ XXX.XX
	Third Parties Costs 1. Contractor A - \$ 2. Contractor B - \$ 3. Contractor C - \$ Etc.	\$ XXX.XX
	<b>Total Cost</b>	\$ XXX.XX
<b>Actual costs</b>		
<b>Description of Work</b>	<b>% of Costs to MTO</b>	<b>Estimated Cost***</b>

<b>From point B to Point C.... (on private property)</b>	Labour Hours = “X” hrs	\$ XXX.XX
	TWE costs	\$ XXX.XX
	Third Parties Costs 1. Contractor A - \$ 2. Contractor B - \$ 3. Contractor C - \$ Etc.	\$ XXX.XX
	Material Costs (detailed material list to be attached to final invoice)	\$ XXX.XX
	<b>Total Cost</b>	\$ XXX.XX

<b>50% Labour &amp; 50% Material Costs</b>		
<b>Description of Work</b>	<b>% of Costs to MTO</b>	<b>Estimated Cost***</b>
<b>From point A to Point B.... (If material is being charged, list at high level. i.e. 60 X 45’ pole in rock, complete with hardware and _____ M of wire. Plus any other large items)</b>	Labour Hours = “X” hrs	\$ XXX.XX
	TWE costs	\$ XXX.XX
	Third Parties Costs 1. Contractor A - \$ 2. Contractor B - \$ 3. Contractor C - \$ Etc.	\$ XXX.XX
	Material Costs (detailed material list to be attached to final invoice)	\$ XXX.XX
	<b>Total Cost</b>	\$ XXX.XX



<b>100% Labour &amp; 100% Material Costs</b>		
<b>Description of Work</b>	<b>% of Costs to MTO</b>	<b>Estimated Cost<sup>***</sup></b>
<b>From point A to Point B.... (If material is being charged, list at high level. i.e. 60 X 45' pole in rock, complete with hardware and _____ M of wire. Plus any other large items)</b>	Labour Hours = "X" hrs	\$ XXX.XX
	TWE costs	\$ XXX.XX
	Third Parties Costs 1. Contractor A - \$ 2. Contractor B - \$ 3. Contractor C - \$ Etc.	\$ XXX.XX
	Material Costs (detailed material list to be attached to final invoice)	\$ XXX.XX
	<b>Total Cost</b>	\$ XXX.XX

<b>50% Labour &amp; 100% Material Costs</b>		
<b>Description of Work</b>	<b>% of Costs to MTO</b>	<b>Estimated Cost<sup>***</sup></b>
<b>From point A to Point B.... (If material is being charged, list at high level. i.e. 60 X 45' pole in rock, complete with hardware and _____ M of wire. Plus any other large items)</b>	Labour Hours = "X" hrs	\$ XXX.XX
	TWE costs	\$ XXX.XX
	Third Parties Costs 1. Contractor A - \$ 2. Contractor B - \$ 3. Contractor C - \$ Etc.	\$ XXX.XX
	Material Costs (detailed material list to be attached to final invoice)	\$ XXX.XX
	<b>Total Cost</b>	\$ XXX.XX

**\*\*\*Important Notes Regarding Estimated Cost & Timelines**

- Hydro One will invoice the Ministry for actual labour and/or material costs at the appropriate rate.
- Hydro One will provide an explanation of variance where the projects constructed costs exceed the estimated cost by +/- 10%. No explanation of variance will be provided for variances of \$1000 or less.
- The above estimated costs assume project approval (Pole Moving Order) from the MTO within 120 days. Hydro One will require a lead-time of (# of days required inserted here) for ordering material, assigning resources, etc. to prepare for start of construction.
- This estimate assumes normal crew complement and deployment.

- It may be possible to shorten construction timelines, by using an alternate complement and deployment of crews. Such an alternate plan will require re-calculation of cost estimate(s) to include additional labour costs.
- Should a scope change occur at any time after the PMO has been issued, Hydro One may need to re-estimate costs and have MTO re-issue a PMO for scope change.

This information is provided to assist in project timeline definition and in the interest of avoiding project completion date disputes. Should you wish to proceed with this work please issue a **Moving of Utilities** (Pole Moving Order) and **Relocation Notification and PSWH Act** letter to our office.

If you have any questions or concerns regarding this information please contact me at your earliest convenience.

Sincerely,

Signature

FBC Clerk's Name  
Title

Field Business Centre Name  
Telephone #

## Appendix 3D - The Railway Relocation and Crossing Act

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The following are the pertinent points as far as this Ministry is concerned and in all cases reference should be made to the Act itself. The Act is available on the Ontario e-laws website.

### **General Intent of the *Railway Relocation and Crossing Act***

- (a) To facilitate the relocation of railway lines or the rerouting of railway traffic in urban areas by federal grants to both the planning and implementation phases of an acceptable project.
- (b) To provide financial assistance for work done for the protection, safety and convenience of the public at railway crossings.

### **Four Main Divisions of the *Railway Relocation and Crossing Act***

The Act is divided into four parts:

- Part I     Joint Urban Development and Transportation Plans
- Part II    Special Grants for Separations
- Part III   Railway Grade Crossing Assistance
- Part IV    General

#### **Note:**

- (a) For reference purposes the applicable section of the Act is shown in brackets in the breakdown of these Parts which follows.
- (b) Wherever the initials "C.T.C." or the word "Commission" is used alone this means the Canadian Transport Commission.

### **Key Features of Each of the Four Parts**

#### **A-Part I of the *Railway Relocation and Crossing Act***

#### **JOINT URBAN DEVELOPMENT AND TRANSPORTATION PLANS**

**INTENT:** To facilitate the relocation or rerouting of railway lines or railway traffic in urban areas and to provide financial assistance for work done for the protection, safety and convenience of the public at railway crossings.

1. Under the Act, the Federal Government may:
  - (a) order the relocation or rerouting, or both, of railways under federal jurisdiction (Section 6).
  - (b) expropriate railway lands (considered to be a last resort) (Section 7).
2. Federal financial assistance consists of:

- (a) up to 50% of costs directly related to preparing urban development and transportation plans (Section 3 (3) and (4)).
  - (b) up to 50% of the net cost of relocation (Section 11).
  - (c) contributions to related grade separations as further described in Parts II and III.
  - (d) other federal programs.
- 3. Federal contributions to transportation or urban development plans do not commit the Federal Government to relocation grants or relocation orders.
- 4. Application Procedure for Relocation or Rerouting - the following major points should be noted:
  - (a) The applicant initiates the process [Section 3(1)].
  - (b) An application for a relocation or rerouting order is to be accompanied by urban development, transportation and financial plans which have been accepted by the Provincial and Municipal Governments [Section 3(1), Section 4, Section 5(1)].
  - (c) There are two different ways in which decisions may be reached at the Federal level:
    - (i) executive decision by the Ministry of State for Urban Affairs and the Governor in Council (through the Ministry of Transport) (Section 3), or
    - (ii) judicial decision by the Canadian Transport Commission.
  - (d) The C.T.C. ensures that the railways neither gain nor lose financially (Section 5 (1) b).
  - (e) The C.T.C. can request any changes to the plan for financing which it considers necessary prior to acceptance.
  - (f) The C.N.C. must hold a hearing before issuing an order [Section 5(2)].

#### B-Part II of the *Railway Relocation and Crossing Act*

### SPECIAL GRANTS FOR SEPARATIONS

INTENT: Provides for federal contributions to special grade separations in either of these categories:

- (a) (new or reconstructed grade separations costing more than \$1,250,000.
- (b) grade separations pursuant to Section 197 of the *Railway Act* "Applications for a Road-Rail Crossing" and required by reason of highways being constructed to reroute traffic.

**Note:** Part II is not retroactive with respect to projects for which funds have already been paid from moneys appropriated by Parliament for purposes of the Act.

1. The Province, or a municipality on behalf of the Province, must apply to the Canadian Transport Commission, assuming a special grant is in order.
  - (a) where all reasonable costs for a proposal, excluding the cost of relocating any public utility plant, appear likely to exceed \$1,250,000 [Section 16(1)], or
  - (b) where a proposed new construction of a grade separation of a railway crossing is required in a province by virtue of a proposal to build a new road or highway in order to reroute highway traffic in an area of the province and an application has been made to the Commission pursuant to Section 197 of the *Railway Act* for a new railway crossing by means of a grade separation, an application may be made to the Commission by the Province or by any municipality on behalf of the Province for a special grant under this section to meet part of the costs of the construction of the grade separation. Municipalities applying for a special grant must have the concurrence of the Province. This procedure is set up in order to inform the C.T.C. that the Province agrees that a specific municipal project is worthwhile. [Section 17(1)].
2. The Minister of Transport (Federal) authorizes the special grant upon the recommendation of the C.T.C. [Section 16 (2) and Section 17 (2)].
3. A special grant must be made from the moneys appropriated by the Federal Parliament for the budget of the Ministry of Transport [Section 16(6)].
4. The special grant varies with the dollar value of the particular project as follows:
  - (a) For Construction of a Grade Separation [Section 16(7)a]
    - (i) the cost of which is more than 41,250,000 but not more than \$5,000,000, the contribution will be \$1,000,000 plus an amount not greater than 60% of the cost in excess of 41,250,000, or
  - (b) For Reconstruction of a Grade Separation [Section 16(7)b]
    - (i) the cost of which is more than 41,250,000 but not more than \$5,000,000, the contribution will be \$625,000, plus an amount not greater than 37 1/2% of the cost in excess of \$1,250,000, or
    - (ii) the cost of which is more than \$5,000,000 the contribution will be \$2,031,000 plus an amount not greater than 25% of the costs in excess of \$5,000,000.
  - (c) Grade Separations Required by New Roads or Highways
    - (i) When a new road or highway is required to cross a railway line as a result of a highway traffic rerouting plan, a special grant of up to 50a of the grade separation cost may be applied for to the Canadian Transport Commission [Section 17(5)].
    - (ii) the Commission may recommend a special grant if it is satisfied that a grade separation is required for the protection, safety and convenience of the public, that the new road or highway will divert traffic from existing grade crossings and that the proposed grade separation would have qualified for assistance from the

fund if a railway crossing had existed for three years at the location of the proposed new railway crossing.

#### Cost of Relocation of Utility Plants Covered

The costs on which the grants are based, in relation to the construction or reconstruction of a grade separation, include the costs of relocating any public utility plant.

5. The C.T.C. apportions the costs for special grade separations to the railway companies concerned and the Province or municipality. [Section 16(4) and Section 17(4)].
6. The C.T.C. may require either land use or transportation plans, or both, in support of a special grant application and may also request a formal hearing. [Section 16(3) and Section 17(3)].
7. The C.T.C. may require the applicant to obtain the views of parties concerned or affected by the application. [Section 16(3) d) and Section 17(3) d)].
8. The C.T.C. issues an order approving a special grade separation after the Ministry of Transport (Federal) has authorized the special grant.

**Note:** Where application should be made under Part II of the *Railway Relocation and Crossing Act* and it is either not made, or an application is withdrawn prior to denial in writing by the C.T.C. or the Minister of Transport, this Ministry will recognize for subsidy purposes only the portion of the municipal expenditure that would have been outstanding by applying the grant formula in Part II of Bill C-27. Where ruling on an application is deferred by the Commission or the Minister of Transport for reason of federal budgetary constraints, the Ministry will accept such deferred program, and subsidy on any undertaking will be limited as above.

#### C-Part III of the *Railway Relocation and Crossing Act*

#### RAILWAY GRADE CROSSING ASSISTANCE

INTENT: To aid actual construction work and encourage other measures for the protection, safety and convenience of the public with respect to highway crossings at rail level by providing for the payment of monies appropriated by Parliament for purposes of the Act:

Typical examples are:

- (a) automatic crossing protection
- (b) improvements to vision and approach gradients
- (c) installation of reflective markings on railway cars
- (d) installation of reflective crossing signs
- (e) new and reconstructed grade separations
- (f) road diversions.

1. Repeal of Section 202 of the *Railway Act*

As of the Proclamation date of Bill C-27, June 1, 1974 - the date on which the *Railway Relocation and Crossing Act* came into force - Section 202 of the *Railway Act* no longer applied. Refer to Section 22(2) - Part IV.

Under the R.R.C. Act, basically the same procedures apply as formerly.

2. The R.R.C. Act was amended March 31, 1981 to repeal the Railway Grade Crossing Fund and substitute therefore the authorization of monies appropriated by Parliament for purposes of the Act. The ceilings of federal contributions are as follows:

- (a) Railway Crossing at Grade Level [Section 20(3) a)] The aggregate total contribution should not exceed:
  - (i) 80% of the cost of the works or \$1,000,000, whichever is the lesser amount, exclusive of the cost of any relocation of a public utility plant, and
  - (ii) 80% of the cost of any relocation of a public utility plant that is part of the work.
- (b) Reconstruction or Improvement of a Grade Separation [Section 20(3) b)]

The aggregate total contribution shall not exceed:

- (i) 50% of the cost of the work, or \$625,000, whichever is the lesser amount, exclusive of the cost of any relocation of a public utility plant, and
- (ii) 50% of the cost of any relocation of a public utility plant that is part of the work.

**Note:** Where the project appears likely to exceed \$1,250,000 in cost, or where construction of a grade separation is required on a new road or highway irrespective of cost, a Special Grant under Part II of the Act may be recommended by the Commission to the Minister of Transport. In these cases, it is expected that municipalities will apply for Special Grant under Part II of the Act.

- 3. A grade crossing must be in existence three years before a contribution from monies appropriated by Parliament for purposes of the Act can be applied to any additional work beyond that originally constructed [Section 20(5)].
- 4. Contribution provided for the reconstruction or improvement of an existing grade separation may be made available where the grade separation has been in existence for at least 15 years [Section 20(1)b)].
- 5. A contribution will be considered by the C.T.C. for the construction of a new grade separation where:
  - (a) a highway relocation involves the closing of an existing at-grade railway crossing.
  - (b) a highway relocation diverts a substantial part of highway traffic from an at-grade railway crossing [Section 20(6)].

D-Part IV of the *Railway Relocation and Crossing Act*

1. The intent of Section 21 was to cover the transitional period at the time of implementation of Act.
2. The definition of a "highway", as used in the *Railway Act*, is repealed and the following substituted: "highway", includes any public road, street, lane, pedestrian walkway or other public way or communications. The change in the definition is the inclusion of pedestrian walkways. [Section 22(1)].

### **Procedure for Applying For Special Grant**

Under part II of the *Railway Relocation and Crossing Act*.

Application for a Special Grant to meet part of the costs of construction or reconstruction of certain grade separations; that is, those estimated to exceed \$1,250,000 in cost and those required by virtue of a new railway crossing may be made to the Canadian Transport Commission by the Province or by any municipality on behalf of the Province.

Application for a Special Grant for the proposed construction or reconstruction of a grade separation on a municipal road will be made to the Commission by the municipality involved. To obtain the authority to apply on behalf of the Province, a municipality will submit to the Field Services Engineer a general description, location, estimated cost, proposed schedule, and justification for the project, together with a preliminary plan. This data may be similar in form and detail as the preliminary application that have been made in the past for grants from the Grade Crossing Fund. Where a grade separation is required at a proposed new railway crossing, evidence is to be provided that application has been made to the Commission pursuant to Section 197 of the *Railway Act*. A request from a municipality must be authorized by a by-law of the Corporation that is to accompany the submission to the Field Services Engineer.

The Field Services Engineer will forward the by-law, application and data to the Regional Municipal Engineer together with an assessment and recommendations concerning the proposal. This will in turn be reviewed in Head Office and recommendation made to the Minister with respect to an Order-in-Council authorizing the municipality to apply to the Commission on behalf of the Province.

Grants cannot be made to projects on which construction has begun before a recommendation has been considered by the Minister of Transport (Federal).

### **Sharing Of Utility Relocation Costs Within The Limits Of A Project Authorized By An Order Of The Railway Transport Committee**

#### Part II R.R.C. Act

The formula paragraph incorporates the basic principles that the applicant and the utility company will share the special grant in proportion to the relationship between the utility costs and the total project costs. In all Part II submissions, the utility costs are included in the project costs and total project costs. In all Part II submissions, the utility costs are included in the



project costs and therefore the utility company must deal directly with the applicant rather than the RTC or the MOT.

If the utility plant is located on right-of-way owned or controlled by the utility company, the applicant pays 100% of the relocation costs directly to the utility company. This is similar to the procedure for Part III projects.

### Part III R.R.C. Act

The Railway Transport Committee (RTC) and the utility company share the total cost of all relocation work required within the RTC limits (including materials) directly and the applicant (either road or rail authority) is not involved, unless the utility plant is located on right-of-way owned or controlled by the utility company in which case the costs of the relocation are included as part of the total project costs by the applicant. In this situation, the applicant pays 100% of the relocation costs directly to the utility company and then receives a grant from monies appropriated by Parliament for purposes of the Act.

Where utilities are located within the highway right-of-way, the applicant advised the RTC of the utility companies whose plant was affected within the limits of the project (applicable to the RTC Order) and the utility company upon completion of the relocation work billed the RTC directly in accordance with the RTC Order. See below for portion paid by RTC.

### **Grant Allocation to Utility Company**

#### Definitions

Public Utility Company: "Public utility company" means a public utility company or a Commission with authority to construct or maintain lines, wires, other conductors, or other structures or appliances for telegraphic or telephonic purposes, or for the conveyance of power or electricity for other purposes and includes a company, Commission or other public body lawfully engaged in the distribution of gas to the public and such other company, Commission or public body as the CTC may from time to time determine. (General Order E-9, Section 2).

Project "Costs": Project "costs" as determined by the Committee in relation to the construction or reconstruction of a grade separation includes the cost of relocating any public utility plant unless otherwise expressly stated.

Symbols: The symbol used herein is defined as

$$y = \frac{\text{Cost of Relocation of a Public Utility Plant}}{\text{Project "Costs"}} \times 100$$

that is, cost of Utility Plant Relocation is Y% of the total cost of grade separation project.

#### General

A public utility company in connection with grade separation work under the *Railway Relocation and Crossing Act* may be paid for its cost of relocating or altering its plant at the same rate to which a road authority is eligible for grant (in terms of absolute percentages of costs) from federal funds under the Act.

Using this as the basis, the following formulae are obtained.

A. Part II R.R.C.A. (Special Grants)

1. If the utility company plant to be relocated is on the right-of-way owned or controlled by the utility company, the costs of the relocation shall be considered part of the project costs.
2. If the utility plant to be relocated is on the public road allowance, the company shall be paid in accordance with the following within the limits of the grade separation project:

(a) Construction Projects

Under Section 16(7) (a)

- (i) If the project cost is less than \$5 million, the payment to utility company will not exceed

$$80\% \text{ of } \frac{\$Y \times 1,250,000}{100}$$

$$+ 60\% \text{ of } \frac{\$Y \times (\text{Project cost} - 1,250,000)}{100}$$

- (ii) If the project cost is greater than \$5 million, the payment to utility company will not exceed

$$80\% \text{ of } \frac{\$Y \times 1,250,000}{100}$$

$$+ 60\% \text{ of } \frac{\$Y \times 3,750,000}{100}$$

$$+ 40\% \text{ of } \frac{\$Y \times (\text{Project cost} - 5,000,000)}{100}$$

Under Section 17(5)

- (iii) Payment to utility company will not exceed

$$50\% \text{ of } \frac{\$Y \times \text{Project Cost}}{100}$$

(b) Reconstruction Project

Under Section 16(7) (b)

- (i) If the project cost is less than \$5 million, the payment to the utility company will not exceed

$$50\% \text{ of } \frac{\$Y \times 1,250,000}{100}$$

$$+37.5\% \text{ of } \frac{\$Y \times (\text{Project cost} - 1,250,000)}{100}$$

The balance of the cost of utility plant relocation in each case shall be borne by the utility company.

3. In any event, the total special grant towards the project costs, including payment towards utility plant relocation costs, shall not exceed the limits prescribed under Part II of R.R.C.A.

**B. Part III R.R.C.A. (Grade Crossing Assistance)**

1. If the utility plant to be relocated is on the right-of-way owned or controlled by the utility company, the costs of the relocation shall be considered part of the project costs.
2. If the utility plant to be relocated is on the public road allowance, the company shall be paid in accordance with the following within the limits of the grade separation project.

(i) Construction Projects

By Section 20 (3) (a) (ii) - Grant to utility company will not exceed 80% of cost of utility plant relocation.

(ii) Reconstruction Projects

By Section 20 (3) (b) (ii) - Grant to utility company will not exceed 50% of cost of utility plant relocation.

The balance of the cost of utility plant relocation in each case shall be borne by the utility company.

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# Highway Corridor Management **Manual**



## **Chapter 4: Access Management**

**Corridor Management Office**  
Ministry of Transportation

**April 2025**

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## 4.1 Purpose

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### 4.1.1 Purpose

Access management is the process that manages entrances (access connections) to Provincial Highways, and to roads in the vicinity of a Provincial Highway within the Ministry's permit control area. Access management preserves the safety, efficiency and sustainability of Provincial Highways.

After reviewing experiences and best practices from transportation agencies, research boards and committees in Canada and the United States, the Ministry developed a set of policies, standards and requirements for access management, specific to the Ontario Provincial Highway transportation system.

This chapter was developed to address road access connections only, and does not cover connections and crossings designed solely for pedestrians, cyclists or transit vehicles. The nearest Regional Highway Corridor Management Section should be consulted for policies and guidelines related to these topics.

The Ministry obtained input from internal and external stakeholders, including municipal and development industry groups, and has incorporated many of their thoughts and ideas into this chapter. The Ministry has linked access management principles with current provincial land use planning and development policies, such as the Provincial Policy Statement, and provincial plans, such as the Greenbelt Plan and the Growth Plan for the Greater Golden Horseshoe.

### 4.1.2 Roles of access management

#### 4.1.2.1 Freight movement

Freight movement plays a major role in the provincial economy, generating large revenues and supplying jobs for hundreds of thousands of employees. Efficient freight movement helps to support safe, livable and complete communities.

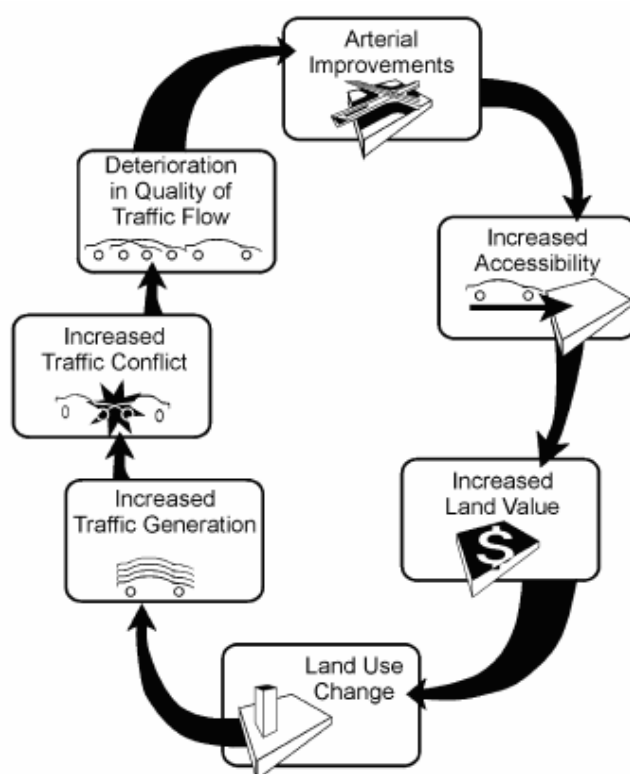
While freight movement in Ontario is multimodal, roads (trucking) are one of the principal modes to deliver goods and services to communities along highway corridors, and within large employment areas and urban areas throughout the province. The freight transportation system relies on the same highways that are used for moving people. It is important to balance these various interests when planning communities and transportation systems.

Access management is important in facilitating safe and efficient freight movement for the economic well-being of Ontario. The Ministry has developed Freight-Supportive Guidelines which provide best practices, examples and implementation tools to create

safe and efficient freight-supportive communities. Additional information about the Ministry's Freight-Supportive Guidelines can be found on the Ministry's public website.

#### 4.1.2.2 Supporting Transportation and Land development

Transportation and land use are closely linked. The transportation and land use cycle begins as major improvements in the highway system enhances accessibility to land (see Figure 4.1.1), which increases land values, and stimulates development outside the existing built-up urban/rural settlement area. As a result, the highway system plays a key role in building strong communities and supporting Ontario's economy.



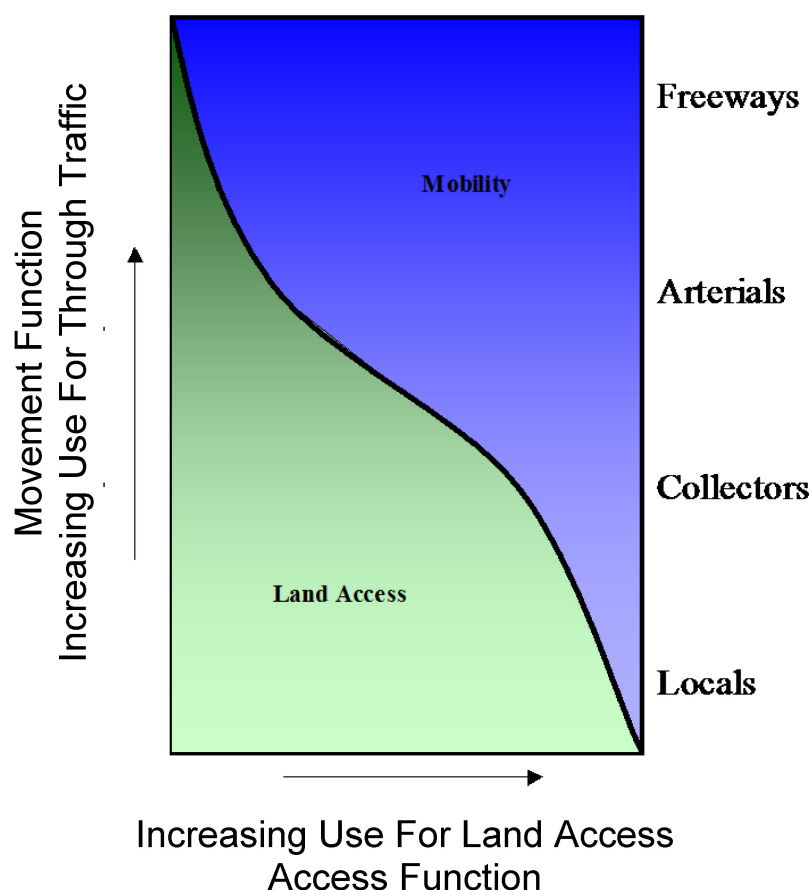
**Figure 4.1.1: Transportation and Land Use Cycle**

#### 4.1.2.3 Transportation and land use cycle

Effective access management helps to lengthen the transportation and land use cycle, and protect public investment in the Provincial Highway system. The transportation and land use cycle can only be managed effectively by addressing the needs of both the Provincial Highway transportation system and adjacent land development simultaneously.

Access management helps to ensure that land use planning and transportation infrastructure planning/design are coordinated.

Highways in the Provincial Highway system are classified by function based on the priority given to through-traffic movement (mobility) vs. land access (see Figure 4.1.2). The four functional classes are Freeway, Arterial, Collector, and Local.



**Figure 4.1.2: Access vs. Mobility**

For the safe and efficient movement of traffic, access management is particularly important along freeways and arterial highways, where access connections to property are typically secondary to mobility. However, access management is still necessary on collectors and locals, to address safety considerations and movement of traffic.

Without effective access management, the function and character of highway corridors can deteriorate rapidly. Failure to manage access is associated with the following problems:

- Increase in vehicular collisions
- Reduction in highway efficiency

- Increased commute times, fuel consumption, and vehicular emissions as numerous access connections and traffic signals intensify congestion along the highway system.

### 4.1.3 Ministry Methodology

The methodology the Ministry uses is as follows:

The Ministry first applies the policies and standards outlined in this chapter, in conjunction with other applicable Ministry policies and standards.

The policies and standards contained in this chapter, for the most part, apply to rural highways. This provides flexibility in applying access management policies and standards in urban highway and urban freeway situations.

When a municipality or stakeholder cannot meet the Ministry policies and standards, the Ministry will work with them to find mutually agreeable solutions that maintain the intent and principles of this chapter.

When a workable solution based on all of the above is unachievable, the Ministry's municipal partners and stakeholders may choose to request a formal review of the situation by following the Dispute Resolution Process.

The Ministry is willing to consult with municipalities and stakeholders regarding the application of the principles of this chapter, in areas where a freeway passes through a municipality, such as within the Greater Toronto and Hamilton Area (GTHA).

Pre-consultation is the best approach, and a good starting point in urban freeway areas, rather than attempting to apply the policies and standards in isolation. The Ministry will work with its municipal partners and stakeholders in a team approach, to find solutions that maintain the principle concepts of this manual, to the benefit of all parties.

Urban freeway situations differ among municipalities across the province, including neighbouring municipalities. While a solution for one may provide merits for another, it should not be viewed as an automatic answer for another municipality; every access management situation and solution is different.

When policies and standards cannot be met by a municipality or stakeholder, particularly in urban freeway situations, the proponent may be responsible for solutions that could be both unconventional and costly. Fundamentally, solutions should always preserve and protect for the safety and efficiency of the Provincial Highway system.

**Note:** The Ministry, at its sole discretion, will determine which sections of the Provincial Highway system are deemed to be urban highway or urban freeway.



#### 4.1.4 Principles of access management

Access management seeks to limit and consolidate access connections (entrances) to Provincial Highways while promoting a supporting municipal roadway system that will sustain land use development. The result is a Provincial Highway system that functions safely and efficiently. The goals of access management are accomplished by applying the following principles:

1. Limit the number of direct access connections and increase their separation.

Highways serving higher volumes of provincial traffic require strict control over access connections, while collector and local highways can accommodate more frequent and direct access connections. Drivers make more mistakes and are more likely to be involved in collisions when there are complex driving situations created by numerous access connections. Conversely, simplifying the driving task contributes to improved traffic operations and fewer collisions. A less complex driving environment is accomplished by limiting the number and type of access connections to the highway.

2. Locate signals in a way that favours through movements of traffic.

Long, uniform spacing of intersections and signals on Provincial Highways makes it easier to coordinate traffic signals to ensure optimum traffic flow. Spacing also needs to be carefully considered for roads with un-signalized intersections, as travel time and operating speeds are impacted by future signalization.

3. Preserve the functional intersection / interchange areas.

The functional area is the area within the intersection or interchange where motorists are decelerating, accelerating, and maneuvering into the appropriate lane to stop, merge or complete a turn. Access connections that are too close to intersections or interchange ramps can cause serious traffic and safety problems.

Access to facilities that serve to improve the efficiency and sustainable operation of the highway, such as transit stations, transit park-and-ride facilities and carpool parking lots, may be permitted closer to the highway interchange or intersection than distances specified in this manual. These must be carefully planned and designed with consideration for their effects on safety, traffic operations and congestion.

4. Remove turning vehicles from through-traffic lanes.

Turning lanes allow drivers to decelerate gradually out of the through lane and wait in a protected area for an opportunity to complete a turn, thereby reducing the severity and duration of conflict between turning vehicles and through traffic. They also improve the safety and efficiency of highway intersections.

#### **4.1.5 Benefits of access management**

Good access management:

- improves traffic flow which is an essential component of successful development
- is essential to support traffic flow that may be associated with achieving development objectives
- ensures that Provincial Highway and municipal road corridors are protected to meet current and projected travel needs
- balances Provincial Highway needs with the needs for development access, by permitting appropriate development adjacent to highways to support economic activity
- provides for safe and efficient use of the Provincial Highway corridors
- supports the preservation of major goods movement corridors, and improves freight movement along the Provincial Highway system
- supports Ontario's economy by providing connections which cross jurisdictional boundaries
- helps reduce greenhouse gas emissions, by increasing highway efficiency
- supports the Province's vision of building complete communities, curbing sprawl, and supporting other modes of transportation such as transit and active transportation.

#### **Road Users**

- Face fewer decision points and traffic conflicts, which simplifies the task of driving or cycling and contributes to road user safety.
- Experience fewer traffic delays and reduced trip time to reach their destinations.

#### **Businesses**

- Are served by a more efficient highway system that captures a broader market area.
- Benefit from stable property values due to a well-managed highway corridor.
- Experience a more predictable and consistent development environment.
- Benefit from reduced delay and increased safety in goods movement. This results in lower transportation costs and shorter delivery times which benefits the trucking industry

## Government

- Preserves the taxpayer's investment in the infrastructure of the Provincial Highway system.
- Benefits from the lower cost of delivering an efficient and safe transportation system.
- Benefits from improved internal and intergovernmental coordination.
- Is more effective in accomplishing its transportation objectives.

## Municipalities

- Receive a safer transportation system.
- Benefit from less need for highway widening, which causes displacement of businesses, homes, and communities.
- Benefit from more attractive highway corridors.
- Are better able to protect and preserve their investment in transportation facilities and may experience reduced capital improvement costs on their roadways.
- Are provided with a tool to help them make good land use planning decisions.
- Are better positioned to achieve goals, such as intensification that functions well without an increase in traffic congestion.

### 4.1.6 Best practices

The following best practices will ensure that land use planning is coordinated with transportation infrastructure planning and design.

#### 4.1.6.1 Ministry of Transportation

The Ministry will be more engaged in the land use planning and development process, starting early and throughout the process. The Ministry will follow the principle concepts of this manual when reviewing Official Plans, Secondary Plans, Transportation Master Plans, and other planning applications circulated either by the Ministry of Municipal Affairs and Housing (One Window Planning Service) or by a municipality or planning board (Municipal Plan Review).

The Ministry will also continue to develop other tools to assist with integrating its new access management policies and standards into municipal land use planning.

#### **4.1.6.2 Municipalities and stakeholders**

Municipalities and stakeholders should contact the Ministry early in their planning and development processes to ensure success. This ensures time to consider and implement access management alternatives.

Access management requirements can be successfully implemented in a timely and cost-effective manner if they are addressed during:

##### **1. General planning and document development**

- Land-use development and transportation objectives should be addressed at the same time.
- Necessary lead time should be scheduled to address access management in the planning and development process of official plans, master transportation plans, environmental assessments (EA) for municipal roads, secondary plans, plans of subdivision, lot severances, municipal building permits, etc.
- Associated implementation costs for access management (which may include development charge by-laws) should be budgeted.
- Solutions for land development and transportation planning may require study areas beyond the Ministry's permit control area.
- The Ministry should be contacted early in the general planning and document development process for input regarding access management requirements.
- The possible need to undertake a Highway Access Management Plan (HAMP) or Interchange Highway Access Management Plan (I-HAMP) should be considered.

##### **2. Municipal road planning**

Planning and design alternatives on municipal roads which connect to Provincial Highways should be considered, to comply with access management standards and to maintain or improve local traffic capacity and operation. Planning considerations include:

- Appropriate distance between the Provincial Highway and the first intersection of the municipal crossing road.
- New or improved municipal roads, including service roads, to better service and distribute local traffic.
- New or improved municipal road intersections to provide a single point of access to a number of local developments.

### **3. Site-specific land use planning and development**

Plans should include an appropriate mix of land use development, both for lands with frontage along Provincial Highways and lands in the immediate area serviced by highway interchanges and at-grade intersections. This will support land use that is recognized by the municipality, and will minimize issues associated with direct highway access. Considerations include:

- Developments that have an adequate internal road system and alternate access points away from the highway.
- Appropriate distance between the Provincial Highway and the first commercial entrance on the municipal crossing road.
- Development density and mix of uses that can be appropriately accommodated within the capacity of the municipal transportation system.

#### 4.1.7 Ministry authority over access management

The Ministry exercises its access management responsibility under two acts of the Ontario Government:

**Table 4.1.1: Acts**

Act	Ministry Responsibility
The <i>Public Transportation and Highway Improvement Act</i> R.S.O. 1990, c.P.50 - Sections 7, 24, 31, 34, 36, 38, 40, 41 and 42	<p><i>Control:</i></p> <p>Designation of Provincial Highways</p> <ul style="list-style-type: none"><li>• Municipalities to obtain the consent of the Minister of Transportation to open, close or divert any road entering upon or intersecting a Provincial Highway</li><li>• Access to highways by issuing Highway Corridor Management Entrance permits for highway access connections</li><li>• Land use and access in the vicinity of highways by issuing Highway Corridor Management Building and Land Use permits</li></ul>
The <i>Planning Act</i> R.S.O. 1990, c.P.13 - Sections 3, 51(24) (a) & (e), 51(25), 51(26) and 53(12)	<p><i>Advise and comment:</i></p> <ul style="list-style-type: none"><li>• On land use proposals circulated either by a municipality (Municipal Plan Review) or by the Ministry of Municipal Affairs and Housing (One Window Planning Service)</li><li>• On related Provincial Highway matters and objectives</li></ul>

#### 4.1.7.1 Public Transportation and Highway Improvement Act (PTHIA)

Under the PTHIA, the Ministry comments on all development applications (subdivisions, consents, zoning amendments, etc.) within its permit control area, to ensure there is no unacceptable or negative impact to the highway. Typically, the Ministry's comments are specific to highway access and other permit related issues.

Although the Ministry is not authorized to approve or object to land use planning applications, it does control whether Highway Corridor Management permits will be available. For example, if the Ministry advises a planning approval authority that a Highway Corridor Management Entrance permit would not be available, and the authority approves the land use in question anyway, then the parcel would, for all intents and purposes, be landlocked. The Ministry is under no obligation to issue the Highway Corridor Management Entrance permit.

#### Delegation of authority over permits

The authority to issue Highway Corridor Management permits under the PTHIA has been delegated to the:

- Head, Regional Highway Corridor Management Section, and any alternate or person occupying such position in an acting capacity.

The Delegated Authority is responsible for reviewing Highway Corridor Management permit applications, resolving conflicts, issuing Highway Corridor Management permits, and enforcing policies if violations occur.

**Note:** The PTHIA may be found on the Ontario government's Service Ontario e-Laws website.

#### 4.1.7.2 Planning Act

Under the *Planning Act*, the Ministry participates in municipal planning (official plans, secondary plans, master transportation plans, etc.). The Ministry provides comments regarding Provincial Highways and broader transportation objectives to planning approval authorities, such as the Ministry of Municipal Affairs and Housing (One Window Planning Service), municipalities and planning boards (Municipal Plan Review).

The Provincial Policy Statement, issued under the authority of the *Planning Act*, outlines the Ontario government's policies on land use planning. It applies province-wide and provides clear land use planning policy direction to promote strong communities, a strong economy, and a clean and healthy environment. It includes policies on key issues that affect communities, such as the efficient use and management of land and infrastructure.

**Note:** The *Planning Act* may be found on the Ontario government's Service Ontario e-Laws website.

## 4.2 Access- related Highway Corridor Management Permits

### 4.2.1 Permit types

There are two types of Ministry Highway Corridor Management permits with respect to access management.

**Highway Corridor Management Entrance permit:** Permits an access connection (entrance) to be constructed with direct access to a Provincial Highway.

**Highway Corridor Management Building and Land Use Permit:** Permits an access connection (entrance) to be constructed with access to an existing or proposed public road, other than a Provincial Highway, within the Ministry's permit control area.

### 4.2.2 Requirements

A Ministry Highway Corridor Management permit is required for the following:

- New entrance to a Provincial Highway, including temporary access connections
- New entrance to a public road that is within the Ministry's permit control area
- Change in location or use of an existing entrance to a Provincial Highway
- Change in location or use of an existing entrance to a public road within the Ministry's permit control area
- Change in land use within the Ministry's permit control area
- Change in property ownership
- Paving an existing gravel entrance

#### 4.2.2.1 New access connections

A Highway Corridor Management permit is required before constructing a new entrance to a Provincial Highway or to a public road (whether existing or proposed) within the Ministry's permit control area.

#### 4.2.2.2 Temporary access connections

A Highway Corridor Management permit is required before constructing a temporary access to a Provincial Highway or to a public road (whether existing or proposed) within the Ministry's permit control area.



#### 4.2.2.3 Change in property ownership

Highway Corridor Management Entrance permits for access connections to a Provincial Highway are issued to the property owner of the lot of record and are non-transferable.

Anytime there is a change in property ownership, the new property owner is required to obtain a Highway Corridor Management Entrance permit to recognize their entitlement to retain the existing access connection, and to clearly state the permitted use of the existing entrance.

If the use of the access connection does not change with the property transfer, a new Highway Corridor Management Entrance permit is required, although there is no fee.

#### 4.2.2.4 Change in land use at an existing access connection

The Ministry strictly controls changes in the use of land serviced by existing access connections. For example, Highway Corridor Management Permits are required when a residential or farmstead lot is redeveloped for commercial purposes.

When land use changes at an existing access connection within the Ministry's Permit Control Area, a new Highway Corridor Management permit is required. The Highway Corridor Management permit application will be treated as if the lot of record had no prior access connection, and all Ministry standards and requirements must be met for approval.

#### 4.2.2.5 Change in location of an existing access connection

A Highway Corridor Management permit is required before changing the location of an existing entrance to a Provincial Highway or to a public road within the Ministry's permit control area. All current standards and requirements shall be met as outlined in this manual.

#### 4.2.2.6 Change in design of an existing access connection

A change in the design of an existing access connection requires Ministry approval. The applicable design standard shall be a design standard approved for use by the Ministry. A change in access design is typically requested to accommodate the type of vehicle that will use the access connection (e.g. oversized farm machinery).

**Note:** A change in access design should not be confused with a change in use or upgrade of an existing access connection. While they often occur concurrently, a change in access design does not necessarily indicate a change of use.

#### 4.2.2.7 Paving an existing gravel access connection

A Ministry Highway Corridor Management permit is required for a property owner to pave an existing gravel access connection with asphalt.

**Note:** Paving stones, concrete or similar products are not permitted for use within the highway right-of-way limits. A property owner considering the use of these products shall either keep the portion within the highway right-of-way limits in gravel, or pave it with asphalt, according to Ministry specifications and drawings.

Between the edges of pavement of the highway to the highway right-of-way limit, the Ministry requires a minimum compacted depth of asphalt to be 50 mm.

#### 4.2.3 Highway Corridor Management Entrance Permit Conditions

The Ministry has the authority to establish project-specific conditions and requirements that shall be satisfied before the issuance of a Highway Corridor Management Entrance permit. Typically, such conditions and requirements may include, but are not limited to, the submission of a traffic impact study, stormwater management report, class environmental assessment for provincial transportation facilities, preliminary or detailed engineering design for highway improvements, legal agreement, letter of credit, etc.

The following standard conditions appear on the back of the Ministry's Highway Corridor Management Entrance permit. Standard conditions are subject to change without notice and supplemental conditions may also be established by the Ministry.

1. In addition to the conditions of this permit, the registered property owner must meet all of the requirements of the local municipality and any other agency having jurisdiction.
2. The work for which this permit is issued must commence within 6 months of the date that the permit is issued, or the permit shall be void and cancelled by the Ministry.
3. All work authorized by this permit shall be carried out in accordance with the approved plans, specifications and agreements and subject to the approval of the Ministry. The registered property owner must bear all expenses related thereto.
4. Vegetation on the right-of-way must not be cut or trimmed without the written permission of the Ministry. Any cutting or trimming permitted must only be done under the supervision of the Ministry or its authorized agent at the expense of the registered property owner. Any cutting or trimming of vegetation adjacent to the highway right-of-way requires the permission of the land owner.

5. During construction the registered property owner shall ensure that the operation of the highway is not interfered with, and that the right-of-way remains free of debris, earth or other materials.
6. If there is an expiry date named on this permit and a further term is required, an application for the renewal of this permit shall be made to the Ministry before the expiry date of this permit. An extension of the expiry date may be approved, or approved with additional conditions or denied by the Ministry.
7. If during the life of this permit any Acts are passed or regulations adopted which affect the rights herein granted, the said Acts and regulations shall be applicable to this permit from the date on which they come into force.
8. The registered property owner holds harmless the Ministry for all damages and liabilities caused as a result of the works undertaken pursuant to this permit.
9. This permit may be cancelled at any time for breach of the regulations or conditions of this permit, or for such other reasons as the Ministry at its sole discretion deems proper. When a permit is cancelled for any reason, the registered property owner shall not be entitled to any compensation or damages by reason of or arising from the cancellation of the permit.
10. An entrance permit to a highway may be cancelled at any time upon the Ministry providing an alternative entrance either to the highway or to a local road, or such other means of access as the Ministry deems proper and thereupon the entrance authorized by this permit shall be closed.
11. The Ministry shall be notified 48 hours prior to the commencement of construction.
12. The registered property owner shall protect all survey markers and monuments in the vicinity of the work, and will replace any markers or monuments that are damaged.
13. The registered property owner is responsible for the construction, marking and maintenance of any detours required and maintaining the applicable safety measures for the protection of the public during the construction of any works in respect of this permit.
14. If this permit expires and is not renewed, all works constructed, maintained or operated under this permit, if the Ministry so requests, shall be removed at no cost to the Ministry and the right-of-way shall be restored to its original condition.
15. The location, design and specifications of an approved entrance may not be changed without the approval of the Ministry.
16. The registered property owner of the property served by this entrance shall maintain the entrance in accordance with the requirements of the Ministry.
17. This permit is not transferable from one registered property owner to another, and a new permit is required when a new registered property owner acquires the property. If the registered property changes ownership, then the new

registered property owner must apply for a new entrance permit. Each new permit is subject to the conditions in effect at the time of applying.

18. The use of an entrance shall only be for the use stated on the permit. The use of an entrance for any other purposes may result in the cancellation of this permit. A change in the use of an entrance requires a new permit.
19. The entrance authorized by this permit shall be designed, constructed and maintained in a manner that prevents surface water from being discharged onto the highway. Failure to maintain the entrance in a satisfactory condition may result in the cancellation of this permit.
20. The registered property owner or applicant/tenant must provide basic uniform requirements for traffic control during roadway and utility work on or adjacent to the ministry's highway right-of-way in accordance with the Ontario Traffic Manual (OTM) Book 7 – Temporary Conditions.

#### **4.2.4 Stakeholder responsibilities**

##### **4.2.4.1 Traffic Impact Study**

A Traffic Impact Study is a special study of the transportation needs and traffic impacts that land use development will have on the surrounding highway system. A Traffic Impact Study is used to identify needed transportation improvements, and to determine a stakeholder's responsibility (financial and otherwise) towards warranted highway improvements. A Traffic Impact Study is to be prepared by a qualified consultant.

**Note:** It is the stakeholder's responsibility to retain a qualified transportation consultant experienced in the preparation of a Traffic Impact Study. Effective January 1, 2010, all Traffic Impact Studies shall be undertaken by a consulting firm approved under the Traffic Impact Analysis specialty category of the Ministry's consultant Registry, Appraisal and Qualification System (RAQS). Also, effective January 1, 2010, a Traffic Impact Study shall be signed and stamped by a Professional Engineer who is registered in the Province of Ontario, to demonstrate their responsibility for the Traffic Impact Study contents.

The cost of undertaking a Traffic Impact Study is the financial responsibility of the stakeholder.

The Ministry's "General Guidelines for the Preparation of Traffic Impact Studies" can be obtained from the nearest Regional Highway Corridor Management Section.

##### **4.2.4.2 Class Environmental Assessment for Provincial Transportation Facilities (Class EA)**

Although the Ministry may determine that a stakeholder is eligible for Highway Corridor Management permit(s), the associated transportation improvements to

support the land use development project may, in some cases, require the stakeholder to complete the environmental assessment process under the 'Class Environmental Assessment for Provincial Transportation Facilities' (Class EA).

Projects and activities are grouped as follows under the Ministry's Class EA:

- Group A: new facilities
- Group B: major improvements to existing facilities
- Group C: minor improvements to existing facilities
- Group D: activities which involve operation, maintenance, administration, and miscellaneous work for provincial transportation facilities

Stakeholders should familiarize themselves with the Ministry's Class EA document, whenever their land use development project would require improvements of any scale to an existing Provincial Highway. The groups above are described in detail in the Ministry's Class EA document. In particular, stakeholders should be aware of the timelines involved in the Ministry's Class EA consultation and documentation study process in order to obtain environmental clearance. The cost of undertaking the Ministry's Class EA study process is the financial responsibility of the stakeholder.

**Note:** The Class EA document may be obtained via the Ministry's public website or for purchase via the Service Ontario Publications website.

When stakeholders undertake work that is defined under the Ministry's Class EA process, they do so "in their own right and under their own responsibility" (including filing of documents prepared under the Class EA study process). Accordingly, stakeholders are responsible for addressing challenges and Part II Order (bump-up) requests during their Class EA study process.

Where lands are required from a property owner to accommodate the associated transportation improvements, stakeholders will be required to document the following during the Class EA study process, to the satisfaction of the Ministry:

- Identify and document all lands required for right-of-way purposes to support the land use development project
- Notify all affected property owners of the need for their land to accommodate the associated transportation improvements to support the land use development project, and to specifically include these land requirements and property owner notifications in the documents prepared under the Class EA study process
- At the end of the Class EA study process, stakeholders will be required to prepare, and submit to the Ministry, a statement indicating that the Class EA process has been successfully completed. The Ministry will confirm the

statement in support of the Highway Corridor Management permit application or will request additional information.

#### **4.2.4.3 Highway Improvements Associated with Land Development**

Highway improvements necessitated by land use development within the Ministry's permit control area, as specified in the PTHIA, will generally be the responsibility, financial and otherwise, of municipalities and stakeholders.

To clarify the respective responsibilities of the Ministry and municipalities and stakeholders, where land use development necessitates highway improvements, the Ministry has published "A Guideline For Highway Improvements Associated With Development". This guideline clarifies the procedure to be followed by municipalities and stakeholders who shall directly or indirectly undertake the construction of highway improvements on a Provincial Highway right-of-way. It is intended to deal with highway improvements that are generally more complex than the construction of a standard commercial entrance.

New access connections, upgrading or alteration of existing access connections, the installation of culverts, or other works within the limits of the highway right-of-way of a Provincial Highway are the financial responsibility of the stakeholder.

Upgrading of existing highway intersections, interchanges or other works as a result of land use development within the Ministry's permit control area are the financial responsibility of the stakeholder.

The Ministry's "A Guideline For Highway Improvements Associated With Development" can be obtained from the nearest Regional Highway Corridor Management Section or via the Ministry's public website.

#### **4.2.4.4 Land Acquisition Associated with Land Development**

In addition to section 3.5.3 and section 3.5.4, all costs associated with the acquisition of land to construct highway improvements associated with land development shall be the responsibility, financial and otherwise, of municipalities and stakeholders.

In some cases, the associated transportation improvements to support the land use development project may require a municipality or stakeholder to obtain land from a property owner, and transfer the lands to either the Ministry or the municipality. Lands acquired for highway purposes become right-of-way under the ownership of the Ministry. Lands acquired for municipal crossing road purposes become right-of-way under the ownership of the municipality.

Typical costs for property acquisition include, but are not limited to:

- the survey, plan preparation and registration

- the actual purchase of the property(s)
- deed preparation, registration and certification of title
- all associated legal fees.

The Ministry shall not, on the behalf of a municipality or stakeholder, invoke rights under the *Expropriations Act* to acquire lands to accommodate highway improvements to support land use development. A municipality or stakeholder shall obtain all lands from property owners as needed to accommodate the highway improvements.

If a municipality or stakeholder does not obtain the necessary lands to accommodate the highway improvements to support their land use development, a Ministry Highway Corridor Management permit(s) shall not be issued, and the land use development shall not proceed, until such time that the lands can be acquired.

#### **4.2.4.5 Irrevocable Standby Letter of Credit (Letter of Credit)**

A Letter of Credit is a financial guarantee from a major Canadian financial institution to provide monies in the event of default for the performance and the timely completion of a contract, in accordance with an issued Highway Corridor Management permit.

At the discretion of the applicable Regional Highway Corridor Management Section, the Ministry may accept other means of financial security (e.g. certified cheque) in lieu of a Letter of Credit.

The Ministry reserves the right to request a Letter of Credit as a condition of issuing any Highway Corridor Management permit, where it deems that the circumstances warrant such securities.

#### **4.2.4.6 Utility Relocations**

Where the construction of an access connection necessitates the relocation or alteration to any public or private utility facility located within the highway right-of-way, the stakeholder is responsible for making the appropriate arrangements with the relevant utility owner, and for payment of all associated costs to relocate or alter the affected utility.

Relocation or alteration of public or private utilities requires Ministry approval, typically in the form of a Highway Corridor Management Encroachment Permit.

#### **4.2.4.7 Access Connection Maintenance**

The property owner of a lot of record served by an access connection from a Provincial Highway is responsible for maintaining the surface of the entrance.

The Ministry will maintain the shoulder of the highway. The Ministry will maintain the access culvert and will replace it when necessary, provided the access connection was built to the Ministry's standards, and is used in accordance with the terms of the Highway Corridor Management Entrance permit.

## 4.3 Access-Related Permit Application Review

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### 4.3.1 Steps in the Review Process

The Ministry requires that a variety of standards for development be met within a permit control area, to protect the safety, mobility and functionality of Ontario's Provincial Highway system.

The steps in the decision-making process are:

#### **Step 1 – Identification of any approved HAMP or I-HAMP**

If the Ministry has adopted a HAMP or I-HAMP, all action taken with respect to access connections shall be in conformance with the HAMP or I-HAMP, unless the Ministry approves an exception or variance.

#### **Step 2 – Determination of Highway Classification**

The Ministry determines the Access Management Classification of the highway that is adjacent to or in the vicinity of the property. This will define the access connection standards applicable for the highway. Highways with higher Access Management classifications are subject to more stringent standards.

#### **Step 3 – Application of Ministry Access Standards and Policy**

In order for an Access Management related Highway Corridor Management permit application to be considered, the proposal should comply with all of the standards and policy contained in this manual.

## 4.4 Types of Access Connections

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### 4.4.1 Purpose of Access

All Highway Corridor Management Entrance permits have a "Purpose of Access" heading, which specifies the type of access allowed for the lot of record. In addition, all the Ministry Highway Corridor Management Entrance permits indicate the "Standard" to which the entrance shall be designed and constructed. See Appendix 4B for a listing of the most widely used Ministry of Transportation Ontario Drawings for entrances.



Any change in the “Purpose of Access” from that stated on the Highway Corridor Management Entrance permit is in contravention of the permit. The Ministry, in consultation with the property owner, would attempt to resolve the situation. If no agreement is reached, the Ministry has grounds to cancel the Highway Corridor Management Entrance permit, and remove the access connection from the highway.

The “Purpose of Access” will typically name one of the following types of access connections:

#### **4.4.2 Interchange**

An Interchange is the intersection of a Provincial Highway or public road with a freeway, staged freeway, or principal arterial road, under the authority of the Province of Ontario.

#### **4.4.3 Public road**

For the purposes of this manual, a public road is a road on which public money has been expended for its repair or maintenance, a public road is either:

- a road established by by-law and under the jurisdiction of a municipality or joint jurisdiction of two or more municipalities, which intersects with a Provincial Highway, or
- a road in territory without municipal organization, where the Ministry may arrange with the Government of Canada, the local roads board elected under the *Local Roads Boards Act*, the roads commissioners elected under the *Statute Labour Act*, or other duly constituted road authority, for the construction or maintenance of a road, which intersects with a Provincial Highway, or
- a road in a First Nation, where the Ministry may arrange with the Government of Canada or the First Nation for the construction or maintenance of a road which intersects with a Provincial Highway.

#### **4.4.4 Private road**

For the purposes of this manual, a private road is a road that:

- is under the jurisdiction, control and ownership of a person, an authority, a corporation, an association, etc. that provides access to one or more lots of record, or to multiple owners of units located on one parcel of land, as is the case of a condominium
- intersects with a Provincial Highway
- public funds are not expended upon.

#### **4.4.5 Service road**

A service road (or frontage road) is typically located parallel and adjacent to a freeway, staged freeway or arterial in order to provide access to adjacent properties. A service road could either be under the jurisdiction of the Ministry or a municipality.

All properties with frontage along the service road shall gain access from it. Entrances to the highway shall be removed and relocated to the service road. The width of a service road right-of-way shall be a minimum of 20 m.

All land use development along a service road that falls within the Ministry's permit control area as defined in the PTHIA requires Ministry approval.

Where the Ministry is protecting for a future service road, typically 20 m will be added to the standard setback requirements outlined in the Chapter 2. Note that a HAMP or I-HAMP may require a right-of-way wider than 20 m for a service road.

#### **4.4.6 Commercial access**

A commercial access is the means of private access connection to a highway from a parcel of land serving a commercial/industrial/ institutional/multi-residential development. Typically, a commercial access is required whenever the zoning for the lot of record is representative of a commercial/industrial/institutional/multi-residential land use.

In recognition of the great variety of business establishments and their different needs, the Ministry employs a number of entrance designs for Commercial access. See Appendix 4B for the most widely used Ministry of Transportation of Ontario Drawings (MTODs) for Commercial access. The appropriate entrance design is determined by the Ministry based upon the nature of the business and the specific use of the property.

#### **4.4.7 Farmstead access**

A farmstead access is the means of access connection to the highway from a farm residence. The access connection design typically should be adequate to accommodate farm machinery and truck movements.

#### **4.4.8 Field access**

A field access is the means of access connection to the highway from a vacant lot of record or for auxiliary access for a Farmstead lot. In the case of the Field access connection being required for agricultural purposes, the access connection design typically should be adequate to accommodate farm machinery and truck movements.

#### **4.4.9 Auxiliary access**

An auxiliary access is a secondary means of access connection to the highway, which is already served by another access connection type. Typically, it is used where internal access to the total holding is impractical due to topographical or physical features (e.g. creek, municipal drain, etc.)

#### **4.4.10 Residential access**

A residential access is the means of access connection to the highway from a residential lot.

#### **4.4.11 Mutual access**

A mutual access provides a means of access connection to the highway for two or more lots of record, which all have highway frontage. Typically, a mutual access is used where a direct highway access connection to two or more lots of record is unachievable due to topographical features.

A mutual access connection request by a stakeholder as part of a Consent application is outlined in Chapter 2 of this manual.

#### **4.4.12 Utility access**

A utility access is the means of access connection to a highway from a utility installation such as a microwave tower, power or telecommunication company substation, municipal utility pumping station, or any other public utility belonging to a municipal corporation, commission, or company operating under a federal, provincial or municipal franchise to provide a public service.

#### **4.4.13 Resource access**

A resource access provides a means of access connection for logging operations, mining exploration, gravel pit, etc.

#### **4.4.14 Temporary access**

A temporary access provides a means of access connection for a specific project, which will last a relatively short period of time, and will ultimately be removed from the highway right-of-way. Typically, a temporary access is used to enable stakeholders and contractors to do work on their lot of record prior to the construction of a permanent access connection and where no other means of access connection is available.

## 4.5 Highway Designation and Ministry Classification Systems

### 4.5.1 Designation of a highway

Provincial Highways and proposed Provincial Highways are designated under the PTHIA as one of the following:

- King's Highway (section 7)
- controlled-access highway (section 36)

In addition, the Ministry can also designate highways as:

- secondary highway (section 40)
- tertiary road (section 41)
- resource road (section 42)

(The above three designated highways will be considered King's Highways in this manual.)

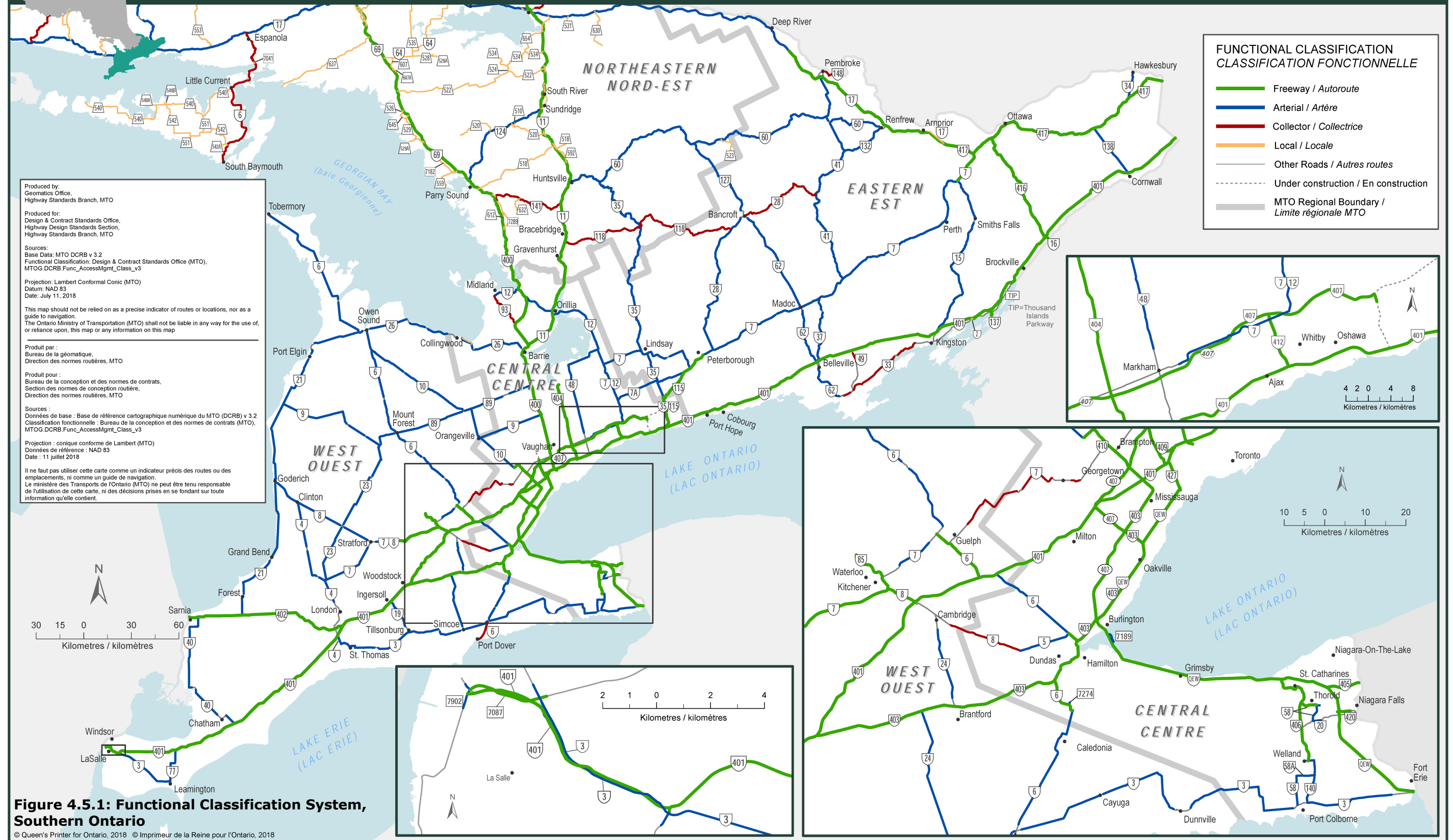
The type of designation determines the extent and degree of the provisions and regulations of the PTHIA that apply.

### 4.5.2 Classification Systems

#### 4.5.2.1 Functional Classification system

The Ministry uses the Functional Classification system as its foundation for highway system planning, engineering, and other classification systems.

Figure 4.5.1 (Southern Ontario) and Figure 4.5.2 (Northern Ontario) illustrate the Functional Classification system for the Province of Ontario's Highway System.





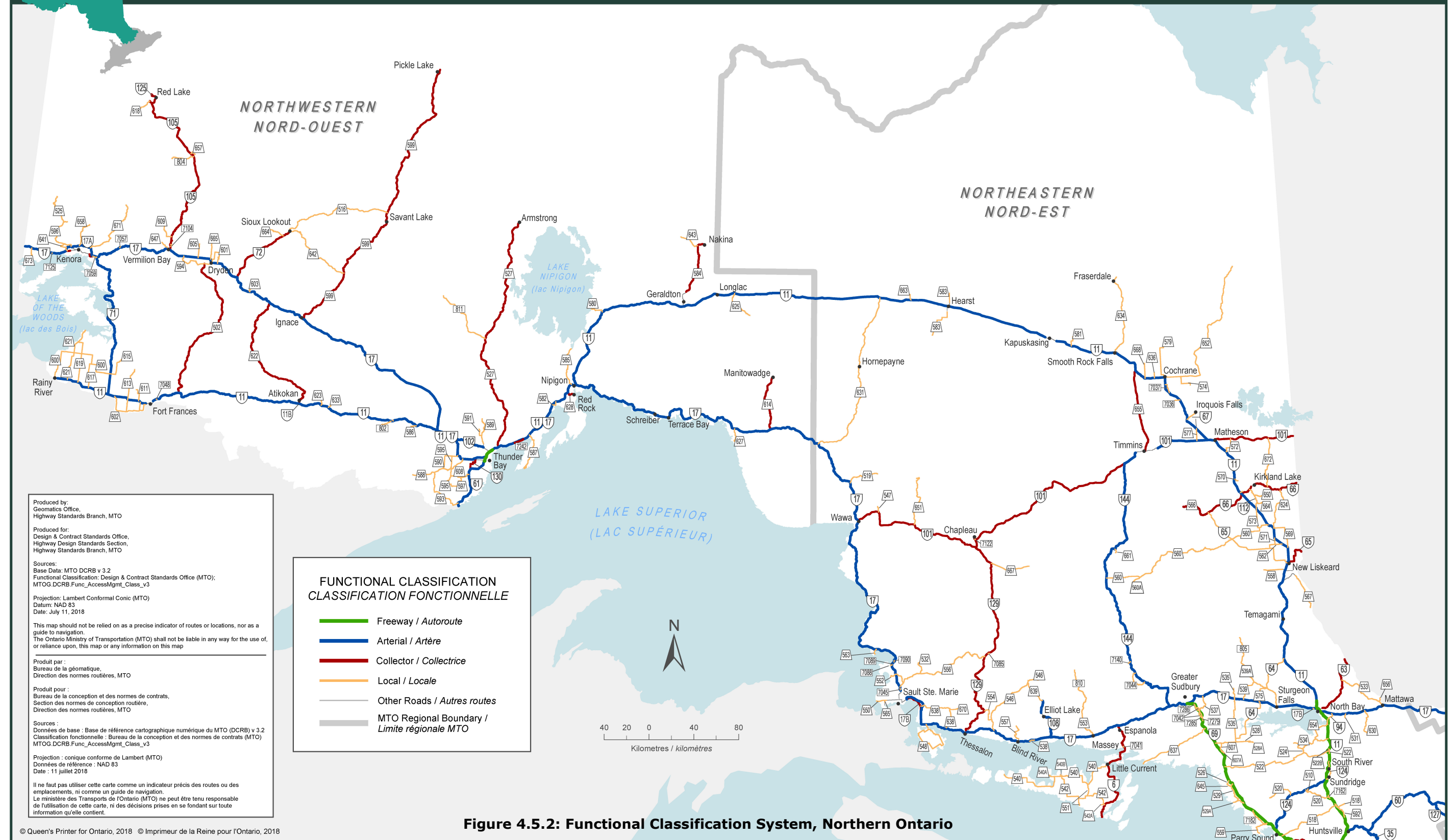


Figure 4.5.2: Functional Classification System, Northern Ontario

#### 4.5.2.2 Access Management Classification system

The Access Management Classification system, and the policies and standards within this manual, protect the Functional Classification system by preserving the intended role, function, mobility and design characteristics of each Provincial Highway. Figure 4.5.3 (Southern Ontario) and Figure 4.5.4 (Northern Ontario) illustrate the Access Management Classification system for the Province of Ontario's highway system.

For access management purposes, the Ministry has classified Ontario's Provincial Highways into the following categories based on the Functional Classification system:

**Table 4.5.1: Access Management Classification System**

Access Management Classification System Category	Controlled-access Highway (CAH) or King's Highway (KH)
1A – Freeway	Fully CAH
1B – Staged Freeway	Fully CAH
2A – Principal Arterial	Fully CAH
2B – Arterial	CAH or KH
3 – Collector	KH
4A – Major Local	KH
4B – Minor Local	KH

Many of the Ministry's standards apply differently for each classification of highway.

The Access Management Classification within built-up urban/rural settlement areas is often the same as the adjacent sections of highway. However, in established, built-up urban/rural settlement areas, the Ministry will consider permitting new access connections for infilling purposes, even if they are outside the normal access management policies and standards.

#### 4.5.3 Access Management Classification System - Definitions

Outlined below are descriptions of each of the Access Management Classification system categories. The descriptions include the role, function, mobility and design characteristics of each category, based on the Functional Classification system.

##### 4.5.3.1 Freeway

Freeway corridors are built to accommodate the movement of large volumes of traffic at high speeds, under free-flow conditions. The need for unrestricted traffic movement on these facilities justifies the elimination of all direct lot of record access connections.

Traffic flow should be uninterrupted and unrestricted. Opposing traffic lanes shall be separated.

Access connections to be located along a public road of an interchange ramp terminal intersection are subject to the Ministry's permit control area and may require a Building and Land Use permit.

Adequate spacing, design and location of access connections along a public road either upstream or downstream of freeway ramps avoids traffic queues onto the mainline and preserves safe and efficient traffic operation in the vicinity of the ramp terminals and the intersecting public road.

Private access connections are prohibited.

The spacing, density and location for all access connection types in the vicinity of an interchange are to be in accordance with this manual.

### **1A - Freeway (Fully controlled-access highway)**

1A - Freeway corridors have full control of access connections, with access provided via grade-separated interchanges only.

### **1B - Staged Freeway (Fully controlled-access highway)**

1B - Staged Freeway corridors are projected to become Freeways at some time in the future.

Staged Freeway corridors have full control of access connections, with access provided via public road connections only at approved locations for future grade-separated interchanges.

Public roads that are permitted to remain during the initial construction of a Staged Freeway will either be closed, become grade-separated crossings or become interchanges when constructed as a Freeway. Existing private access connections to Staged Freeways may remain on a temporary basis. These access connections shall be removed when the highway is upgraded to Freeway status or when there are operational problems. A change in use of an existing private access connection related to a change in land use is prohibited.

## **4.5.3.2 Arterial**

The role of Arterial corridors is to provide mobility. In areas where Freeways are not warranted, Arterials are the highest type of highway.

Arterials are typically 2 or 4 lane divided or undivided highways with at-grade intersections, which could potentially have short sections of Freeway or Staged Freeway constructed within the overall corridor.



Access connections to be located along a public road of an interchange ramp terminal intersection or an at-grade intersection, are subject to the Ministry's permit control area and may require a Building and Land Use permit.

All access connection types will be reviewed during the Ministry Work Projects for potential removal, relocation or consolidation in order to protect the role, function and mobility of the corridor as an Arterial.

All private access connection types for existing lots of record will be permitted to remain for existing land use.

## **2A – Principal Arterial (Fully Controlled-access)**

Fully controlled-access Principal Arterial corridors have full control of access connections, with access provided via public road connections only at approved locations for:

- future grade-separated interchanges, or
- future at-grade public road intersections.

All other access connection types are prohibited.

## **2B – Arterial (Controlled-access or King's Highway)**

Controlled-access or King's Highway Arterial corridors have extensive control of access connections.

Access for development of land (i.e. subdivisions) shall be from existing public roads or via a new public road connection at an approved location.

New private access connections or upgrading of an existing access connection (i.e. Residential access to Commercial access) for a land use change, which meets the desirable/minimum spacing, density, frontage and safety requirements outlined in this manual will be considered.

### **4.5.3.3 Collector (King's Highway)**

The role of Collector corridors is to provide a balance between mobility and access. However, access is still secondary to mobility. Collectors typically are 2- or 4-lane undivided highways with at-grade intersections. Collector corridors have substantial control of access.

Access for development of land (i.e. subdivisions) is to be from existing public roads or via a new public road connection at an approved location.

All private access connections for existing lots of record will be permitted to remain. New private access connections are permitted, but they should be from existing public roads where possible. Upgrading of an existing access connection (i.e. Residential access to Commercial access) for a land use change will be considered, if the upgrade meets the minimum spacing, density, frontage and safety requirements outlined in this manual.

All access connections will be reviewed during the Ministry Work Projects for potential removal, relocation or consolidation in order to protect the role, function and mobility of the corridor as a Collector.

Access connections to be located along a public road of an at-grade intersection are subject to the Ministry's permit control area and may require a Building and Land Use permit.

#### **4.5.3.4 Local (King's Highway)**

A Local corridor's role is to serve through traffic, with mobility being secondary to access. Local corridors provide both traffic service and land service and are given equal consideration. Local corridors typically are 2 lane undivided highways with at-grade intersections.

Local corridors have some degree of access control. New private access connections for the development of land are still preferred from existing public roads where possible or via new public road connections at approved locations.

Access connections to be located along a public road of an at-grade intersection are subject to the Ministry's permit control area and may require a Building and Land Use permit.

#### **4A– Major Local (King's Highway)**

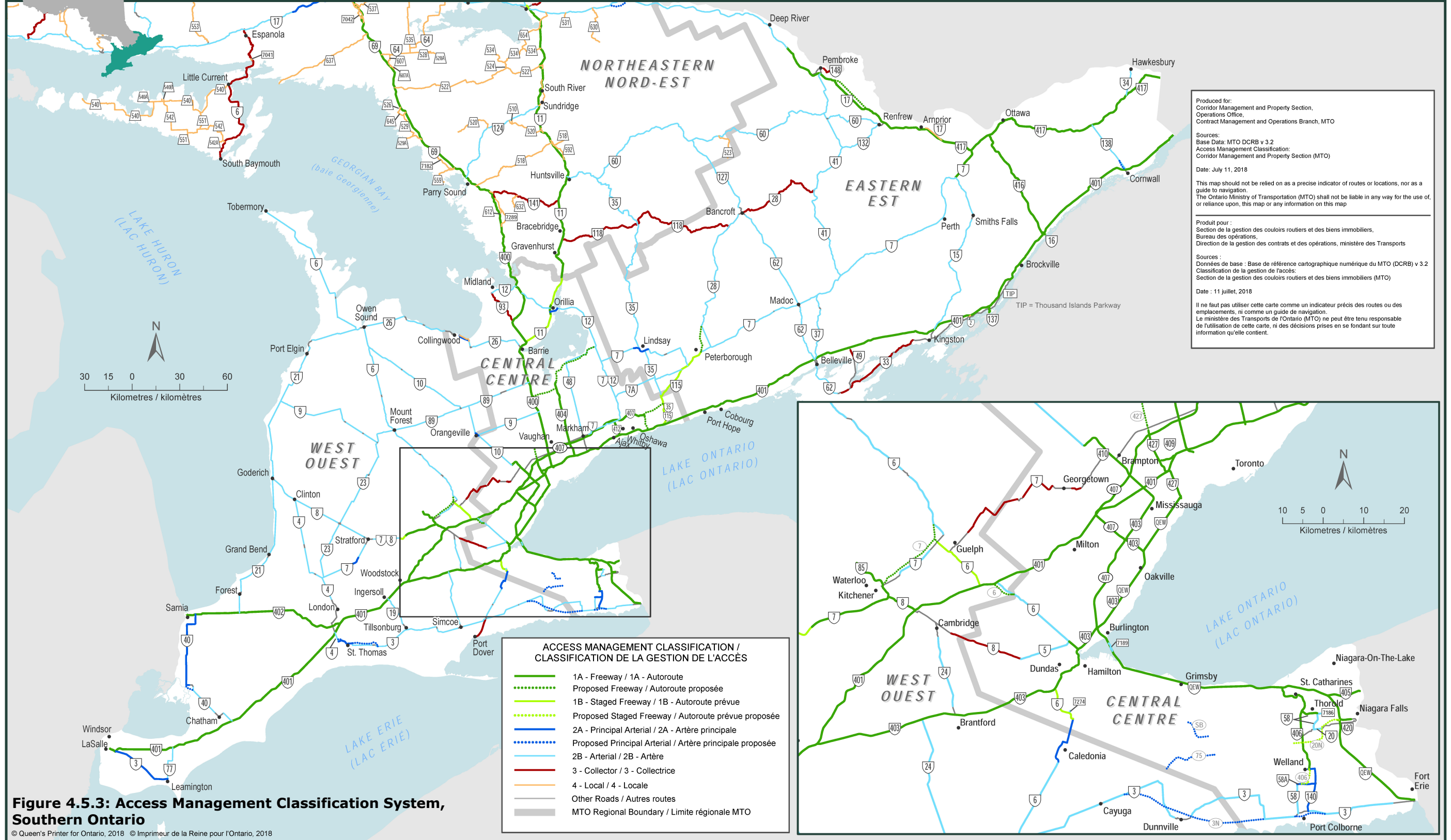
All private access connections for existing lots of record will be permitted to remain. New private access connections or upgrading of an existing access connection (i.e. Residential access to Commercial access) for a land use change, which meet the minimum spacing, density, frontage and safety requirements outlined in this manual will be considered.

#### **4B– Minor Local (King's Highway)**

All private access connections for existing lots of record will be permitted to remain. Due to the low traffic volumes on these highways, the Ministry is less concerned with the spacing and density of access and therefore will work cooperatively with municipalities/property owners and allow for new access connections as requested, provided the access meets minimum sight distance requirements. The Ministry reserves the right to deny an access where access management best practices as outlined in this manual are being compromised.

# Access Management Classification - Southern Ontario Classification de la gestion de l'accès - Sud de l'Ontario

July 2018  
Juillet 2018



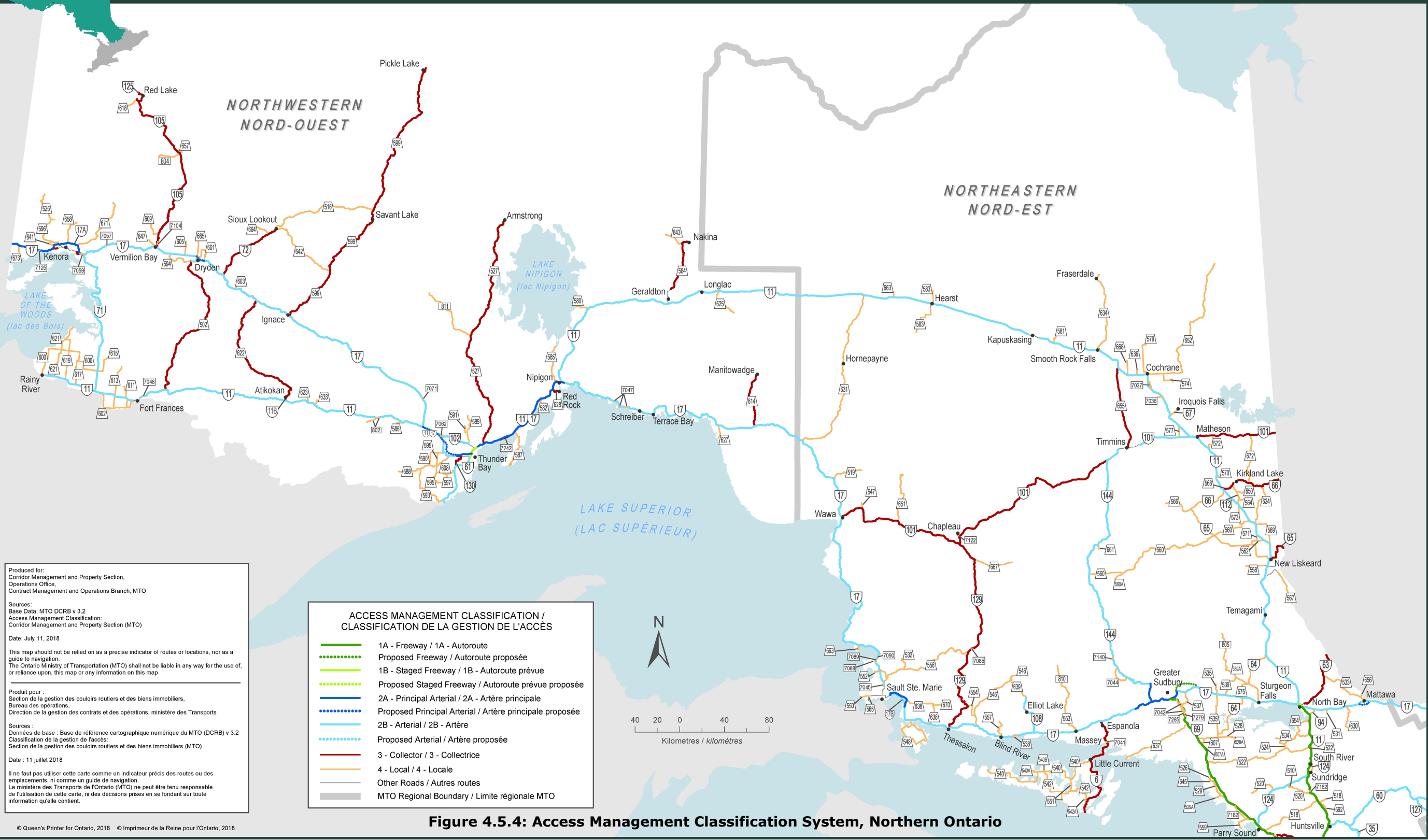


Figure 4.5.4: Access Management Classification System, Northern Ontario



## 4.6 Standards and Policy

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Standards for the design of freeways and interchanges, highways and intersections and associated items such as interchange ramps, turning lanes, traffic signals, etc. can be found in the Transportation Association of Canada (TAC) June 2017 Geometric Design Guide (GDG) for Canadian Roads along with MTO's Design Supplement (DS) to the TAC GDG, and should be consulted in connection with other MTO Standards and Policy, such as the Ministry's Roadside Design Manual, Ontario Traffic Manual series, etc.

Certain sections of "Chapter 8 – Access" from the TAC GDG are also applicable and should be consulted in conjunction with this manual and the MTO DS regarding access standards.

### 4.6.1 Desirable and minimum values

It is important to understand how "desirable" and "minimum" values are applied when the Ministry considers an Access Management related Highway Corridor Management permit application. Some standards have both desirable and minimum values. This is how the Ministry determines whether to require a desirable or a minimum value:

- The first choice is to meet desirable values as supported by a Traffic Impact Study.
- The second choice, if it is necessary to address limitations imposed by factors such as topography or existing road patterns, is to exceed or at least meet the minimum values, as supported by a Traffic Impact Study.
- The third choice is to explore design alternatives to at least meet the minimum standards (e.g. access roads opposite ramp terminals, grade separations, roundabouts, active transportation overpasses / underpasses), as supported by a Traffic Impact Study.

As an alternative to the application of desirable and minimum standards with respect to access within the Ministry Permit Control Area, the Ministry will consider the initiation of a Highway Access Management Plan (HAMP) or Interchange Highway Access Management Plan (I-HAMP). This would require a comprehensive Traffic Impact Study to identify technically sound approaches for meeting access management and development objectives.

### 4.6.2 Distance between access connections (Access Spacing)

**Note:** Proper spacing of access connections has a direct effect on highway safety and efficiency. The Ministry has established standards for the spacing of various access connection types, depending on whether the access connection is on a highway or a public road within the Ministry's permit control area (see Table 4.6.1 for details).

Highways with higher Access Management Classifications require greater distances between access connections, while highways with lower Access Management Classifications can have more frequent and more closely spaced access connections.

Access spacing standards have been established for:

- signalized and unsignalized public roads
- signalized and unsignalized commercial/private road access connections.

These access spacing standards help to ensure that, should these types of access connections require an auxiliary lane (i.e. a left turn lane) and/or signalization, now or in the future, they will be properly spaced to permit their design and construction. If proper spacing is not provided for an access connection and an auxiliary lane or signalization is required later, it can cause a substantial reduction in highway safety, operations and efficiency.

The Ministry's access spacing standards are outlined in Table 4.6.1. In addition, the Ministry's access spacing standards for:

- signalized and unsignalized public roads are illustrated for each applicable Access Management Classification category in Figures 4.6.1 to 4.6.4.
- signalized and unsignalized commercial/private road access connections are illustrated for each applicable Access Management Classification category in Figures 4.6.5 to 4.6.7.

### **New Public Roads**

New Public Road connections will only be considered if there is no existing Public Road located within the specified spacing requirement. The Ministry may consider allowing a new Public Road to be located opposite an existing Public Road, subject to the review and approval of a Traffic Impact Study.

New Public Roads connections may be influenced by factors such as an unopened road allowance or an existing Commercial/Private Road access connection that is signalized and/or has an auxiliary lane (i.e. a left turn lane). In these situations, a new Public Road will need to be designed in accordance with the specified spacing requirement.

### **New Commercial/Private Road Access Connections**

New Commercial/Private Road access connections will only be considered if there is no existing Public Road or existing Commercial/ Private Road access located within the specified spacing requirement, regardless of which side of the highway it is located.

The Ministry may consider a new Commercial/Private Road access connection to be located opposite an existing public road or an existing Commercial/ Private Road access connection, subject to the review and approval of a Traffic Impact Study.

## **Roundabouts**

The Ministry considers the use of roundabouts as a viable alternative at intersections where traffic signals or other operational improvements (e.g. opposing left-turn lanes) are warranted. Roundabouts shall be designed and constructed according to the latest Ministry policies, guidelines and standards.

Screening is a preliminary step for determining if a roundabout is feasible and warranted at a new or existing intersection, compared with signalized or stop control intersection alternatives. The Ministry will work with stakeholders to provide guidance when undertaking a Traffic Impact Study, where the Ministry considers a roundabout to be a feasible alternative.

## **Separation requirements for private access connections**

Private access connections should be separated from any other private access connection on the same side of the highway. The desirable separation distance is equal to half the value of the minimum stopping sight distance. At a minimum, private access connections on the same side of the highway should be separated by at least 30 m.

The Ministry encourages that access connections be located opposite each other, to minimize operational conflicts on the highway.

Private access connections will not be permitted within a right-turn channelization, auxiliary lane, taper, ramp, or similar facility.

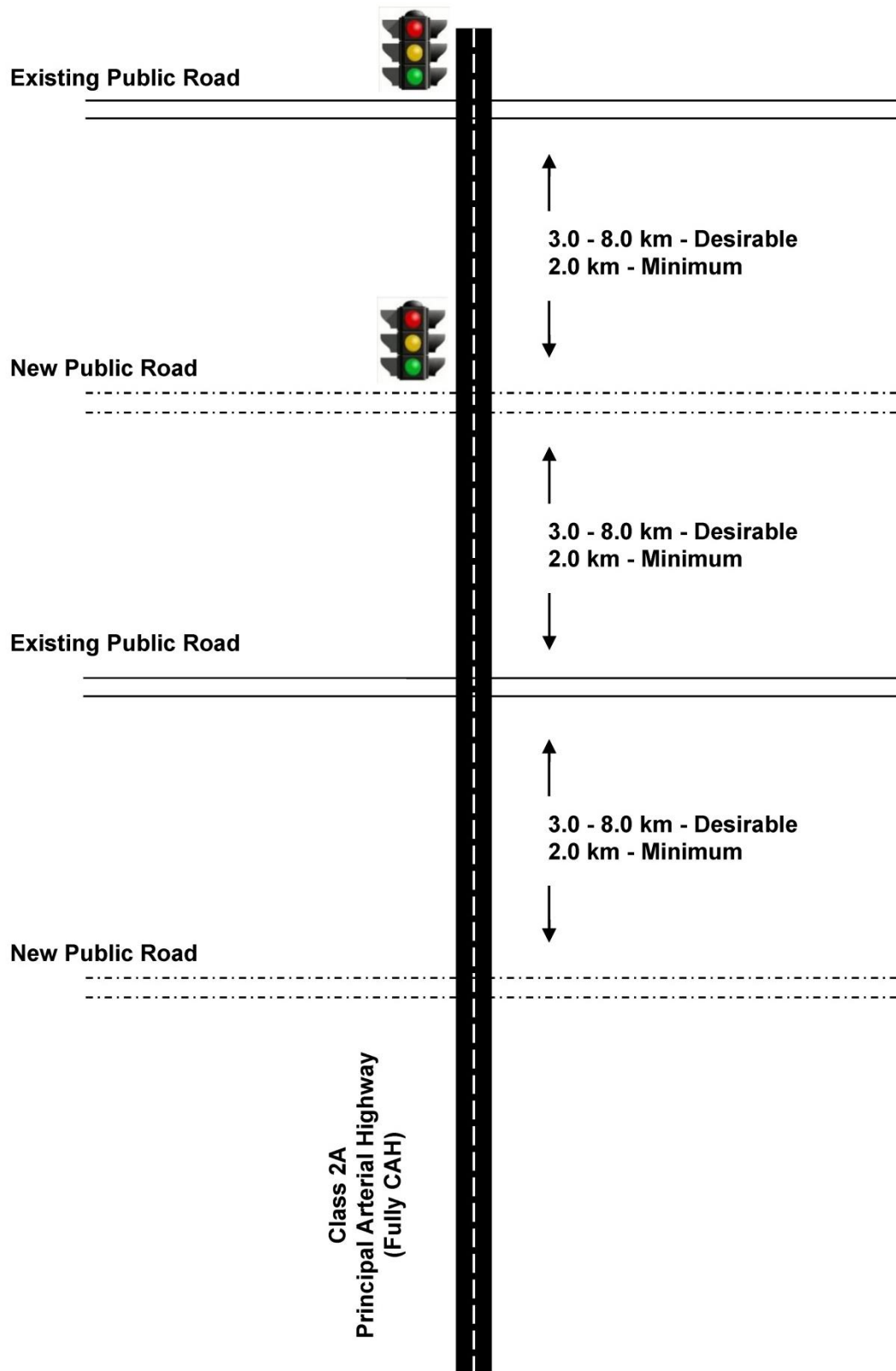
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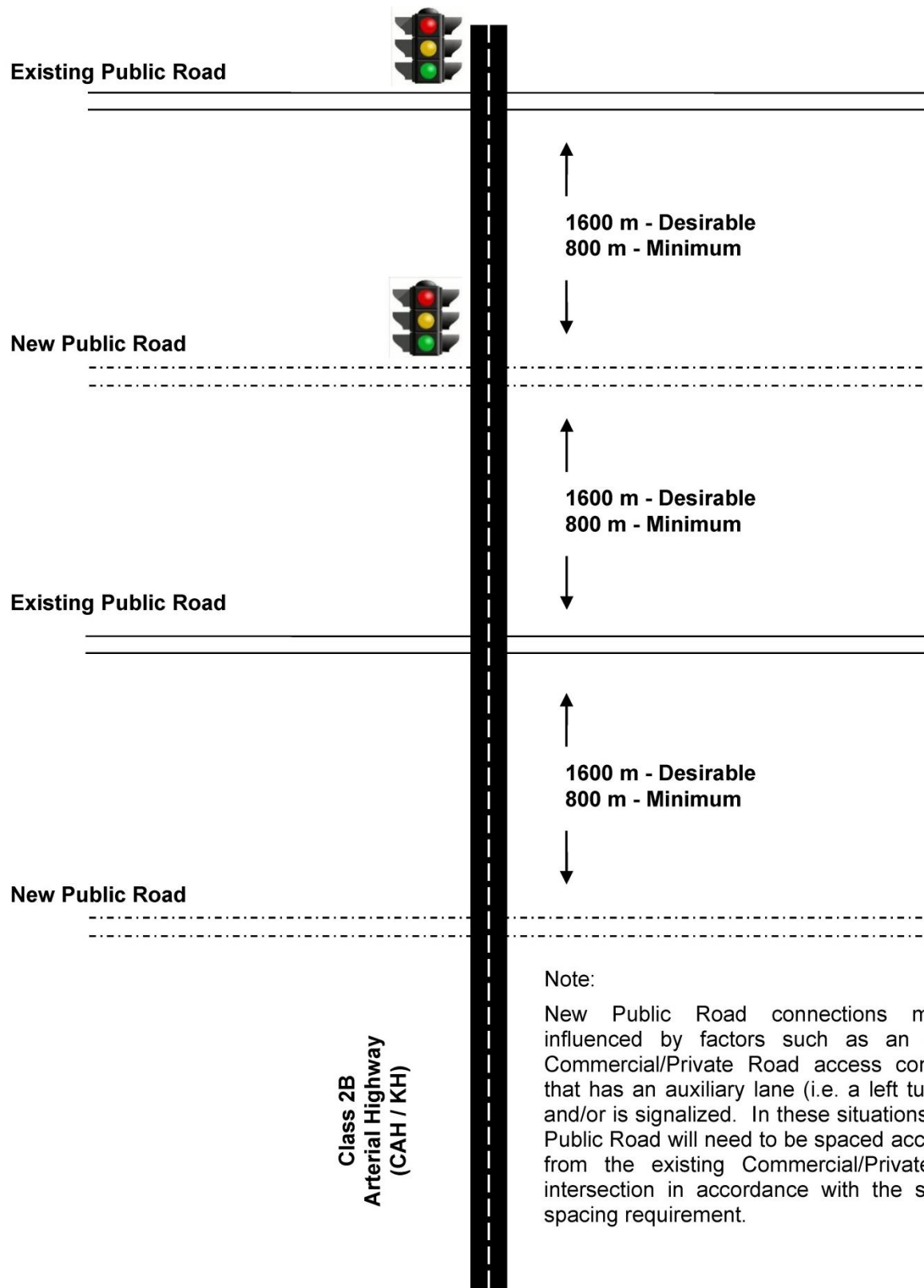
Table 4.6.1: Spacing and density of various access connection types

Highway Access Management Classification System Category		Controlled-Access Highway (CAH) or King's Highway (KH)	Interchange Spacing <sup>a</sup>	Public Road Intersection Spacing Signalized / Unsignalized <sup>b</sup>	Commercial / Private Road Access Spacing Signalized / Unsignalized <sup>c</sup>	Total Private Access Density <sup>d</sup> / km / side	Minimum Total Pre-Severance Frontage Requirement for the Creation of a New Lot of Record <sup>e</sup>	
							New Access Connection	Mutual Access
1A -	Freeway	Fully CAH	3.0 - 8.0 km Desirable 2.0 km Minimum	N/A	N/A	N/A	N/A	N/A
1B -	Staged Freeway			3.0 - 8.0 km Desirable <sup>f</sup> 2.0 km Minimum <sup>f</sup>	N/A	N/A	N/A	N/A
2A -	Principal Arterial	Fully CAH	3.0 - 8.0 km Desirable 2.0 km Minimum	3.0 - 8.0 km Desirable <sup>f</sup> 2.0 km Minimum <sup>f</sup>	N/A	N/A	N/A	N/A
2B -	Arterial	CAH / KH	N/A	1600 m Desirable <sup>g</sup> 800 m Minimum <sup>h</sup>	1600 m Desirable <sup>i</sup> 800 m Minimum <sup>j</sup>	4	500 m	250 m
3 -	Collector	KH	N/A	800 m Minimum <sup>h</sup>	800 m Minimum <sup>j</sup>	6	300 m	150 m
4A -	Major Local	KH	N/A	400 m Minimum <sup>h</sup>	400 m Minimum <sup>j</sup>	8	250 m	125 m
4B -	Minor Local	KH	N/A	400 m Minimum <sup>h</sup>	N/A <sup>k</sup>	N/A <sup>l</sup>	N/A <sup>l</sup>	N/A <sup>l</sup>
(The colours shown above correspond to the colour for each category on the Access Management Classification Maps)								
(For related 'Notes', see the following page)								

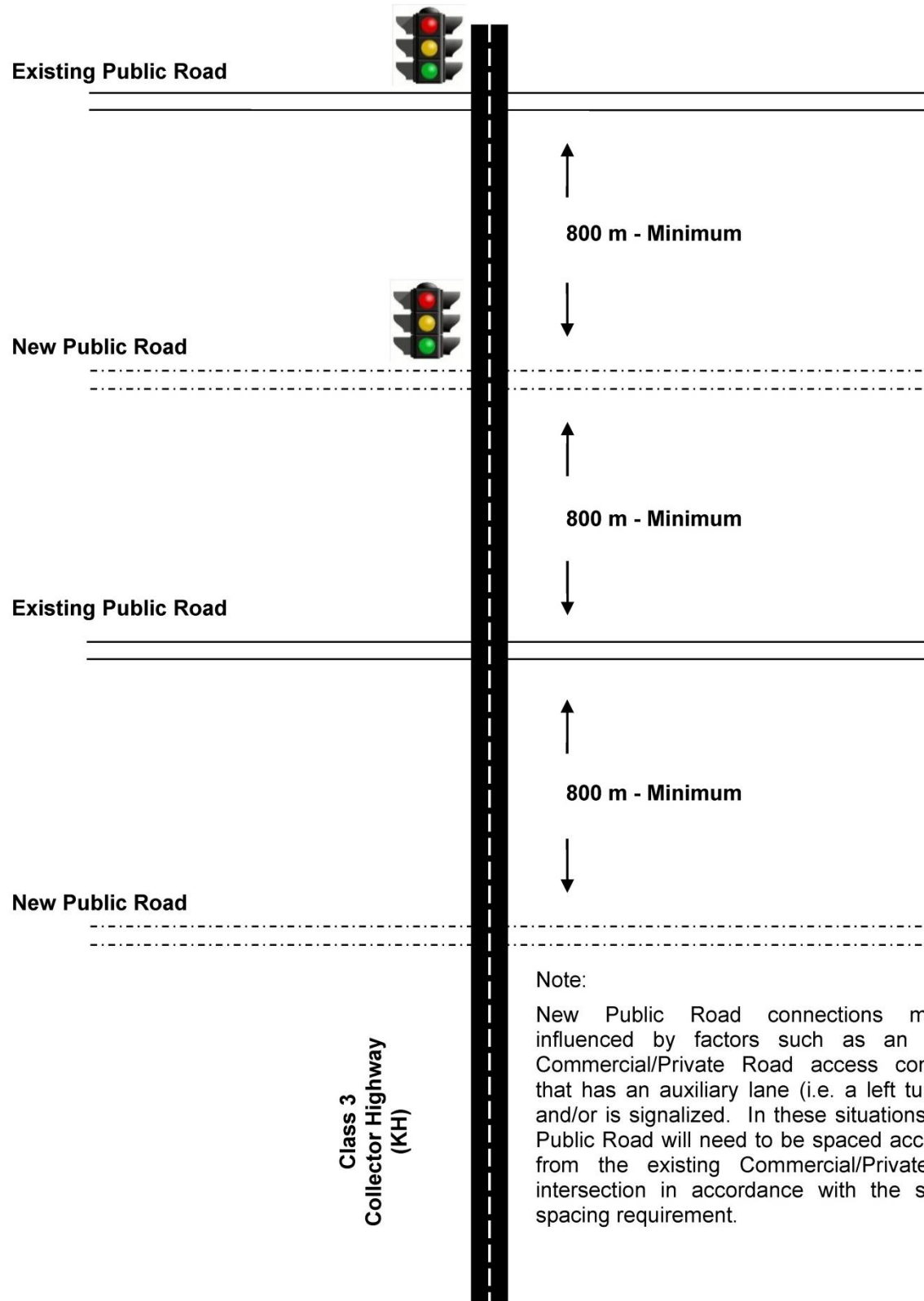
Notes for Table 4.6.1: Spacing and density of various access connection types	
<sup>a</sup>	<i>Desirable</i> or <i>minimum</i> spacing between interchanges is measured from the centre point of the crossing road from one interchange to the centre point of the crossing road of the next interchange.
<sup>b</sup>	New Public Road connections will only be considered if there is no existing Public Road located within the specified spacing requirement. New Public Road access connections are measured from the centreline of the existing Public Road. MTO may consider new a Public Road access connection to be located opposite each other, subject to the review and approval of a Traffic Impact Study. New Public Roads connections may be influenced by factors such as an unopened road allowance or existing Commercial/Private Road access connection that has an auxiliary lane (i.e. a left turn lane) and/or is signalized. In these situations, a new Public Road will need to be spaced accordingly from the unopened road allowance or existing Commercial/Private Road intersection in accordance with the specified spacing requirement.
<sup>c</sup>	New Commercial/Private Road access connections will only be considered if there is no existing Public Road or existing Commercial/Private Road access located within the specified spacing requirement, regardless of which side of the highway it is located. New Commercial/Private Road access connections are measured from the centreline of the existing Public Road or existing Commercial/Private Road. MTO may consider a new Commercial/Private Road access connection to be located opposite each other or opposite an existing public road; a Traffic Impact Study may be required for MTO's review in these situations.
<sup>d</sup>	Total Private Access Density per km per side is the maximum density for any one side of the highway. The creation of a new access connection for the creation of a new lot (e.g. severance by consent) will only be considered if the Access Density can accommodate the new access connection, regardless if the Minimum Total Pre-Severance Frontage Requirement is met. Should the Access Density be maximized, but the total frontage of the lot of record equals or exceeds the Minimum Total Frontage Requirement for a new access connection, a Mutual Access may be considered provided it meets all other requirements outlined in the Mutual Access section of this manual.
<sup>e</sup>	The creation of a new access connection for the creation of a new lot (e.g. severance by consent) requires that the lot of record meet the Minimum Total Pre-Severance Frontage Requirements for a new access connection, in addition to the Access Density requirement. Where the total pre-severance frontage is less than the minimum for a new access connection, a Mutual Access may be considered provided it meets the Minimum Total Pre-Severance Frontage Requirements for a Mutual Access and all other requirements outlined in the Mutual Access section of this manual.
<sup>f</sup>	New Public Road connections will only be considered at approved locations for future grade-separated interchanges.
<sup>g</sup>	MTO requires all requests for new Public Roads to meet the 1600 m desirable spacing as indicated. Consideration by MTO to reduce the spacing below 1600 m to any point down to and including the 800 m minimum will only be considered subject to the review and approval of a Traffic Impact Study. The Traffic Impact Study shall clearly indicate and support a reduction in spacing that will not affect the overall role, function, mobility and design characteristics of the highway corridor.
<sup>h</sup>	Minimum spacing is based on a 70 km/h posted speed limit or greater on the highway. MTO will consider a reduction in the Public Road spacing requirement where the posted speed limit is lower than 70 km/h, based on the review and approval of a Traffic Impact Study and the recommended reduction meets the requirements of Ontario Traffic Manual Book 12. MTO will work cooperatively with municipalities/developers to determine appropriate intersection spacing and other roadway characteristics where needed to support intensification and more compact development within communities.
<sup>i</sup>	MTO requires that all requests for new Commercial/Private Roads meet the 1600 m desirable spacing as indicated. Consideration by MTO to reduce the spacing below 1600 m to any point down to and including the 800 m minimum will only be considered subject to the review and approval of a Traffic Impact Study. The Traffic Impact Study shall clearly indicate and support a reduction in spacing that will not affect the overall role, function, mobility and design characteristics of the highway corridor.
<sup>j</sup>	Minimum spacing is based on a 70 km/h posted speed limit or greater on the highway. MTO will consider a reduction in the Commercial/Private Road spacing requirement where the posted speed limit is lower than 70 km/h, based on the review and approval of a Traffic Impact Study and the recommended reduction meets the requirements of Ontario Traffic Manual Book 12. MTO will work cooperatively with municipalities/developers to determine appropriate intersection spacing and other roadway characteristics where needed to support intensification and more compact development within communities.
<sup>k</sup>	Due to the low traffic volumes on these highways, MTO is less concerned with the spacing of access and therefore will work cooperatively with municipalities/property owners and allow for new access connections as requested, provided the access meets minimum sight distance requirements. MTO reserves the right to request a Traffic Impact Study and apply appropriate spacing requirements for proposed Commercial/Private Roads where MTO deems the development to be a high traffic generator, which may result in the need for highway improvements.
<sup>l</sup>	Due to the low traffic volumes on these highways, MTO is less concerned with the density of access and therefore will work cooperatively with municipalities/property owners and allow for new access connections as requested, provided the access meets minimum sight distance requirements. However, MTO reserves the right to deny an access where access management best practices as outlined in this manual are being compromised.



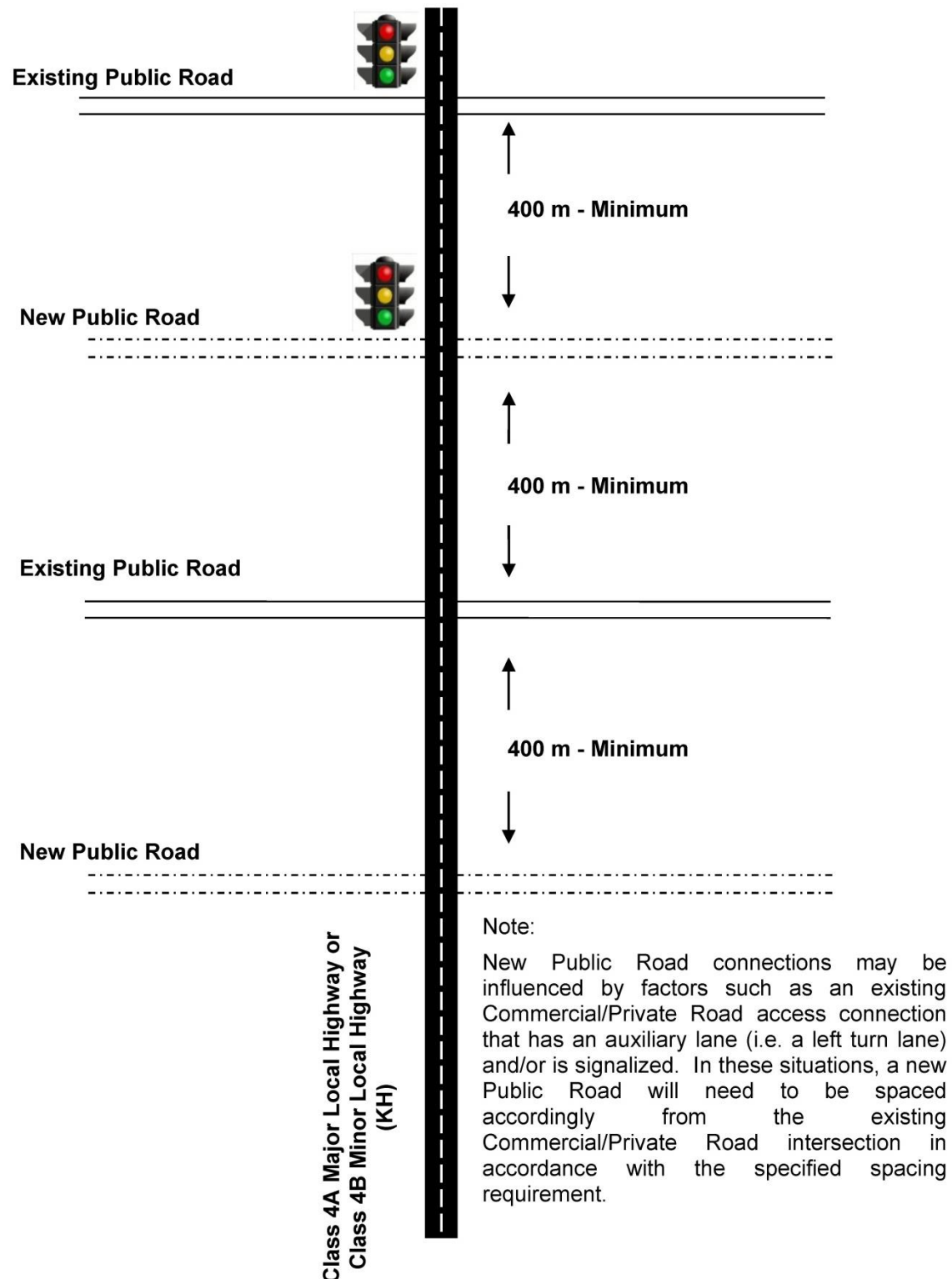
**Figure 4.6.1: Public Road Spacing Standards for Class 2A – Principal Arterial Highways**



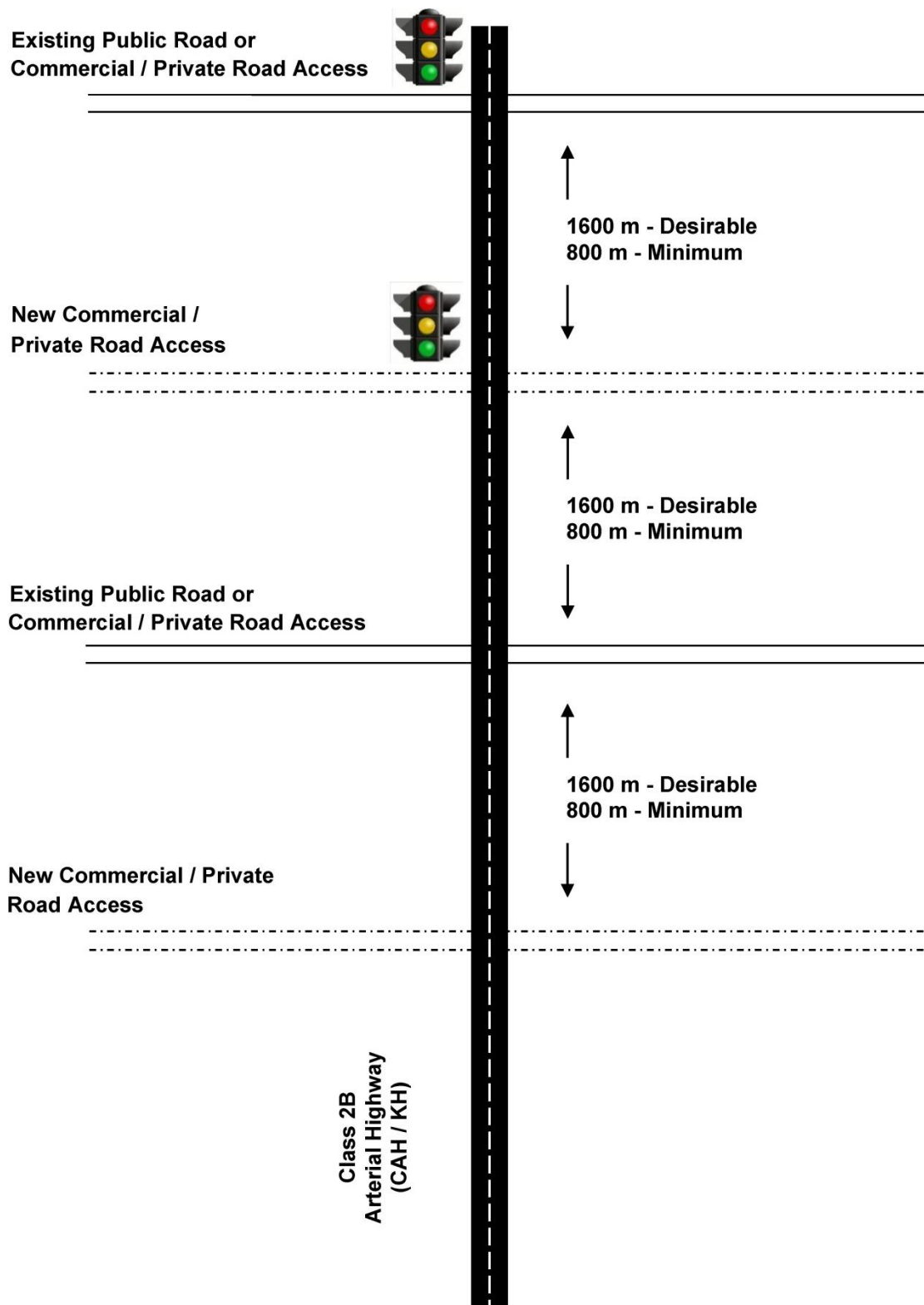
**Figure 4.6.2: Public Road Spacing Standards for Class 2B - Arterial Highways**



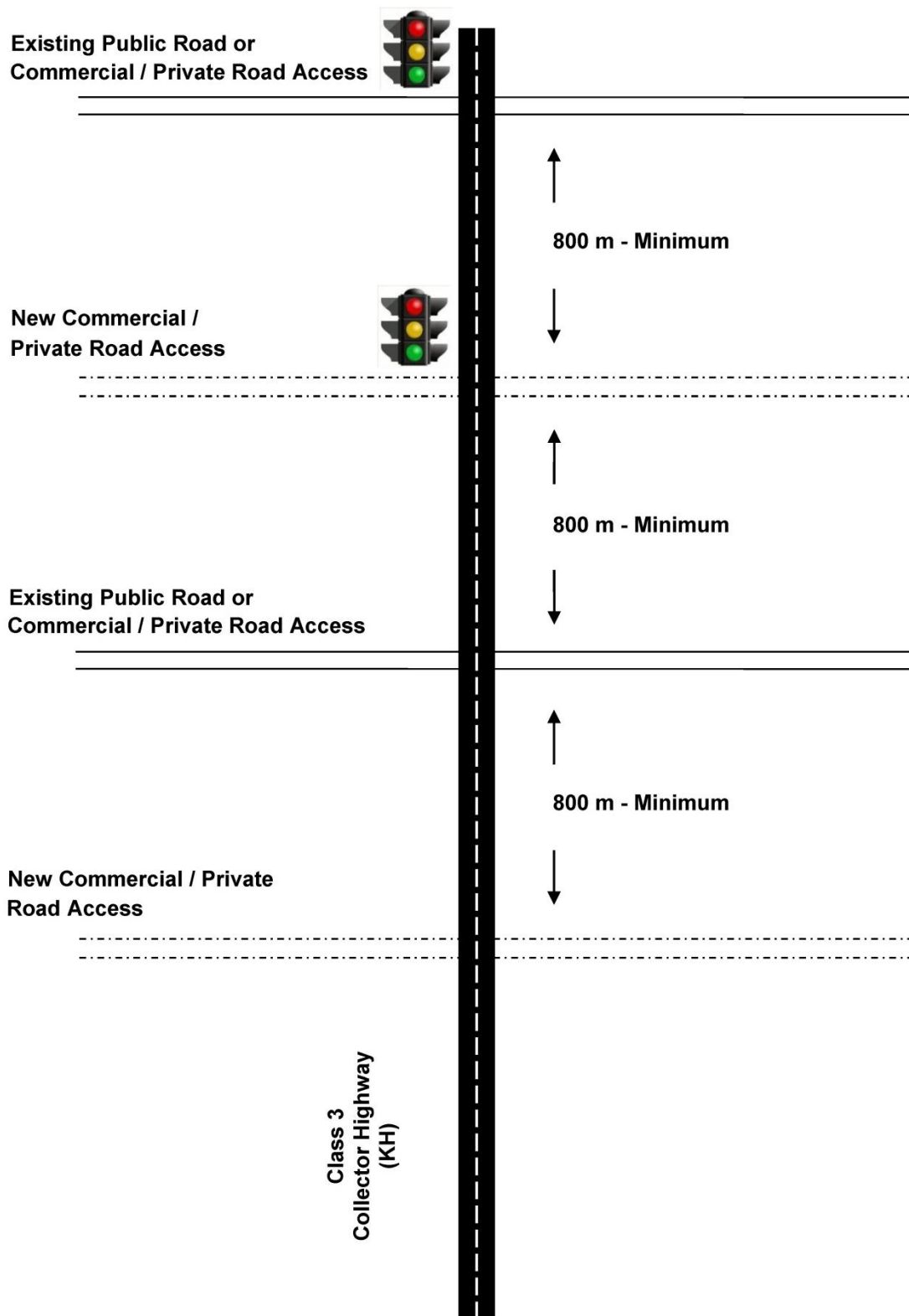
**Figure 4.6.3: Public Road Spacing Standards for Class 3 - Collector Highways**



**Figure 4.6.4: Public Road Spacing Standards for Class 4A Major/Class 4B Minor - Local Highways**

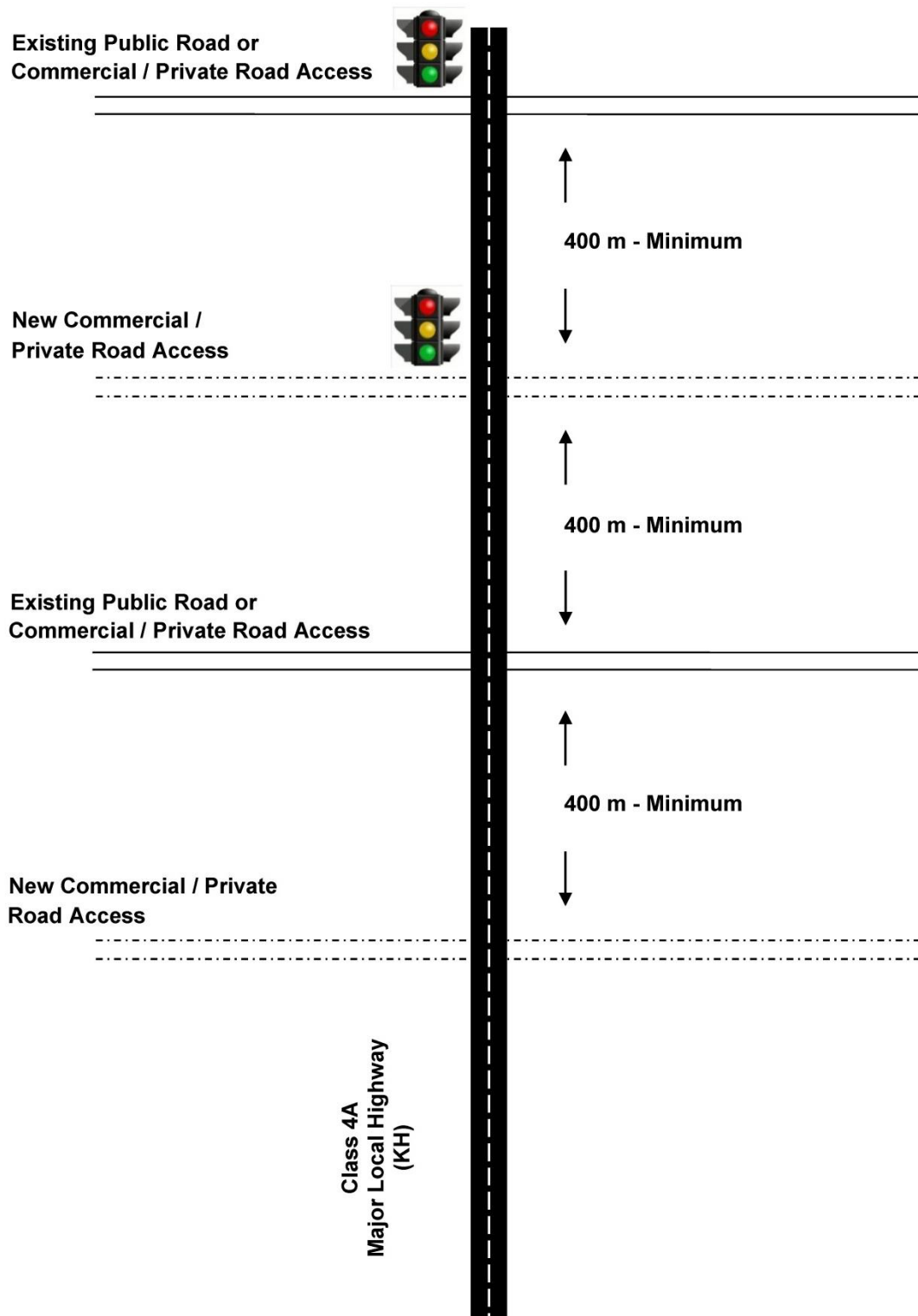


**Figure 4.6.5: Commercial/Private Road Access Spacing Standards for Class 2B - Arterial Highways**



**Figure 4.6.6: Commercial/Private Road Access Spacing Standards for Class 3 - Collector Highways**





**Figure 4.6.7: Commercial/Private Road Access Spacing Standards for Class 4A – Major Local Highways**

### 4.6.3 Number of private access connections permitted per kilometre

#### Access Density for the creation of new lots of record

Access density refers to the number of private access connections per kilometre on each side of a highway. The higher the Access Management Classification of the highway, the lower the access density permitted.

To determine the total access density permitted for a class of highway, the Ministry measures the distance in metres between existing intersections from centreline to centreline, and then multiplies this distance by the Access Density Factor from Table 4.6.2. Each class of highway has its own Access Density Factor.

In situations where measuring the distance in metres between existing intersections and one of the intersections is located in a built-up urban/rural settlement area, the intersection should not be utilized for determining access density. This is because the built-up urban/rural settlement area will likely have a much higher access density than the rural area.

The Ministry will determine the urban/rural settlement area limit, and use this limit and the next intersection in the rural area to calculate access density. The urban/rural settlement area limit would, for all intents and purposes, act as a municipal road for calculating access density in this situation. However, the creation of new lots of record or other land use development which would extend the existing built-up urban/rural settlement area boundary will not be considered by the Ministry, unless the Ministry has endorsed this expansion through the planning process (e.g. official plan).

As a threshold, if existing intersections are spaced more than 5000 m (5 km) apart, the Ministry would calculate total access density by measuring 2500 m from the centreline of the proposed access, in both directions, and then multiplying the total distance (5000 m) by the Access Density Factor from Table 4.6.2. If a municipal road falls within 2500 m from the centreline of the proposed access, the existing municipal road would act as the limit for measuring in that particular direction and any calculation would be based on that measurement.

**Note:** The access density calculation determines the maximum number of private access connections permitted per kilometre on each side of the highway. If there are already the maximum number of private access connections along a segment of highway, the Ministry will advise the applicable planning authority (and/or the property owner) regarding the land severance application, that it will not issue the required Highway Corridor Management Entrance permit for the creation of a new lot of record (the Ministry may consider a mutual access connection).

In addition to meeting access density requirements, to qualify for a severance, a property owner's total pre-severance highway frontage shall meet the minimum frontage requirements.

**Table 4.6.2: Access density factors for creating a new lot of record**

Access Management Classification System Category	Access Density /km/side	Access Density Factor
2A – Principal Arterial	N/A	N/A
2B – Arterial	4/km/side (4/1000 m)	.004
3 – Collector	6/km/side (6/1000 m)	.006
4A – Major Local	8/km/side (8/1000 m)	.008
4B – Minor Local	N/A	N/A

In counting the number of existing access connections per side, the Ministry excludes certain types of access connections, as shown below:

**Types of access connections included in count:**

- Unsignalized commercial or private road access
- Farmstead access
- Residential access
- Mutual access
- Field/Auxiliary access where it is the only access to the Lot of Record
- Lot of Record (where no access currently exists, but is eligible for a Residential access)
- Utility access (medium-high volume)
- Resource access

**Types of access connections excluded from count:**

- Field access
- Auxiliary access
- Utility Access (low volume)

- Temporary access

Field and Auxiliary access connections are excluded from the count because they generate very low volume and are typically used on a very limited and/or seasonal basis. In addition, low volume Utility access connections are excluded. Typically, an existing Field or Auxiliary entrance is used to access the utility (e.g. cell tower, Hydro One sub-station, Natural Gas Meter Station, Bell pedestal, etc.).

Temporary access connections are excluded because they are issued for a specified period of time, and will ultimately be removed.

However, whenever the Ministry considers permitting a new private access connection, it reviews all types of existing access connections located along the property owner's total highway frontage. The Ministry will request removal of all non-essential Field and Auxiliary access connections as a condition of any new Highway Corridor Management Entrance permit.

This helps to preserve the safety and efficiency of the Provincial Highway system. In addition, removal of non-essential access connections improves the Ministry's drainage system, assists with maintenance operations such as shoulder grading and snowplowing, and reduces future the Ministry Work Project costs such as entrance reconstruction and culvert replacement.

### Examples to illustrate the Ministry's access density calculation

The following seven examples will help illustrate how the Ministry calculates access density, and determines whether to permit a new private access connection to the Provincial Highway system. There are many situations that will not be covered by these examples. The Ministry will determine the access density for any given section of the Provincial Highway system utilizing these principles.

**Note:** In calculating the permitted Total Access Density, the following threshold is used for rounding purposes:

- $<0.9 = 0$  access connections
- $>0.9 = 1$  access connection

For example, a calculated Total Access Density of 2.89 rounds down to 2, meaning that 2 access connections are permitted per kilometre. However, a calculated Total Access Density of 2.9 rounds up to 3, meaning that 3 access connections per kilometre are permitted.

#### Example 1

On a Class 2B - Arterial Highway the distance between two public roads is 1600 m. Multiply this distance (1600 m) by the Access Density Factor from Table 4.6.2 (.004).

There are a total of 2 private access connections along the east side of the highway and 3 private access connections along the west side of the highway.

**East Side:**  $1600 \times .004 = 6.4$  calculated

Therefore, 6 access connections are permitted (Total Access Density)

$6 - 2$  (existing access connections) = 4

Therefore, 4 additional private access connections could be permitted by the Ministry along the east side of the highway.

**West Side:**  $1600 \times .004 = 6.4$  calculated

Therefore, 6 access connections are permitted (Total Access Density)

$6 - 3$  (existing access connections) = 3

Therefore, 3 additional private access connections could be permitted by the Ministry along the west side of the highway.

## Example 2

On a Class 2B - Arterial Highway the distance between two public roads is 1270 m. Multiply this distance (1270 m) by the Access Density Factor from Table 4.6.2 (.004).

There are a total of 5 private access connections along the north side of the highway and 2 private access connections along the south side of the highway.

**North Side:**  $1270 \times .004 = 5.08$  calculated

Therefore, 5 access connections are permitted (Total Access Density)

$5 - 5$  (existing access connections) = 0

Therefore, no additional private access connections would be permitted by the Ministry along the north side of the highway. The total number of permitted access connections is already maximized for the north side of the highway.

**South Side:**  $1270 \times .004 = 5.08$  calculated

Therefore, 5 access connections are permitted (Total Access Density)

$5 - 2$  (existing access connections) = 3

Therefore, 3 additional private access connections could be permitted by the Ministry along the south side of the highway.

### Example 3

On a Class 3 - Collector Highway, the distance between two public roads is 1675 m. Multiply this distance (1675 m) by the Access Density Factor from Table 4.6.2 (.006).

There are a total of 6 private access connections along the east side of the highway and 11 private access connections along the west side of the highway.

**East Side:**  $1675 \times .006 = 10.05$  calculated

Therefore, 10 access connections are permitted (Total Access Density)

$10 - 6$  (existing access connections) = 4

Therefore, 4 additional private access connections could be permitted by the Ministry along the east side of the highway.

**West Side:**  $1675 \times .006 = 10.05$  calculated

Therefore, 10 access connections are permitted (Total Access Density)

$10 - 11$  (existing access connections) = -1

Therefore, no additional private access connections would be permitted by the Ministry along the west side of the highway. The total number of permitted access connections is already exceeded for the west side of the highway.

### Example 4

On a Class 3 - Collector Highway the distance between two public roads is 3200 m.

One of the public roads is located in a built-up urban/rural settlement area. The built-up urban/rural settlement area limit is located 600 m from the public road. Therefore, for the purposes of calculating access density, the distance between the one public road and the limit of the built-up urban/rural settlement area is 2600 m. Multiply this distance (2600 m) by the Access Density Factor from Table 4.6.2 (.006).

There are a total of 11 private access connections along the east side of the highway, and 17 private access connections along the west side of the highway.

**East Side:**  $2600 \times .006 = 15.6$  calculated

Therefore, 15 access connections are permitted (Total Access Density)

$$15 - 11 \text{ (existing access connections)} = 4$$

Therefore, 4 additional private access connections could be permitted by the Ministry along the east side of the highway.

**West Side:**  $2600 \times .006 = 15.6$  calculated

Therefore, 15 access connections are permitted (Total Access Density)

$$15 - 17 \text{ (existing access connections)} = -2$$

Therefore, no additional private access connections would be permitted by the Ministry along the west side of the highway. The total number of permitted access connections is already exceeded for the west side of the highway.

### Example 5

On a Class 4A – Major Local Highway the distance between two public roads is 1150 m. Multiply this distance (1150 m) by the Access Density Factor from Table 4.6.2 (.008).

There are a total of 7 private access connections along the north side of the highway and 5 private access connections along the south side of the highway.

**North Side:**  $1150 \times .008 = 9.2$  calculated

Therefore, 9 access connections are permitted (Total Access Density)

$$9 - 7 \text{ (existing access connections)} = 2$$

Therefore, 2 additional private access connections could be permitted by the Ministry along the north side of the highway.

**South Side:**  $1150 \times .008 = 9.2$  calculated

Therefore, 9 access connections are permitted (Total Access Density)

$$9 - 5 \text{ (existing access connections)} = 4$$

Therefore, 4 additional private access connections could be permitted by the Ministry along the south side of the highway.

### Example 6

On a Class 4A – Major Local Highway in Northern Ontario, the distance between two public roads is 12,000 m (or 12 km). This is an unreasonable distance to calculate access density between existing intersections.

Therefore, the Ministry will measure 2500 m from the centreline of the proposed private access connection, in both directions, and then multiply this total distance (5000 m) by the Access Density Factor from Table 4.6.2 (.008).

There are a total of 17 private access connections along the north side of the highway, and 21 private access connections along the south side of the highway.

**North Side:**  $5000 \times .008 = 40$  calculated

Therefore, 40 access connections are permitted (Total Access Density)

$40 - 17$  (existing access connections) = 23

Therefore, 23 additional private access connections could be permitted by the Ministry along the north side of the highway.

**South Side:**  $5000 \times .008 = 40$  calculated

Therefore, 40 access connections are permitted (Total Access Density)

$40 - 21$  (existing access connections) = 19

Therefore, 19 additional private access connections could be permitted by the Ministry along the south side of the highway.

### Example 7

On a Class 4A – Major Local Highway in Northern Ontario, the distance between two public roads is 14,000 m (or 14 km). This is an unreasonable distance to calculate access density between existing intersections.

Therefore, the Ministry will measure 2500 m from the centreline of the proposed private access connection, in both directions, and then multiply this total distance (5000 m) by the Access Density Factor from Table 4.6.2.

However, in this situation, an existing municipal road is located only 1100 m east of the proposed private access connection. Therefore, the distance factor to multiply by in this situation is not 5000 m, but 3600 m (2500 m + 1100 m = 3600 m); and then multiply this distance (3600 m) by the Access Density Factor from Table 4.6.2 (.008).



There are a total of 23 private access connections along the north side of the highway, and 19 private access connections along the south side of the highway.

**North Side:**  $3600 \times .008 = 28.8$  calculated

Therefore, 28 access connections are permitted (Total Access Density)

$28 - 23$  (existing access connections) = 5

Therefore, 5 additional private access connections could be permitted by the Ministry along the north side of the highway.

**South Side:**  $3600 \times .008 = 28.8$  calculated

Therefore, 28 access connections are permitted (Total Access Density)

$28 - 19$  (existing access connections) = 9

Therefore, 9 additional private access connections could be permitted by the Ministry along the south side of the highway.

#### **4.6.4 Minimum frontage requirements (for creation of new lots of record)**

##### **Pre-Severance Frontage**

To qualify for a severance, a property owner's total pre-severance highway frontage shall meet the minimum frontage requirements shown in the table below. The minimum frontage requirement helps to ensure that the average access density for each Access Management Classification system category is maintained.

**Table 4.6.3: Minimum Total Frontage Requirement**

Access Management Classification System Category	Minimum Total Pre-Severance Frontage Requirement	
	New Access Connection	Mutual Access
2A – Principal Arterial	N/A	N/A
2B – Arterial	500 m	250 m
3 – Collector	300 m	150 m
4A – Major Local	250 m	125 m
4B – Minor Local	N/A	N/A

Where the total pre-severance highway frontage is less than the minimum for a new access connection, the Ministry may consider allowing a mutual access.

### **New Lot of Record**

In addition to the above, to qualify for a highway access connection, a new lot of record is required to have a minimum amount of highway frontage. One reason for this is to accommodate the appropriate entrance design.

As a general rule, the required minimum highway frontage for new lots of record is:

- 45 m where the posted speed is 70 km/h or greater
- 32 m where the posted speed is less than 70 km/h

**Note:** There are some exceptions to the above for infill development in built-up urban/rural settlement areas.

These minimum highway frontages apply when the Ministry's minimum sight distance requirements can be met for the new access connection. If the minimum sight distance requirement cannot be met, the Ministry will require increased minimum frontage to accommodate minimum visibility requirements.

### **4.6.5 Distance from intersections and interchanges**

As a rule, access connections cannot be located within a Functional Intersection Area or a Functional Interchange Area. In addition, access connections are not permitted within a right-turn channelization, auxiliary lane, taper, or similar facility at an intersection or interchange.

**Note:** In order for the Ministry to deliver long-term sustainable transportation and better transit and reduce auto demand, exceptions to this manual may occur, to

accommodate transit vehicle movement, transit parking facilities and standalone carpool facilities. Exceptions for standalone transit facilities, transit-supportive parking facilities, and standalone carpool facilities will be considered on a case by case basis. In the development of these facilities, the Ministry (and its agencies, such as Metrolinx) will reference the policies and standards of this manual to ensure the safety and efficiency of traffic operations are upheld.

### **Functional Intersection Area**

The Functional Intersection Area is the section of highway or crossing road that extends both upstream and downstream from the physical intersection area itself. This area is controlled to enable a motorist to enter and pass through an intersection, before having to consider a potential conflict at a subsequent access connection.

Controlling access connections in the vicinity of intersections provides for a safer driving environment. Inadequate spacing of access connections from an intersection can result in problems with traffic operation, safety, and capacity. These problems can be caused by blocked access connections in close proximity to intersections, conflicting and confusing turns at intersections, insufficient weaving distances, and backups from a downstream access connection into an intersection.

It is preferable to prohibit left turns into and out of access connections within the Functional Intersection Area along undivided highways.

### **Desirable and minimum offset spacing criteria from intersections**

Refer to Figures 4.6.8 to 4.6.10 for the desirable and minimum offset spacing criteria that apply to various types of access connections.

The desirable offset spacing criteria will apply to requests for new access connections or a change in use or upgrade of an existing access connection. Existing access connections that do not meet the desirable offset spacing criteria will be permitted to remain for their existing use. However, the Ministry will use its best efforts to achieve the desirable offset spacing criteria as abutting lands are developed and re-developed, or as the Ministry undertakes highway improvements by way of the Ministry Work Projects.

### **Low Volume Commercial/Private Road Access Connection Definition (Figure 4.6.9)**

A low volume Commercial/Private Road access connection is one that provides access to a commercial development which is a low volume traffic generator that would not warrant intersection improvements on the Public Road itself. The Ministry reserves the right to request a Traffic Impact Study for a commercial development which is a low volume traffic generator, where it is deemed appropriate to determine whether intersection improvements are warranted on the Public Road itself.

### **Medium/High Volume Commercial/Private Road Access Connection Definition (Figure 4.6.10)**

A medium/high volume Commercial/Private Road access connection provides access to a commercial development, which is a medium/high volume traffic generator that would likely warrant intersection improvements on the Public Road. The Ministry requires the submission of a Traffic Impact Study for all commercial developments which are deemed to be medium/high volume traffic generators.

### **Functional Interchange Area**

Freeway interchanges provide the means of moving traffic between freeways and crossroads.

The Functional Interchange Area is the section of highway or crossing road that extends both upstream and downstream from the physical freeway ramp terminal area. This area is controlled to enable a motorist to enter and pass through the freeway ramp terminal intersection, before having to consider a potential conflict at a subsequent access connection.

As a general rule, public road, commercial/private road and private access connections are not to be located within the Functional Interchange Area, unless the location meets the Ministry's offset spacing criteria provided in Figures 4.6.11 to 4.6.13. Access connections are not permitted within a right-turn channelization, auxiliary lane, taper or similar facility at an interchange.

Properties surrounding interchanges have become focal points for land use development. Therefore, public road, commercial/private road and private access connections to support land use development at interchanges shall be sufficiently spaced from freeway ramp terminals.

Where public road, commercial/private road and private access connections are placed too close to the freeway ramp terminals along the crossroad, heavy weaving volumes, complex traffic signal operations, frequent collisions, and congestion have resulted.

Adequate spacing and design of access connections along the crossroad at an interchange prevents traffic queues, both on the freeway ramps and the crossroad. This helps to ensure safe and efficient freeway operations.

### **Desirable and minimum offset spacing criteria from freeway ramp terminals**

See Figures 4.6.11 to 4.6.13 for the desirable and minimum offset spacing criteria that apply from a freeway ramp terminal to a public road, a commercial/private road, or a private access connection.

The desirable offset spacing criteria will apply to requests for new access connections or a change in use or upgrade of an existing access connection.

Existing access connections that do not meet the desirable offset spacing criteria will be permitted to remain for their existing use. However, the Ministry will use its best efforts to achieve the desirable offset spacing criteria as abutting lands are developed and re-developed, or as the Ministry undertakes highway improvements.

### **Access roads at freeway ramp terminals**

Access roads at freeway ramp terminals have been provided on a limited case-by-case basis in Ontario. In high volume urbanized areas, the Ministry may consider an access road opposite a freeway ramp terminal. This solution would only be considered as a last resort, after all other alternatives have been exhausted and an I-HAMP has been established.

The Ministry will not consider an access road opposite a freeway ramp terminal to allow the development of greenspace land in rural areas.

Appendix 4C provides the Ministry's design parameters and an approval process for a proposed access road at a freeway ramp terminal. The Ministry will not consider an access road if it is the only means of access for the development. The Ministry may consider an access road as a secondary access to the site.

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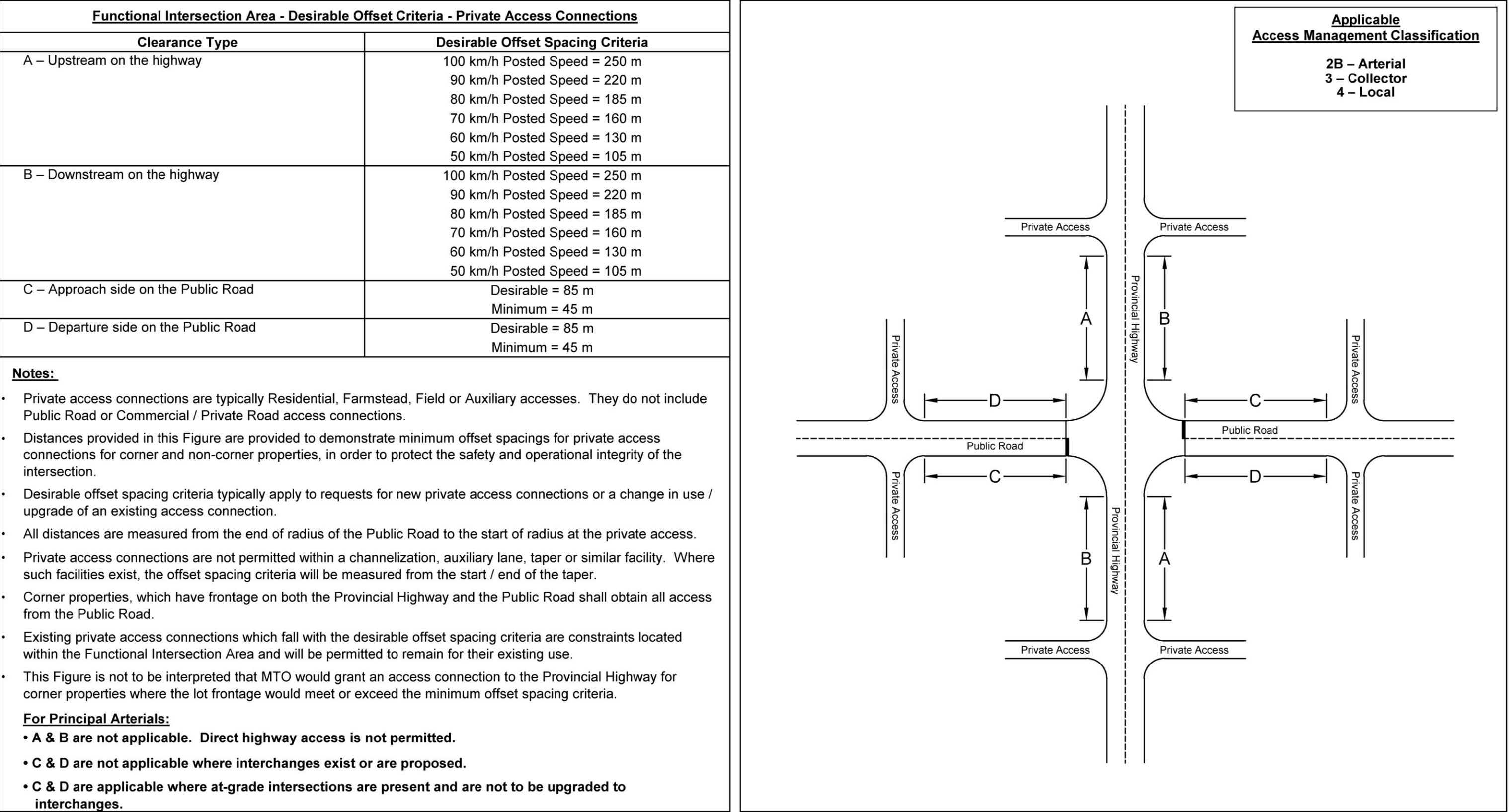


Figure 4.6.8: Functional Intersection Area - Desirable Offset Spacing Criteria - Private Access Connections









Functional Interchange Area - Access Connection Offset Spacing Criteria - Diamond I/C		
Two Lanes - Offset Spacing Criteria		
	W or X	Y or Z
Intersecting Access	800 m - Desirable	125 - 185 m
	400 m - Minimum	
<b>W or X =</b> <b>Public Road, Service Road or signalized Commercial / Public Road Access Connections</b>  Desirable / minimum offset spacing distance to first Public Road, Service Road or signalized Commercial / Private Road access. Variances below the desirable offset spacing criteria, down to and including the minimum offset spacing criteria, will only be considered where a valid case can be supported by MTO (e.g. traffic impact study).		
<b>Y or Z =</b> <b>Non-signalized Commercial / Private Road Access Connections</b>  Desirable offset spacing criteria to first non-signalized Commercial / Private Road access; right-in / right-out only. Right-in / right-out Commercial / Private Road access requires appropriate design in order to prevent left turns into / out of the access connection (e.g. median island on intersecting road, right-in / right-out island, right-in only, one-way access). Should appropriate design not be provided for, the right-in / right-out access connection(s) may not be placed between ramp terminal and the first downstream Public Road, Service Road or signalized Commercial / Private Road access.  <b>Private Access Connections</b>  Desirable offset spacing criteria to first private access connection (i.e. Residential entrance, Farmstead entrance, Field entrance); all turning movements permitted.		

Four Lanes or Greater - Offset Spacing Criteria		
	W or X	Y or Z
Intersecting Access	800 m - Desirable	125 - 185 m
	400 m - Minimum	
<b>W or X =</b> <b>Public Road, Service Road or signalized Commercial / Public Road Access Connections</b>  Desirable / minimum offset spacing distance to first Public Road, Service Road or signalized Commercial / Private Road access. Variances below the desirable offset spacing criteria, down to and including the minimum offset spacing criteria, will only be considered where a valid case can be supported by MTO (e.g. traffic impact study).		
<b>Y or Z =</b> <b>Non-signalized Commercial / Private Road Access Connections</b>  Desirable offset spacing criteria to first non-signalized Commercial / Private Road access; right-in / right-out only. Right-in / right-out Commercial / Private Road access requires appropriate design in order to prevent left turns into / out of the access connection (e.g. median island on intersecting road, right-in / right-out island, right-in only, one-way access). Should appropriate design not be provided for, the right-in / right-out access connection(s) may not be placed between ramp terminal and the first downstream Public Road, Service Road or signalized Commercial / Private Road access.  <b>Private Access Connections</b>  Desirable offset spacing criteria to first private access connection (i.e. Residential entrance, Farmstead entrance, Field entrance); all turning movements permitted.		

**NOTES:**

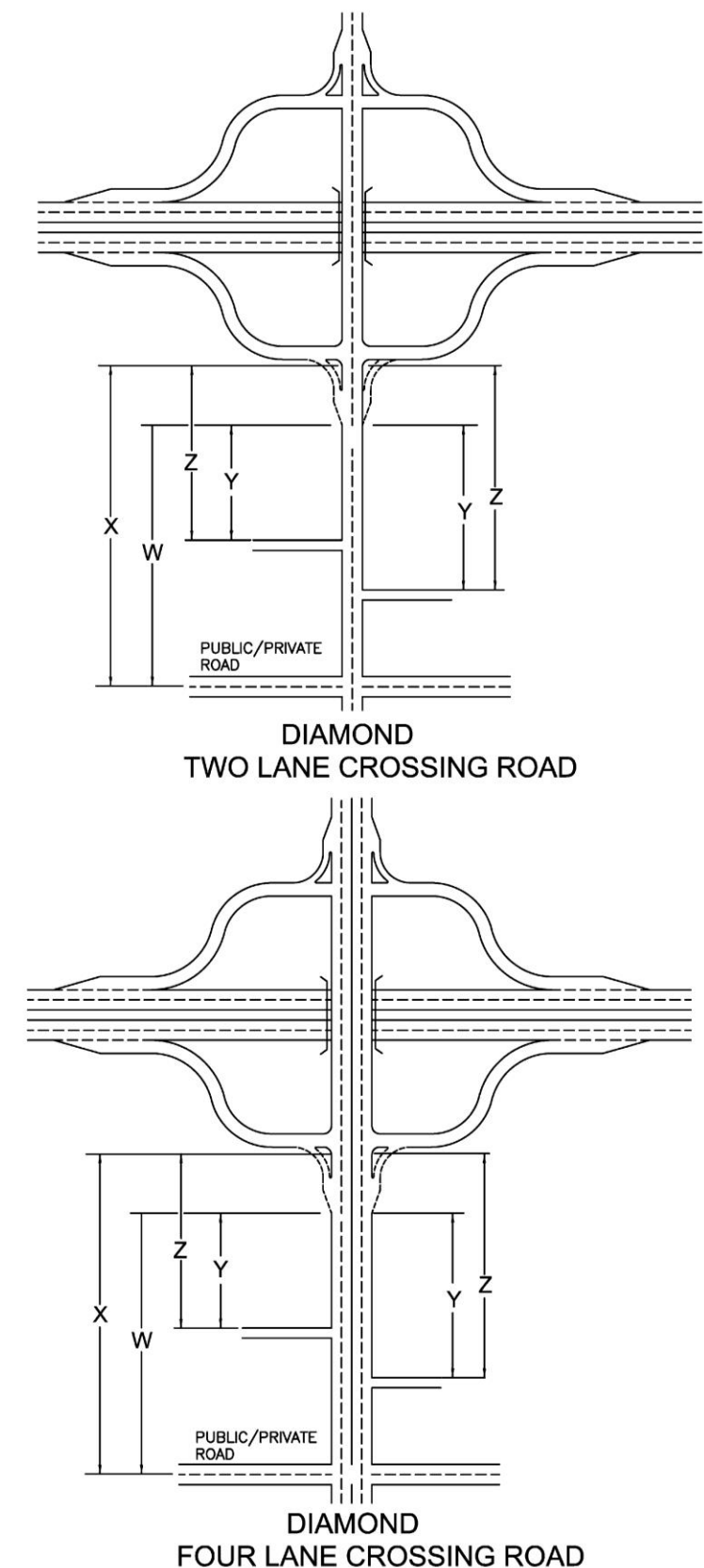
Desirable offset spacing criteria may be increased based upon MTO's review of a Traffic Impact Study.

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MTO will consider as an alternative to the application of desirable and minimum standards, the initiation of a I-HAMP through a comprehensive Traffic Impact Study to identify technically sound approaches for meeting access management and development objectives.

Posted Speed	Desirable Offset Spacing Criteria
50 km / h	125 m
60 km / h	150 m
70 km / h	160 m
80 km / h	185 m





Functional Interchange Area - Access Connection Offset Spacing Criteria - Parclo A-4 I/C														
Two Lanes - Offset Spacing Criteria			Four Lanes or Greater - Offset Spacing Criteria											
Intersecting Access	W or X	Y or Z	Intersecting Access	Y or Z										
	800 m - Desirable	125 - 185 m		800 m - Desirable	125 - 185 m									
	400 m - Minimum			400 m - Minimum										
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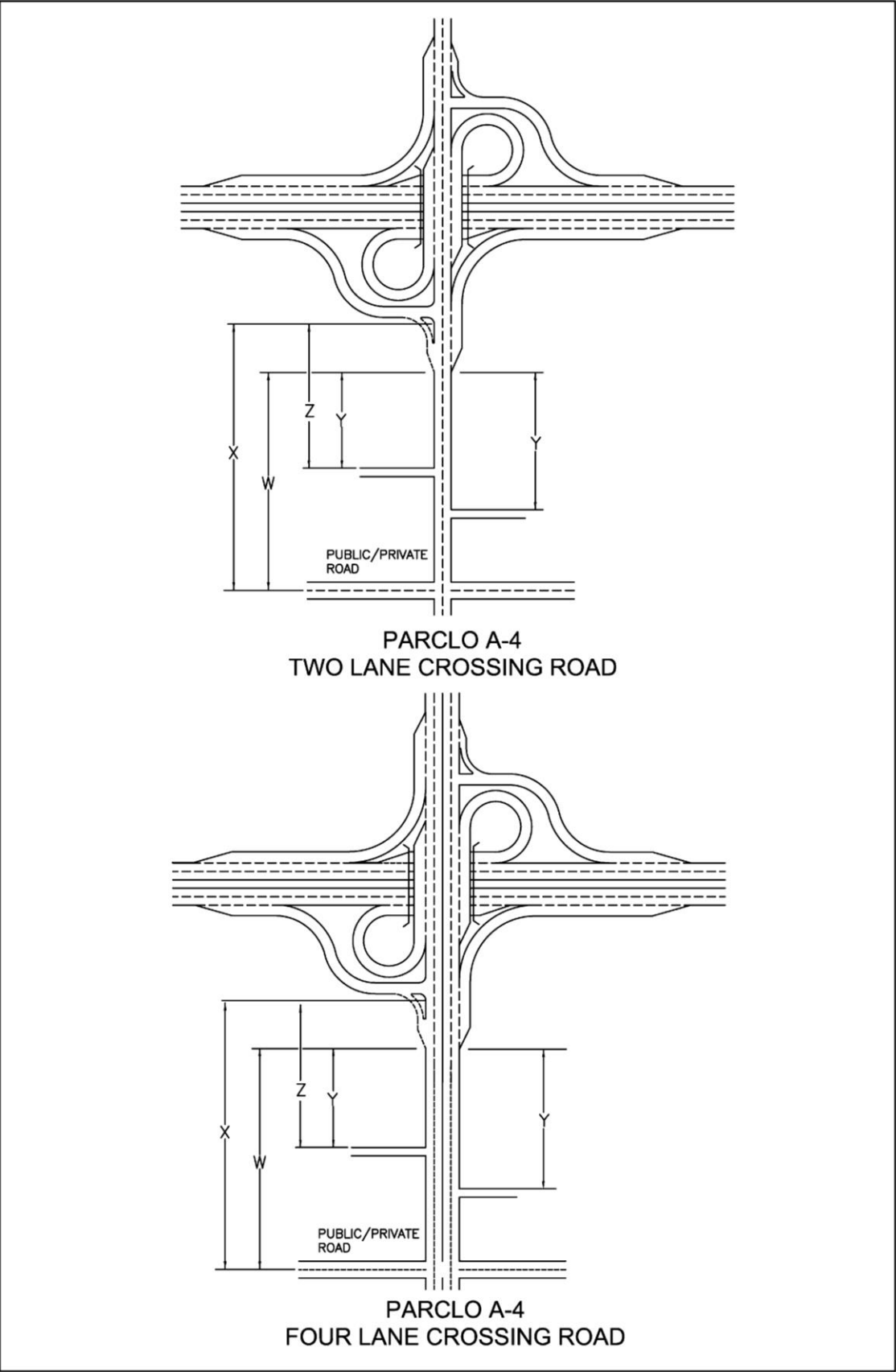


Figure 4.6.12: Functional Interchange Area - Access Connection Offset Spacing Criteria – Parclo A-4 I/C

Functional Interchange Area - Access Connection Offset Spacing Criteria - Parclo B-4 I/C

Two Lanes - Offset Spacing Criteria			Four Lanes or Greater - Offset Spacing Criteria												
Intersecting Access	W or X	Y or Z	Intersecting Access	W or X	Y or Z										
	800 m - Desirable	125 - 185 m		800 m - Desirable	125 - 185 m										
	400 m - Minimum			400 m - Minimum											
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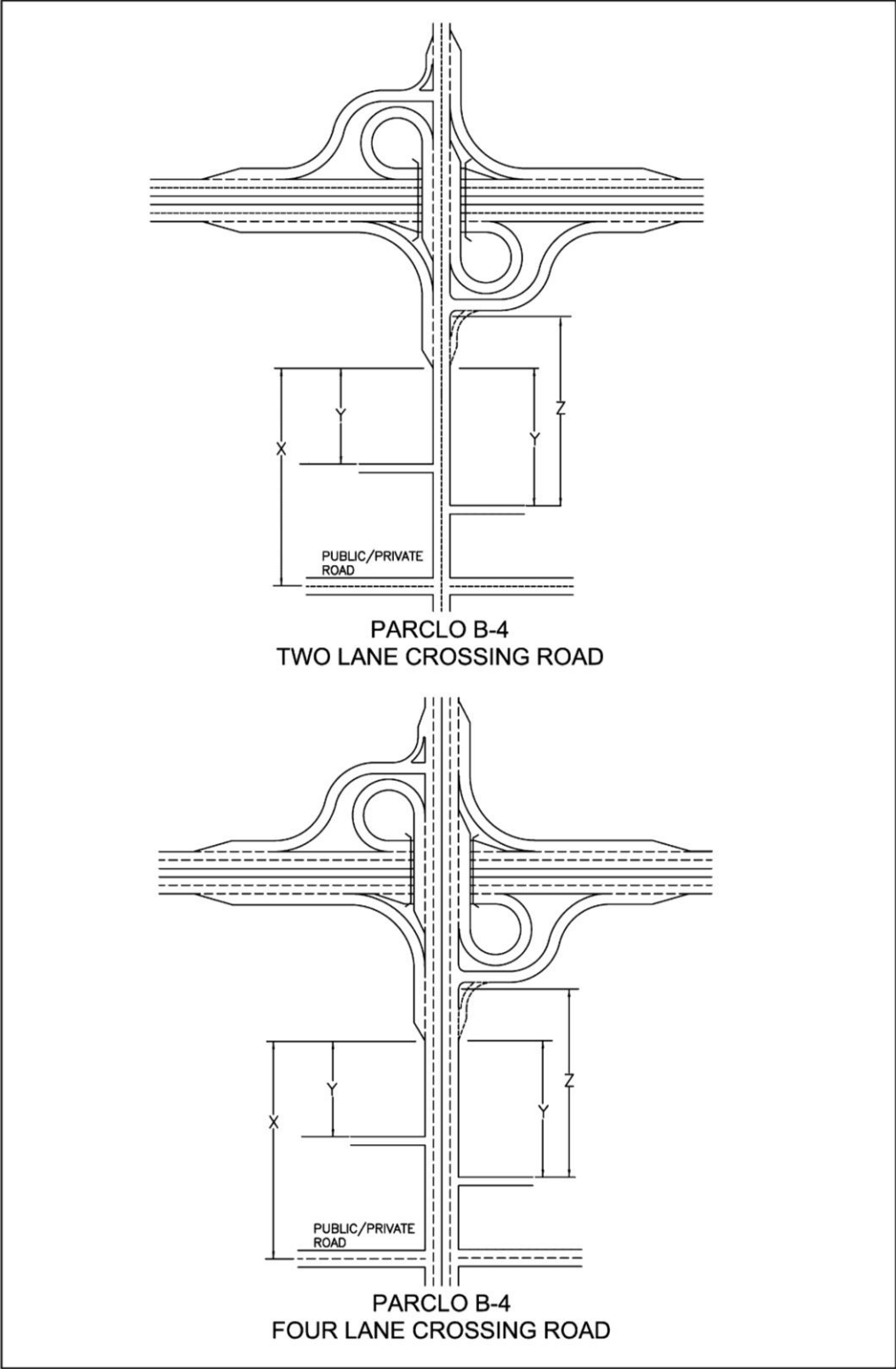


Figure 4.6.13: Functional Interchange Area - Access Connection Offset Spacing Criteria – Parclo B-4 I/C



#### **4.6.6 Minimum sight distance requirements (visibility)**

New and upgraded access connections shall be designed to provide good visibility for both motorists entering and travelling on the highway. Unobstructed visibility is an important safety factor associated with an access connection.

The Transportation Association of Canada (TAC) Geometric Design Guide (GDG) for Canadian Roads (June, 2017), in conjunction with the latest "MTO Design Supplement For TAC Geometric Design Guide for Canadian Roads – June 2017" (MTO DS) shall be used for planning and geometric design of roadways within Ontario Provincial Highways, which includes calculation methods and requirements for intersection sight distance, stopping sight distance and sight triangles.

#### **Requirements**

For safety, a Highway Corridor Management Entrance permit will not be issued by the Ministry unless the following requirements are satisfied:

- All existing access connections should meet the minimum Stopping Sight Distance requirements specified in Chapter 2 of the TAC GDG and Appendix 2 of the MTO DS.
- Proposed new and/or altered access connections shall meet the minimum Stopping Sight Distance requirements specified in Chapter 2 of the TAC GDG and Appendix 2 of the MTO DS.
- Proposed new and/or altered access connections should meet the minimum Intersection Sight Distance and sight triangle requirements specified in Chapter 9 of the TAC GDG and Appendix 9 of the MTO DS.

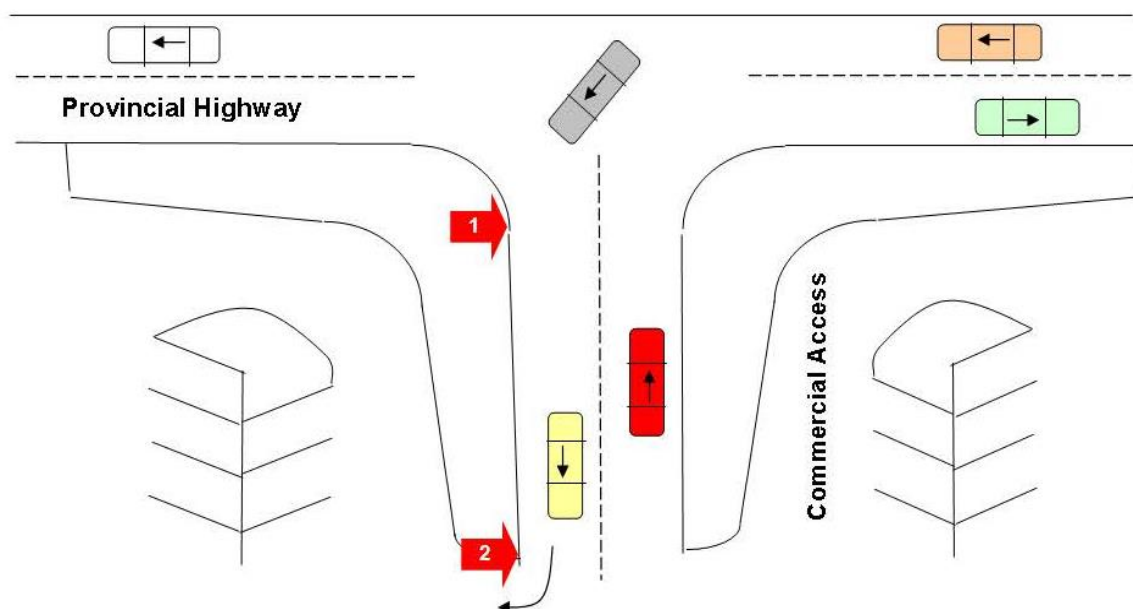
The following vehicle types are to be used for calculating sight distance and sight triangle requirements:

- Passenger vehicle - used for residential access connections
- Single-unit truck - used for farmstead, field, auxiliary and utility access connections
- Combination truck - used for public, service, commercial, private road and resource access connections

#### **4.6.7 Access connection depth**

After vehicles turn off the highway, a minimum required distance shall exist before the next available turnoff.

The distance between arrow 1 and arrow 2 in the figure below is the access connection depth. It is the distance between the end of the turning radius at an access connection and the next available turnoff.



- Arrow #1 shows the end of the turning radius as the vehicle leaves the highway.
- Arrow #2 shows the next available turnoff into a parking lot.
- The distance between the two arrows is the access connection depth.

**Figure 4.6.14: Access Connection Depth**

A sufficient access connection depth enables motorists to clear the intersection of the access connection itself before encountering any further internal access connections or parking areas.

The desirable access connection depths for different land uses are provided in the table below. Access connection depths may be increased or decreased based upon the Ministry's review and approval of a Traffic Impact Study.

**Table 4.6.4: Access Connection Depths**

Land Use(s) Served by the Access Connection	Desirable Access Connection Depth
Large shopping centre development (shopping mall, big box centre, etc.)	80 m
Sports or entertainment facility development (arena, drive-in theatre, baseball park, theme park, etc.)	80 m
Small shopping centre development (strip mall, supermarket complex, drug store complex, etc.)	25 m
Office building development	25 m
Drive-thru commercial development (coffee shops, fast food, etc.)	15 m

#### **4.6.8 Drainage**

New access connections or changes in the use of an access connection that require a new culvert shall not impede the existing flow of water within the ditch or cause water to flow onto the highway or shoulder.

Access connections should be constructed so they do not:

- cause water to enter onto the highway or shoulder
- interfere with the existing drainage system on the right-of-way or any municipal drainage system
- cause flooding on adjacent lands.

The highway drainage system is not designed to serve the drainage requirements of abutting or other properties beyond pre-development historical flow rates. Drainage onto the highway right-of-way shall not exceed the pre-development historical flow rates.

At their own expense, stakeholders shall provide drainage culverts or structures for the access connection. This will become an integral part of the existing drainage system, and the property of the Ministry. The type, design, diameter, length, and condition of drainage culverts or structures shall conform to the Ministry drainage design standards.

The general requirements for the placement of drainage culverts or structures are:

1. Culverts are open-ended underground pipes conveying stormwater under an access connection. They form part of the highway drainage system.

2. Culverts required for new or redesigned access connections shall be of sufficient diameter to maintain the free flow of water in the ditch.
3. Generally, the minimum diameter of culverts for residential and commercial access connections is 500 mm.
4. Generally, the minimum diameter of culverts for a public road is 600 mm.
5. When the highway ditch is part of a municipal drain, the diameter of the culvert is subject to municipal requirements for that specific municipal drain. The Ministry will liaise with the municipal drainage superintendent to establish the diameter of the culvert.
6. Where the upstream culvert is of greater diameter than the minimum standard, the culvert for the new access connection shall be at least the same diameter.
7. Supply and installation of culverts shall meet the applicable Ontario Provincial Standards for roads and public works (i.e. type, material, gauge, bedding, etc.).
8. Headwalls of any type at either end of the culvert are strictly prohibited.

#### **4.6.9 First principle: One lot = One access connection**

Unless access rights have been purchased, each lot of record with highway frontage that has been in existence prior to the date of designation of the highway is entitled to one access connection, if no alternative access exists. All such lots of record are entitled to a Residential access, a Farmstead access or a Field access connection, based on the municipal zoning in place prior to the highway designation, or after the Ministry-endorsed zoning.

Should the Ministry deem, for safety reasons, not to grant an access connection to a lot of record, and that access connection would provide the only means of access to the lot of record, the Ministry would be obligated to either:

Provide an alternate means of access via the highway or an existing public road.

or

Purchase the lot of record (via its Regional Property Section, which would negotiate the amount of compensation with the property owner).

A lot of record with highway frontage, which also has frontage on a public road, shall obtain its access connection from that public road. An access connection generally will not be permitted to the highway for lots of record with public road frontage, unless:

Internal access to the total holding is impractical due to topographical or physical constraints.

or

It can be demonstrated that access from the public road would be unsafe.



#### **4.6.10 Grandfathering**

##### **Access connection grandfathering**

All existing access connections to a highway or within the Ministry's Permit Control Area, which legally existed (either in accordance with a valid Highway Corridor Management Entrance permit or as a recognized approved access connection) prior to December, 2013, are allowed to remain for their present land use.

However, if changes are proposed (e.g. change in use or upgrade of a Residential/Farmstead Entrance to Commercial) to an existing access connection or are required as a result of land use development, municipal road upgrades, Ministry Work Projects (which may involve closing of non-essential or unsafe access connections, refer to section 5.5.16), etc., the policies and standards outlined in this manual apply.

Where the Ministry has previously issued permits for new or modified entrances or for development within the Ministry's Permit Control Area, the permits will be honoured.

##### **Controlled-access highways that are not freeways**

In the late 1970s and early 1980s, the Ministry designated a significant number of non-freeway highways as controlled-access highways, by Order-in-Council under the PTHIA. These controlled-access highways are typically two or four lane highways. Their purpose prioritizes mobility over direct land access. Access connections to controlled-access highways are strictly controlled.

The criteria that dealt with access control for these non-freeway controlled-access highways were revoked under the Ministry's 2013 Highway Access Management Guideline. However, each criterion contained an exemption clause that stated that any lot of record zoned commercial prior to the Order-in-Council designation date would be granted a commercial access.

To honour this exemption, the Ministry implemented a grandfathering date for granting commercial access connections along controlled-access highways, for any lot of record that was appropriately zoned commercial before January 1, 1980. The granting of a commercial access connection under the grandfathering date applies only to those properties located on a controlled-access highway. They must meet all of the following criteria:

- Designated controlled-access highway under the PTHIA by Order-in-Council
- Classified as either 2B – Arterial or 3 – Collector
- Property owner can prove to the satisfaction of the Ministry that the lot of record in question was zoned for commercial purposes before January 1, 1980
- No alternate means of access is available (e.g. access via municipal road)

- Commercial access can be accommodated in accordance with Ministry policies, guidelines, and specifications.
- Should a dispute arise regarding the utilization of the grandfathering date, a property owner may request that the Ministry verify the actual Order-in-Council date to determine when the highway in question was designated as controlled-access.

Property owners who feel that their lot of record was zoned commercial subsequent to the grandfathering date, but prior to the actual Order-in-Council date, may request a review by the Ministry to determine when the highway was actually designated as controlled-access. Should the Ministry determine that a property owner's lot of record was zoned commercial prior to the actual Order-in-Council date (which designated the highway as controlled-access), that lot of record would be given consideration for a commercial access, provided the above criteria could be satisfied.

#### **4.6.11 Infilling and Planned Expansion of the Urban Boundary**

##### **Infilling in built-up urban/rural settlement areas**

Infilling refers to the creation of new lots of record, development of vacant lots of record, or redevelopment of existing lots of record in built-up urban/rural settlement area (towns, villages, hamlets) where the pattern of development and the building line are well established. New access connections in a built-up urban/rural settlement area may be considered only where the posted speed is less than 70 km/h.

Notwithstanding normal Ministry access management policies and standards outlined in this manual, the Ministry will consider permitting a new access connection or upgrade/change in use of an existing access connection in established built-up urban/rural settlement areas, provided there are no adverse safety impacts.

For residential entrances, the minimum frontage requirement of 32 m may be reduced based upon the Ministry's review of existing lot frontages and access density, within the established settlement area.

The minimum frontage requirement of 32 m for a new commercial lot shall be met in all cases.

##### **Planned Expansion of the Urban Boundary**

The Ministry will recognize planned expansion that it has endorsed through the planning process (e.g. Official Plan).

The creation of new lots of record or other land use development which would extend the existing built-up urban/rural settlement area boundary will not be considered by the Ministry, unless it has endorsed such expansion through the planning process (e.g. Official Plan).

For both infilling and planned expansion, the Ministry will determine appropriate density and spacing for access connections based on the pattern and density of development within the built-up urban/rural settlement area, and review of traffic impact studies, where appropriate.

#### **4.6.12 Application of the HCMM in the Greater Toronto and Hamilton Area**

The Provincial Policy Statement provides policy direction on matters of provincial interest related to land use planning and development for the province. The Growth Plan for the Greater Golden Horseshoe, the Greenbelt Plan, the Oak Ridges Moraine Conservation Plan, and the Niagara Escarpment Plan work together to manage growth, build complete communities, curb sprawl, and protect the natural environment in the Greater Toronto and Hamilton Area (GTHA). These four provincial plans build upon the policy foundation provided by the Provincial Policy Statement. They provide land use planning policies to address the issues facing the GTHA.

With provincial plans in mind, the Ministry recognizes the transportation challenges within the GTHA. The needs of all travellers and modes (including cars, trucks, transit users, cyclists, and pedestrians) should be part of all land use planning decisions, by considering the impact of new development on all forms of transportation. The Ministry also needs to consider the impact the associated access(s) to a new development has on the highway system, when determining whether to issue a Highway Corridor Management Entrance permit and/or Building and Land Use permit.

The Ministry will work cooperatively with municipalities and stakeholders to determine the appropriate application of access management principles. From a regulatory perspective, the Ministry understands the need to be more flexible in its decision-making process when reviewing land use planning/development applications and Highway Corridor Management Entrance/Building and Land Use permit applications in the GTHA. The fundamentals of HAMPs and I-HAMPs will help guide municipalities, stakeholders and the Ministry to be flexible, where appropriate, in addressing many of the new and emerging transportation situations in the GTHA.

#### **4.6.13 Checkerboard Plans**

Prior to the imposition of universal subdivision control in June 1970, reference plans and simultaneous conveyance were frequently used in rural areas to subdivide land into conveyable lots, referred to as Checkerboard Plans.

There may be hundreds of Checkerboard Plans in Ontario. Many of them are likely to be along Provincial Highways, with no other means of access connection.

The Ministry will not grant an access connection to the Provincial Highway for a lot of record created in this fashion. Exceptions may be granted if the property owner or municipality can demonstrate that the Ministry was consulted prior to the registration of the plan, and has indicated a willingness to provide an individual access connection for the created lot of record.

The Ministry, in consultation with all affected property owners and the local municipality, should resolve the access connection issues created by Checkerboard Plans by attempting to create either a public or private road access.

#### **4.6.14 First Nations**

Under the PTHIA, the Ministry's permit control area within a First Nations reserve is limited to the designated highway right-of-way. The extent of the Ministry's permit control area is defined in the transfer document which granted the highway to the Ministry.

Access management policies and standards, as outlined in this manual, should be adhered to as much as possible for safety.

Highway Corridor Management Entrance permits are required for all types of access connections along a Provincial Highway within a First Nation reserve.

#### **4.6.15 Crown Land**

Crown Land is land under the administration and control of Her Majesty the Queen, in right of the Province of Ontario, or any agency thereof. Highway Corridor Management Entrance permits are required from the Ministry for the construction or use of an access connection from the Provincial Highway to Crown Lands.

For the purposes of this chapter, Crown Land is defined as lands under the jurisdiction and control of the Ministry of Natural Resources (MNR).

An access connection to Crown Land is a means of access from the highway for uses authorized by MNR, through instruments such as Sustainable Forest Licenses, Land Use permits, or other such authorizations issued by MNR. The access connection type will be directly related to the specific land use type. The Ministry Highway Corridor Management Entrance permit will state the land use and applicable geometric design standards associated with the Provincial Highway access connection to the Crown Lands.

#### **4.6.16 Severance of a lot of record by natural physical feature**

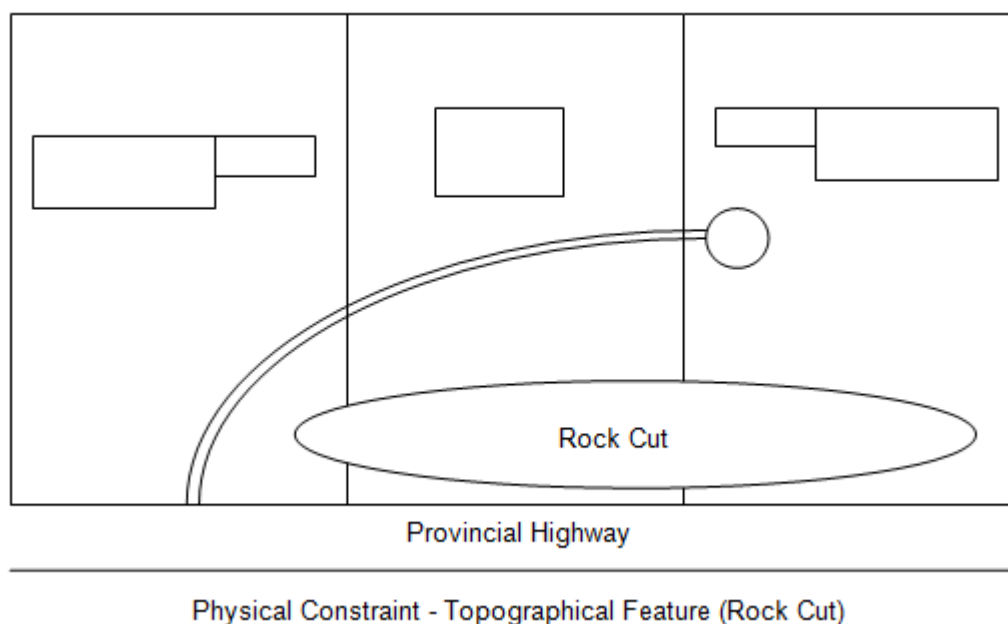
The Ministry will allow an access connection to a Provincial Highway in situations where a lot of record is divided as a result of a naturally occurring physical feature (i.e. river course, municipal drain), and it is impractical or cost-prohibitive to reinstate the original internal access to that portion of the lot of record.

The Ministry spacing, density and location standards are not applicable, except for commercial access connections. Otherwise, all other standards outlined in this manual apply.

Where a consent application is made to sever a lot of record which has been divided by a naturally occurring physical feature, access from the severed portion to the Provincial Highway will be granted, provided the above conditions are satisfied, and the severed lot has no other means of access to a public road.

#### 4.6.17 Mutual access

A mutual access provides a means of access connection to the highway for two or more lots of record, which all have highway frontage. Typically, a mutual access is used where a direct highway access connection to two or more lots of record is unachievable due to topographical features (refer to Figure 4.6.15).



**Figure 4.6.15: Mutual access**

Mutual access connection requests by way of a Consent Application are strictly controlled, because of potential maintenance problems and conflicts between property owners. They will only be considered if all of the following conditions are met:

- The Consent Application involves the creation of only one new lot, so that the mutual access services only the one new lot and the retained parcel. The Ministry will not grant a mutual access connection and associated Highway Corridor Management Entrance permit to service multiple new lots (two or more) by way of a Consent Application.
- Both the severed and retained parcels shall have highway frontage following the consent.
- The criteria in Table 4.6.5 and Table 4.6.6 can be satisfied.

- The proposed mutual access involves an existing Residential, Farmstead or Commercial access connection, or the closure and relocation of an existing Residential, Farmstead or Commercial access connection to service the severed and retained parcels.
- The land uses of the severed and retained parcels are compatible (i.e. Residential and Farmstead, Commercial and Industrial).

The Ministry has produced a guide for the creation of mutual access connections, which covers various easement scenarios, the need for 0.3 m reserves, and other mutual access procedures. It is attached as Appendix 4A to this chapter.

The Highway Corridor Management Entrance permit for a mutual access will specifically state the permitted use of the access connection (i.e. Residential).

Only one Highway Corridor Management Entrance permit is issued for a mutual access. The Highway Corridor Management Entrance permit contains all applicable property owner names and is issued in duplicate (one to each property owner).

**Table 4.6.5: Mutual Access Eligibility Criteria**

<b>Access Management Classification System Category</b>	<b>Criteria 1</b>	<b>Criteria 2</b>	
	<b>Minimum Total Pre-Severance Frontage Requirement</b>	<b>AADT** ≤ 8000</b>	<b>AADT** &gt; 8000</b>
2A – Principal Arterial	N/A	N/A	N/A
2B – Arterial	>250 m	Permitted	Not Permitted
3 – Collector	>150 m	Permitted	Not Permitted
4A – Major Local	>125 m	Permitted	Not Permitted
4B – Minor Local	N/A	N/A	N/A
** AADT stands for Annual Average Daily Traffic			

**Table 4.6.6: Mutual Access Eligibility Criteria – Commercial**

Access Management Classification System Category	Criteria 1	Criteria 2	
	Minimum Total Pre-Severance Frontage Requirement	AADT** ≤ 7000	AADT** > 7000
2A – Principal Arterial	N/A	N/A	N/A
2B – Arterial	>250 m	Permitted*	Not Permitted
3 – Collector	>150 m	Permitted*	Not Permitted
4A – Local	>125 m	Permitted*	Not Permitted
4B – Minor Local	N/A	N/A	N/A
* MTO reserves the right to request a Traffic Impact Study to determine the need for highway improvements. ** AADT stands for Annual Average Daily Traffic			

#### 4.6.18 0.3 m Reserves

Stakeholders are often required to convey to the Ministry a 0.3 m reserve along their highway frontage. A 0.3 m reserve serves to inform future property owners that an access connection from the highway is either not available or restricted to a certain location along the highway frontage.

#### 4.6.19 Farmstead lot – multiple access connections

Farmstead lots which have an existing Farmstead access may also be eligible for Field or Auxiliary access connection(s), where internal access to the total holding is impractical due to either topographical features or other extenuating circumstances, and where the farmer can demonstrate a justifiable need for additional access to the farmstead.



#### **4.6.20 Temporary entrance**

A temporary entrance provides a means of access for a specific project. It is likely to last a relatively short period of time, and will ultimately be removed from the highway right-of-way. Typically, a temporary entrance is used to enable stakeholders and contractors to do work on their lot of record before construction of a permanent access connection, and where no other means of access is available.

A temporary Highway Corridor Management Entrance permit shall clearly specify:

- the expiry date
- the nature and extent of the works to be undertaken on the lot of record
- the property owner's responsibility to remove the temporary entrance and restore the highway right-of-way to the Ministry's satisfaction
- the property owner's responsibility to clean up mud and debris from the highway in a timely fashion, so as not to cause a hazard to the public.

The validity period for a Temporary Highway Corridor Management Entrance permit shall not exceed one year, except for logging operations, which shall coincide with MNR's licence period or shall be issued for a period of up to two years.

A Letter of Credit or other means of financial security may be required as a condition of issuance of a Temporary Highway Corridor Management Entrance permit. This covers the Ministry's cost for access removal and/or highway clean-up, if not undertaken by the property owner.

Temporary Highway Corridor Management Entrance permits for the Ministry contractors are not required if the access is located within the contract limits of the project.

#### **4.6.21 Emergency entrance**

Emergency entrances provide access connection to major developments for emergency vehicles only. Typically, emergency entrances are requested where only one means of access connection to the overall development is available, and a municipality's emergency services are requesting a secondary means of access connection to the development.

As a general policy, the Ministry does not permit emergency entrances to Provincial Highways. However, the Ministry may consider exceptions provided:

- it has been demonstrated that there is no reasonable alternative to provide adequate emergency access elsewhere
- a safe location can be identified
- the entrance will be owned and maintained by the municipality
- the design of the emergency entrance discourages/prohibits non-emergency use
- the municipality will ensure that emergency status is maintained over the long-term.

The Ministry will not restrict emergency access connections to municipal streets within its permit control area, provided they are placed at locations which will not affect the safe operation of the highway.

The Head, Regional Highway Corridor Management Section and/or the Manager, Regional Engineering shall approve any exceptions to the above.

#### **4.6.22 Private Roads**

For the purposes of this manual, a private road is a road that:

- is under the jurisdiction, control and ownership of a person, authority, corporation, association, etc. that provides access to one or more lot of record, or to multiple owners of units located on one parcel of land, as in the case of a condominium
- intersects with a Provincial Highway
- public funds are not expended upon.

There are several types of private roads. Some examples of private roads are those that access:

- condominium developments
- major commercial or industrial developments involving two or more buildings, and that typically require highway improvements (e.g. turning lanes, traffic signals, etc.)
- public facilities (e.g. landfill sites, provincial parks, public institutions, etc.)
- private recreational facilities (e.g. a private resort, etc.)
- cottages and lakefront properties (e.g. an unassumed road).

Typically, only one Highway Corridor Management Entrance permit is required for a private road, regardless of the number of lots of record or units involved.

There are many historical private roads in Ontario that access cottages and lakefront properties. Many of these historical private roads do not meet minimum design and safety requirements. The Ministry, municipalities and affected property owners should work cooperatively to upgrade these private roads to current design and safety standards. This should be done before the creation of any new lots of record or other land-use developments which are served by them. In some cases, the municipality should consider assuming the private road and opening it as a public road.

The creation of any new lots of record for cottages and lakefront properties utilizing an existing private road are subject to the Ministry's approval. This is considered a change in use of the current Highway Corridor Management Entrance permit for the private road. As a result, a new Entrance permit is required for the private road. Depending on the traffic volume on the highway itself, a traffic impact study may be required, to support the additional traffic volumes generated by the continued lot creation of cottages and lakefront properties utilizing an existing private road. Also, to ensure continuous access to all cottages and lakefront properties utilizing an existing private road, the deed for each cottage or lakefront property should contain a deeded right-of-way to the Provincial Highway.

Requests for new Private Roads shall meet the access spacing standards as outlined in this manual.

#### **4.6.23 Access to public roads near Provincial Highway intersections**

Where a proposed access connection to a public road falls within the Ministry's permit control area the Ministry will require that a Highway Corridor Management Building and Land Use permit be obtained.

The Ministry will deny a Highway Corridor Management Building and Land Use permit, if the location of the access connection does not meet Ministry standards, or if the access connection, in the opinion of the Ministry, affects the safety and proper operation of the intersection.

The Ministry, municipalities, and stakeholders need to work cooperatively to ensure that intersections function and operate both safely and efficiently.

#### **4.6.24 Ministry Work Projects - Closing of illegal, non-essential or unsafe access connections**

The Ministry will endeavour, through the normal course of a Ministry Work Project, to review all access connection locations to determine:

- whether the access is illegal
- whether the lot of record has exceeded the allowable number of access connections, according to this manual (i.e. First Principle – One Lot = One Access Connection)
- if the access design for the lot of record meets the Ministry design standards for the current land use.

The removal of an illegal or non-essential access connection, or the reconstruction of an access connection to current design standards, when identified through the course of a Ministry Work Project, is the financial responsibility of the Ministry.

The Ministry will consult with the affected property owner if it becomes necessary to remove or redesign an access connection. Should the Ministry deem it necessary to close an access connection for safety reasons, as part of a Ministry Work Project, and that access connection provides the only means of access to the lot of record, the Ministry is obligated to either provide an alternate means of access via the highway or an existing public road, or purchase the affected lot of record. In the latter case, the Regional Property Section will negotiate the amount of compensation with the property owner.

#### **4.6.25 Home occupation or industry**

Through their official plan and/or comprehensive zoning by-laws, most municipalities permit property owners to operate home occupations and small-scale home industries as a secondary use to the main permitted land use, provided they are compatible with neighbouring uses.

Municipal official plans and/or comprehensive zoning by-laws typically regulate the details of home occupations and home industry uses. A property owner intending to open a home occupation or home industry located along a Provincial Highway should ensure that the Ministry's requirements concerning entrance and sign approval can be met before initiating the business.

Some home occupations and home industries can generate significant traffic volumes. Depending on the Access Management Classification of the highway and/or the HAMP for the highway corridor, a change in use of the existing highway access connection (e.g. commercial entrance) may not be permitted by the Ministry. The following figure

illustrates an application for a Property Owner Acknowledgement.

<b>Ministry of Transportation (MTO)</b> <b>Property Owner Acknowledgement - Home Occupation and Home Industry</b> <b>(To Be Attached To An Entrance Permit)</b>	
Property Owner: _____	
Address & Phone Number: _____	
Municipality: _____	
Highway Number: _____ Existing Entrance Permit Number: _____	
Primary Land Use (Zoning): _____	
Secondary Land Use (Home Occupation / Home Industry): _____	
<p>MTO acknowledges the use of a small portion of the property owners land for conducting _____ as a Home Occupation / Home Industry and accordingly approves the use of the entrance for this secondary land use.</p> <p>MTO hereby permits one sign no greater than 3m<sup>2</sup> (32 sq. ft.) or a two-sided sign with a total area no greater than 3m<sup>2</sup> (32 sq. ft.) to be located on the property owner's land, to identify the Home Occupation / Industry business.</p>	
_____	_____
Ministry of Transportation Representative	Date
<p>I, the Property Owner of the above noted property, hereby acknowledges the following:</p> <ol style="list-style-type: none"> <li>1. I am aware that the Home Occupation / Home Industry business on my property is permitted on the understanding that it will not create a traffic hazard, will not interfere with the proper operation of the highway and will continue to be a secondary land use to the primary land use (zoning) on my property.</li> <li>2. I am aware that my property does not meet the MTO requirements for a commercial access to the highway and I understand that conversion of my existing entrance to a commercial access shall NOT be permitted.</li> <li>3. I am aware that MTO would not support a future severance to separate the Home Occupation / Home Industry business from my property and therefore would not issue a new entrance permit from the highway for a new lot of record.</li> </ol>	
_____	_____
Property Owner	Date
<p>The municipality of _____ has been advised and is aware of MTO's position regarding the use of the entrance to this property.</p>	
_____	_____
Municipal Representative (i.e. Clerk, CAO)	Date

**Figure 4.6.16: Property Owner Acknowledgement – Home Occupation / Home Industry**

## 4.7 HAMPS and I-HAMPS

### 4.7.1 Definitions of HAMPS and I-HAMPS

Highway Access Management Plans (HAMPS) are plans for managing access to all or part of a Provincial Highway corridor. Interchange Highway Access Management Plans (I-HAMPS) are plans for managing access at an interchange on a Provincial Highway. HAMPS and I-HAMPS are versatile tools that can be used to guide access decisions, prevent future access problems, or provide solutions to existing access problems along a Provincial Highway corridor or around an interchange.

HAMPS and I-HAMPS aim to achieve the optimum balance between transportation and planning objectives, and preservation of the current and future function of the highway. Once a HAMP or I-HAMP has been developed and/or implemented, Highway Corridor Management permit applications that are in compliance should be issued without complication, provided all site-specific matters for the development of the lot of record have been satisfied.

For new highway corridors, the Ministry will endeavour to develop a HAMP and/or I-HAMP as part of the overall planning process in consultation with municipalities/developers/property owners. Where the Ministry has developed and/or implemented a HAMP and I-HAMP, it will outline its requirements for permitting access connections along the Provincial Highway corridor or around the interchange.

In some situations, a HAMP or I-HAMP may not be necessary to manage access connections. The Ministry will work cooperatively with municipalities/developers/property owners to determine appropriate intersection spacing and other roadway characteristics. This will be done where needed in urbanized areas and emerging growth nodes of the province, to support intensification and more compact development within communities.

For many municipalities in the Greater Toronto and Hamilton Area (GTHA), the development of I-HAMPS will be the likely starting point for addressing access management at interchanges. The development of I-HAMPS may also be the starting point in other high density urbanized areas and emerging growth nodes of the province where freeways exist.

### 4.7.2 Purpose of HAMPS and I-HAMPS

The purpose of HAMPS and I-HAMPS is to:

- a. find lasting solutions to access management problems and help eliminate the disconnect between land use planning and transportation planning objectives.
- b. establish a level of cooperation between the Ministry, municipalities and stakeholders, to accomplish access management objectives that support mutual economic goals/strategies.

- c. identify and address issues of strategic importance to the long-term function, economic potential, and character of the highway corridor. This requires that the study includes municipal crossing roads, the surrounding road system, transit, active transportation and considers the density of neighbouring development and its 'traffic generating' capacity.
- d. provide the opportunity to reduce future potential conflicts between Provincial Highway access management objectives (policies/standards) and municipal land use objectives (road/land development plans), so that both objectives are efficiently achieved.
- e. provide the Ministry, municipalities and stakeholders with a study process to evaluate and resolve situations where development plans appear to be unable to comply with the Ministry's access management policies/standards.
- f. co-ordinate highway access management and adjacent road/land development on a strategic (rather than reactive) basis.

#### **4.7.3 Benefits of HAMPs and I-HAMPs**

The benefits of HAMPs and I-HAMPs include:

- a. development of creative and sustainable transportation strategies and solutions to support economic development.
- b. improved coordination and consistency in transportation and land use planning, broader stakeholder involvement, and the potential for teamwork in problem solving.
- c. identification and resolution of transportation deficiencies before they turn into critical problems.
- d. reduction of the incidence of the "last-in pays all" problem. This happens when previous development contributed to the overall need for work associated with access management. The last party involved triggers the access management work, and has to pay all expenses.
- e. support of the development charges bylaw process by capturing expenditures related to access management in advance. This enables municipalities to collect development charges earlier in the land use development cycle. It also spreads the costs equitably across multiple developments according to their fair share.
- f. support of the "user-pay" principle.
- g. reduction of unwarranted demands on municipal general revenues and the ministry.
- h. reduction of the administrative overhead that would otherwise be incurred by evaluating a series of individual development proposals one at a time.

#### **4.7.4 HAMPs and I-HAMP Triggers**

The creation of a HAMP or I-HAMP may be triggered three ways.

##### **Trigger 1, as a component of broader government transportation or municipal land use planning initiatives.**

Trigger 1 includes:

- a. Ministry transportation planning initiatives:
  - provincial transportation planning or environmental assessment (EA) studies
  - Provincial Highway design studies (preliminary or detailed)
- b. Municipal land use planning and transportation initiatives:
  - official plan updates, official plan amendments, secondary plans, etc.
  - master transportation plans, area transportation plans, including transit and active transportation (may require preliminary design study for the highway or interchange)
  - municipal road preliminary design studies
- c. Provincial or municipal transit and/or active transportation related infrastructure initiatives that are important to the more efficient and sustainable operation of the highway such as:
  - transit stations
  - park and ride facilities
  - carpool parking lots
  - active transportation routes
- d. Permit authority of the PTHIA:
  - draft plans of subdivisions
  - amendments to official plans or zoning bylaws
  - consents, site plans, etc.

##### **Trigger 2, as a reaction to significant pressures or conflicts associated with municipal land use planning and access management.**

Trigger 2 includes situations where:

- a. the pressure of a high number of municipal land use planning applications and the Ministry Highway Corridor Management permit applications results in the Ministry being reactive instead of proactive



- b. conflicts are arising because municipalities and stakeholders demand application of access management standards below minimum standards
- c. ongoing anticipated pressures and conflicts resulting from municipally approved changes in land use designations and/or significant increase in transportation demand and strategic planning.

### **Trigger 3, as a reaction to specific land development proposals**

HAMPs and I-HAMPs are generally not required if it appears that access management desirable standards will be achieved.

Trigger 3 includes:

- a. HAMPs and I-HAMPs may be considered if it appears that only access management minimum standards will be achieved for a corridor or interchange. Under these circumstances, the goal is to identify design alternatives that are closer to desirable standards, but not below the minimum standards, where achievable.
- b. HAMPs and I-HAMPs should be actively pursued if it appears that access management minimum standards will not be achieved. Under these circumstances, the goal is to develop practical strategies and design alternatives that help improve and align transportation and development objectives. The goal is to find solutions to existing or emerging access management problems.

#### **4.7.5 Principles for HAMP and I-HAMP studies**

##### **Principle #1**

Inter-regional transportation on the Provincial Highway system is a critical component of the overall provincial economy. As a result, policy requires that transportation systems be protected.

Access management standards are designed to meet this obligation within the context of 21st century land use planning objectives/patterns and transportation planning objectives/characteristics.

Accordingly, the considerations for developing a HAMP or I-HAMP are:

1. Protecting the safety and capacity of the inter-regional Provincial Highway corridors and associated intersections and interchanges. The corridor protection policies of the Provincial Policy Statement (Section 1.6.8) and Growth Plan for the Greater Golden Horseshoe (Section 3.2.2) supports protecting these corridors and rights-of-way to meet current and projected needs.

2. Minimizing the travel time through interchanges for inter-regional and municipal transit and the time spent by bus operators serving highway-oriented transit and related facilities.
3. Protecting the safety and capacity of local traffic, including active transportation, on municipal roads in the vicinity of their connection to the Provincial Highway system.
4. Achieving provincial and municipal land development policy objectives on lands in the vicinity of Provincial Highway corridors and associated intersections or interchanges (e.g. orderly development intensification). For example, preserving, where applicable, safe and convenient access by transit users walking or cycling to and from transit stops and key local destinations, such as schools, retail uses, workplaces, residential areas, hospitals, community centres, government offices, libraries, etc.
5. Achieving land development objectives of individual stakeholders.

## **Principle #2**

In general, there are more alternatives and greater flexibility in the planning of land use development and municipal roads, than there are in protecting and providing inter-regional transportation capacity on the Provincial Highway system.

Accordingly, where on a preliminary basis it appears that land use development proposals do not comply with access management standards, alternatives shall be developed. These include:

- Municipal road or inter-regional and municipal transit planning alternatives, such as:
  - New or improved municipal roads and intersections, including service roads
  - New or improved municipal road connections to provide a single point of access to a number of local developments
  - New or improved inter-regional and municipal transit routing and facilities
  - New or improved active transportation routing and facilities
  - Innovative alternatives (e.g. grade separations, roundabouts, etc.)
- Land use development planning alternatives which avoid or minimize the need for direct highway access, such as:
  - Adequate internal road system
  - Access points away from the highway
- Consideration of extending/providing the above alternatives beyond the Ministry's permit control area of the PTHIA, as a means of accommodating land use development proposals with the Ministry's permit control areas.

### **Principle #3**

HAMPs and I-HAMPs should not be seen as a mechanism to compromise good access management practices. They should be seen as a mechanism to hopefully resolve situations where development plans, (and in the GTHA, intensification targets) appear to be unable to comply with access management policies/standards.

Accordingly, the overall access management study process for selecting a HAMP or I-HAMP alternative(s) should consider and evaluate the following:

- Desirable and minimum standards contained in Figures 4.6.8 to 4.6.13.
- Viable design alternatives beyond the desirable and minimum spacing and offset standards contained in the figures noted above.
- Innovative design approaches, where appropriate, such as comprehensive, broader-based land use planning/design and transportation planning/design alternatives that look towards meeting access management objectives while still meeting land use development objectives.
- Improve regional coordination of land use and transportation planning.
- Improve or maintain the safety and operational efficiency of the Provincial Highway and municipal roadway through access management.
- Expand mode choice through new or improved transit facilities and services and active transportation facilities.
- Improve operations through signal coordination and other operational strategies.
- Establishment of an effective land use or growth management plan for the highway corridor and or interchange area.
- Promote development of supporting street, sidewalk, and site circulation systems where land development is desired.

### **Principle #4**

In developing HAMPs and I-HAMPs, municipal access management policies, standards, permits/approvals, etc. can be evaluated alongside the Ministry's access management policies and standards.

### **Principle #5**

HAMPs and I-HAMPs require a traffic impact study to support planning decisions. In complex situations, these studies must be very comprehensive.

The Ministry is particularly interested in the study's recommendations with respect to:

- left turns from a Provincial Highway to a public road or commercial/private road
- downstream left turns (left turns available after motorists exit the highway) on public roads or commercial/private roads that are in close proximity to Ministry intersections or interchange ramp terminals
- innovative alternatives (e.g. grade separations, roundabouts, etc.).

## Principle #6

HAMPs and I-HAMPs require both time and financial resources, where:

- Municipalities and stakeholders are the catalyst for justifying the need for a HAMP or I-HAMP, they need to ensure their schedules and funding accommodates their development.
- The Ministry is the catalyst for justifying the need for a HAMP and I-HAMP, it will ensure its schedules accommodate their development, including funding.
- There is a joint benefit to the Ministry, municipalities and stakeholders to develop a HAMP or I-HAMP, all parties need to ensure their schedules and funding (cost-sharing) accommodate their development. A partnership agreement can be helpful in these situations.

## Principle #7

Stakeholders can avoid the need for HAMPs and I-HAMPs if the early stages of their planning comply with the Ministry's access management policies and standards. Planning which complies with access management standards may be less complex / costly than potential redesign and delays resulting from initial non-compliance.

### 4.7.6 Key components of HAMPs and I-HAMPs

At a minimum, HAMPs and I-HAMPs should identify the following:

- a. Provincial Highway Corridor, including:
  - functional classification and access management classification of the Provincial Highway corridor
  - location of all existing interchanges/intersections
  - location of any proposed interchanges/intersections
  - location of any proposed road realignments or closures
- b. Public roads

- location of existing/proposed municipal road system in the vicinity of the highway corridor to support land use growth (offset spacing from highway interchanges/intersections)
- c. Transit, carpool lots and active transportation
  - location of existing and proposed inter-regional and municipal transit routes and facilities
  - location of existing and proposed inter-regional and municipal carpool lots
  - location of existing and proposed province-wide, inter-regional and municipal active transportation systems, routes and facilities
- d. Commercial/private roads
  - location of commercial/private road entrances
  - location of any proposed commercial/private road entrances
  - location of any proposed commercial/private road closures
  - location of existing/proposed commercial/private roads in the vicinity of the highway corridor to support land use growth (offset spacing from highway interchanges/intersections)
- e. Private access connections (e.g. residential, farmstead, etc.)
  - location of private entrances
  - location of any proposed private entrances
  - location of any proposed private entrance closures
  - location of existing/proposed private access connections in the vicinity of the highway corridor to support land use growth (offset spacing from highway interchanges/intersections)
- f. Municipal land use planning and transportation initiatives
  - official plan objectives, secondary plans, plans of subdivision, etc.
  - master transportation plans, area transportation plans, including transit and active transportation
  - municipal road preliminary design studies

In the development of a HAMP or I-HAMP, the following should be reviewed and analyzed:

- spacing between interchanges/intersections/entrances along the highway
- offset spacing from highway to first intersection/entrance on public crossing road

- interchange/intersection functional areas and schematics for compliance with access management standards
- proposed interchanges/intersections/entrances along highway and on public crossing roads
- municipal planning documents (official plan, master transportation plan, etc.), broader government policy (Provincial Policy Statement) and the Ministry transportation planning objectives (the Ministry Work Projects)
- location of existing and proposed inter-regional and municipal transit routes and facilities, carpool lots and active transportation routes and facilities
- Traffic Impact Study(s), to support existing and future land use planning decisions for the above

#### **4.7.7 Funding responsibilities for HAMPs and I-HAMPs**

##### **Municipality or stakeholder funding responsibility**

In general, the municipality has the funding responsibility when a HAMP or I-HAMP is triggered as a component of a municipal land use planning initiative or a municipal transportation planning initiative.

In general, the stakeholder has the funding responsibility where a HAMP or I-HAMP is triggered in response to a specific development proposal, particularly where development plans appear to be unable to comply with access management standards.

For combinations of the above, the shared municipal/stakeholder funding responsibility may be proportionate to the respective trigger.

##### **Ministry responsibility for funding**

In general, the Ministry has funding responsibility where a HAMP or I-HAMP is triggered as a component of a "Ministry transportation planning initiative".

It is unlikely that the Ministry would be a funding participant in a HAMP or I-HAMP which is triggered in response to a municipal land use or transportation planning initiative or a "stakeholder development initiative", unless there is a joint benefit to the Ministry and the municipality/stakeholder in achieving their respective transportation objectives. Any such Ministry funding participation would be subject to availability and approval of funding, and a partnership agreement would be required.

##### **Funding handled jointly by the municipality and the Ministry**

Municipalities and the Ministry may consider joint funding responsibility where a HAMP or I-HAMP is triggered in reaction to:

- current ongoing pressures or conflicts associated with a high number of municipal land use planning applications and the Ministry Highway Corridor Management permit applications
- anticipated ongoing pressures/conflicts resulting from municipal approved changes in land use designations and/or significant increase in transportation demand
- concurrent municipal and the Ministry planning and design studies with adjacent/overlapping study areas (e.g. which overlap at interchanges or intersections).

Municipal/Ministry cost-sharing (funding responsibility) may be proportionate to the respective trigger. Ministry funding participation would be subject to availability and approval of funding. A partnership agreement would be required in these situations.

#### **4.7.8 Management of HAMP and I-HAMP studies**

Although HAMPs and I-HAMPs may be triggered by municipal or stakeholder initiatives, they are to be overseen and approved by the Ministry. HAMPs and I-HAMPs should include an up-front plan for technical work and consultation, including identification of a study area. For provincial/municipal transportation planning and design studies, this may be part of the broader EA study process.

Where the municipality and/or stakeholder has the sole or primary funding responsibility, they will be responsible (pursuant to the Ministry review and approval) for developing the up-front plan for technical work and consultation, carrying out the study work, and making necessary modifications to the study.

#### **4.7.9 Participants in HAMP and I-HAMP studies**

Potential HAMP and I-HAMP participants shall include:

- Ministry participants
  - Regional Highway Corridor Management Section staff
  - Regional Planning and Design staff
  - Regional Traffic staff
- Municipal participants
  - Planning staff
  - Transportation/Engineering staff

They may include:

- property owners, developers and agencies, community groups, etc., (if applicable)
- owners of all properties within the HAMP or I-HAMP study area
- inter-regional and municipal transit providers
- major area transportation service providers (trucking, emergency services etc.)

#### **4.7.10 Approved HAMPs and I-HAMPs**

A HAMP or I-HAMP should be signed-off on by all parties involved.

After a HAMP or I-HAMP is approved by the Ministry, it is to be available for use by the Ministry, the municipality and all stakeholders.

Where Highway Corridor Management permit applications are fully in compliance with an approved HAMP or I-HAMP, the Ministry Highway Corridor Management permits should be issued without complication, provided:

- all associated HAMP and I-HAMP requirements have been addressed
- all matters for the development of the site itself meet the Ministry requirements (e.g. building setbacks, stormwater management, signs, etc.)

Where modifications to an approved HAMP or I-HAMP are proposed, the affected municipality and stakeholders shall be consulted and an amended HAMP or I-HAMP issued, if appropriate. Where the HAMP or I-HAMP is a component of an EA study, the appropriate EA addendum process shall apply.

## **4.8 Dispute Resolution Process**

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### **4.8.1 Introduction**

The Ministry has established a dispute resolution process, to help develop solutions that support safe, effective, and sustainable access to Provincial Highways and land developments. This process will be followed by stakeholders and Ministry staff to address access issues arising from a municipal land use planning application (for which the Ministry has provided comments) or a Highway Corridor Management Entrance permit and/or Building and Land Use permit application.

The Ministry will endeavour to initiate and complete all reviews in the dispute resolution process in a timely manner. The timeframe for completing the review and communicating a decision will depend on the complexity of the situation.

The Ministry and its staff are committed to meeting and working with stakeholders to find the best possible solution to access situations to protect the needs of all travelers, including cars, trucks, transit users, cyclists and pedestrians.



The Ministry recognizes that land development is critical to the economic well-being of Ontario, and that successful land development demands safe, effective and sustainable access to the development site. The Ministry shall consider the impact that access to a new development has on the ability to move people and goods on the Provincial Highway network.

Stakeholders should be aware that the dispute resolution process does not necessarily ensure a positive outcome for them. The Ministry will, to the best of its ability, endeavour to resolve the situation to the mutual benefit of the stakeholder, other stakeholders, and the Ministry.

#### **4.8.2 Dispute Resolution Process**

##### **Initial Review**

The Ministry's review of an access request can be initiated through the land use planning process, through a pre-consultation meeting with Ministry staff, or through the submission of a Highway Corridor Management Entrance permit and/or Building and Land Use permit application. The Ministry's review of requests for access is coordinated by the applicable Regional Highway Corridor Management Section, and a decision is communicated to the stakeholder.

Stakeholders may move through the process below if their access request has been denied, or they object to conditions of approval required by the Regional Highway Corridor Management Section.

##### **Step 1: Ministry Regional Manager, Engineering**

Stakeholder submits a written review request to the Ministry's Regional Manager, Engineering. The request should include the following:

- summary of the situation
- basic site information (location and vicinity map, size, type of development, site plan, current/proposed land use designation, etc.)
- background correspondence and relevant studies (e.g. traffic impact study)
- any previous Ministry access management decisions related to the subject site
- rationale for the stakeholder's position
- support for the assertion that approval of the access request would not negatively impact the safety, capacity, operating speeds, efficiency, integrity, and sustainability of the Provincial Highway network and any related municipal road network, or alternatively, how such impacts could be mitigated
- letter from the local municipality, signed by a person duly authorized by the municipality, indicating whether the municipality supports approval of the request, including any municipal terms or conditions.

The Ministry's Regional Manager, Engineering will review the submission. This review may include:

- meeting with the stakeholder to clarify points or request further information.
- consultation with the Ministry's Highway Corridor Management Committee, comprising five regional heads of the Highway Corridor Management Sections, the Head, Provincial Highway Corridor Management Section, and the Regional Manager, Engineering (ex-officio for the Ministry's Highway Corridor Management Committee)
- consulting with other Ministry regional engineering functions (i.e. Planning and Design Section, Traffic Section), the Regional Director and the Ministry's Provincial Office functions (i.e. Provincial Highway Corridor Management Section, Design and Contract Standards Office, Traffic Office, Provincial Planning Office).
- conducting an informational, non-binding independent third-party review.

The Manager, Engineering will consider the possible impacts on the safety, capacity, operating speeds, efficiency, integrity, and sustainability of the Provincial Highway network, and any other matters as appropriate to seek a resolution.

The Manager, Engineering will meet with the stakeholder to further discuss their situation, and will endeavour to resolve the situation to the mutual benefit of both the stakeholder and the Ministry.

The Manager, Engineering will issue the stakeholder a decision in writing.

If the stakeholder disputes the outcome of Step 1:

## **Step 2: The Ministry's Chief Engineer**

The stakeholder submits a written review request to the Ministry's Chief Engineer. The Chief Engineer may conduct an informational, non-binding independent third-party review.

As part of this review, the Chief Engineer will arrange for quotes from an independent third-party expert(s) to review the application, and make recommendations about the request for access. Costs of the 3rd party review will be identified and assessed to the stakeholder/applicant. The degree of independence required for such a review is the same as that required of an expert witness in an Ontario court. The recommendations of the independent third-party expert are non-binding.

To assist the independent third-party expert with the review, a meeting will be held with the following key stakeholders:

- the Ministry's Chief Engineer

- independent third-party expert
- stakeholder, and their consultant (if applicable)
- municipal staff (as required)
- Ministry regional staff
- staff from the Ministry's Provincial Highway Corridor Management Section.

All participants may participate in person, by telephone, or by video teleconference, and will be provided with an opportunity to make a presentation.

The Chief Engineer will consider the recommendations of the third-party consultant (if applicable), and communicate the final decision to the stakeholder in writing.

The decision may include denial of the access request, approval of the access request, or approval of the access request subject to certain conditions.

If the review results in the issuance of a Highway Corridor Management permit, the Chief Engineer will sign the Highway Corridor Management permit as the approving authority for the Ministry.

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14. Maine Department of Transportation, "Maine Department of Transportation – Highway Driveway and Entrance Rules", 2002
15. Ministry of Transportation, Ontario, "Corridor Control and Permit Procedures Manual", 2001
16. Ministry of Transportation, Ontario, "Geometric Design Standards for Ontario Highways" manual, 1994
17. Ministry of Transportation, Ontario, "Commercial Site Access Policy and Standard Designs Manual", 1994
18. Ministry of Transportation, Ontario, "Ontario Traffic Manual (OTM) Book 12 – Traffic Signals" dated July 2001
19. Ministry of Transportation, Ontario, "Intersection Spacing" – David J. Smith - Highway Design Office Research Report – 1986
20. Ministry of Transportation, Ontario cancelled "Memorandums PD-77-03 and ED-77-50" dated August 2, 1977
21. Ministry of Transportation, Ontario "Highway Designation Limits guideline" dated July 1975
22. Minnesota Department of Transportation, "Technical Memorandum No. 02-10-IM-01", March 20, 2002
23. Minnesota Department of Transportation "Technical Study #4 - Toward An Access Classification System and Spacing guidelines" – February 1999
24. National Cooperative Highway Research Program, Transportation Research Board, National Research Council, National Academy of Science, "NCHRP Report 420 Impacts of access management Techniques", 1999
25. National Cooperative Highway Research Program, Transportation Research Board, National Research Council, National Academy of Science, "NCHRP Synthesis 332 access management on Crossroads in the Vicinity of Interchanges", 2004
26. National Cooperative Highway Research Program, Transportation Research Board, National Research Council, National Academy of Science, "NCHRP Synthesis 337 Cooperative Agreements for Corridor Management", 2004
27. National Cooperative Highway Research Program, Transportation Research Board, National Research Council, National Academy of Science, "NCHRP Report 348 access management guidelines for Activity Centers", 1992

28. New Jersey Department of Transportation, "New Jersey State Highway access management Code"
29. New Mexico State Highway Transportation Department, "New Mexico State access management Manual", 2001
30. Ohio Department of Transportation, "Ohio State Highway access management Manual", 2001
31. Transportation Association of Canada, "Geometric Design Guide for Canadian Roads, Part 2" dated September 1999.
32. Transportation Commission of Colorado, "Colorado State Highway Access Code", 2002
33. University of South Florida, "Managing Corridor Development – A Municipal Handbook Center for Urban Transportation Research, University of South Florida", 1996

## Appendix 4A – Mutual Access

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### **Mutual Access Guide and Procedures**

To ensure continuous access to all lots served by a Mutual Access, the deed for each lot shall contain an easement/right-of-way in favour of all other lots sharing the Mutual Access. The easement/right-of-way rights are to be incorporated into the deeds of all the lots.

For lots where a Mutual Access has been permitted, a 0.3 m reserve will also be required across the entire highway frontage of the properties involved, with the exception of the opening for the Mutual Access connection. The exception to this requirement is when a property with an existing physical constraint precludes their ability to obtain a direct access to the highway.

All 0.3 m reserves are to be deeded to the Ministry free and clear of all encumbrances. A preliminary reference plan, draft deed and certification of title (example below) are to be submitted to the Ministry for review and approval prior to depositing/registration. Once approved, the property owner's solicitor, on behalf of the Ministry, can deposit the reference plan, register the deed and execute the certification of title. The Ministry is exempt from Land Transfer Tax and therefore an affidavit is not required. When forwarding the registered deed to the Ministry, any applicable discharges shall also be provided.

The transferee name on the deed is to read as follows:

"Her Majesty the Queen in right of the Province of Ontario, represented by the Minister of Transportation for the Province of Ontario".

In addition, the preliminary reference plan and draft deeds associated with the establishment of a Mutual Access shall be submitted to the Ministry prior to registration to ensure proper wording and layout.

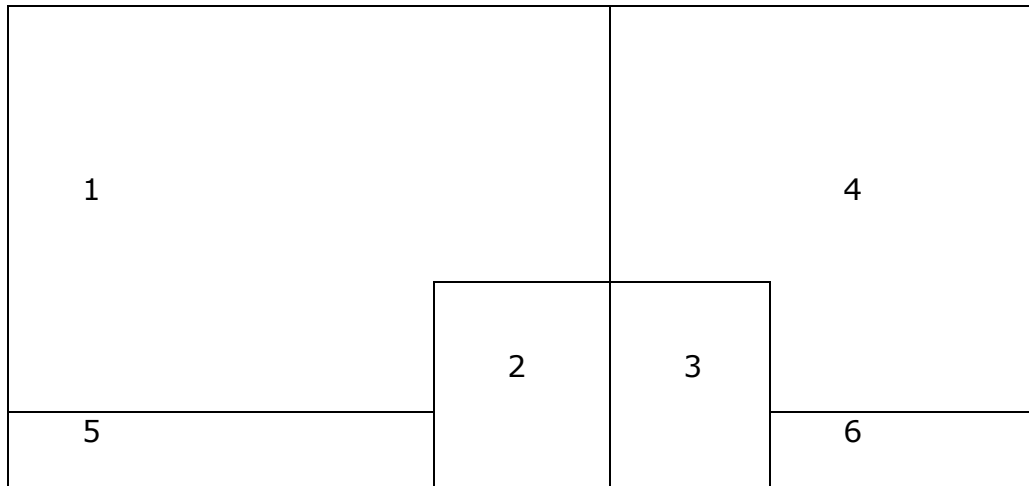
The total width of the easement/right-of-way for a Mutual Access based on the land use should typically be:

- 10 m for residential access
- 20 m for farmstead
- 20 m for commercial access

The Ministry provides the following diagrams as examples for establishing a Mutual Access. Examples 1, 2 and 3 illustrate a Mutual Access arrangement as a result of a Consent Application. Example 4 illustrates a Mutual Access arrangement that is required to resolve situations where individual direct access to a lot of record(s) is unachievable due to a topographical feature.

### Example 1

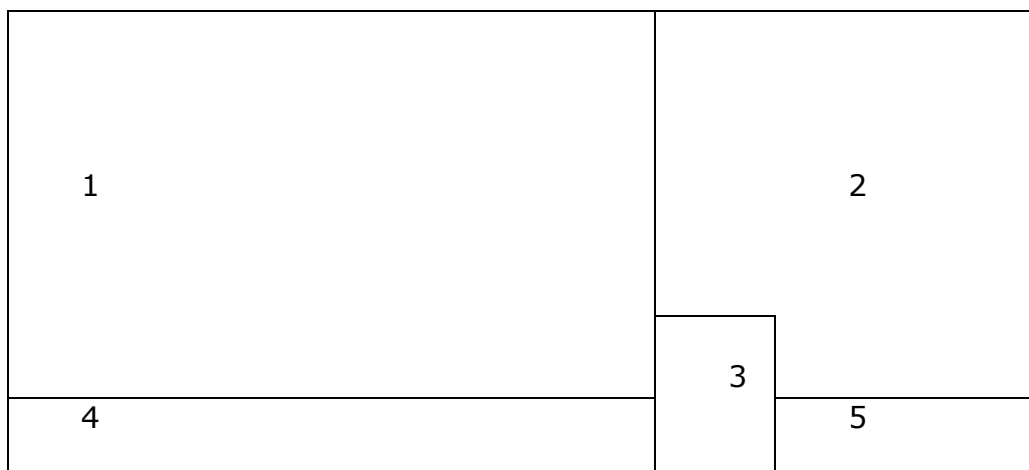
The reference plan should be prepared to illustrate a minimum of six (6) parts as shown below:



Parts 1 and 2 (plus a right-of-way over part 3 and an easement over part 2).  
Parts 3 and 4 (plus a right-of-way over part 2 and an easement over part 3).  
Parts 5 and 6 are 0.3 m reserves.

### Example 2

The reference plan should be prepared to illustrate a minimum of five parts:

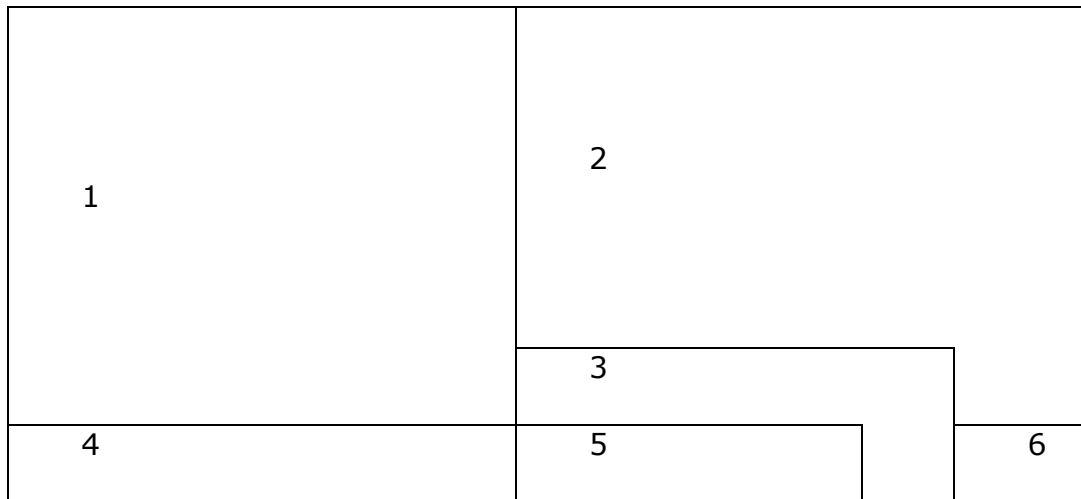


Part 1 (plus a right-of-way over part 3).  
Parts 2 and 3 (and an easement over part 3).  
Parts 4 and 5 are 0.3 m reserves.



### Example 3

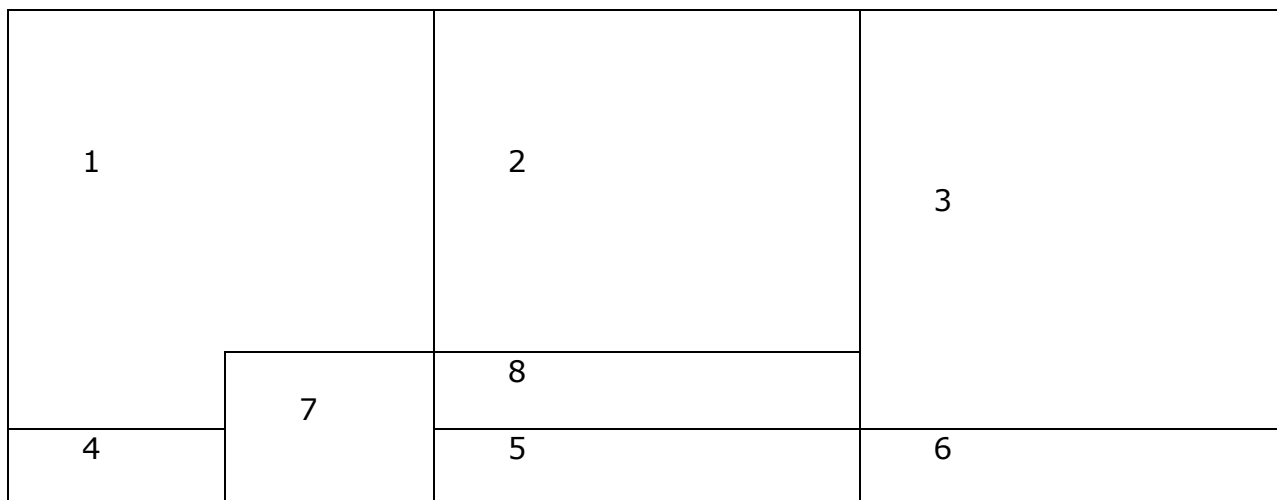
The reference plan should be prepared to illustrate a minimum of six parts:



Part 1 (plus a right-of-way over part 3).  
Parts 2 and 3 (and an easement over part 3).  
Parts 4, 5 and 6 are 0.3 m reserves.

### Example 4

The reference plan should be prepared to illustrate a minimum of eight (8) parts as shown below:



Part 1 and 7 (with an easement over part 7).  
Parts 2 and 8 (with an easement over part 8; plus a right-of-way over 7).  
Part 3 (plus a right-of-way over parts 7 and 8).  
Parts 4, 5 and 6 are 0.3 m reserves.

## Certification of Title

This is to certify that the Minister of Transportation is the registered owner of a parcel of land situate, lying and being in Lot \_\_\_\_\_, Concession \_\_\_\_\_, in the \_\_\_\_\_ (municipality), in the \_\_\_\_\_ (Regional Municipality/County), more particularly described as Part(s) \_\_\_\_\_ on Reference Plan \_\_\_\_\_ registered in the Registry Office for the Land Registry Division of \_\_\_\_\_, and that the Minister has a good and marketable title in fee simple to the said lands, free and clear of all mortgages, liens and encumbrances.

On conducting a search with the Sheriff's Office for the Judicial District of \_\_\_\_\_, we discovered no executions filed against any prior registered owners on title over the last 40 years.

The said lands were conveyed to the Minister of Transportation on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by a deed registered in the Registry Office for the Registry Division of \_\_\_\_\_ as Instrument No. \_\_\_\_\_.

DATED at the \_\_\_\_\_ (municipality) this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Yours very truly,

Name of Solicitor

Address of Solicitor

## Appendix 4B – Entrance Drawings

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This appendix contains the most widely used Ministry of Transportation Ontario Drawings (MTOD) and Ontario Provincial Standard Drawings (OPSD) for entrance design/construction of Provincial Highway access connections.

Any request for a significant modification to an MTOD/OPSD for a proposed access connection requires review by the applicable Regional Highway Corridor Management Section.

In some of the MTOD's, a double entrance is required to serve the proposed land use (i.e. service station). In these instances, the double entrance is integral to the design, and shall be treated as a single access on a single Highway Corridor Management Entrance permit. These double entrance standard designs *do not constitute two separate entrances independent of each other*.

MTOD and OPSD drawings are current as of the publishing date of this manual, and are subject to change without notice. These drawing sets include select plan and profile drawings, but are not a comprehensive listing of all standard drawings for reference during design. It is the designer's responsibility to consult other standard drawings, as necessary, and ensure the most recent versions of the drawings (available via the Ministry's public website) are referenced during the design of an entrance.

## List of Drawings in this Appendix

<b>MTOD</b>	<b>Description</b>
305.000	General Notes
305.010	Service Station, 2 & 4 lane highway, near side location, raised island
305.020	Service Station, 2 & 4 lane highway, near side location, open ditch
305.030	Service Station, 2 & 4 lane highway, far side location, raised island
305.040	Service Station, 2 & 4 lane highway, far side location, open ditch
305.050	Service Station, 2 & 4 lane highway, between intersections, raised island
305.060	Service Station, 2 & 4 lane highway, between intersections, open ditch
305.070	Truck/Resource Access
305.090	Shopping Centre, 2 & 4 lane highway, Unsignalized
305.110	Right-in/Right-out entrance to Commercial Shopping Centre, 4 lane divided highway
305.120	Recreational Area
305.130	Utility Access
305.140	Small Business
305.150	Site Profile Standard
<b>OPSD</b>	<b>Description</b>
300.010	Side Road Intersection – Fill
300.020	Side Road Intersection – Cut
301.010	Rural Entrances to Roads on Fill
301.020	Rural Entrances to Roads in Earth Cut
301.030	Rural Entrance – Rock Cut
304.010	Shoulder Treatment – Sideroad Intersections
350.010	Urban, Industrial, Commercial, and Apartment Entrances
351.010	Urban Residential Entrance

## GENERAL NOTES:

- A A “commercial entrance” is a private access connection to a highway from a parcel of land zoned for commercial, industrial, institutional, or multi-residential land use.
- B A Traffic Impact Study (TIS) is typically required as part of the MTO permit application process for access connections to be constructed onto a provincial highway or onto a public road within MTO’s permit control area.
- C These standard drawings describe minimum requirements for commercial entrances. Deviating from these standards, if recommended by a Traffic Impact Study, require ministry review and approval.
- D Spacing for entrances and Access Connection Depths should be according to the MTO Highway Corridor Management Manual.
- E Visibility requirements for access connections shall be according to the MTO Highway Corridor Management Manual.
- F Unless otherwise stated, paving of entrances will be to highway limit, back of island, or end of radius, whichever is less.
- G For the purposes of commercial entrance standard drawings, TAC–GDG refers to the Transportation Association of Canada’s June 2017 Geometric Design Guide, as supplemented by the December 2017 MTO Design Supplement.
- H Unless otherwise stated, entrances are designed for the TAC–GDG WB–20 design vehicle.
- I For signalized intersection design, consult with MTO.
- J The Traffic Impact Study should include recommendations regarding existing and proposed pedestrian and cyclist facilities. Sidewalks and cycling facilities, where required, shall be constructed to MTO standards.
- K Refer to Figure 1 for commercial entrance locations.

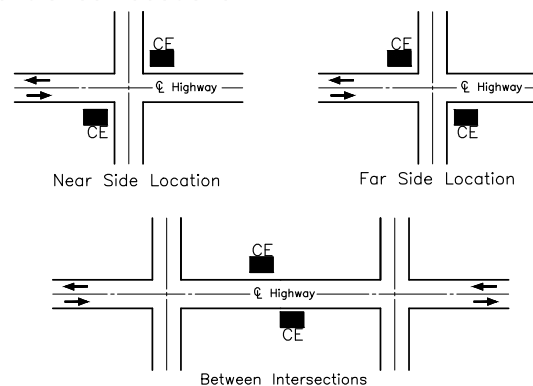
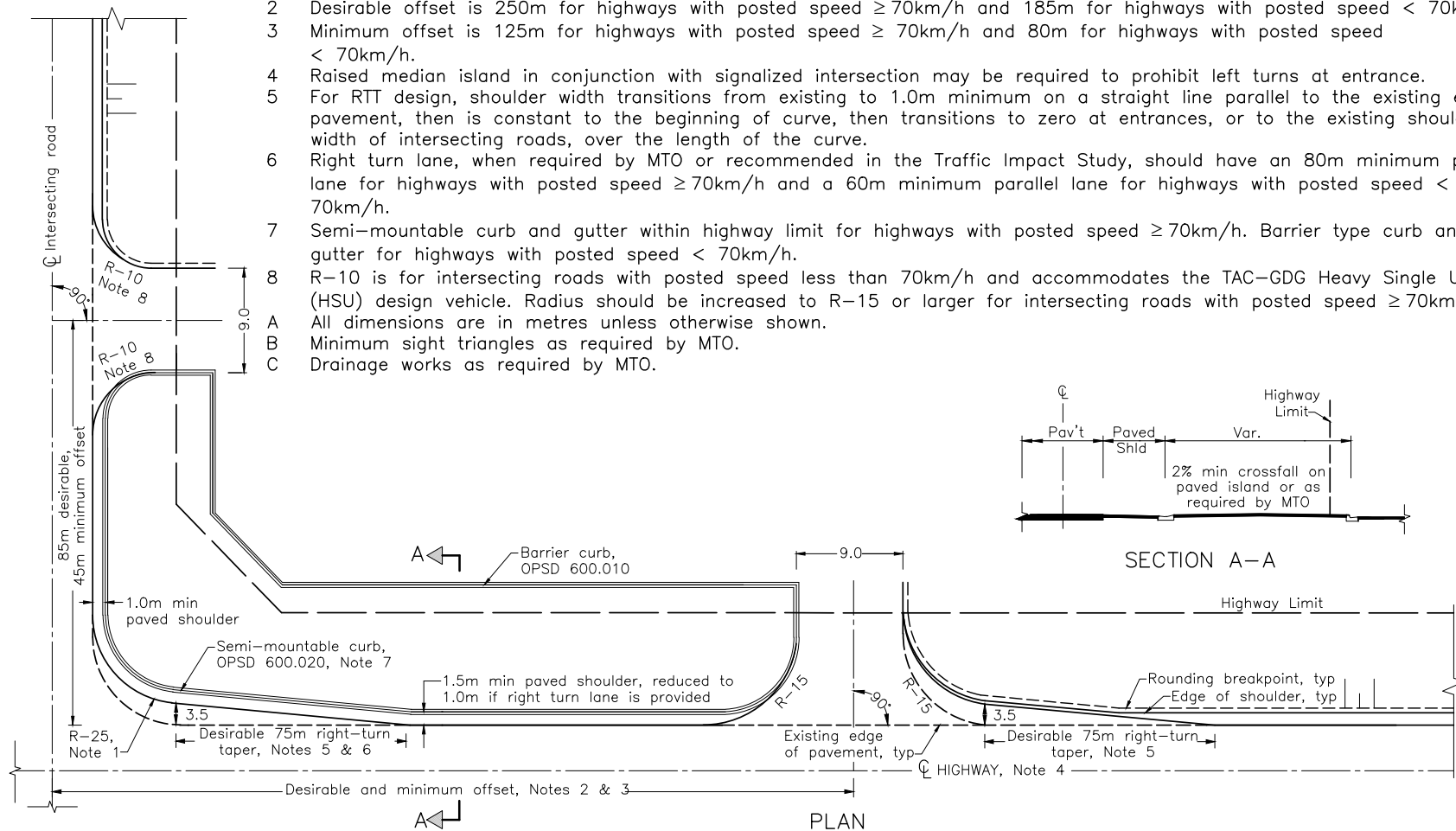


Figure 1: Commercial Entrance (CE)  
Locations

MINISTRY OF TRANSPORTATION ONTARIO DRAWING	August 2018	Rev	0
COMMERCIAL ENTRANCE GENERAL NOTES	-----		
	MTOD 305.000		

## NOTES:

- 1 Larger radius, including the use of an equivalent compound curve as described in the TAC-GDG, may be required for designs without a right-turn taper (RTT). Smaller radius may be appropriate for highways with posted speed < 70km/h.
- 2 Desirable offset is 250m for highways with posted speed  $\geq 70$ km/h and 185m for highways with posted speed < 70km/h.
- 3 Minimum offset is 125m for highways with posted speed  $\geq 70$ km/h and 80m for highways with posted speed < 70km/h.
- 4 Raised median island in conjunction with signalized intersection may be required to prohibit left turns at entrance.
- 5 For RTT design, shoulder width transitions from existing to 1.0m minimum on a straight line parallel to the existing edge of pavement, then is constant to the beginning of curve, then transitions to zero at entrances, or to the existing shoulder width of intersecting roads, over the length of the curve.
- 6 Right turn lane, when required by MTO or recommended in the Traffic Impact Study, should have an 80m minimum parallel lane for highways with posted speed  $\geq 70$ km/h and a 60m minimum parallel lane for highways with posted speed < 70km/h.
- 7 Semi-mountable curb and gutter within highway limit for highways with posted speed  $\geq 70$ km/h. Barrier type curb and gutter for highways with posted speed < 70km/h.
- 8 R-10 is for intersecting roads with posted speed less than 70km/h and accommodates the TAC-GDG Heavy Single Unit (HSU) design vehicle. Radius should be increased to R-15 or larger for intersecting roads with posted speed  $\geq 70$ km/h.
- A All dimensions are in metres unless otherwise shown.
- B Minimum sight triangles as required by MTO.
- C Drainage works as required by MTO.



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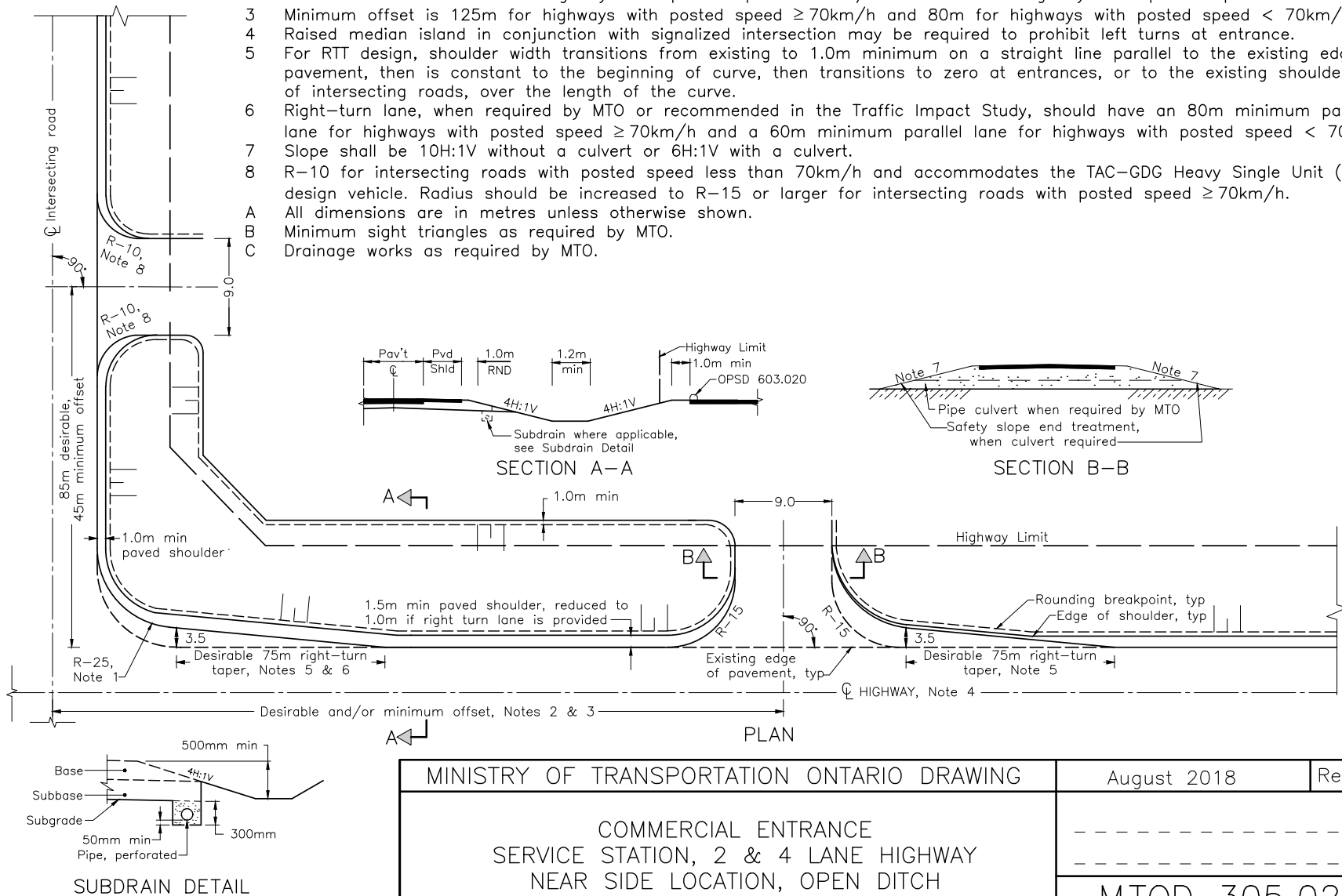
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COMMERCIAL ENTRANCE  
SERVICE STATION, 2 & 4 LANE HIGHWAY  
NEAR SIDE LOCATION, RAISED ISLAND

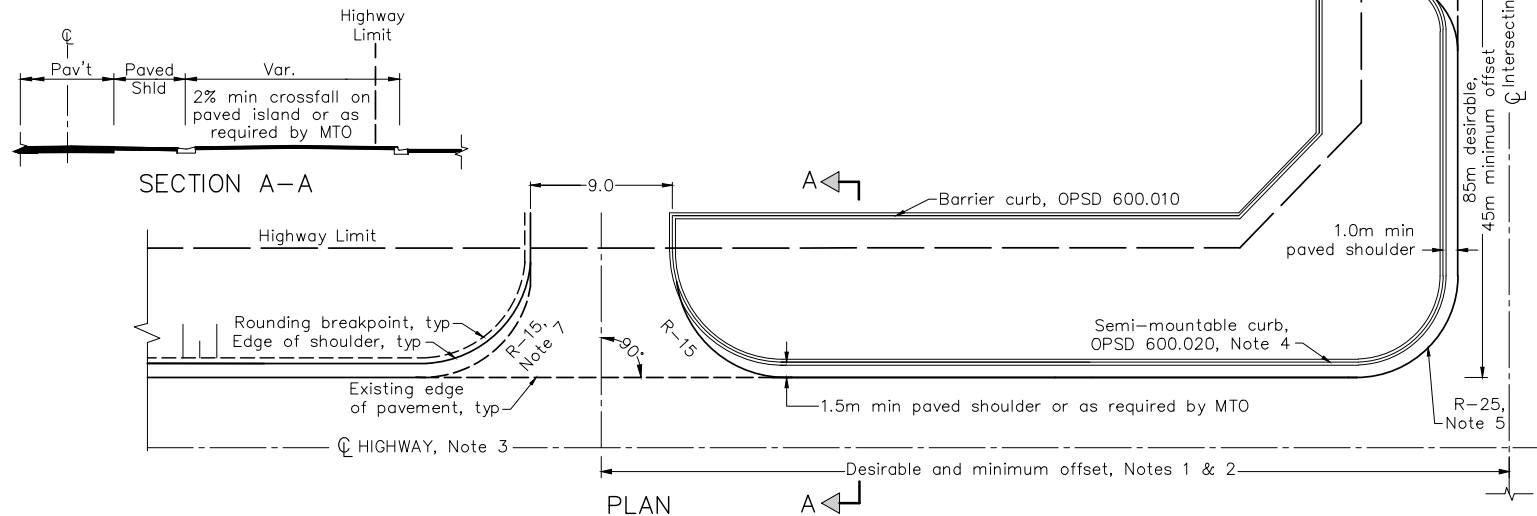
MTOD 305.010

## NOTES:

- 1 Larger radius, including the use of an equivalent compound curve as described in the TAC-GDG, may be required for designs without a right-turn taper (RTT). Smaller radius may be appropriate for highways with posted speed < 70km/h.
  - 2 Desirable offset is 250m for highways with posted speed  $\geq 70$ km/h and 185m for highways with posted speed < 70km/h.
  - 3 Minimum offset is 125m for highways with posted speed  $\geq 70$ km/h and 80m for highways with posted speed < 70km/h.
  - 4 Raised median island in conjunction with signalized intersection may be required to prohibit left turns at entrance.
  - 5 For RTT design, shoulder width transitions from existing to 1.0m minimum on a straight line parallel to the existing edge of pavement, then is constant to the beginning of curve, then transitions to zero at entrances, or to the existing shoulder width of intersecting roads, over the length of the curve.
  - 6 Right-turn lane, when required by MTO or recommended in the Traffic Impact Study, should have an 80m minimum parallel lane for highways with posted speed  $\geq 70$ km/h and a 60m minimum parallel lane for highways with posted speed < 70km/h.
  - 7 Slope shall be 10H:1V without a culvert or 6H:1V with a culvert.
  - 8 R-10 for intersecting roads with posted speed less than 70km/h and accommodates the TAC-GDG Heavy Single Unit (HSU) design vehicle. Radius should be increased to R-15 or larger for intersecting roads with posted speed  $\geq 70$ km/h.
- A All dimensions are in metres unless otherwise shown.  
 B Minimum sight triangles as required by MTO.  
 C Drainage works as required by MTO.



- 1 Desirable offset is 250m for highways with posted speed  $\geq 70\text{km/h}$  and 185m for highways with posted speed  $< 70\text{km/h}$ .
- 2 Minimum offset is 125m for highways with posted speed  $\geq 70\text{km/h}$  and 80m for highways with posted speed  $< 70\text{km/h}$ .
- 3 Raised median island in conjunction with signalized intersection may be required to prohibit left turns at entrance.
- 4 Semi-mountable curb and gutter within highway limit for highways with posted speed  $\geq 70\text{km/h}$ . Barrier type curb and gutter for highways with posted speed  $< 70\text{km/h}$ .
- 5 Larger radius, including the use of an equivalent compound curve as described in the TAC-GDG, may be required by MTO. Smaller radius may be appropriate for highways with posted speed  $< 70\text{km/h}$ .
- 6 R-10 is for entrances on intersecting roads with posted speed  $< 70\text{km/h}$  and accommodates the TAC-GDG Heavy Single Unit (HSU) design vehicle. Radius should be increased to R-15 or larger for intersecting roads with posted speed  $\geq 70\text{km/h}$ .
- 7 Shoulder width transitions from zero to existing over the length of the curve. Shoulder should be fully paved for 10m, then, if applicable, transition at a 5:1 rate.
- A All dimensions are in metres unless otherwise shown.
- B Minimum sight triangles as required by MTO.
- C Drainage works as required by MTO.

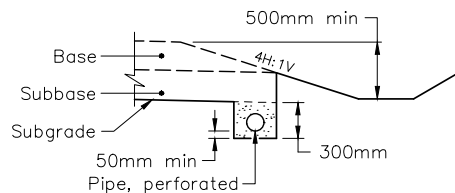
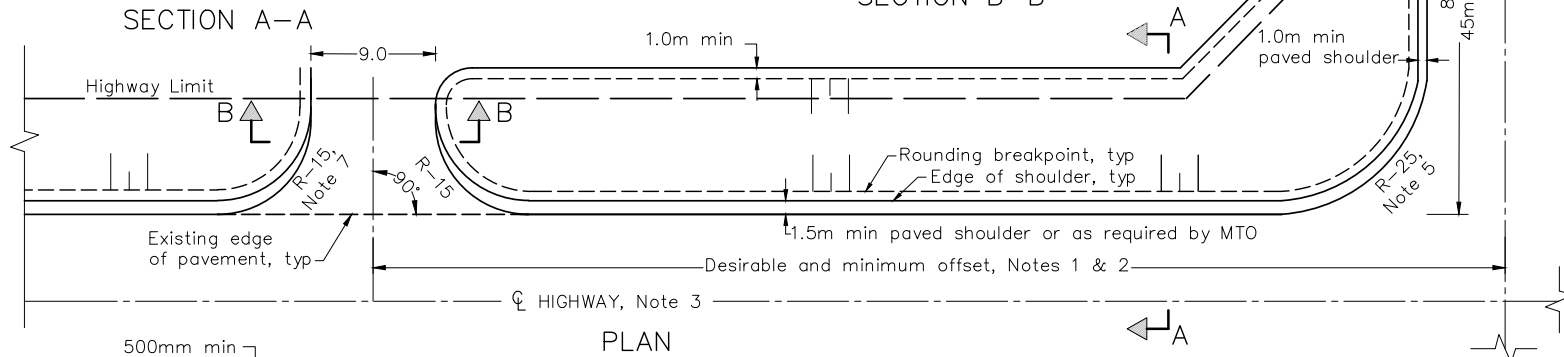
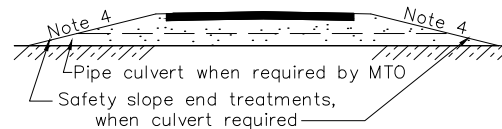
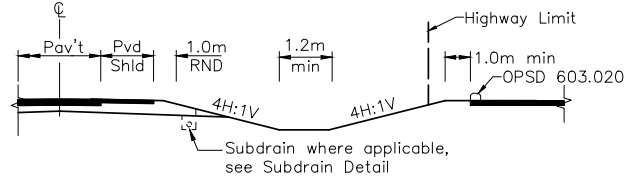


MINISTRY OF TRANSPORTATION ONTARIO DRAWING		August 2018	Rev	0
COMMERCIAL ENTRANCE SERVICE STATION, 2 & 4 LANE HIGHWAY FAR SIDE LOCATION, RAISED ISLAND		----- -----		
		MTOD 305.030		



## NOTES:

- 1 Desirable offset is 250m for highways with posted speed  $\geq 70\text{km/h}$  and 185m for highways with posted speed  $< 70\text{km/h}$ .
- 2 Minimum offset is 125m for highways with posted speed  $\geq 70\text{km/h}$  and 80m for highways with posted speed  $< 70\text{km/h}$ .
- 3 Raised median island in conjunction with signalized intersection may be required to prohibit left turns at entrance.
- 4 Slope shall be 10H:1V without a culvert or 6H:1V with a culvert.
- 5 Larger radius, including the use of an equivalent compound curve as described in the TAC-GDG, may be required by MTO. Smaller radius may be appropriate for highways with posted speed  $< 70\text{km/h}$ .
- 6 R-10 is for entrances on intersecting roads with posted speed  $< 70\text{km/h}$  and accommodates the TAC-GDG Heavy Single Unit (HSU) design vehicle. Radius should be increased to R-15 or larger for intersecting roads with posted speed  $\geq 70\text{km/h}$ .
- 7 Shoulder width transitions from zero to existing over the length of the curve. Shoulder should be fully paved for 10m, then, if applicable, taper at a 5:1 rate.
- A All dimensions are in metres unless otherwise shown.
- B Minimum sight triangles as required by MTO.
- C Drainage works as required by MTO.



MINISTRY OF TRANSPORTATION ONTARIO DRAWING

August 2018

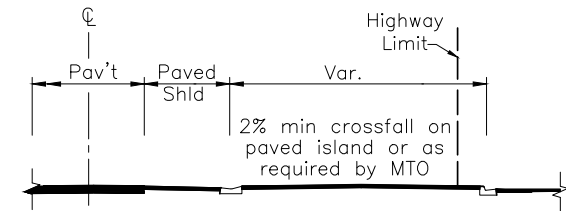
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COMMERCIAL ENTRANCE  
SERVICE STATION, 2 & 4 LANE HIGHWAY  
FAR SIDE LOCATION, OPEN DITCH

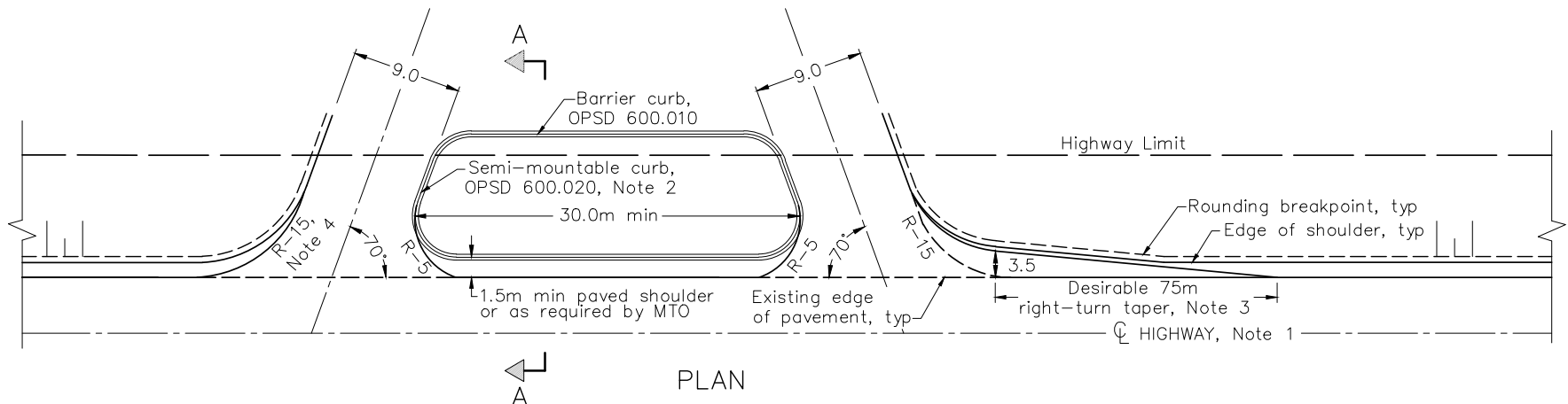
MTOD 305.040

## NOTES:

- 1 Raised median island may be required to prohibit left turns at entrance.
  - 2 Semi-mountable curb and gutter within highway limit for highways with posted speed  $\geq 70\text{km/h}$ . Barrier type curb and gutter for highways with posted speed  $< 70\text{km/h}$ .
  - 3 For RTT design, shoulder width transitions from existing to 1.0m minimum on a straight line parallel to the existing edge of pavement, then is constant to the beginning of the curve, then transitions to zero over the length of the curve.
  - 4 Shoulder width transitions from zero to existing over the length of the curve. Shoulder should be fully paved for 10m, then, if applicable, taper at a 5:1 rate.
- A All dimensions are in metres unless otherwise shown.  
 B Minimum sight triangles as required by MTO.  
 C Drainage works as required by MTO.



SECTION A-A



MINISTRY OF TRANSPORTATION ONTARIO DRAWING

August 2018

Rev 0

COMMERCIAL ENTRANCE  
 SERVICE STATION, 2 & 4 LANE HIGHWAY  
 BETWEEN INTERSECTIONS, RAISED ISLAND

MTOD 305.050

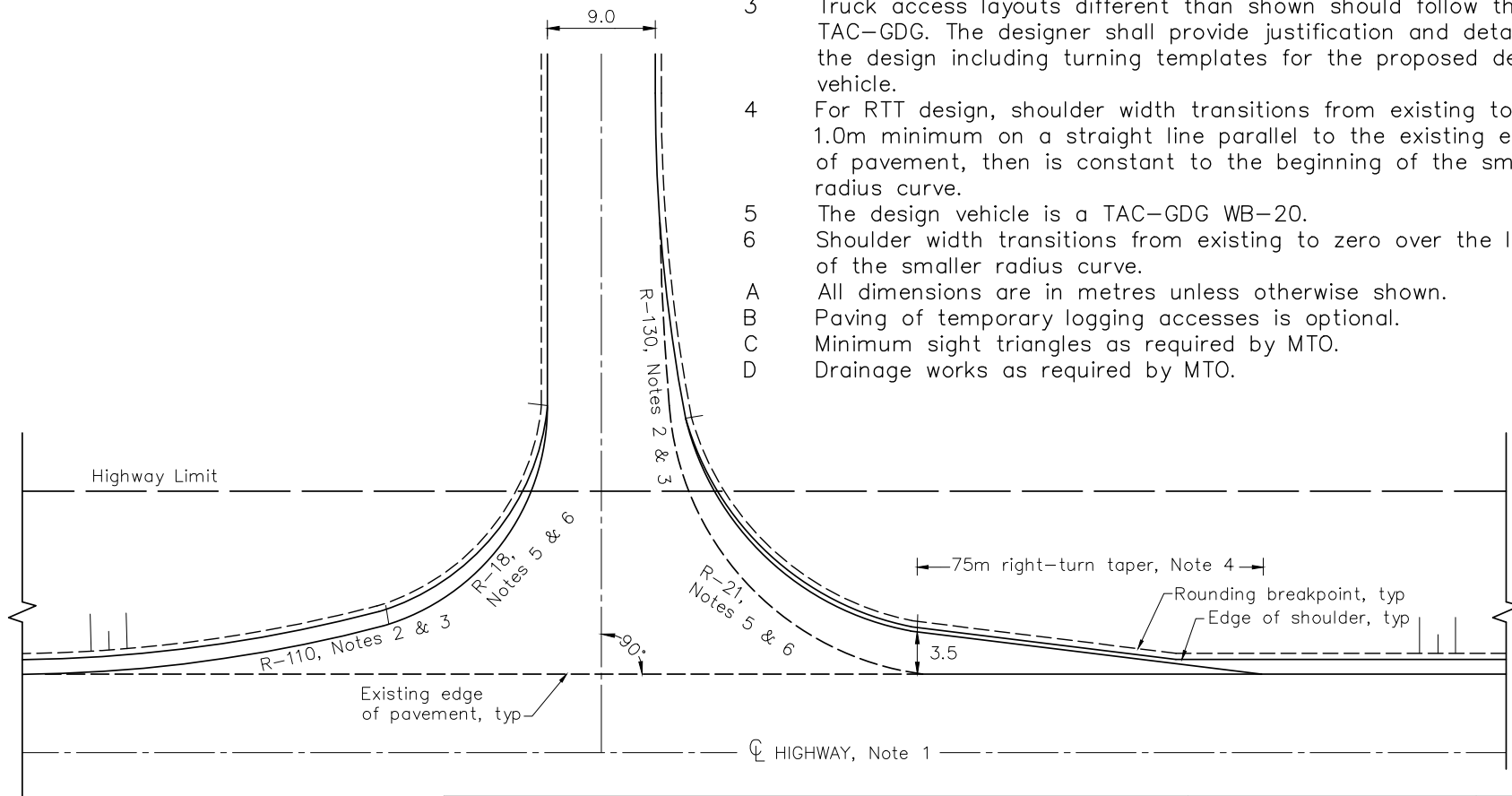
1 Slope shall be 10H:1V without a culvert, and 6H:1V with a culvert.  
2 Raised median island may be required to prohibit left turns at entrance.  
3 For RTT design, shoulder width transitions from existing to 1.0m minimum on a straight line parallel to the  
existing edge of pavement, then is constant to the beginning of the curve, then transitions to zero over the  
length of the curve.  
4 Shoulder width transitions from zero to existing over the length of the curve. Shoulder should be fully paved for  
10m, then, if applicable, taper at a 5:1 rate.  
A All dimensions are in metres unless otherwise shown.  
B Minimum sight triangles as required by MTO.  
C Drainage works as required by MTO.



MINISTRY OF TRANSPORTATION ONTARIO DRAWING		August 2018	Rev	0
COMMERCIAL ENTRANCE SERVICE STATION, 2 & 4 LANE HIGHWAY BETWEEN INTERSECTIONS, OPEN DITCH		----- -----		
		MTOD 305.060		

## NOTES:

- 1 Raised median island may be required to prohibit left turns at entrance.
- 2 The two compound curves shown are based on  $15^\circ/75^\circ$  complementary angles.
- 3 Truck access layouts different than shown should follow the TAC-GDG. The designer shall provide justification and details of the design including turning templates for the proposed design vehicle.
- 4 For RTT design, shoulder width transitions from existing to 1.0m minimum on a straight line parallel to the existing edge of pavement, then is constant to the beginning of the smaller radius curve.
- 5 The design vehicle is a TAC-GDG WB-20.
- 6 Shoulder width transitions from existing to zero over the length of the smaller radius curve.
- A All dimensions are in metres unless otherwise shown.
- B Paving of temporary logging accesses is optional.
- C Minimum sight triangles as required by MTO.
- D Drainage works as required by MTO.



MINISTRY OF TRANSPORTATION ONTARIO DRAWING

August 2018

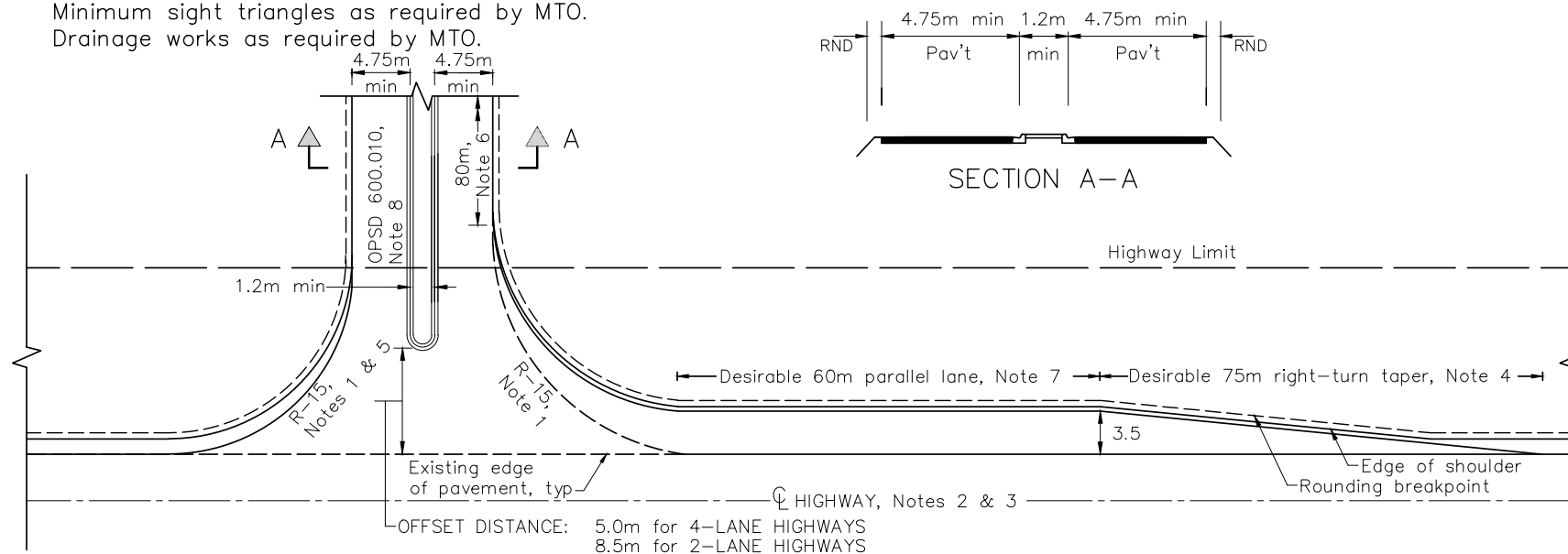
Rev 0

COMMERCIAL ENTRANCE  
TRUCK/RESOURCE ACCESS

MTOD 305.070

## NOTES:

- 1 The design vehicle is a TAC-GDG Heavy Single Unit (HSU).
- 2 Raised median island may be required to prohibit left turns on entrance. Where left turns are permitted, left-turn lane may be required.
- 3 This layout shows minimum requirements for highways with posted speed < 70km/h. For highways with posted speed  $\geq 70$ km/h, consult with MTO.
- 4 For RTT design, shoulder width transitions from existing to 1.0m minimum on a straight line parallel to the existing edge of pavement, then is constant to the beginning of curve, then transitions to zero over the length of the curve.
- 5 Shoulder width transitions from existing to zero over the length of the curve. Shoulder should be fully paved for 10m, then, if applicable, taper at a 5:1 rate.
- 6 25m for small shopping centre developments, or as recommended in the Traffic Impact Study.
- 7 85m minimum parallel lane length for highways with posted speed  $\geq 70$ km/h.
- 8 For concrete curb and gutter design, use semi-mountable type for highways with posted speed  $\geq 70$ km/h and barrier type for highways with posted speed < 70km/h.
- A All dimensions are in metres unless otherwise shown.
- B Minimum sight triangles as required by MTO.
- C Drainage works as required by MTO.



MINISTRY OF TRANSPORTATION ONTARIO DRAWING

August 2018

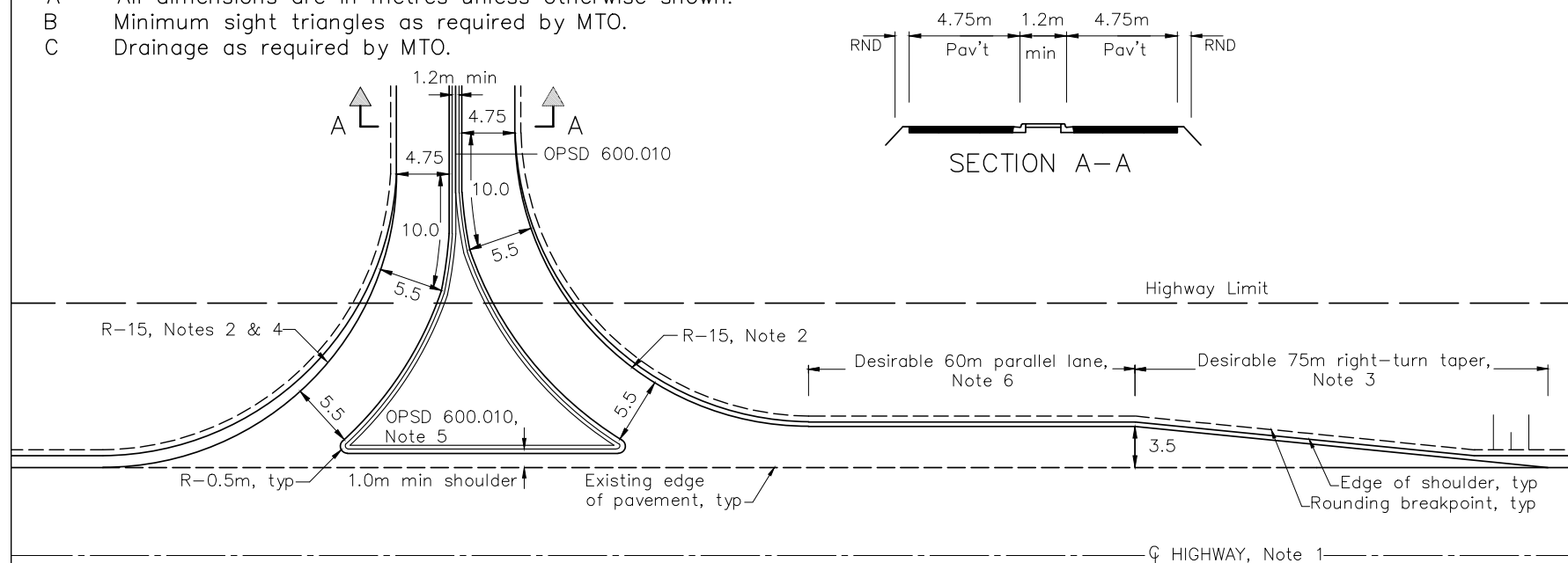
Rev 0

COMMERCIAL ENTRANCE  
SHOPPING CENTRE, 2 & 4 LANE HIGHWAYS  
UNSIGNALIZED

MTOD 305.090

## NOTES:

- 1 This layout shows minimum requirements for highways with posted speed < 70km/h. For highways with posted speed  $\geq$  70km/h, consult with MTO.
- 2 The design vehicle is a TAC-GDG Heavy Single Unit (HSU).
- 3 For RTT design, shoulder width transitions from existing to 1.0m minimum on a straight line parallel to the existing edge of pavement, then is constant to the beginning of curve, then transitions to zero over the length of the curve.
- 4 Shoulder width transitions from zero to existing over the length of the curve. Shoulder should be fully paved for 10m, then, if applicable, taper at a 5:1 rate.
- 5 For concrete curb and gutter design, semi-mountable for highways with posted speed  $\geq$  70km/h and barrier type for highways with posted speed < 70km/h.
- 6 85m minimum parallel lane length for highways with posted speed  $\geq$  70km/h.
- A All dimensions are in metres unless otherwise shown.
- B Minimum sight triangles as required by MTO.
- C Drainage as required by MTO.



MINISTRY OF TRANSPORTATION ONTARIO DRAWING

August 2018

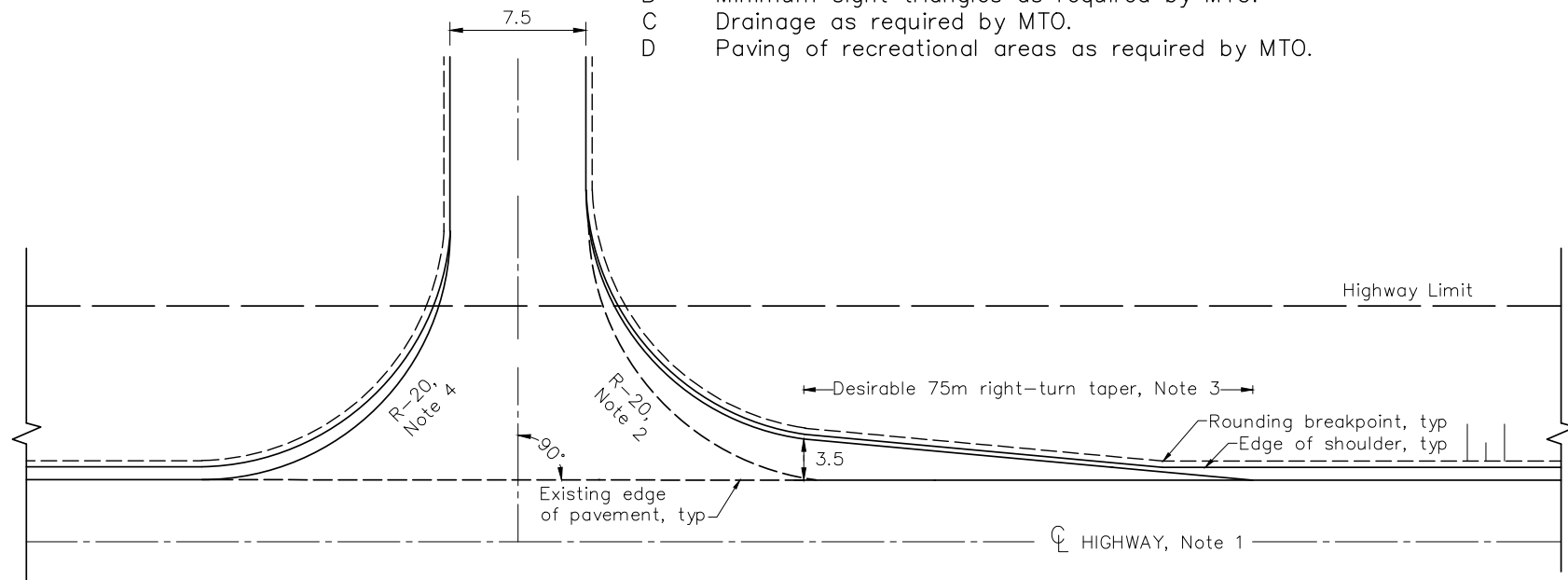
Rev 0

COMMERCIAL ENTRANCE  
 RIGHT-IN/RIGHT-OUT ENTRANCE TO COMMERCIAL  
 SHOPPING CENTRE, 4 LANE DIVIDED HIGHWAY

MTOD 305.110

## NOTES:

- 1 The design vehicle is a TAC-GDG Standard Single Unit (B-12).
  - 2 R-25 or equivalent compound curves without right-turn taper.
  - 3 For RTT design, shoulder width transitions from existing to 1.0m minimum on a straight line parallel to the existing edge of pavement, then is constant to the beginning of curve, then transitions to zero over the length of the curve.
  - 4 The paved portion of the highway shoulder should taper from existing to fully paved at a 5:1 rate, then be fully paved for 10m, and then it should continue to be fully paved as it transitions from the existing highway shoulder width to zero over the length of the entrance curve.
- A All dimensions are in metres unless otherwise shown.  
 B Minimum sight triangles as required by MTO.  
 C Drainage as required by MTO.  
 D Paving of recreational areas as required by MTO.



MINISTRY OF TRANSPORTATION ONTARIO DRAWING

August 2018

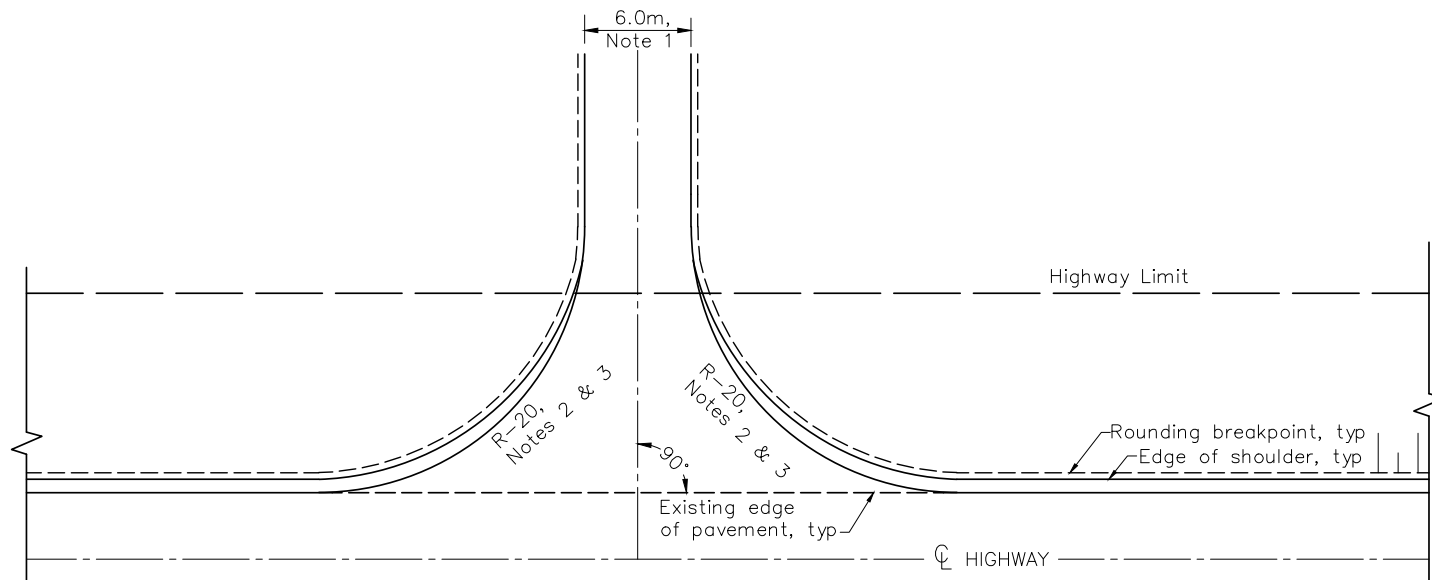
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COMMERCIAL ENTRANCE  
RECREATIONAL AREA

MTOD 305.120

## NOTES:

- 1 The design vehicle for the 6.0m throat is the TAC-GDG Heavy Single Unit (HSU).
- 2 R-20 for large utility stations. R-12 for small utility stations.
- 3 Shoulder width transitions from existing to zero over the length of the curve.
- A All dimensions are in metres unless otherwise shown.
- B Paving of utility access is optional.



MINISTRY OF TRANSPORTATION ONTARIO DRAWING

August 2018

Rev 0

COMMERCIAL ENTRANCE  
UTILITY ACCESS

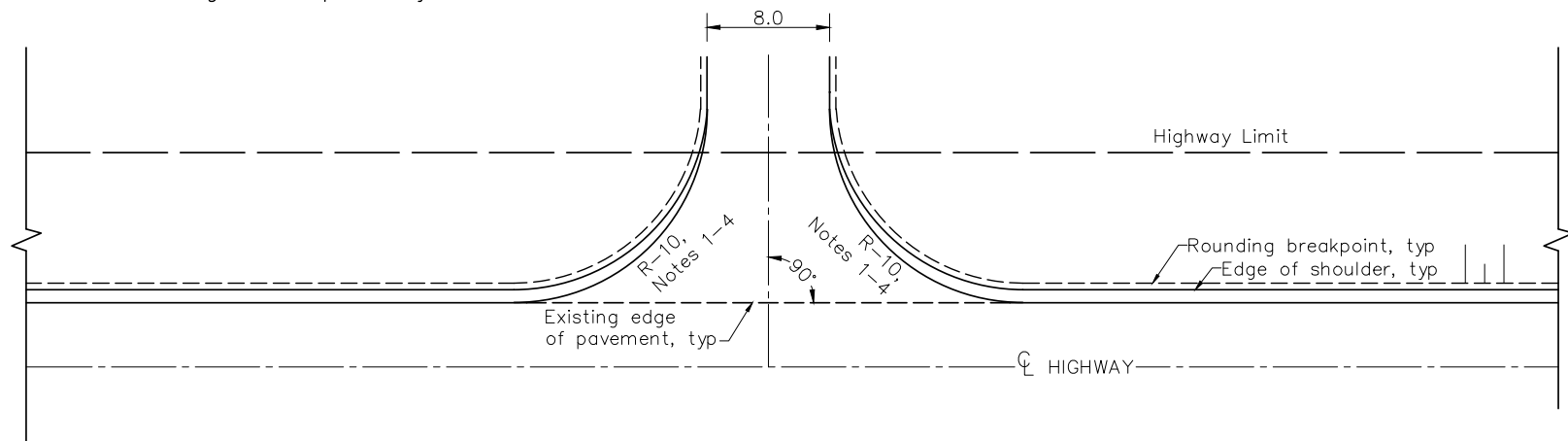
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MTOD 305.130



## NOTES:

- 1 The design vehicle is a TAC-GDG Heavy Single Unit (HSU).
- 2 R-15 for highways with posted speed  $\geq 70\text{km/h}$ .
- 3 The paved portion of the highway shoulder should taper from existing to fully paved at a 5:1 rate, then be fully paved for 10m, and then it should continue to be fully paved as it transitions from the existing highway shoulder width to zero over the length of the entrance curve.
- 4 For concrete curb and gutter design, use semi-mountable type for highways with posted speed  $\geq 70\text{km/h}$  and barrier type for highways with posted speed  $< 70\text{km/h}$ .
- A All dimensions are in metres unless otherwise shown.
- B Minimum sight triangles as required by MTO.
- C Drainage as required by MTO.



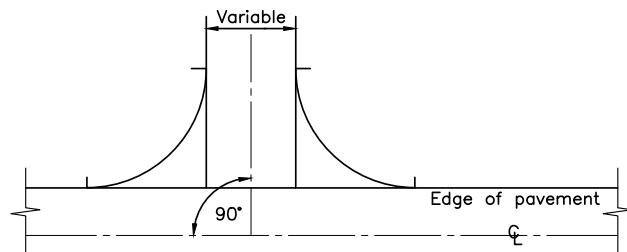
MINISTRY OF TRANSPORTATION ONTARIO DRAWING

August 2018

Rev 0

COMMERCIAL ENTRANCE  
ENTRANCE TO SMALL BUSINESS

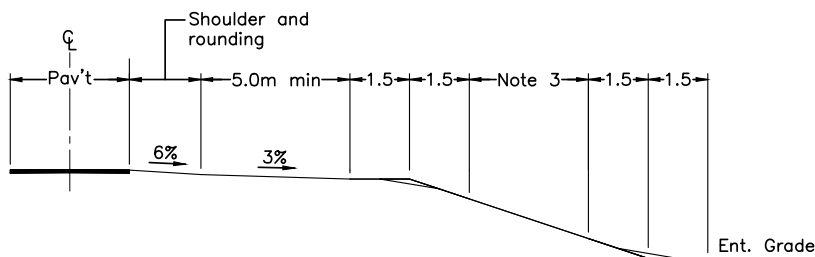
MTOD 305.140



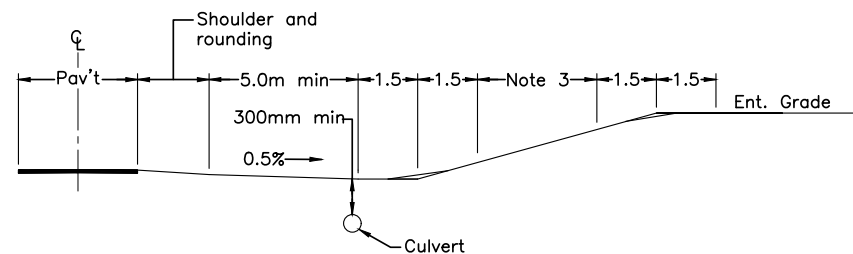
TYPICAL ENTRANCE

## NOTES:

- 1 For designs with islands, the control line is the curb line adjacent to the edge of pavement.
- 2 For designs without islands, the control line is the edge of shoulder.
- 3 Desirable gradient is 6% for commercial entrances. Maximum gradient is 10%.
- A All dimensions are in metres unless otherwise shown.



TYPICAL PROFILE IN FILL



TYPICAL PROFILE IN CUT

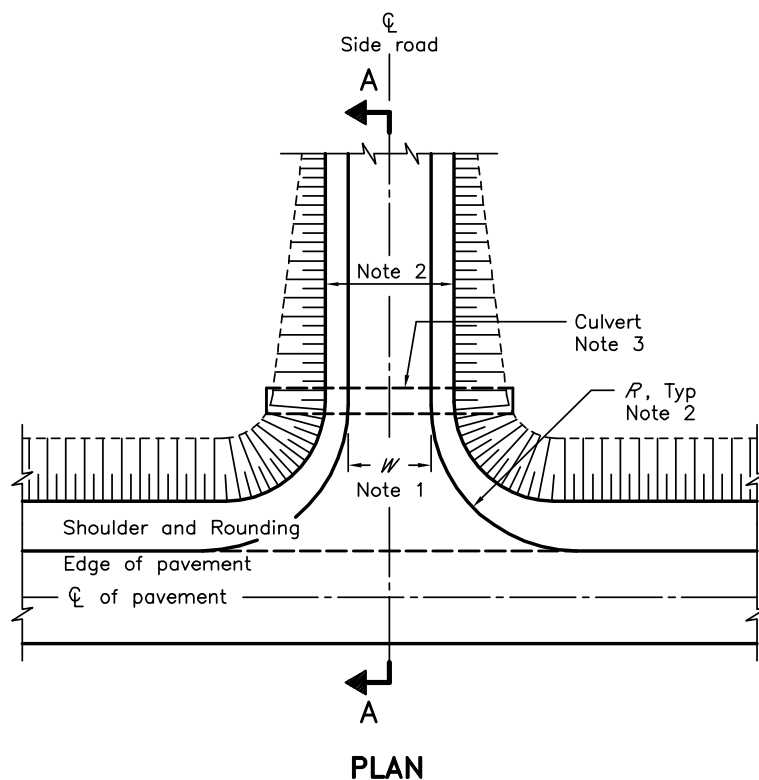
MINISTRY OF TRANSPORTATION ONTARIO DRAWING

August 2018

Rev 0

COMMERCIAL ENTRANCE  
SITE PROFILE STANDARD

MTOD 305.150

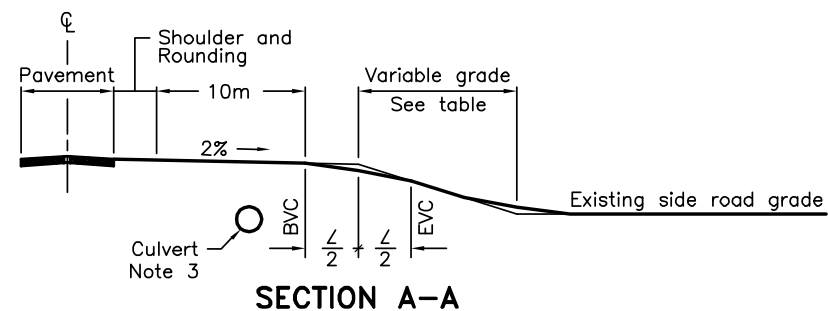


## NOTES:

- 1 When curb and gutter is specified,  $W$  shall be 8.5m minimum.  
Taper to existing pavement width at 1:25 along each pavement edge.
  - 2 Side road radii and pavement and shoulder widths shall be as specified.
  - 3 Culvert type, dimensions, and location shall be as specified.
- A All dimensions are in millimetres unless otherwise shown.

## LEGEND:

- $L$  - Length of vertical curve  
 $R$  - Side road radius  
 $W$  - Pavement width



GRADE TABLE	
Downgrade %	$L$ m
3	4
4	8
5	12
6	16
7	20
8	24
9	28
Max 10	32

ONTARIO PROVINCIAL STANDARD DRAWING

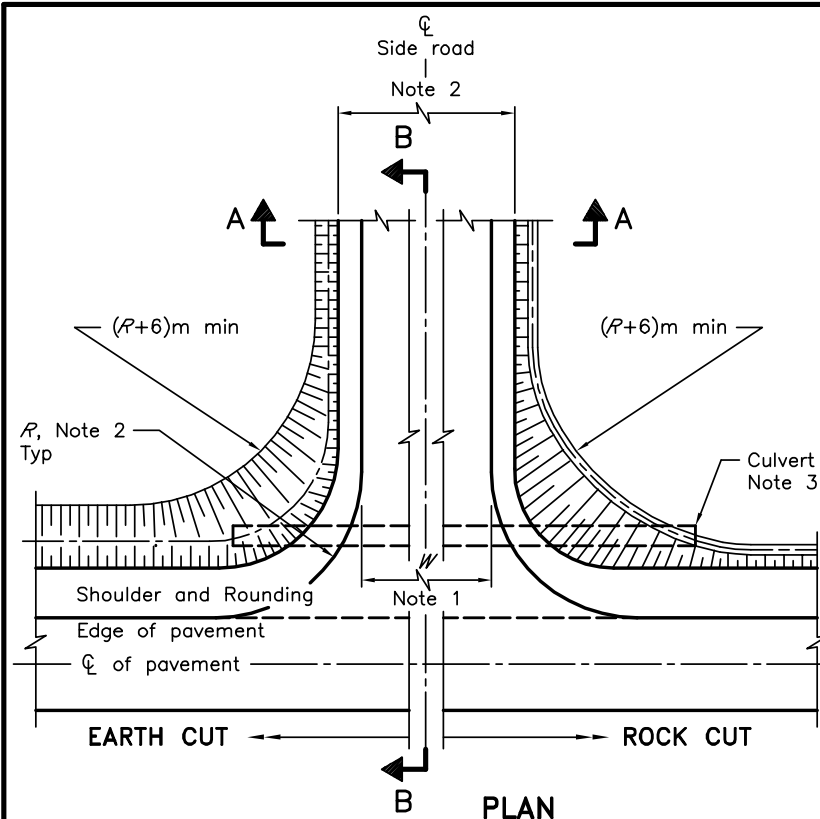
Nov 2011 Rev 2

SIDE ROAD INTERSECTION

FILL

OPSD 300.010

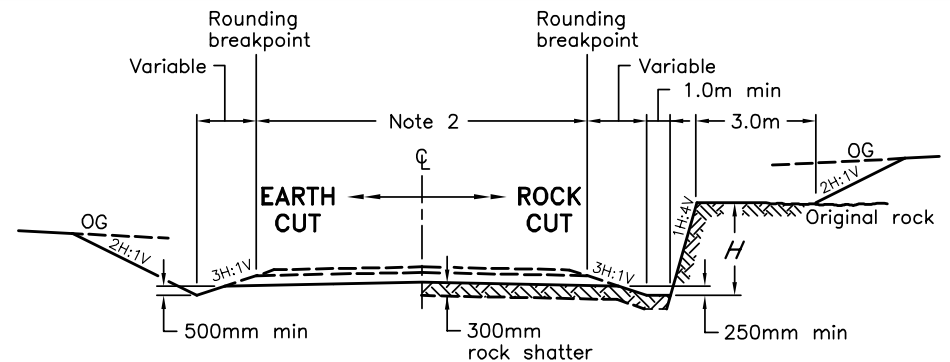
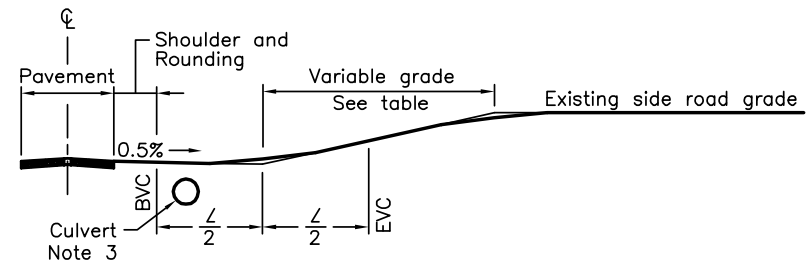


**NOTES:**

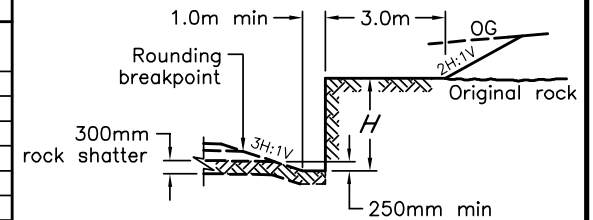
- 1 When curb and gutter is specified,  $W$  shall be 8.5m minimum. Taper to existing pavement width at 1:25 along each pavement edge.
  - 2 Side road radii and pavement and shoulder widths shall be as specified.
  - 3 Culvert type, dimensions, and location shall be as specified.
- A All dimensions are in millimetres unless otherwise shown.

**LEGEND:**

- $H$  — Height of rock face  
 $L$  — Length of vertical curve  
 $R$  — Side road radius  
 $W$  — Pavement width

**SECTION A-A****SECTION B-B**

GRADE TABLE	
Upgrade %	L m
1	6
2	10
3	14
4	18
5	22
6	26
7	30
8	34
9	38
Max 10	42

**ALTERNATIVE ROCK CUT DETAIL  
when specified**

ONTARIO PROVINCIAL STANDARD DRAWING

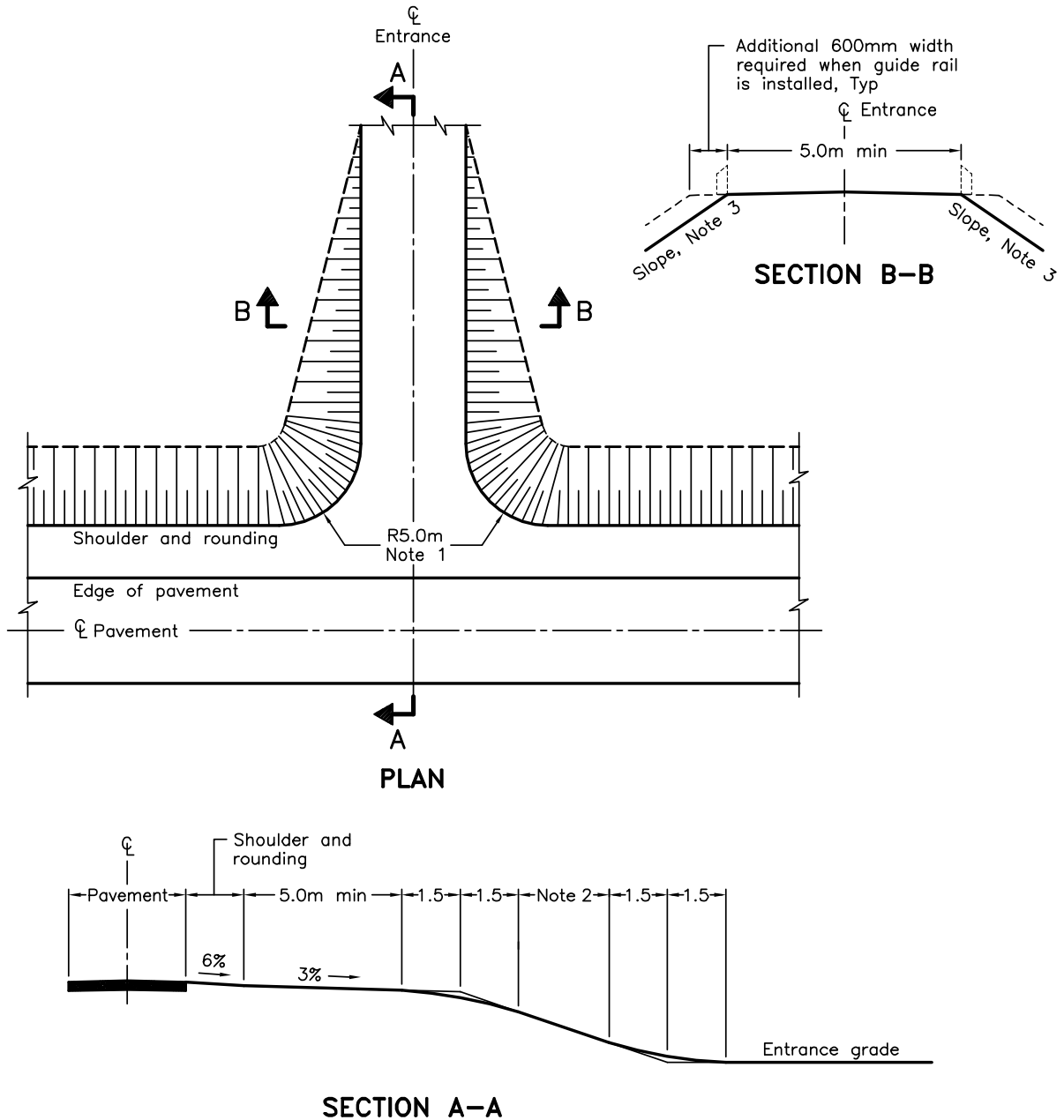
**SIDE ROAD INTERSECTION**

CUT

Nov 2011

Rev 2

**OPSD 300.020**



#### NOTES:

- 1 Radius shall be 8.0m when entrance is used for farm equipment.
  - 2 Maximum gradient: 6% for residential entrances and 10% for farm and field entrances.
  - 3 Slope shall be 3H:1V or flatter when specified.
- A All dimensions are in metres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

Nov 2010

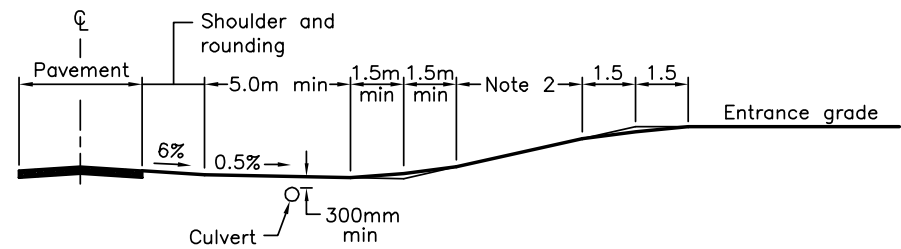
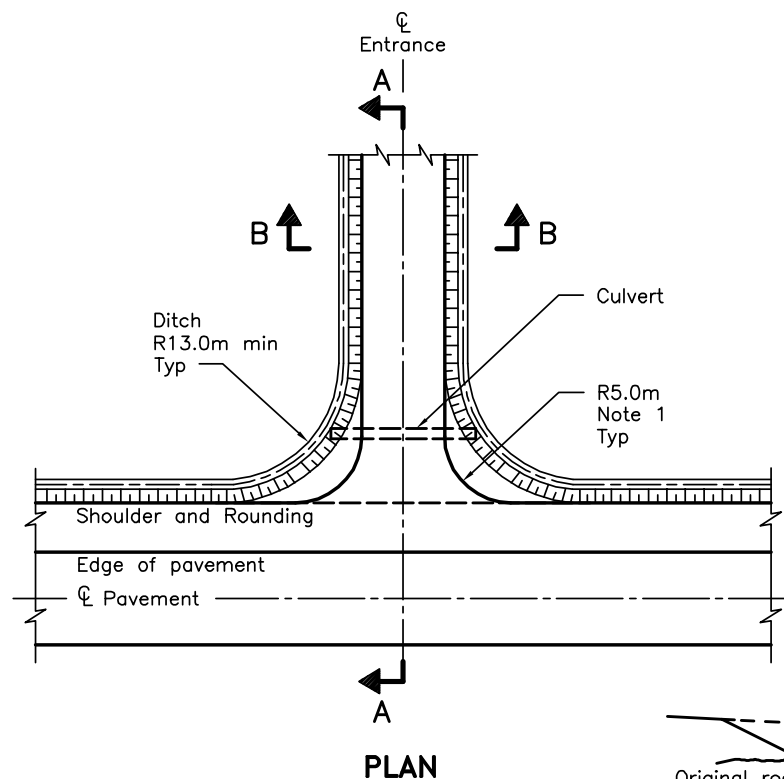
Rev 2

## RURAL ENTRANCES TO ROADS ON FILL

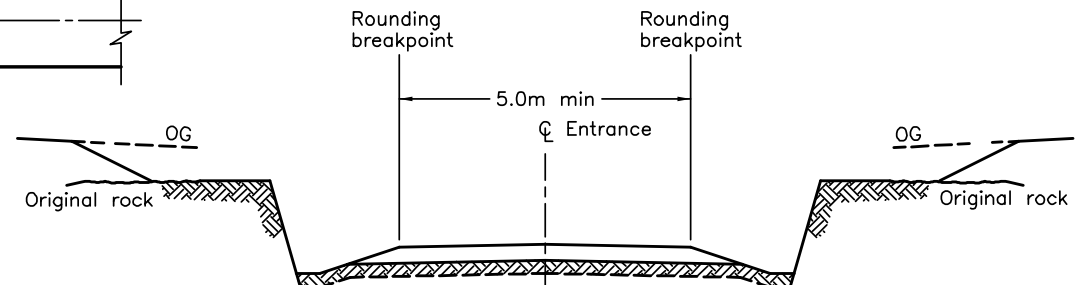


OPSD 301.010





SECTION A-A



SECTION B-B

Note 3

## NOTES:

- 1 Radius shall be 8.0m when entrance is used for farm equipment.
- 2 Maximum gradient: 6% for residential entrances, and 10% for farm and field entrances.
- 3 For rock grading details see OPSD 201.010.

A All dimensions are in metres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

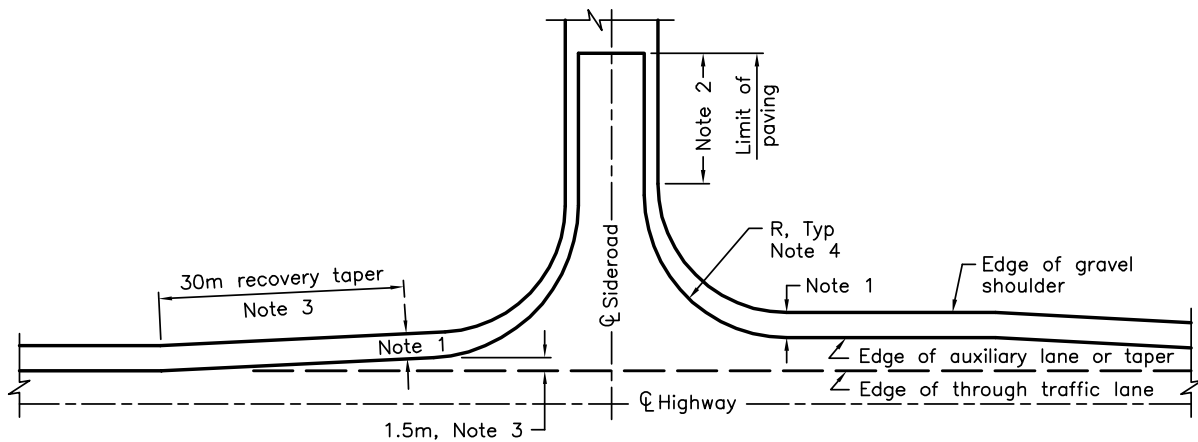
# RURAL ENTRANCE ROCK CUT

Nov 2010

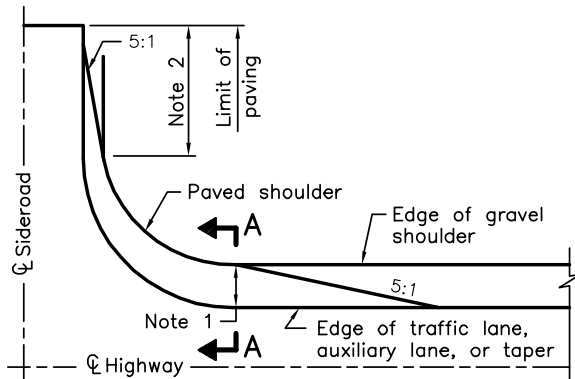
Rev 2



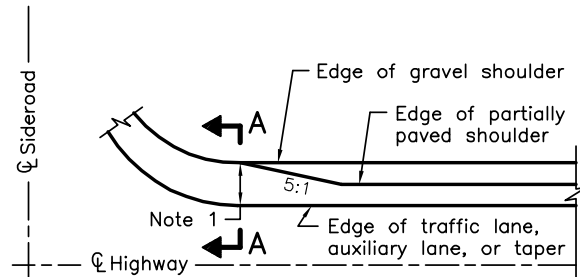
OPSD 301.030



**PLAN A, AUXILIARY LANE OR TAPER – GRAVEL SHOULDER**

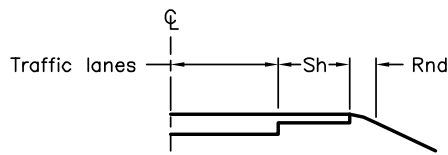


**PAVED SHOULDER RADIUS WITH  
GRAVEL SHOULDER ON HIGHWAY**



**PAVED SHOULDER RADIUS WITH PARTIALLY  
PAVED SHOULDER ON HIGHWAY**

**PLAN B, PAVED SHOULDER OR PARTIALLY PAVED SHOULDER**

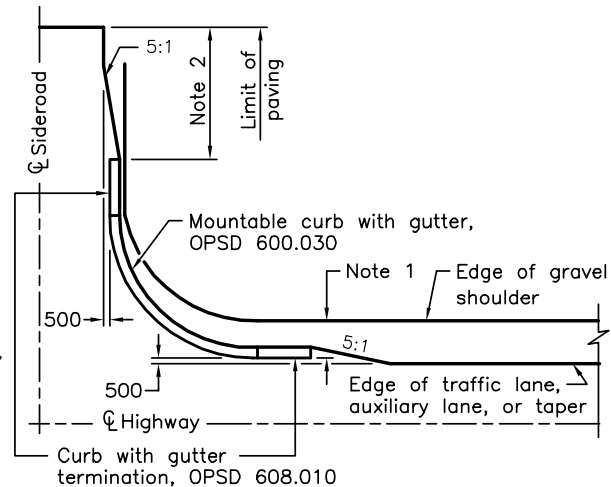


**SECTION A-A**

**NOTES:**

- 1 Highway shoulder width tapers to sideroad shoulder width over length of radius.
- 2 For gravel sideroad, distance shall be 15.0m.
- 3 Recovery taper is required when traffic lanes include auxiliary lane or taper.
- 4 Sideroad radii as specified.

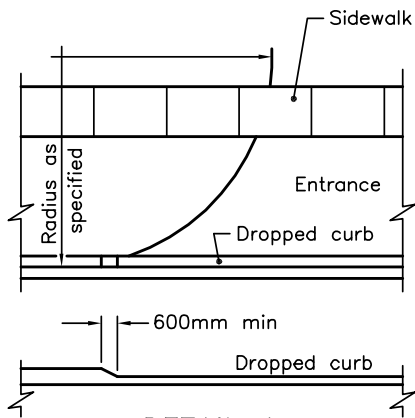
A All dimensions are in millimetres unless otherwise shown.



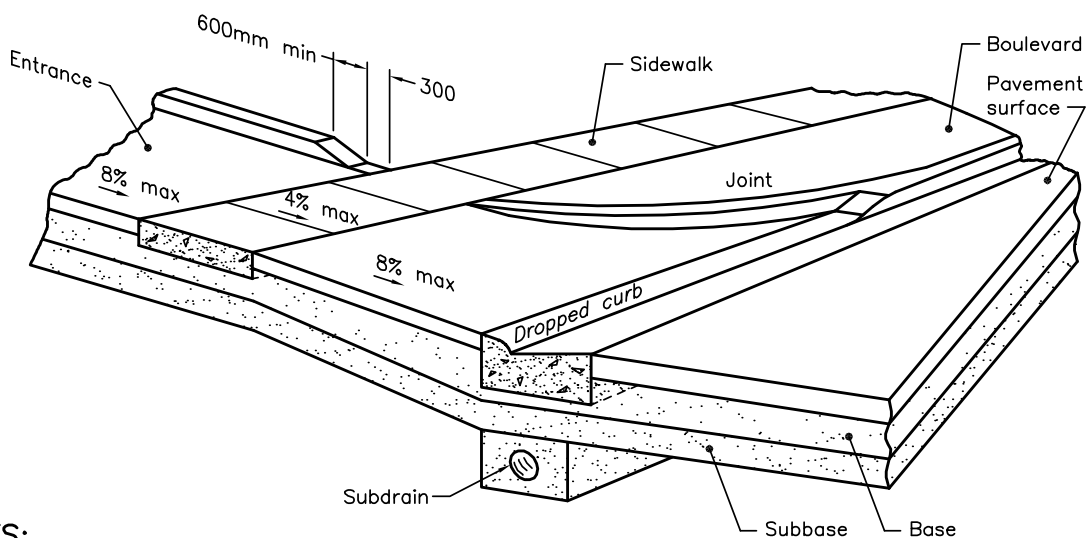
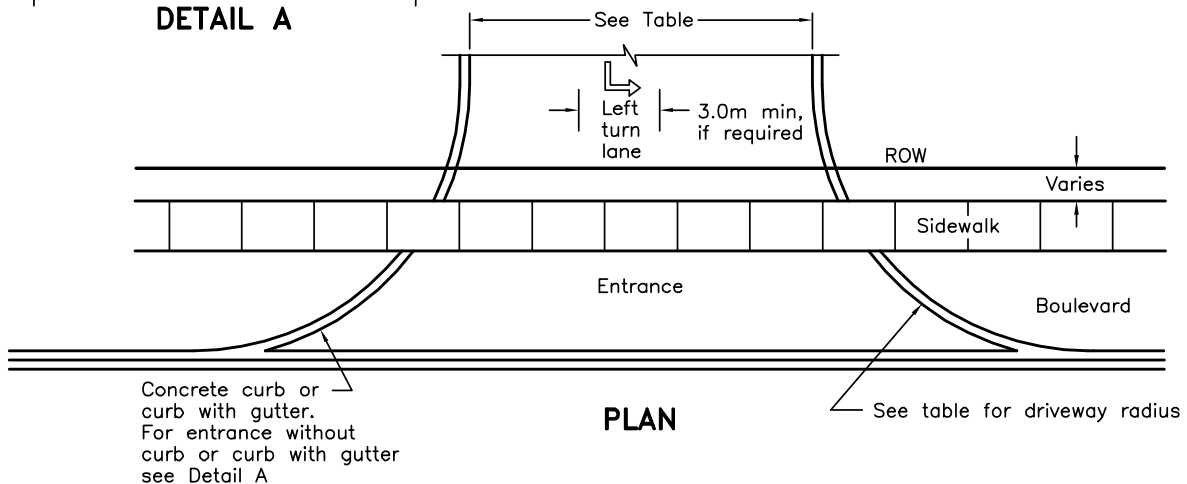
**PLAN C, CURB AND GUTTER**

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2009	Rev	1	
SHOULDER TREATMENT SIDEROAD INTERSECTIONS				
	OPSD 304.010			





DRIVEWAY DIMENSIONS						
LAND USE	WIDTH m				RADIUS m	
	One-Way		Two-Way		min	max
	min	max	min	max		
Light Industrial, Commercial, and Apartment	4.5	7.5	7.2	12.0	4.5	12.0
Heavy Industrial	5.0	9.0	9.0	15.0	9.0	15.0



#### NOTES:

A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

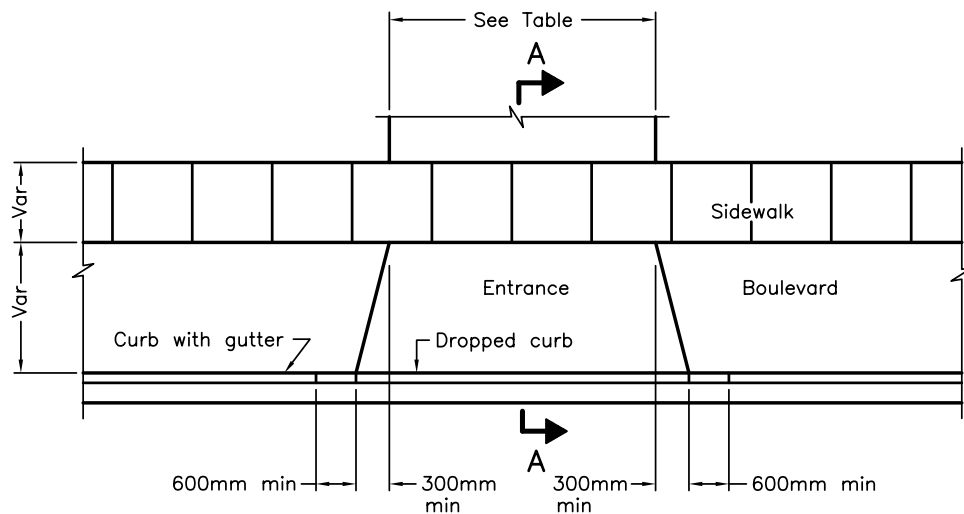
**URBAN  
INDUSTRIAL, COMMERCIAL, AND  
APARTMENT ENTRANCES**

Nov 2009

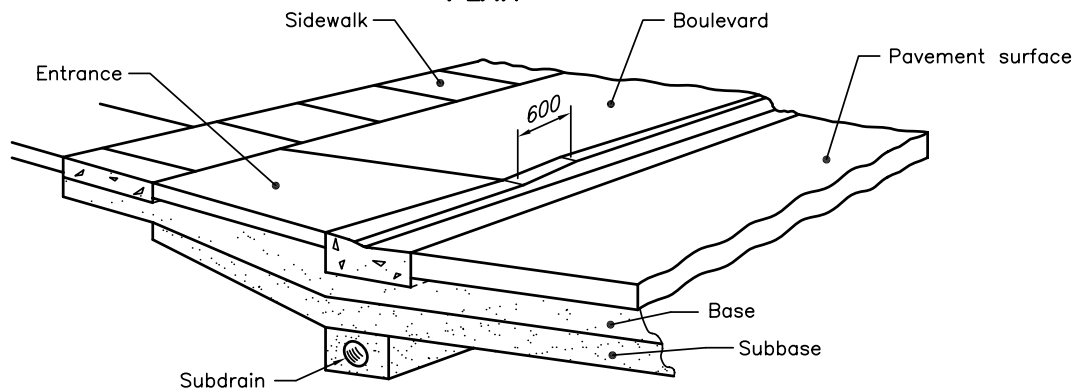
Rev 1



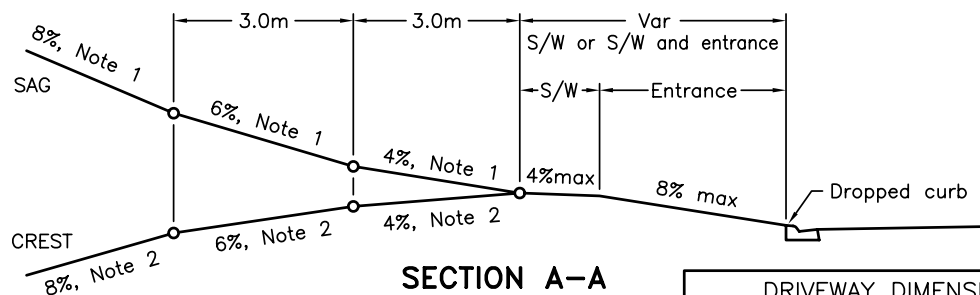
**OPSD 350.010**



PLAN



ISOMETRIC VIEW



SECTION A-A

NOTES:

- 1 Maximum upgrade shall be 10%.
- 2 Maximum downgrade shall be 8%.

A All dimensions are in millimetres unless otherwise shown.

DRIVEWAY DIMENSIONS				
LAND USE	WIDTH m			
	Single		Double	
	min	max	min	max
Residential	3.0	4.3	6.0	7.3

ONTARIO PROVINCIAL STANDARD DRAWING

Nov 2009

Rev 1

URBAN RESIDENTIAL  
ENTRANCE



OPSD 351.010

## Appendix 4C - Access Roads at Freeway Ramp Terminals

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### 1.0 Introduction

The purpose of this Appendix is to provide design parameters and an approval process for a proposed Access Road at a freeway ramp terminal. It applies to both new and existing interchanges. Approval of the Ministry of Transportation (MTO) shall be obtained before an Access Road can be implemented.

MTO may consider an access road opposite a freeway ramp terminal in high volume urbanized areas, in order to deal with traffic operational problems at an interchange. This solution would only be considered as a last resort after all other alternatives have been exhausted. MTO shall not consider an access road opposite a freeway ramp terminal in order to allow Proponents to develop greenspace land in rural areas.

This Appendix is not to be used as a tool to gain approval for an Access Road opposite a ramp terminal at an interchange that provides the only means of access connection for the development. The Ministry shall not consider Access Roads at interchanges for development purposes, unless Primary and Secondary Access connections are located elsewhere on the Crossing Road and/or municipal roads. Offset requirements for the Primary and Secondary Access connections are provided elsewhere in this manual.

This Appendix is based upon the following objectives, in order of priority:

- safety
- capacity
- desirable and efficient traffic operations
- corridor management
- provision for long-range planning and growth (i.e. future expansion of the freeway system).

Potential challenges of an Access Road that shall be considered by a Proponent include:

- increased traffic volumes
- reduced intersection capacity
- reconfiguration of the freeway on-ramp and speed change lane/taper
- weaving on the Crossing Road at the freeway entrance ramp
- more complex traffic signal phasing
- general traffic operation problems.

As such, introducing an Access Road could adversely impact capacity and traffic operations at the freeway interchange. The implementation of the Access Road, if approved, shall require a design which addresses the objectives and challenges discussed earlier to maintain a high level of service at a freeway ramp terminal intersection, without adversely impacting the overall safety and operational integrity of the interchange or the freeway.

This Appendix supplements well-established general freeway interchange and access design standards including those available elsewhere in this manual, the TAC GDG, MTO's Design Supplement to the TAC GDG, MTO Drawings (MTODs), and the *Ontario Traffic Manual* (OTM). In particular, existing design standards to be followed include alignment and intersection / interchange configuration standards outlined elsewhere in this manual and in the TAC GDG / MTO Design Supplement to TAC GDG. Visibility requirements, including sight distance requirements in this manual and the TAC GDG / MTO Design Supplement to TAC GDG shall also be met for development of any Access Road at a freeway ramp terminal location.

Access Roads at freeway ramp terminals have been provided on a limited case-by-case basis in Ontario. By researching literature and surveying other provinces and states in North America during the development of this Appendix, it was found that other jurisdictions rarely allow an Access Road at a freeway ramp terminal. No formal guidelines or policies were found.

The majority of interchanges in Ontario are Parclo type interchanges. In a Parclo interchange where ramps do not exist in all quadrants, an Access Road at a freeway ramp terminal can be considered provided it can be physically accommodated without compromising future expansion needs. In Ontario the Parclo A-4 interchange configuration is desirable. An Access Road at a Parclo A-4 interchange can be considered provided it can be physically accommodated by a grade separation constructed over the freeway entrance ramp. In some situations, the Ministry may consider the reconfiguration of a Parclo A-4 interchange such that the freeway entrance ramp is relocated downstream of the Access Road intersection in lieu of a grade separation.

In high volume urbanized areas, freeway exit ramps typically end at a signalized intersecting Crossing Road, which is typically a T (or three-legged) intersection. Freeway exit ramps have no access along the length of the ramp between the freeway and the signalized Crossing Road. An Access Road at a freeway ramp terminal is considered to be the provision of the fourth leg at the traffic signals across from a freeway entrance or exit ramp, thereby providing a high level of traffic service to and from the freeway for a development.

The provision of an Access Road at a freeway ramp terminal essentially converts a T-intersection into a cross or four-way intersection. This offers operational challenges that are not typical of intersections between two municipal roads. A key operational safety issue of an Access Road at freeway ramp terminals is the relatively high differential in operating speeds between the freeway and the Access Road itself.

Therefore, the consideration of an Access Road at a freeway ramp terminal intersection shall accommodate the interaction between the relatively higher speeds of the freeway ramp traffic and the typically slower speeds of the local site traffic using the Access Road.

Section 5.0 of this Appendix provides the process and requirements for a Proponent's submission for an Access Road at a freeway ramp terminal. The approval process for an Access Road requires analysis of safety, capacity and operational issues. The key component of the approval process is the submission of a Feasibility Study Report (FSR) by a professional engineer for Ministry approval. The FSR shall establish a business case for the Access Road; otherwise the Access Road shall not be considered.

## **2.0 General Description of Freeway Ramp Terminal Configurations and Potential Access Road Locations**

The consideration of a proposed Access Road at a freeway ramp terminal depends primarily on the existing configuration of the freeway interchange and future expansion needs. The following are interchange configurations that may accommodate a proposed Access Road:

- Parclo A-2 interchange (Figure 1)
- Parclo A-4 interchange (Figures 2A and 2B)
- Parclo B-2 interchange (Figure 3)
- Parclo B-4 interchange (Figure 4)
- Buttonhook interchange (Figures 5 and 6).

### **2.1 Parclo A Type Interchanges**

Parclo A type interchanges use loop ramps to provide access for traffic travelling from the Crossing Road to the freeway. There are essentially two configurations of the Parclo A type interchange; Parclo A-2 and Parclo A-4, as shown in Figures 1, 2A and 2B.

The major difference between the Parclo A-2 and A-4 configurations when considering an Access Road is the positioning of the entrance ramps to the freeway. For a Parclo A-2, the Access Road would be directly opposite the exit and entrance ramps. For a Parclo A-4, the Access Road would only be opposite the exit ramp and would require either a grade separation over or under the entrance ramp to the freeway, or reconfiguration of the freeway on-ramp and speed change lane / taper.

### **2.2 Parclo B Type Interchanges**

Parclo B type interchanges use loop ramps to provide access for traffic travelling from the freeway to the Crossing Road. There are essentially two configurations of the

Parclo B type interchange designs, Parclo B-2 and Parclo B-4, as shown in Figures 3 and 4.

The major difference between the Parclo B-2 and B-4 configurations when considering an Access Road is the positioning of the entrance ramps to the freeway. For a Parclo B-2, the Access Road would be directly opposite the exit and entrance ramps. For a Parclo B-4, the Access Road would only be opposite the entrance ramp and would require a grade separation over or under the exit ramp from the freeway.

## **2.3 Buttonhook Interchanges**

Buttonhook interchanges do not connect directly to the Crossing Road, but to a Connecting Road that typically runs parallel to the freeway. Figure 5 illustrates Buttonhook interchange ramps on the near side of the Crossing Road. Figure 6 illustrates Buttonhook interchange ramps on the far side of the Crossing Road.

For a Buttonhook Interchange, the Access Road would be located on the Connecting Road directly opposite the exit and entrance ramps.

For the purposes of this Appendix, the intersection of the Crossing Road and Connecting Road shall be considered the same as the intersection of a freeway ramp terminal and Crossing Road.

## **3.0 Common Safety, Design and Operational Considerations for Access Roads at Freeway Ramp Terminals – All Interchange Configurations**

It shall be understood that under no circumstances shall the service levels for traffic on the Access Road take precedence over the service levels on the freeway exit ramp or on the Crossing Road.

As a minimum, a Proponent's FSR shall review and address the following safety, design and operational concerns for an Access Road at an interchange, for consideration by the Ministry.

### **3.1 Exit and/or Entrance Ramp Design**

Consideration of an Access Road requires the review and possible adjustment of the length, alignment, cross-fall and lane configuration of the exit and/or entrance ramps and their respective speed change lanes on the freeway and Crossing Road (or Connecting Road for Buttonhook interchanges) to ensure they meet all geometric design requirements for the appropriate design speeds. This review shall include a minimum 5-year summary of collisions of the exit and/or entrance ramps to help identify potential operational concerns that shall need to be addressed as part of the consideration for an Access Road.

## **3.2 Crossfall Correction at Freeway Ramp Terminal Intersection**

Consideration of an Access Road requires the review and possible adjustment of the profiles, crossfalls, and drainage of the Crossing Road (or Connecting Road for Buttonhook interchanges) and exit and/or entrance ramps, to safely accommodate the through movements and turning movements at the ramp terminal intersection.

## **3.3 Inbound Through Movement and First Internal Intersection along the Access Road**

An inbound through movement from the ramp terminal intersection into an Access Road may be considered for the following interchange configurations: Parclo A-2, Parclo A-4, Parclo B-2 and Buttonhook (near side and far side). This movement may be considered provided all design, operations and safety issues are considered and addressed. An inbound through movement from the ramp terminal intersection for a Parclo B-4 interchange configuration is not applicable.

To ensure that the movements at the ramp terminal/Crossing Road intersection with the new Access Road do not adversely affect the capacity of the exit ramp's left turning traffic, an exclusive lane(s) shall be provided for the through traffic on the ramp and on the Access Road. The design should protect for the possibility of two lanes of inbound traffic. The length of this lane(s) shall depend on the geometric features of the ramp, the available sight distances and the Ministry's review of the FSR.

It is crucial that the ramp design allow for the adequate sight distance requirements, including visibility distances to traffic signals. Sightlines shall be long enough along the speed change lane to points on the radius of the ramp where the maximum estimated queue length is expected to occur.

To provide guidance for an exclusive through lane(s), signage and pavement markings shall be provided on the ramp. The appropriate lane designation signs shall be placed in a location that does not block the sight lines between the approaching drivers and the traffic signals. Currently, the OTM for regulatory signs requires that lane designation arrows be provided on overhead signs for four-lane ramp terminals. Due to their unique nature, freeway exit ramps leading to an Access Road shall have overhead signs for three lane cross sections.

In the absence of an inbound through movement, the Crossing Road traffic signal timing is generally set for the time required to clear the left turn movement from the freeway ramp. Given the inbound through movement shall be serviced concurrently with the left and right turn movements from the ramp, and to avoid a potential degradation in the level of service, it is recommended that the average delay per vehicle calculated for the inbound through movement not exceed the projected average delay per vehicle for the critical ramp movement, which is typically the left turn movement from the ramp. Adequate Level of Service "C" or better for the

through movement shall be maintained. In this way, the overall level of service due to the addition of the inbound through movement is not being compromised.

Driving on freeways leads to speed adaptation, even for short periods of time. As traffic exits the freeway, drivers need time to adapt to a new lower driving speed environment. As drivers traverse the ramp terminal/Crossing Road intersection (or Connecting Road for Buttonhook interchanges) and enter the Access Road into the development, they need time to orient themselves. Therefore, an unimpeded offset distance between the ramp terminal/Crossing Road intersection and the first internal intersection along the Access Road is required.

The Ministry's offset distance requirement between the ramp terminal/Crossing Road intersection and the first internal intersection along the Access Road shall be 400 m desirable/200 m minimum, whether it is an intersection with another internal roadway or access to parking areas. Consideration by the Ministry to reduce the spacing below the 400 m desirable spacing offset to any point down to and including the 200 m minimum spacing offset shall only be considered based on the Ministry's review of the FSR. The FSR shall clearly indicate and support a reduction in offset that shall not affect the overall operations and safety characteristics of the existing ramp terminal and Crossing Road intersection. The Ministry's desirable/minimum offset distance requirements for the first internal intersection along the Access Road are further discussed in Section 4.0.

Where the first internal intersection along the Access Road is to be signalized, the offset distance shall not be less than the 400 m desirable offset.

### **3.4 Inbound Left Turn Movements for Access Roads**

The intention of an Access Road into a development, by definition, is to provide ingress and egress for traffic to and from the freeway and act as a Secondary Access to the development. Access to the development site shall be provided at Primary and Secondary Access connections located elsewhere on the Crossing Road (or Connecting Road for Buttonhook interchange) or adjacent municipal road system. This access arrangement ensures the majority of turning movements in and out of the development occur away from the already complex operations of the interchange. The overall development site plan shall ensure that the development's Primary and Secondary Access connections are designed to service the traffic from the Crossing Road and adjacent municipal roads, including provisions for inbound left turn movements. This manual provides for standard offset requirements for Primary and Secondary Access connections located elsewhere on the Crossing Road and/or municipal roads. For new development, this manual's policies and standards shall be satisfied for Primary and Secondary Access connections located on the Crossing Road.

To avoid traffic operations difficulties, reduce potential congestion and collisions at the interchange, and ensure consistency for the Access Road to be used as a secondary access to the development only, an inbound left turn is not permitted into the Access



Road from the Crossing Road. The necessary turning prohibition signs and intersection design elements shall be provided to maximize driver compliance with this restriction.

### **3.5 Inbound Right Turn Movements for Access Roads**

Inbound right turns shall be considered into the Access Road provided all safety and operational concerns are considered and addressed.

The Primary and Secondary Access connections to / from the site shall be located elsewhere on the Crossing Road (or Connecting Road for Buttonhook interchanges) or adjacent municipal roads and not at the freeway ramps. Adequate site accesses shall be provided, such that the majority of right turn traffic into the development site shall occur at the development's Primary and Secondary Access connections. An Adequate Level of Service "C" shall be maintained at the Primary and Secondary Access connections to minimize the right turn diversions to the Access Road at a freeway ramp terminal.

When a separate right turn taper or lane is required from the Crossing Road into the Access Road, it shall not be continued through the intersection.

### **3.6 Outbound Through Movements for Access Roads**

An outbound through movement from the Access Road may be considered for traffic destined to the freeway for the following interchange configurations: Parclo A-2, Parclo B-2, Parclo B-4 and Buttonhook (near side and far side). This movement may be considered provided all design, operations and safety issues are considered and addressed. An outbound through movement from the Access Road for a Parclo A-4 interchange configuration is not applicable.

The "in" and "out"-bound lanes of the Access Road shall be separated by a median island. This separation is required to ensure that the inbound Access Road lane is aligned with the inbound through lane from the freeway ramp, while the outbound through lane of the Access Road is aligned with the opposite entrance ramp. The distance of this separation is dependent upon the number of left turn lanes on the freeway exit ramp and the separation between the entrance and exit ramps for the freeway.

An additional signal phase is required for the outbound through movement. This movement shall only be considered where the additional phase can be accommodated while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Crossing Road.

It may be necessary to remove the pedestrian crossing adjacent to and on the right of the outbound through movement. Eliminating this pedestrian movement allows the critical left turn from the freeway exit ramp to move more freely to process more traffic. It is also recommended that this pedestrian movement be removed to reduce the potential vehicle-pedestrian conflicts with the left turning traffic leaving the

freeway ramp. Elimination of this pedestrian movement would require approval of the local municipality and/or road authority; otherwise, the outbound through movement would not be approved by the Ministry.

It is also recommended that large trucks be prohibited from exiting the development site using the Access Road, to maximize the capacity and reduce the effects of the slow acceleration capabilities of most large trucks.

### **3.7 Outbound Left Turn Movements for Access Roads**

#### **Parclo A and Buttonhook (near side) Interchange Configurations**

The intention of an Access Road into a development is to provide ingress and egress for traffic to and from the freeway. Access to and from the Crossing Road and adjacent municipal road shall be provided at Primary and Secondary Access connections, located elsewhere outside the interchange. This access arrangement ensures the majority of turning movements in and out of the development occur away from the already complex operations of the interchange.

The overall development site plan shall ensure that the development's Primary and Secondary Access connections are designed to service the traffic to and from the municipal roads, including provisions for outbound left turn movements.

To simplify traffic operations around the interchange and to ensure consistency with the Access Road definition, an outbound left turn movement is not permitted from the Access Road to the Crossing Road.

#### **Parclo B and Buttonhook (far side) Interchange Configurations**

An outbound left turn movement from the Access Road may be considered to orientate drivers back into the freeway interchange to return to their point of origin. The position of the outbound left turn lane should be separated from the through and/or right turn lanes of the Access Road by a median island so that the outbound left turn lane is positioned directly opposite one of the left turn lanes on the freeway exit ramp.

To avoid the potential for "side swipe" collisions between the outbound left turning traffic and the freeway exit-ramp traffic, the signal phasing could be set to provide separation on a temporal basis by either a split phase operation or a protected left turn operation for the freeway exit ramp. However, due to the typically high volumes that exist at most interchanges and would be expected with the new Access Road, split phase operation or protected left turn operation for the freeway exit ramp may not always be possible, as the loss of green time for the other movements would cause unacceptable impacts to the traffic operations.

Since an additional signal phase is required for the outbound access, movements shall only be considered where the additional phase can be accommodated while

maintaining an adequate level of service for both the freeway exit ramp and the Crossing Road.

It is also recommended that large trucks be restricted from exiting the development site using the Access Road, to maximize the capacity and reduce the effects of the slow acceleration capabilities of most large trucks.

### **3.8 Outbound Right Turn Movements for Access Roads**

An outbound right turn movement from the Access Road may be considered for all interchange configurations. To provide more protection for pedestrians and reduce potential vehicle conflicts with other turning movements in the intersection, the outbound right turns shall be controlled by the traffic signal and shall not be channelized.

Provision of an outbound right turn requires the Crossing Road to have at least one additional lane than the number of left turn lanes from the exit ramp (i.e. double left lanes requires three lanes or more on the Crossing Road per direction). Where an additional lane does not exist on the Crossing Road, a “no right turn on red” prohibition shall be used to avoid conflicts from the left turn movements from the freeway exit ramp.

In addition, the signal phasing could be set to provide separation on a temporal basis by either a split phase operation or a protected left turn operation for the freeway exit ramp. However, due to the typically high volumes that exist at most interchanges and that would be expected with the new Access Road, split phase operation or protected left turn operation for the freeway exit ramp may not always be possible, as the loss of green time for the other movements would cause unacceptable impacts to the traffic operations.

Outbound movements shall only be considered where the additional phase can be accommodated while maintaining an adequate level of service for both the freeway exit ramp and the Crossing Road.

It is also required that large trucks be prohibited from exiting the development site using the Access Road, to maximize the capacity and reduce the effects of the slow acceleration capabilities of most large trucks.

It shall also be understood that under no circumstances shall the service levels for traffic on the Access Road take precedence over the service levels on the freeway exit ramp or on the Crossing Road.

### **3.9 FSR Challenges**

The Proponent shall consider and address the following safety, design and operational challenges in the FSR, if an Access Road at a freeway ramp terminal is to be potentially considered by the Ministry:

- differences in operating speeds between freeway ramp traffic and local traffic
- maintaining capacity and level of service for existing intersection movements
- provision for adequate storage lengths for all traffic movements
- signal timing/phasing at the ramp terminal intersection
- signal progression with adjacent traffic signals
- additional right-of-way requirements
- regulatory, warning and guide signing
- provision for safe pedestrian and cyclist movements.

#### **4.0 Parameters for Access Roads at Freeway Ramp Terminals**

In addition to the common safety, design and operational considerations outlined in Section 3, the FSR shall address individual turning movement parameters for each type of interchange configuration that may accommodate a proposed Access Road.

The following outlines the individual turning movement parameters to be addressed for each type of interchange configuration.

##### **4.1 Parameters for Access Roads at Freeway Ramp Terminals Parclo A-2 Interchanges**

An Access Road at a Parclo A-2 interchange may be considered if the freeway ramp geometry and operations meet or exceed the design standards of the Ministry. See Figure 1 for a generic diagram showing potential ingress and egress movements for an Access Road at a Parclo A-2 interchange.

For a standard Parclo A-2 interchange the following shall be considered:

- The freeway exit ramp would require adequate sight distances, appropriate lane configuration and adequate storage lengths for all traffic movements, including the additional Access Road traffic.
- The freeway entrance ramp would require adequate sight distances and appropriate lane configuration for all traffic movements, including the additional Access Road traffic.
- Where these requirements are not met, upgrading of the ramp would be required by the Proponent for an Access Road to be allowed at the freeway ramp terminal.

In addition, the following individual turning movement parameters shall be addressed.

#### **4.1.1 Inbound Through Movement**

An inbound through movement from the exit ramp may be considered into the Access Road, provided the following criteria are met:

- The offset distance from the Crossing Road to the first internal intersection within the site shall not be less than 400 m desirable/200 m minimum.
- Where the first internal intersection along the Access Road is to be signalized, the offset distance shall under no circumstances be less than the 400 m minimum.
- The Access Road inbound through movement shall have the right-of-way over other traffic movements at the first internal intersection.
- An exclusive lane(s) shall be provided for the through movement on the ramp.
- The exit ramp and the Access Road designs shall meet sight distance requirements along their full length.
- Pavement markings shall be provided to identify the lane designations on the ramp.
- Overhead signs shall be provided for freeway exit ramps with three lanes or more leading to an Access Road.
- The projected average delay per vehicle for the inbound through movement shall not exceed that of the critical movement on the ramp (typically the left turns), such that an Adequate Level of Service "C" is maintained.
- The Access Road shall not have a closure gate.

#### **4.1.2 Inbound Left Turn**

An inbound left turn movement from the Crossing Road shall not be permitted into the Access Road.

#### **4.1.3 Inbound Right Turn**

An inbound right turn movement from the Crossing Road may be considered into the Access Road, provided the following criteria are met:

- The majority of inbound right turns are provided for at the Primary and Secondary Access connections rather than at the Access Road.
- An Adequate Level of Service "C" shall be maintained for the inbound right turn movement at upstream Primary and Secondary Access connections, to minimize the right turn diversions to the Access Road.

- Should an exclusive right turn taper or lane be required, it shall terminate at the Access Road and shall not be continued through the intersection onto the Crossing Road.
- Advanced signing for the signalized intersection on the Crossing Road shall be provided.

#### **4.1.4 Outbound Through Movement**

An outbound through movement from the Access Road across the Crossing Road to a Freeway entrance ramp may be considered provided the following criteria are met:

- The outbound through movement shall align with the freeway entrance ramp on the opposite side of the Crossing Road.
- A separate phase shall be provided to accommodate outbound movements.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Crossing Road.
- The pedestrian crossing adjacent to and on the right of the outbound through movement shall be eliminated. (This would require approval of the local municipality and/or road authority; otherwise, the outbound through movement would not be approved by the Ministry.)
- Prohibiting outbound truck movements shall be considered to avoid delay to the critical movements.

#### **4.1.5 Outbound Left Turn**

An outbound left turn movement is not permitted from the Access Road to the Crossing Road.

#### **4.1.6 Outbound Right Turn**

An outbound right turn movement from the Access Road may be considered provided the following criteria are met:

- The outbound right turn movement shall turn into a through lane on the Crossing Road.
- The outbound right turn shall be controlled by the traffic signals (i.e. no channelized right turn).
- A "no right turn on red" prohibition shall be considered to avoid unexpected and conflicting movements in the intersection.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Crossing Road.

- Prohibiting truck outbound movements shall be considered to avoid delay to the critical movements.

## **4.2 Parameters for Access Roads at Freeway Ramp terminals Parclo A-4 Interchanges**

An Access Road at a Parclo A-4 interchange may be considered if the freeway ramp geometry and operations meet or exceed Ministry design standards.

Based on the standard Parclo A-4 interchange configuration, the required design and construction of a grade separation under or over the freeway entrance ramp for the Access Road is the preferred alternative (Figure 2A).

The Ministry may, in some situations, consider the reconfiguration of the freeway entrance ramp downstream of the Access Road intersection in lieu of a grade separation (Figure 2B). The new geometry and design of the entrance ramp would need to be according to the TAC GDG / MTO Design Supplement to TAC GDG. Deviations from the standards would not be accepted. Direct spiral exit terminal designs may be considered when there is a minimum of three lanes in each direction on the Crossing Road and its design speed is 60 km/h or less.

For a standard Parclo A-4 interchange the following shall be considered:

- The freeway exit ramp would require adequate sight distances, appropriate lane configuration, and adequate storage lengths for all traffic movements, including the additional Access Road traffic.
- Where these requirements are not met, upgrading of the ramp would be required by the Proponent to allow for an Access Road at the freeway ramp terminal.

In addition, the following individual turning movement parameters shall be addressed.

### **4.2.1 Inbound Through Movement**

An inbound through movement from the exit ramp may be considered into the Access Road, provided the following criteria are met:

- A grade separation over or under the freeway entrance ramp (Figure 2A) or reconfiguration of the freeway entrance ramp downstream of the Access Road intersection in lieu of a grade separation (Figure 2B) would be required.
- The offset distance from the Crossing Road to the first internal intersection within the site shall not be less than 400 m desirable/200 m minimum.
- Where the first internal intersection along the Access Road is to be signalized, the offset distance shall under no circumstances be less than the 400 m minimum.

- The Access Road inbound through movement shall have the right-of-way over other traffic movements at the first internal intersection.
- An exclusive lane(s) shall be provided for the through movement on the ramp.
- The exit ramp and the Access Road designs shall meet sight distance requirements along their full length.
- Pavement markings shall be provided to identify the lane designations on the ramp.
- Overhead signs shall be provided for freeway exit ramps with three lanes or more leading to an Access Road.
- The projected average delay per vehicle for the inbound through movement shall not exceed that of the critical movement on the ramp (typically the left turns), such that an Adequate Level of Service "C" is maintained.
- The Access Road shall not have a closure gate.

#### **4.2.2 Inbound Left Turn**

An inbound left turn movement from the Crossing Road shall not be permitted into the Access Road.

#### **4.2.3 Inbound Right Turn**

An inbound right turn movement from the Crossing Road may be considered into the Access Road, provided the following criteria are met:

- The majority of inbound right turns are provided for at the Primary and Secondary Access connections rather than at the Access Road.
- An Adequate Level of Service "C" shall be maintained for the inbound right turn movement at upstream Primary and Secondary Access connections to minimize the right turn diversions to the Access Road.
- Should an exclusive right turn taper or lane be required, it shall terminate at the Access Road and shall not be continued through the intersection onto the Crossing Road.
- Where reconfiguration of the freeway entrance ramp upstream of the Access Road intersection is being considered in lieu of a grade separation, directional signing for the ramp shall be positioned to minimize driver confusion between the Access Road and the freeway entrance ramp.
- Advanced signing on the Crossing Road for the Access Road and the entrance ramp shall be provided.



#### **4.2.4 Outbound Through Movement**

An outbound through movement from the Access Road for a Parclo A-4 interchange configuration is not applicable.

#### **4.2.5 Outbound Left Turn**

An outbound left turn movement is not permitted from the Access Road to the Crossing Road.

#### **4.2.6 Outbound Right Turn**

An outbound right turn movement from the Access Road may be considered provided the following criteria are met:

- The outbound right turn movement shall turn into a through lane on the Crossing Road.
- The outbound right turn shall be controlled by the traffic signals (i.e. no channelized right turn).
- A “no right turn on red” prohibition shall be considered to avoid unexpected and conflicting movements in the intersection.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service “C” for both the freeway exit ramp and the Crossing Road.
- Prohibiting truck outbound movements shall be considered to avoid delay to the critical movements.

### **4.3 Parameters for Access Roads at Freeway Ramp terminals Parclo B-2 Interchanges**

An Access Road at a Parclo B-2 interchange may be considered if the freeway ramp geometry and operations meet or exceed the design standards of the Ministry. See Figure 3 for a generic diagram showing potential ingress and egress movements for an Access Road at a Parclo B-2 interchange.

The configuration of the Parclo B-2 interchange uses a loop-ramp from the freeway to the Crossing Road. This configuration requires drivers to reduce their speeds sooner than with the “S” shaped off-ramps of the Parclo A type designs. As drivers are transitioning their speeds and negotiating both vertical and horizontal curves, they are also required to orient themselves into the appropriate lanes on the ramp in advance of the interchange signals.

For a standard Parclo B-2 interchange the following shall be considered:

- The freeway exit ramp would require adequate sight distances, appropriate lane configuration and adequate storage lengths for all traffic movements, including the additional Access Road traffic.
- Where these requirements are not met, upgrading of the ramp would be required by the Proponent to allow for an Access Road at the freeway ramp terminal.

In addition, the following individual turning movement parameters shall be addressed:

#### **4.3.1 Inbound Through Movement**

An inbound through movement from the exit ramp may be considered into the Access Road, provided the following criteria are met:

- An exclusive lane(s) shall be provided for the through movement on the ramp that aligns with the inbound through movement of the Access Road. (Development of a through lane(s) may not be possible due to the configuration of the loop ramp inherent in the Parclo B-2 design. The Ministry would not approve an Access Road where the appropriate through lane(s) cannot be developed.)
- The offset distance from the Crossing Road to the first internal intersection within the site shall not be less than 400 m desirable/200 m minimum.
- Where the first internal intersection along the Access Road is to be signalized, the offset distance shall under no circumstances be less than the 400 m minimum.
- The Access Road inbound through movement shall have the right-of-way over other traffic movements at the first internal intersection.
- The exit ramp and the Access Road designs shall meet sight distance requirements along their full length.
- Pavement markings shall be provided to identify the lane designations on the ramp.
- Overhead signs shall be provided for freeway exit ramps with three lanes or more leading to an Access Road.
- The projected average delay per vehicle for the inbound through movement shall not exceed that of the critical movement on the ramp (typically the left turns), such that an Adequate Level of Service "C" is maintained.
- The Access Road shall not have a closure gate.

#### **4.3.2 Inbound Left Turn**

An inbound left turn movement from the Crossing Road shall not be permitted into the Access Road.

### **4.3.3 Inbound Right Turn**

An inbound right turn movement from the Crossing Road may be considered into the Access Road, provided the following criteria are met:

- The majority of inbound right turns are provided for at the Primary and Secondary Access connections rather than at the Access Road.
- An Adequate Level of Service "C" shall be maintained for the inbound right turn movement at upstream Primary and Secondary Access connections to minimize the right turn diversions to the Access Road.
- Should an exclusive right turn taper or lane be required, it shall terminate at the Access Road and shall not be continued through the intersection onto the Crossing Road.
- Advanced signing for the signalized intersection on the Crossing Road shall be provided.

### **4.3.4 Outbound Through Movement**

An outbound through movement from the Access Road across the Crossing Road to a Freeway entrance ramp may be considered provided the following criteria are met:

- The outbound through movement shall align with the freeway entrance ramp on the opposite side of the Crossing Road.
- A separate phase shall be provided to accommodate outbound movements.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Crossing Road.
- Elimination of the pedestrian crossing adjacent to and on the right of the outbound through movement would be required. (This would require approval of the local municipality and/or road authority; otherwise, the outbound through movement would not be approved by the Ministry.)
- Prohibiting outbound truck movements shall be considered to avoid delay to the critical movements.

### **4.3.5 Outbound Left Turn**

An outbound left turn movement from the Access Road may be considered provided the following criteria are met:

- The outbound left turn lanes shall be positioned opposite the left turn lane(s) on the freeway exit ramp.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Crossing Road.

- Prohibiting truck outbound movements shall be considered to avoid delay to the critical movements.

#### **4.3.6 Outbound Right Turn**

An outbound right turn movement from the Access Road may be considered provided the following criteria are met:

- The outbound right turn movement shall turn into a through lane on the Crossing Road.
- The outbound right turn shall be controlled by the traffic signals (i.e. no channelized right turn).
- A “no right turn on red” prohibition shall be considered to avoid unexpected and conflicting movements in the intersection.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service “C” for both the freeway exit ramp and the Crossing Road.
- Prohibiting truck outbound movements shall be considered to avoid delay to the critical movements.

#### **4.4 Parameters for Access Roads at Freeway Ramp terminals Parclo B-4 Interchanges**

An Access Road at a Parclo B-4 interchange would only provide for an exit from the development to the freeway. An Access Road at a Parclo B-4 interchange may be considered if the freeway ramp geometry and operations meet or exceed Ministry design standards. See Figure 4 for a generic diagram showing potential ingress and egress movements for an Access Road at a Parclo B-4 interchange.

Based on the standard Parclo B-4 interchange configuration, it is unlikely that an Access Road could be accommodated to meet design standards for the freeway exit ramp without a grade separation. The design and construction of a grade separation under or over the freeway exit ramp for the Access Road is the only alternative.

The Ministry shall not consider the reconfiguration of the freeway exit ramp upstream of the Access Road intersection in lieu of a grade separation for the following reasons:

- potential for high speed rear-end collisions along the exit ramp resulting from queuing,
- potential for queuing along the exit ramp to extend back onto the freeway, and
- the weaving situation created between the exit ramp traffic from the freeway that is destined for the Crossing Road and the approaching Crossing Road traffic merging to the right to enter the Access Road.

For a standard Parclo B-4 interchange the following shall be considered:

- The freeway entrance ramp would require adequate sight distances and appropriate lane arrangements for all traffic movements, including the additional Access Road traffic.
- Where these requirements are not met, upgrading of the ramp would be required by the Proponent to allow for an Access Road at the freeway ramp terminal.

In addition, the following individual turning movement parameters shall be addressed.

#### **4.4.1 Inbound Through Movement**

An inbound through movement from the ramp terminal intersection for a Parclo B-4 interchange configuration is not applicable.

#### **4.4.2 Inbound Left Turn**

An inbound left turn movement from the Crossing Road shall not be permitted into the Access Road.

#### **4.4.3 Inbound Right Turn**

An inbound right turn movement from the Crossing Road may be considered into the Access Road, provided the following criteria are met:

- The majority of inbound right turns are provided for at the Primary and Secondary Access connections rather than at the Access Road.
- An Adequate Level of Service "C" shall be maintained for the inbound right turn movement at upstream Primary and Secondary Access connections to minimize the right turn diversions to the Access Road.
- Should an exclusive right turn taper or lane be required, it shall terminate at the Access Road and shall not be continued through the intersection onto the Crossing Road.
- Advanced signing for the signalized intersection on the Crossing Road shall be provided.

#### **4.4.4 Outbound Through Movement**

An outbound through movement from the Access Road across the Crossing Road to a Freeway entrance ramp may be considered provided the following criteria are met:

- The outbound through movement shall align with the freeway entrance ramp on the opposite side of the Crossing Road.

- A separate phase shall be provided to accommodate outbound movements.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Crossing Road.
- Prohibiting outbound truck movements shall be considered to avoid delay to the critical movements.

#### **4.4.5 Outbound Left Turn**

An outbound left turn movement from the Access Road may be considered provided the following criteria are met:

- the necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Crossing Road.
- prohibiting truck outbound movements shall be considered to avoid delay to the critical movements.

#### **4.4.6 Outbound Right Turn**

An outbound right turn movement from the Access Road may be considered provided the following criteria are met:

- The outbound right turn movement shall turn into a through lane on the Crossing Road.
- The outbound right turn shall be controlled by the traffic signals (i.e. no channelized right turn).
- A "no right turn on red" prohibition shall be considered to avoid unexpected and conflicting movements in the intersection.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway entrance ramp and the Crossing Road.
- Prohibiting truck outbound movements shall be considered to avoid delay to the critical movements.

### **4.5 Parameters for Access Roads at Freeway Ramp terminals Buttonhook Interchanges (Near Side of Crossing Road)**

An Access Road at a Buttonhook interchange (near side of Crossing Road) may be considered if the freeway ramp geometry and operations meet or exceed Ministry design standards. See Figure 5 for a generic diagram showing potential ingress and egress movements for an Access Road at a Buttonhook interchange (near side of Crossing Road).

For a standard Buttonhook interchange (near side of Crossing Road) the following shall be considered:

- The freeway exit ramp would require adequate sight distances, appropriate lane configuration and adequate storage lengths for all traffic movements, including the additional Access Road traffic.
- The high left turn rate from the freeway exit ramp to the Connecting Road conflicts with the Access Road outbound through movement.
- The limited spacing between the ramp terminal intersection and the Crossing Road intersection negates the possibility of an inbound left turn lane for an Access Road, due to left turn storage requirements for the Crossing Road intersection. An inbound left turn lane for an Access Road shall not be permitted.
- The limited spacing between the ramp terminal intersection and the Crossing Road intersection negates the possibility of a mid-block Primary Access connection, due to left turn storage requirements for the Crossing Road intersection.
- Where these requirements are not met, upgrading of the ramp would be required by the Proponent to allow for an Access Road at the freeway ramp terminal.

In addition, the following individual turning movement parameters shall be addressed.

#### **4.5.1 Inbound Through Movement**

An inbound through movement from the exit ramp may be considered into the Access Road, provided the following criteria are met:

- An exclusive lane(s) shall be provided for the through movement on the ramp that aligns with the inbound through movement of the Access Road.
- The offset distance from the Crossing Road to the first internal intersection within the site shall not be less than 400 m desirable/200 m minimum.
- Where the first internal intersection along the Access Road is to be signalized, the offset distance shall under no circumstances be less than the 400 m minimum.
- Inbound through movement on an Access Road at a freeway ramp terminal shall have the right-of-way over other traffic movements at the first internal intersection.
- The exit ramp and Access Road designs shall meet sight distance requirements along their full length.
- Pavement markings shall be provided to identify the lane designations on the ramp.
- Overhead signs shall be provided for freeway exit ramps with three lanes or more leading to an Access Road.

- The projected average delay per vehicle for the inbound through movement shall not exceed that of the critical movement on the ramp (typically the left turns), such that an Adequate Level of Service "C" is maintained.
- The Access Road shall not have a closure gate.

#### **4.5.2 Inbound Left Turn**

An inbound left turn movement from the Connecting Road shall not be permitted into the Access Road.

#### **4.5.3 Inbound Right Turn**

An inbound right turn movement from the Connecting Road may be considered into the Access Road, provided the following criteria are met:

- The majority of inbound right turns are provided for at the Primary and Secondary Access connections rather than at the Access Road.
- An Adequate Level of Service "C" shall be maintained for the inbound right turn movement at Primary and Secondary Access connections to minimize the right turn diversions to the Access Road.
- Should an exclusive right turn taper or lane be required, it shall terminate at the Access Road and shall not be continued through the intersection onto the Crossing Road.
- Advanced signing for the signalized intersection on the Crossing Road shall be provided.

#### **4.5.4 Outbound Through Movement**

An outbound through movement from the Access Road across the Crossing Road to a Freeway entrance ramp may be considered provided the following criteria are met:

- The outbound through movement shall align with the freeway entrance ramp on the opposite side of the Crossing Road.
- A separate phase shall be provided to accommodate outbound movements.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Connecting Road.
- Elimination of the pedestrian crossing adjacent to and on the right of the outbound through movement shall be required. This would require the approval of the local municipality and/or road authority; otherwise, the outbound through movement would not be approved by the Ministry.



- Prohibiting outbound truck movements shall be considered to avoid delay to the critical movements.

#### **4.5.5 Outbound Left Turn**

An outbound left turn movement is not permitted from the Access Road to the Connecting Road.

#### **4.5.6 Outbound Right Turn**

An outbound right turn movement from the Access Road may be considered provided the following criteria are met:

- The outbound right turn movement shall turn into a through lane on the Connecting Road.
- The outbound right turn shall be controlled by the traffic signals (i.e. no channelized right turn).
- A “no right turn on red” prohibition shall be considered to avoid unexpected and conflicting movements in the intersection.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service “C” for both the freeway exit ramp and the Connecting Road.
- Prohibiting truck outbound movements shall be considered to avoid delay to the critical movements.

#### **4.5.7 Secondary Access Connections on Connecting Road**

The layout of a Buttonhook interchange (near side of the Crossing Road) typically results in limited spacing between the ramp terminal intersection and the Crossing Road intersection. This negates the possibility of a mid-block Primary Access connection due to left turn storage requirements for the Crossing Road intersection. Left turn movements at a Primary Access connection typically require a left turn lane and, potentially, traffic signals. With existing traffic signals and turning lanes at the ramp terminal and Crossing Road intersection, the introduction of a Primary Access connection between them would result in significant traffic servicing issues, should the Primary Access connection also require traffic signals and/or turning lanes.

To avoid potential safety and operational problems, consideration for an access into the development along the Connecting Road between the ramp terminal and Crossing Road intersection shall be restricted to a Secondary Access connection. Inbound/outbound left turns from the Secondary Access connection along the Connecting Road between the ramp terminal and Crossing Road intersection shall be prohibited. The necessary intersection design elements and turning prohibition signs shall be provided for driver compliance with this restriction.

This access arrangement ensures the majority of turning movements in and out of the development occur away from the already complex operations of the interchange. The overall development site plan shall ensure that the Primary Access connection(s) are designed to service the development traffic from the municipal road system and not from the Connecting Road.

Secondary Access connections on a Connecting Road may be considered provided the following criteria are met:

- Confirmation exists that there is a need for a Secondary Access connection on the Connecting Road.
- Sufficient separation distance exists between the ramp terminal intersection and the Crossing Road intersection to consider a Secondary Access connection.
- Necessary intersection design elements and turning prohibition signs shall be provided to prohibit inbound/outbound left turns.
- Should the Connecting Road be designated as a controlled-access highway under the control and jurisdiction of the Ministry, a Secondary Access connection shall be prohibited.

#### **4.6 Parameters for Access Roads at Freeway Ramp terminals – Buttonhook Interchanges (Far Side of Crossing Road)**

An Access Road at a Buttonhook interchange (far side of Crossing Road) may be considered if the freeway ramp geometry and operations meet or exceed the design standards of MTO. See Figure 6 for a generic diagram showing potential access and egress movements for an Access Road at a Buttonhook interchange (near side of Crossing Road).

For a standard Buttonhook interchange the following shall be considered:

- The freeway exit ramp would require adequate sight distances, appropriate lane configuration and adequate storage lengths for all traffic movements, including the additional Access Road traffic.
- The high right turn rate from the freeway exit ramp to the Connecting Road conflicts with the Access Road outbound left turn movement.
- The limited spacing between the ramp terminal intersection and the Crossing Road intersection negates the possibility of an inbound left turn lane for an Access Road, due to left turn storage requirements for the Crossing Road intersection and freeway exit ramp (overlapping left turn lanes). An inbound left turn lane for an Access Road shall not be permitted.
- The limited spacing between the ramp terminal intersection and the Crossing Road intersection negates the possibility of a mid-block Primary Access connection, due to left turn storage requirements for the Crossing Road intersection and freeway exit ramp (overlapping left turn lanes).

- Where these requirements are not met, upgrading of the ramp would be required by the Proponent to allow for an Access Road at the freeway ramp terminal.

In addition, the following individual turning movement parameters shall be addressed.

#### **4.6.1 Inbound Through Movement**

An inbound through movement from the exit ramp may be considered into the Access Road, provided the following criteria are met:

- An exclusive lane(s) shall be provided for the through movement on the ramp that aligns with the inbound through movement of the Access Road.
- The offset distance from the Crossing Road to the first internal intersection within the site shall not be less than 400 m desirable/200 m minimum.
- Where the first internal intersection along the Access Road is to be signalized, the offset distance shall under no circumstances be less than the 400 m minimum.
- Inbound through movement on an Access Road at a freeway ramp terminal shall have the right-of-way over other traffic movements at the first internal intersection.
- The exit ramp and Access Road designs shall meet sight distance requirements along their full length.
- Pavement markings shall be provided to identify the lane designations on the ramp.
- Overhead signs shall be provided for freeway exit ramps with three lanes or more leading to an Access Road.
- The projected average delay per vehicle for the inbound through movement shall not exceed that of the critical movement on the ramp, such that an Adequate Level of Service "C" is maintained.
- The Access Road shall not have a closure gate.

#### **4.6.2 Inbound Left Turn**

An inbound left turn movement from the Connecting Road shall not be permitted into the Access Road.

### **4.6.3 Inbound Right Turn**

An inbound right turn movement from the Connecting Road may be considered into the Access Road, provided the following criteria are met:

- The majority of inbound right turns are provided for at the Primary and Secondary Access connections rather than at the Access Road.
- An Adequate Level of Service "C" shall be maintained for the inbound right turn movement at Primary and Secondary Access connections, to minimize the right turn diversions to the Access Road.
- Should an exclusive right turn taper or lane be required, it shall terminate at the Access Road and shall not be continued through the intersection onto the Crossing Road.
- Advanced signing for the signalized intersection on the Crossing Road shall be provided.

### **4.6.4 Outbound Through Movement**

An outbound through movement from the Access Road across the Crossing Road to a Freeway entrance ramp may be considered provided the following criteria are met:

- The outbound through movement shall align with the freeway entrance ramp on the opposite side of the Crossing Road.
- A separate phase shall be provided to accommodate outbound movements.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Connecting Road.
- Prohibiting outbound truck movements shall be considered to avoid delay to the critical movements.

### **4.6.5 Outbound Left Turn**

An outbound left turn movement is not permitted from the Access Road to the Connecting Road.

### **4.6.6 Outbound Right Turn**

An outbound right turn movement from the Access Road may be considered provided the following criteria are met:

- A "no right turn on red" prohibition shall be considered to avoid unexpected and conflicting movements in the intersection.
- The necessary phasing shall be provided while maintaining an Adequate Level of Service "C" for both the freeway exit ramp and the Connecting Road.

- Prohibiting truck outbound movements shall be considered to avoid delay to the critical movements.

#### **4.6.7 Secondary Access Connections on Connecting Road**

The layout of a Buttonhook interchange (near side of Crossing Road) typically results in limited spacing between the ramp terminal intersection and the Crossing Road intersection and negates the possibility of a mid-block Primary Access connection, due to left turn storage requirements for the Crossing Road intersection. Left turn movements at a Primary Access connection typically requires a left turn lane and, potentially, traffic signals. With existing traffic signals and turning lanes at the ramp terminal and the Crossing Road intersection, the introduction of a Primary Access connection between them would result in significant traffic servicing issues, should the Primary Access connection also require traffic signals and/or turning lanes.

To avoid potential safety and operational problems, consideration for an access into the development along the Connecting Road between the ramp terminal and the Crossing Road intersection shall be restricted to a Secondary Access connection. Inbound / outbound left turns from the Secondary Access connection along the Connecting Road between the ramp terminal and Crossing Road intersection shall be prohibited. The necessary intersection design elements and turning prohibition signs shall be provided for driver compliance with this restriction.

This access arrangement ensures that the majority of turning movements in and out of the development occur away from the already complex operations of the interchange. The overall development site plan shall ensure that the Primary Access connection(s) are designed to service the development traffic from the municipal road system and not from the Connecting Road.

Secondary Access connections on a Connecting Road may be considered provided the following criteria are met:

- Confirmation exists that there is a need for a Secondary Access connection on the Connecting Road.
- Sufficient separation distance exists between the ramp terminal intersection and the Crossing Road intersection to consider a Secondary Access connection.
- Necessary intersection design elements and turning prohibition signs shall be provided to prohibit inbound/outbound left turns.
- Should the Connecting Road be designated as a controlled-access highway under the control and jurisdiction of MTO, a Secondary Access connection shall be prohibited.

## **5.0 Submission Requirements for Feasibility Study Reports (FSR) for Access Roads at Freeway Ramp Terminals**

The approval process for an Access Road requires a thorough analysis of the safety, design, and operational issues at the freeway interchange. The key component of the approval process is the submission of a Feasibility Study Report (FSR). To ensure the Ministry is provided with the necessary information needed to consider approval of an Access Road, the FSR submission requirements are detailed below.

The Proponent shall prepare and submit an FSR for Ministry approval to establish a business case for the Access Road. The focus of the FSR shall be the existing and future traffic operations at the interchange. In addition, the consideration of a proposed Access Road at a freeway ramp terminal depends primarily on the existing configuration of the freeway interchange and future expansion needs. The FSR shall analyze traffic impacts “with” and “without” the proposed Access Road and shall address each proposed turning movement in accordance with the issues and conditions presented in this Appendix. The FSR shall be prepared by a consulting firm in accordance with the Ministry’s “General Guidelines for the Preparation of Traffic Impact Studies”. The consulting firm shall be approved under the Ministry’s consultant Registry, Appraisal and Qualification System (RAQS) under the Traffic Impact Analysis specialty category. In addition, the FSR shall be signed and stamped by a Professional Engineer registered in the Province of Ontario taking responsibility for the FSR contents.

The signal operations of the ramp terminal intersection(s) shall be modeled using a Ministry approved computer signal timing optimization and simulation package to corroborate the permitted turning movements, level of service and queuing of each approach of the intersection. The traffic volumes used for the signal timing analysis shall be projected to the Ministry approved design years.

The FSR shall include a draft site plan to ensure that this manual and Appendix have been satisfied. The draft site plan shall show, at a minimum, the proposed upgrading of freeway ramps and municipal roadways, on-site circulation plans, and signing and illumination plans.

Gaining approval of an Access Road is contingent upon obtaining all required approvals, including but not limited to, Ministry and municipal approvals. This includes either the assumption of the Access Road by the municipality or a maintenance agreement with respect to the Access Road between the Ministry and the municipality.

Should the Ministry endorse the FSR and approve the Access Road, the Ministry would require the Proponent and/or municipality to enter into a legal agreement with the Ministry, and be financially responsible for all associated highway improvements to accommodate the Access Road. The Proponent should reference the Ministry’s “A Guideline For Highway Improvements Associated With Development”.

The Ministry's "A Guideline For Highway Improvements Associated with Development", can be obtained from the nearest Regional Highway Corridor Management Section or by visiting the Ministry's Highway Corridor Management website.

## Appendix 4C - Definitions

<b>Access Road</b>	A proposed municipally owned and/or maintained road located across from a freeway entrance or exit ramp, thereby providing direct connection to and from the freeway.
<b>Adequate Level of Service</b>	Level of Service "C" as defined by the Highway Capacity Manual (HCM 2000).
<b>Connecting Road</b>	The road that connects from the end of Buttonhook ramps to the Crossing Road.
<b>Critical Movement</b>	Turning or through movement at a signalized intersection that controls the signal timing of that traffic signal.
<b>Crossing Road</b>	The intersecting road at a freeway interchange that is accessible to and from the freeway.
<b>Primary Access (Full Movement)</b>	The access(es) at a development or property that provides the main (Full Movement) or primary movement into the site and provides the full movements (i.e. all turns and through movements) from the adjacent road.
<b>Secondary Access (Partial Movement)</b>	The access(es) at a development or property that provides the secondary movement into the site and the partial movements (i.e. right-in / right-out turn movements) from the adjacent road. Inbound / outbound left turn movements are prohibited.

## Appendix 4C - List of Figures

Figure 1 – Typical Parclo A-2 interchange

Figure 2A & 2B – Typical Parclo A-4 interchange

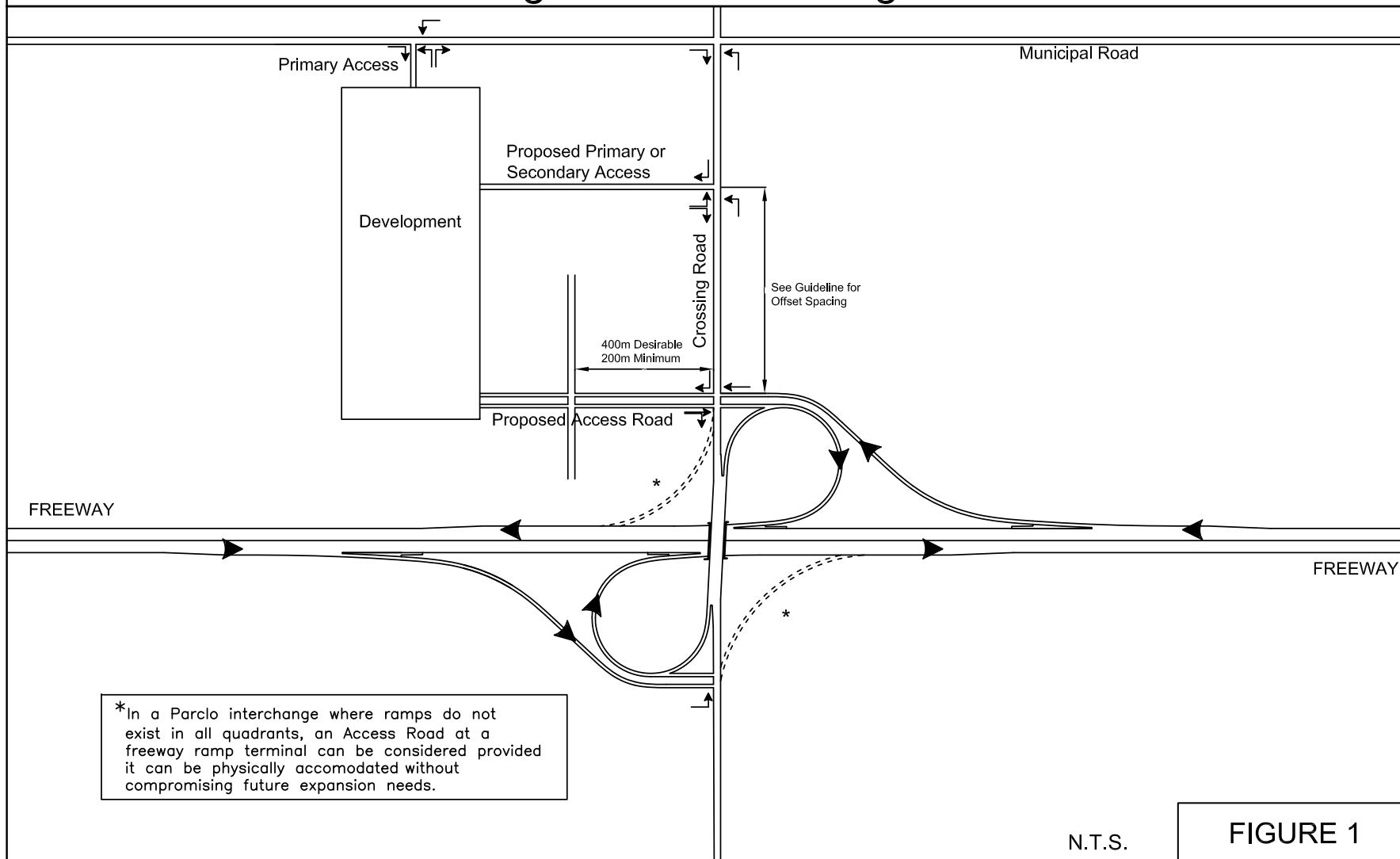
Figure 3 – Typical Parclo B-2 interchange

Figure 4 – Typical Parclo B-4 interchange

Figure 5– Typical Buttonhook interchange (Near Side)

Figure 6 – Typical Buttonhook interchange (Far Side)

## Typical Parclo A-2 Interchange-Proposed Access Road Turning Movement Configuration





# Typical Parclo A-4 Interchange-Proposed Access Road (Grade Separation) Turning Movement Configuration

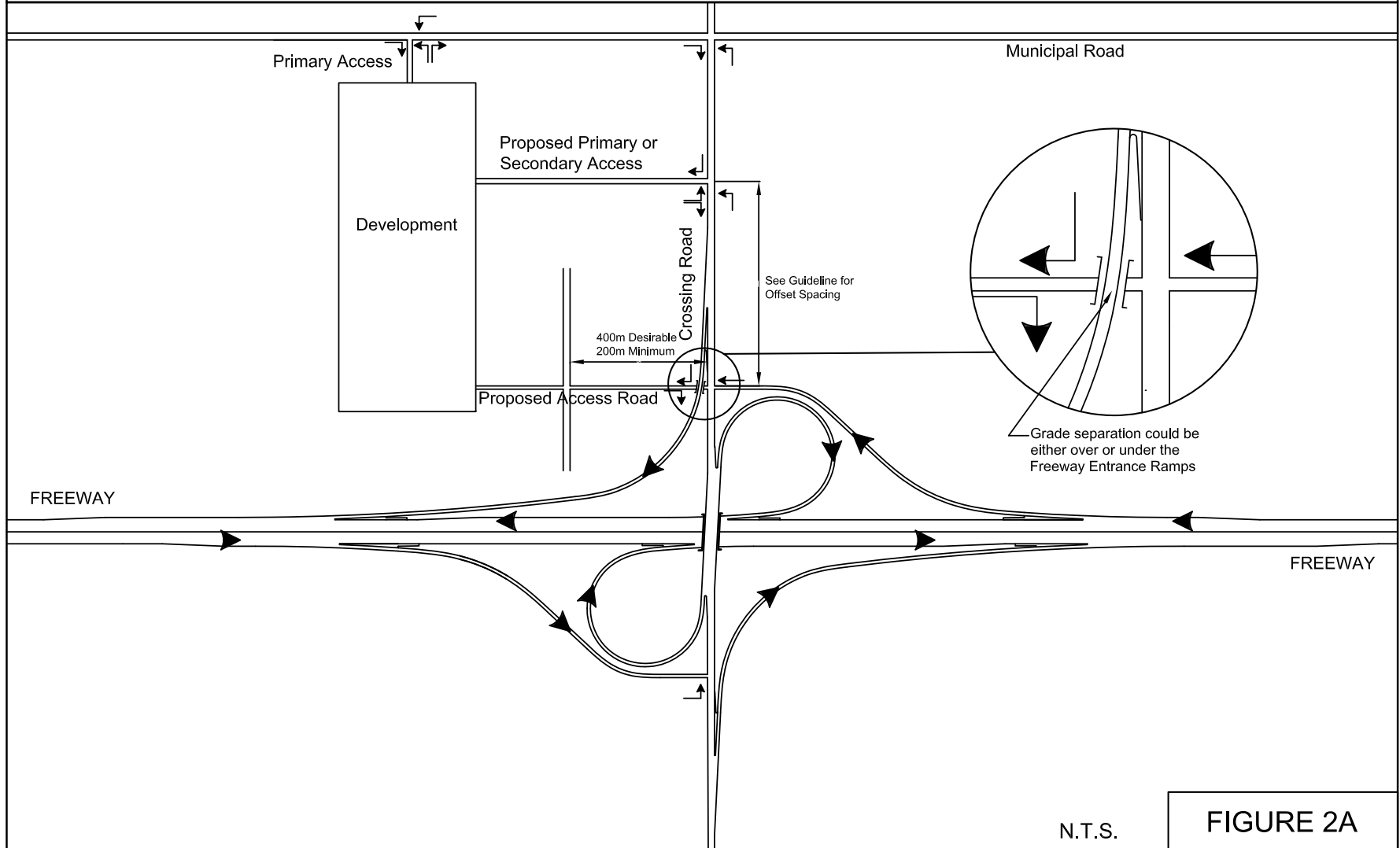
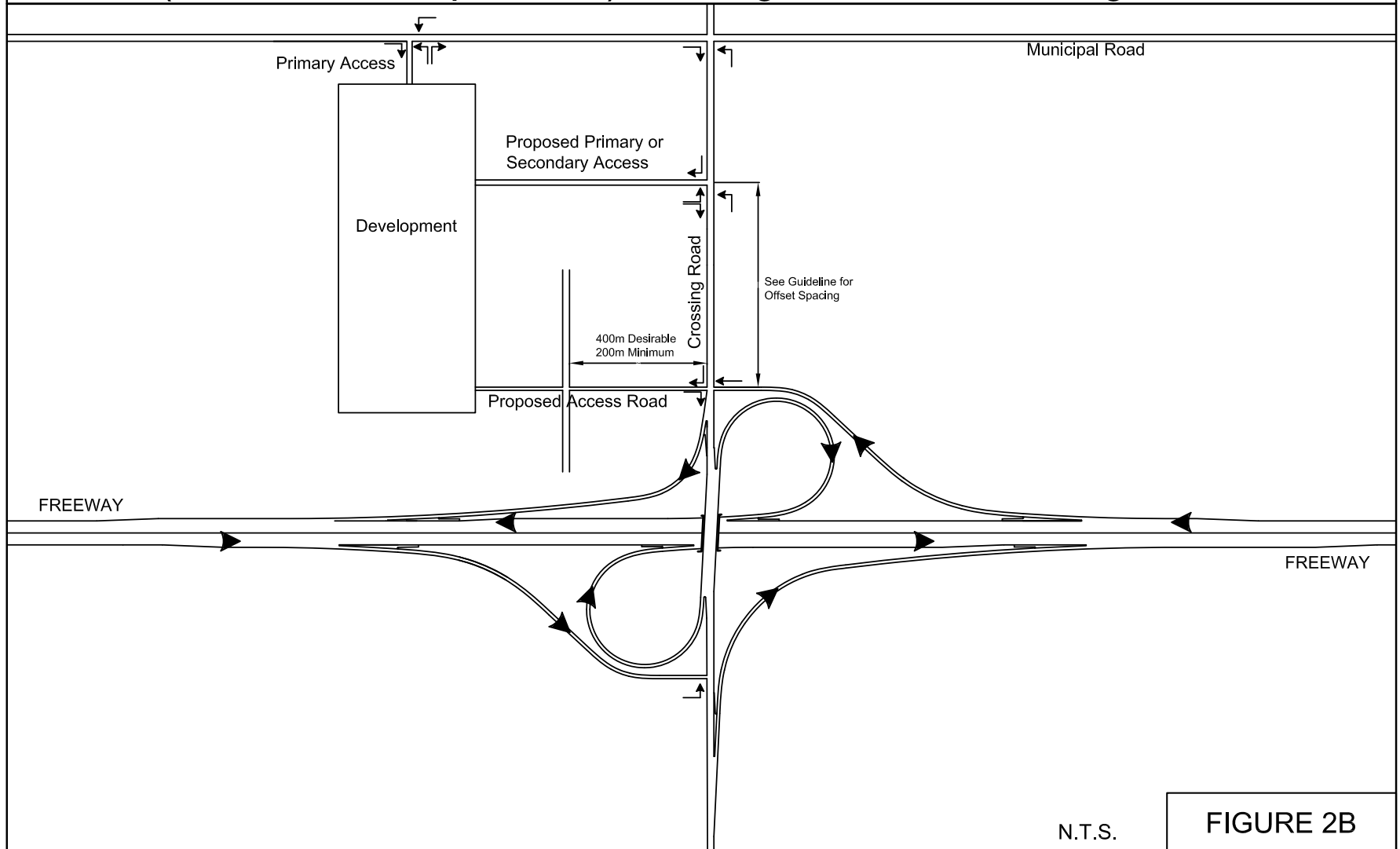
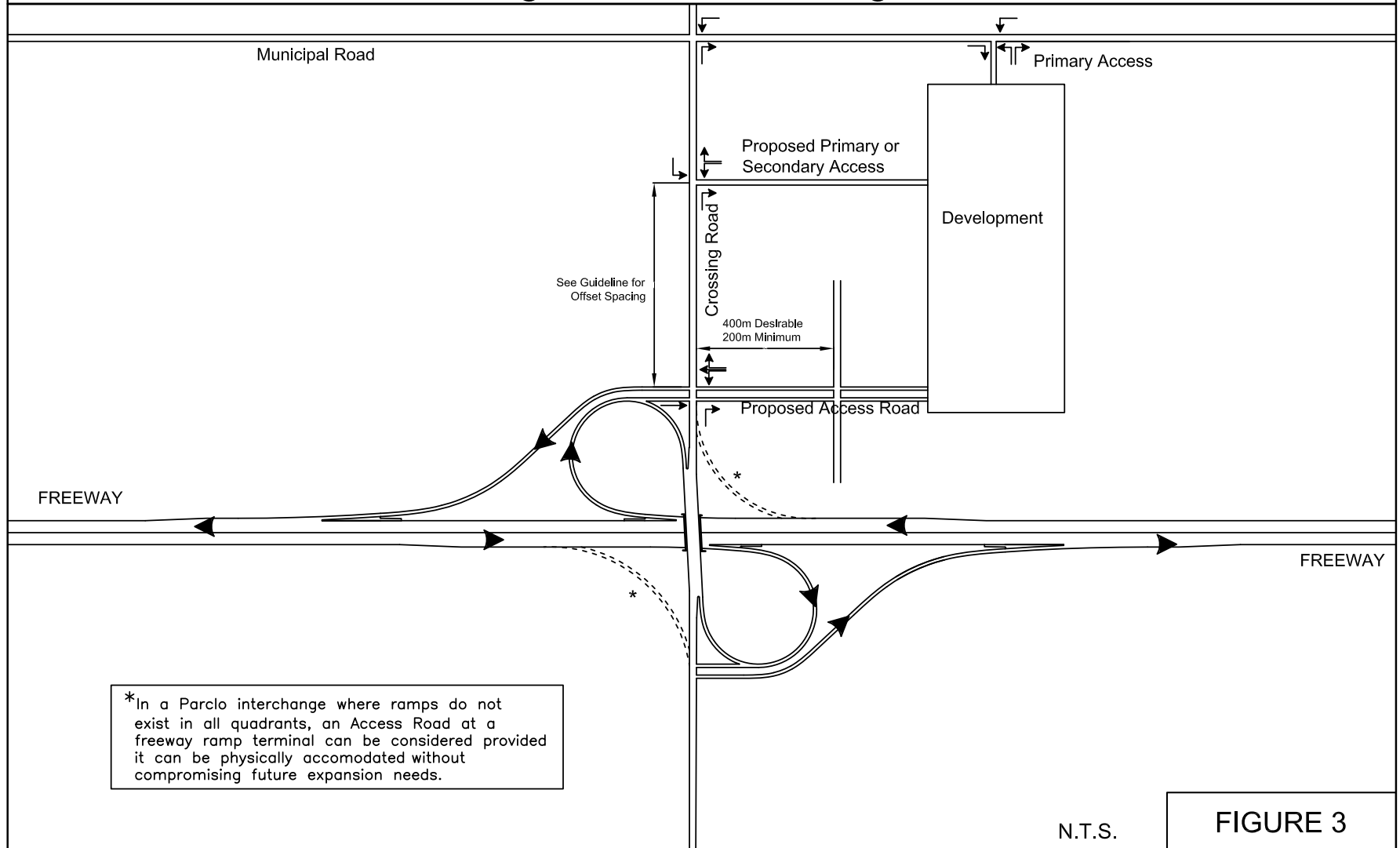


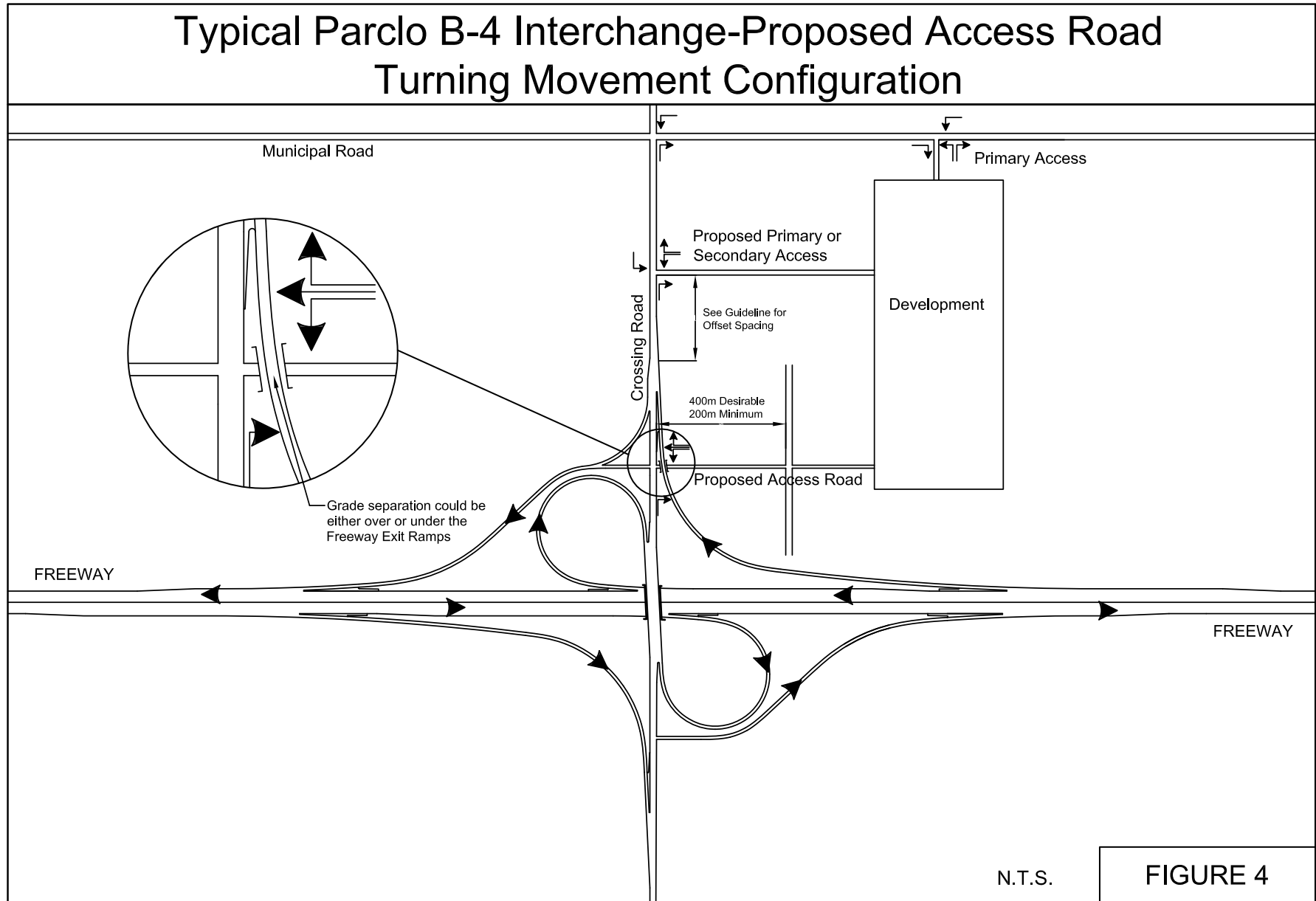
FIGURE 2A

## Typical Parclo A-4 Interchange-Proposed Access Road (Non-Grade Separation) Turning Movement Configuration

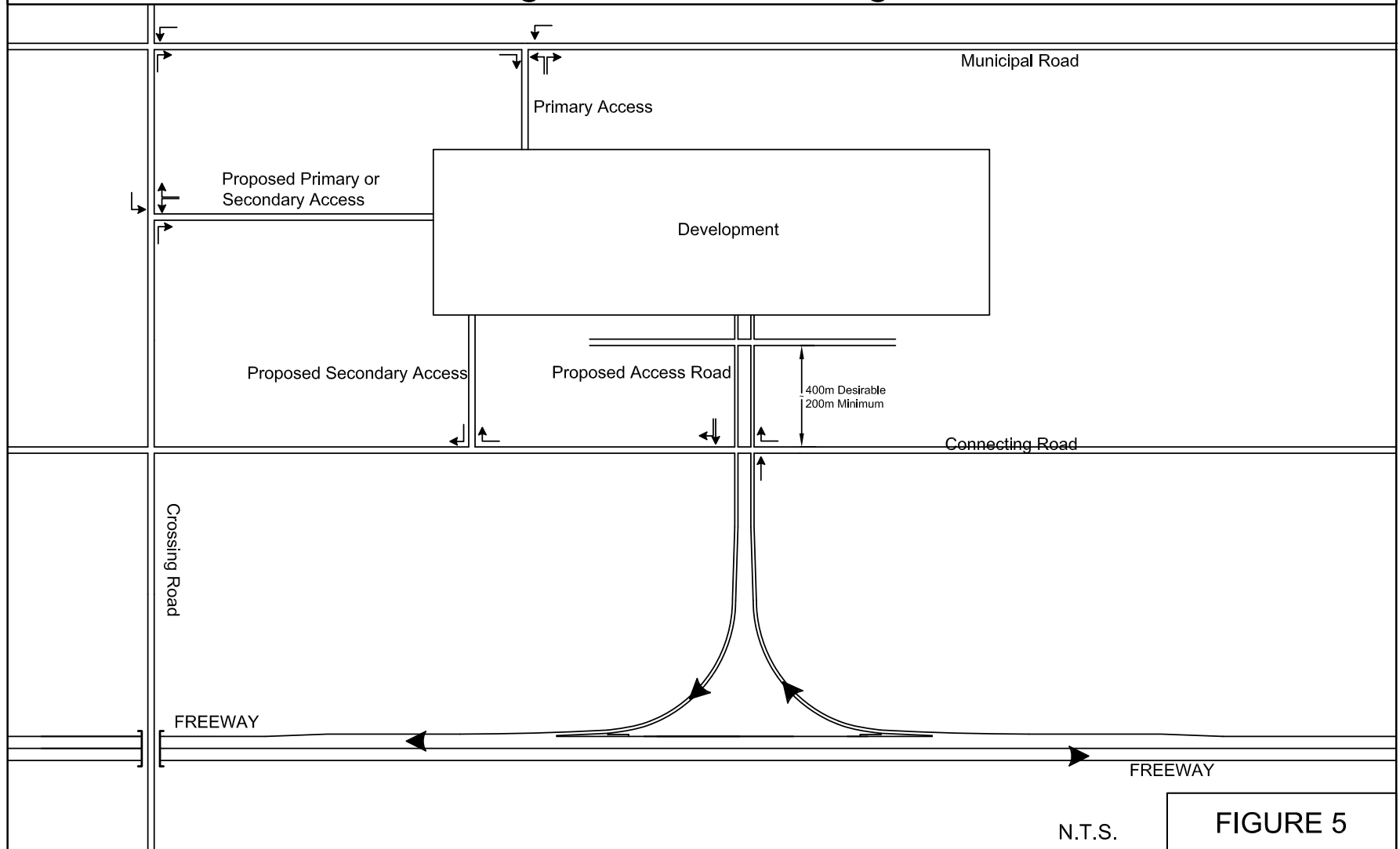


## Typical Parclo B-2 Interchange-Proposed Access Road Turning Movement Configuration

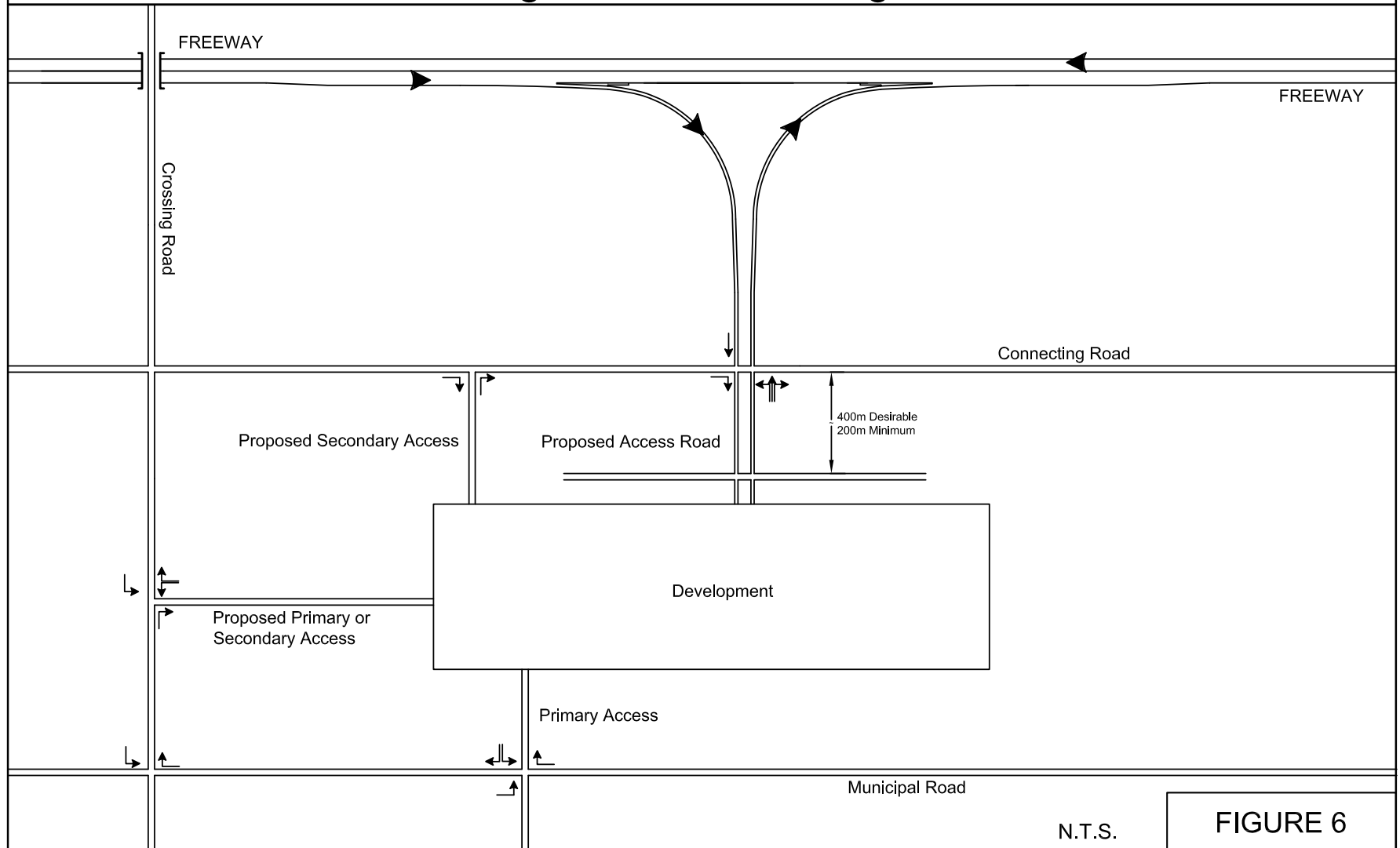




## Typical Buttonhook Interchange (near side) Proposed Access Road Turning Movement Configuration



## Typical Buttonhook Interchange (far side) Proposed Access Road Turning Movement Configuration

**FIGURE 6**

# Highway Corridor Management **Manual**



## **Chapter 5: Signs**

**Corridor Management Office**  
Ministry of Transportation

**April 2025**

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## 5.1 Legislation

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### General

The Ministry's legal authority to regulate signing upon or adjacent to a Provincial Highway derives from Sections 34 and 38 of the *Public Transportation and Highway Improvement Act* (PTHIA).

### For a King's Highway:

34(2) Despite any general or special Act, regulation, by-law or other authority, no person shall, except under a permit therefor from the Minister,

(c) display any sign, notice or advertising device, whether it contains words or not, within 400 metres of any limit of the King's highway, other than,

(i) one sign not more than 60 centimetres by 30 centimetres in size displaying the name or the name and occupation of the owner of the premises where it is displayed or the name of the premises,

(ii) a maximum of two single-sided signs, each being not more than 122 centimetres by 122 centimetres in size and facing in different directions, or one single-sided sign not more than 122 centimetres by 244 centimetres in size if,

(A) the signs display information about the sale of agricultural products, other than tobacco, that are produced and offered for sale on the premises where the signs are displayed, and

(B) the signs are displayed on premises that is zoned for agricultural uses and that is not owned by the Crown in right of Canada or the public sector as defined in subsection 2 (1) of the *Public Sector Salary Disclosure Act*, 1996, or

(iii) a maximum of two single-sided signs, each being not more than 122 centimetres by 122 centimetres in size and facing in different directions, or one single-sided sign not more than 122 centimetres by 244 centimetres in size if,

(A) the signs display directions to a place where agricultural products produced in Ontario, other than tobacco, are offered for sale or information about the sale,

(B) the owner of the signs also owns or rents the land on which the agricultural products mentioned in sub-subclause (A) were produced,

(C) the signs are displayed on premises that is zoned for agricultural uses and that is not owned by the Crown in right of Canada or the public sector as defined in subsection 2 (1) of the *Public Sector Salary Disclosure Act*, 1996,

(e) sell, offer for sale or display produce, goods or merchandise upon the King's Highway;

An "agricultural product" is defined in Section 34(1):

"agricultural product" means an agricultural product that is not edible, an agricultural food product or a food product that is processed on a farm in Ontario from an agricultural food product.

### **For a Controlled-Access Highway:**

38(2) Despite any general or special Act, regulation, by-law or other authority, no person shall, except under a permit therefor from the Minister,

(c) sell, offer or expose for sale any vegetables, fruit or other produce or any goods or merchandise upon or within 45 metres of any limit of a controlled-access highway or within 395 metres of the centre point of an intersection;

(e) display any sign, notice or advertising device, whether it contains words or not, other than one sign not more than sixty centimetres by thirty centimetres in size displaying the name or the name and occupation of the owner of the premises to which it is affixed or the name of such premises within 400 metres of any limit of a controlled-access highway;

## **5.2 Sign Permit Applications and Requirements**

### **5.2.1 Classifications**

Please refer to the appendix located at the end of this chapter for a list of sign classifications.

### **5.2.2 Permit Required**

All visible signs within 400 m of any limit of a Provincial Highway require a Ministry issued permit, with the exception of one sign measuring not more than 0.18 m<sup>2</sup> per property, and certain signs advertising agricultural products. These permits shall be of such form and upon such terms and conditions as the Ministry considers appropriate. Furthermore, these permits may be cancelled at the sole discretion of the Ministry.

Inquires related to specific signing applications and/or location related requests should be directed to the nearest local Area Office.

### **5.2.3 Onus on the Applicant to Secure Sign Permit**

The PTHIA places the onus on the individual to secure a permit from the Ministry before displaying a sign within 400 m (0.25 mile) of any limit of a highway, other than one sign 0.18 m<sup>2</sup> (2 sq. ft.) in size displaying the name or the name and occupation of the owner of the premises to which it is affixed or the name of the premises, and certain signs advertising agricultural products. Each sign shall be subject to the requirements of this policy.

Each person, firm, or municipality planning to display a sign(s) within the controlled area adjacent to a Provincial Highway (except only those signs specifically exempted by law or by this policy) shall be required to obtain a sign permit(s) in all instances where this policy so indicates. The applicable fee must be received before a permit is issued. Where an application for a permit is received and a permit is not required by this policy, the Delegated Authority shall prepare a Letter of Approval (in duplicate) and send the original to the applicant. The second copy will be filed in the Ministry's office.

### **5.2.4 Applicant to be Advised of Requirements**

Each owner or applicant seeking information regarding the control of signs etc. exercised by the Ministry must be fully advised of the restrictions which apply to those areas adjacent to Provincial Highways.

### **5.2.5 Compliance, Enforcement and Municipal Requirements**

The placing of a sign that contravenes this policy, or the conditions included in the Ministry's approval, may result in prosecution and/or cancellation of any approvals or permits.

The PTHIA provides the Ministry with the authority to issue a notice to a property owner/permit holder to alter and/or remove any non-complying signs. Furthermore, the Ministry may, as provided for under the legislation, legally enter upon private lands to do whatever is necessary to ensure compliance with that direction.

Any person who contravenes Sections 34(2), 38(2), or fails to comply with a notice issued under the PTHIA, is guilty of an offence, and upon conviction is liable for a fine.

In addition to the conditions of a Ministry sign permit, a property owner/permit holder must meet all of the requirements of the local municipality and any other agency with jurisdiction over the placement of signs.

### **5.2.6 Sign Permit Application**

Application for a sign permit shall be made by each person, firm, or organization planning to display a sign(s) or advertising device(s) within the



controlled area. The property owner shall be responsible for completing the necessary application forms and submitting the appropriate approved fees.

The Ministry shall consider each application and the accompanying information having full regard to this policy.

When an application for a sign(s) has been approved, the Ministry shall issue the permit in the name of the registered property owner or sign owner, in accordance with this policy.

Refer to Chapter 1, for information regarding the application process and contact information.

#### **5.2.7 Application Required when Sign to be Changed**

When a major alteration (change in size or location) of a sign is proposed, the applicant shall submit a completed application form indicating the proposed changes. When necessary, to clarify the changes, the applicant must submit a detailed sketch and letter.

When a sign that is to be altered or replaced is covered by a permit, the number of the current permit must be shown on the application form.

#### **5.2.8 When Change in Sign Approved, New Permit is Issued**

When an application to alter or replace a sign has been approved, any existing permit shall be cancelled, and a new permit issued. An application to alter or replace a sign may be approved or refused at the discretion of the Ministry. If a sign is changed in a manner that changes the classification, etc. to a different classification or to a size, etc. that requires payment of a fee or of a higher fee, the difference between the previous amount paid and the fee for the new permit shall be payable before a permit is issued.

#### **5.2.9 Application to Change Sign may be Approved or Refused**

An application to change a sign already erected may be approved or refused at the discretion of the Ministry. Any change must meet the current requirements of the Ministry.

#### **5.2.10 Permit Fees**

The Ministry may prescribe a fee to be paid for any permit issued under the provisions of the PTHIA. Where the fee for a permit is based on the area of the sign, it shall be the actual physical area of all sign faces that are visible from the highway. Permit fees, including renewals, shall be in accordance with the annual schedule of fees.

#### **5.2.11 Message on Two Sides Counts as Two Signs**

Where a sign conveys a message, identifies a business or property, or advertises a business, product, real estate, or service on more than one side, each side of the sign shall be counted as one sign for the purpose of this policy. Cylindrical and spherical shaped signs shall be counted as two signs when visible from two or more directions. Official signs on the right-of-way of a highway shall only be counted as one sign, regardless of whether the message is on one or both sides.

#### **5.2.12 Expiry Date of Sign Permits**

The expiry date for billboard and private roadway signs shall be five years from the date of permit approval.

### **5.3 General Restrictions Regarding Signs**

---

The following restrictions regarding signs shall apply to the area over which the Ministry has control by authority of the PTHIA (referred to in this policy as the "controlled area").

#### **5.3.1 Signs Subject to Approval of Ministry**

Each sign placed, erected, maintained, or altered within the controlled area shall be subject to the approval of the Ministry. The only exceptions shall be one sign not more than 0.18 m<sup>2</sup> (2 sq. ft.) in size displaying the name or the name and occupation of the owner of the premises on which the sign is located or the name of the premises, and certain signs advertising agricultural products, which may be placed by the owner under the provisions of the PTHIA without the approval of the Ministry.

#### **5.3.2 Sign Must not be Placed until Permit is Obtained**

Installation of a sign within the controlled area must not begin unless a permit or letter of approval is issued by the Ministry. Failure to adhere to the conditions of a sign permit may result in prosecution of the owner or in cancellation of the permit.

#### **5.3.3 Sign Must be Placed within Six Months of Issuance of Permit**

When a sign permit has been issued, the sign(s) to which the permit applies must be placed or erected within six months of the date of issue of the permit otherwise the permit shall be void and cancelled. When a permit is cancelled in accordance with this procedure, the fee shall not be refunded.

#### **5.3.4 Location of Signs**

A sign, placed within the controlled area, must not be,

1. affixed to, or mounted upon a tree, public utility pole, guide rail, or utility standard;
2. painted or pasted upon rock, surface, or other signboard or structure except if approved by the Ministry;
3. placed in, or allowed to overhang, a daylighting area;
4. placed in a position in which the sign, or any part thereof, encroaches upon, or overhangs the right-of-way of a highway, except where this policy specifically permits such signs, and/or,
5. placed in a position in which the sign, or any part thereof, overhangs the travelled portion of the highway.

The owner of each sign attached to or forming part of an awning, canopy or marquee or other structure that overhangs the right-of-way of a highway shall be responsible for any damage that may be caused thereby or result thereupon.

#### **5.3.5 Location of Signs Adjacent to At-Grade Intersections in Developed Area**

The following restrictions shall apply to signs adjacent to at-grade intersections in a built-up or urban area:

- a. every billboard sign shall be prohibited within 46 m (150 ft.) of the nearest limit of an at-grade intersection of a highway and a road, street, railway or another highway.
- b. a sign within 15 m (50 ft.) of the nearest limit of an at-grade intersection of a highway and a road, etc., which sign is affixed to the commercial establishment to which it applies, may be approved by the Delegated Authority.

#### **5.3.6 Frontage Road Does Not Limit Control**

The existence of a road, frontage road, or street within the controlled area shall not limit the application of this policy, except for particular types of signs as specifically set out in this policy.

#### **5.3.7 Sign may be Moved Subject to Approval of the Ministry**

An application to move a sign from one location to another within the controlled area may be approved by the Ministry. The old permit, if any, shall be cancelled in these cases, and a new permit will be issued. Each relocated sign must meet the current requirements of the Ministry in its new location.

#### **5.3.8 Basic Setback to be Restored when Conditions Change**

In any case where the basic setback distance for a sign has been relaxed to provide a better view of the sign (location and billboard in Bush Country), and the reason for relaxing the basic setback distance ceases to exist, the sign shall be relocated in accordance with the basic setback distance, or as near as is practical under the changed conditions.

#### **5.3.9 Signs Must be of Permanent Construction**

Each sign (other than temporary signs or portable signs) shall be of permanent construction, and shall be fixed in a permanent location. The foundation or base of a sign shall be part of the sign for the purposes of this policy, but shall not be included in the measurement when determining the area of a sign.

#### **5.3.10 Sign Must be Kept in Satisfactory Condition**

Each sign placed or retained in the controlled area must be kept in good condition. When the Delegated Authority considers the condition of a sign to be unsatisfactory, the owner must be notified in writing and advised to improve or remove the sign within a specified time period.

#### **5.3.11 Lighting Subject to Approval of the Ministry**

A sign may be luminous or illuminated, provided the lighting:

- does not cause direct or indirect glare that may interfere with traffic safety, and
- is not to be used to illuminate a building, sign, structure, or premises etc. either directly or indirectly, in a manner that causes direct or indirect glare that may interfere with traffic safety.

#### **5.3.12 Certain Lights and Lighting Prohibited**

The following shall be prohibited:

- Flashing lights or intermittent or activated lighting of any kind, including searchlights which are used solely as a means of attracting attention.

#### **5.3.13 Lights, Lighting and Advertising Devices Creating Hazard May Result in Prosecution**

When, in the opinion of the Delegated Authority, the use of lights, lighting, advertising devices or the design or location of a sign may create a traffic hazard or endangers the public, the Delegated Authority shall notify the appropriate police authority.

#### **5.3.14 Signs Resembling Traffic Signs or Signals are Prohibited**

The use of a sign or other device that purports to be, is an imitation of, or resembles an official traffic sign, signal, or other traffic regulating device, shall be prohibited.

#### **5.3.15 Use of Certain Words, Phrases, Symbols, Relating to Directions**

A sign may carry directions for reaching an establishment providing such directions, in the opinion of the Delegated Authority, do not interfere with the normal flow of traffic or create a traffic hazard.

#### **5.3.16 Signs Indicating Distance**

A sign, other than an official sign, must not carry a message which indicates the distance to a city, town, village or police village. However, a sign may indicate the distance to a place of business provided the distance shown is reasonably accurate.

#### **5.3.17 Signs that Interfere with View of Business Establishments or Other Signs**

A permit must not be issued for a sign that would interfere with or block the view of either a commercial establishment or a sign already approved by the Ministry, when the sign or commercial establishment is owned or operated by a person other than the applicant for the permit. The decision in these cases shall be made by the Delegated Authority.

#### **5.3.18 Trees and Shrubs Must not be Removed or Trimmed to Improve View of Advertising**

Trees and shrubs located within the right-of-way of a highway must not be removed, cut or trimmed for the sole purpose of improving the view of a sign or other advertising matter. However, brush may be cleared subject to the approval of the Delegated Authority.

On highway rights-of-way in excess of 46 m (150 ft) which have been designated as Bush Country highway by the Ministry, bush and brush may be removed, subject to the approval of the Delegated Authority and at no expense to the Ministry, to permit the erection of billboard signs on the right-of-way.

#### **5.3.19 Signs on Walls**

When it is a requirement of this policy that a sign be affixed to a building, the sign shall not be affixed to a wall which does not form a part of the architectural design of the building.

### **5.3.20 Signs on Chimneys, Smokestacks, or Tanks**

Any message on a chimney, smokestack or tank, other than the name of a municipality or business identification, shall be prohibited.

Approved signs painted upon or affixed to a chimney, smokestack or tank must not exceed the height or width of the chimney, smokestack or tank.

### **5.3.21 Public Sales Barn Signs**

Signs placed by or on behalf of public sales barns or other auction establishments of a permanent nature shall be classified as location or billboard signs depending upon whether they are located upon the property upon which the sales are held or upon another property.

### **5.3.22 Signs at Shopping Centres**

Only approved commercial plaza location signs will be permitted (refer to *Commercial Plaza or Industrial Complex Signs* section of this policy).

### **5.3.23 Contravention of this Policy May Result in Prosecution**

The placing of a sign which contravenes this policy or contravenes the conditions of a permit for that sign may result in the prosecution of the owner, and/or in the cancellation of the permit.

### **5.3.24 Compensation for Sign to be Determined by the Ministry's Property Section**

Compensation may be paid as determined by the Ministry's Property Section when:

1. a sign is located upon property which is purchased for use as the right-of-way of a highway.
2. a sign is affected by the purchase of property for a highway.
3. there is a change in the limits of the right-of-way of a highway.
4. it is necessary to move or remove the sign for any other reason for which the Ministry is responsible.

## 5.4 Advertising or Decorative Devices

### 5.4.1 General Requirements

An advertising or decorative device is a device (other than a recognized or standard type of sign) that is placed or affixed to advertise, attract attention, or promote an individual firm, organization, product, or event. These include devices of a decorative nature, banners, streamers, strings of flags, multiple flag installations, lights, or other such devices. They are all subject to the approval of the Ministry. Approval shall be at the discretion of the Delegated Authority in accordance with the following:

- a. Advertising or decorative devices must not be placed adjacent to Class 1 and 2 highways, except if specifically indicated in this policy.
- b. Advertising or decorative devices must not be placed within or allowed to overhang the right-of-way of the highway.
- c. Advertising or decorative devices must be placed at least 3 m (10 ft.) behind the highway property line, and not in a daylighting or visibility requirement area. Where a service road exists, these signs must not be placed closer to the highway property line than 1.5 m (5 ft.) behind the service road property line.
- d. Approved advertising or decorative devices used solely to decorate a premise, to mark a particular holiday season, or a particular recognized public celebration or ceremony, may be placed adjacent to a highway.
- e. The maximum period these devices may remain in place is 69 days, and all such devices must be removed within 7 days after the date of the particular holiday which they have been placed to mark.
- f. An advertising or decorative device must not:
  - be allowed to move or turn by mechanical or other means. This shall also apply to any part or parts, standard or pylon.
  - have flashing lights or intermittent or activated lighting of any kind, including searchlights used solely as a means of attracting attention.
- g. All displays or devices must be in good taste. The Ministry reserves the right to determine what constitutes good taste.
- h. Holograms and searchlights within the controlled area shall be prohibited.

### 5.4.2 Inflatable Advertising Displays

- a. Inflatable advertising shall be considered as a temporary sign, and will be allowed under permit per location or property.
- b. An inflatable device/display must be located so it does not encroach on the Ministry's rights-of-way or daylighting area.

- c. An inflatable device/display shall only be allowed adjacent to Class 3 special controlled access, Class 4 Major, and Class 5 Minor highways when an approved permit has been issued by the Ministry, and must be on the property where the business is conducted.
- d. This type of advertising shall be prohibited adjacent to Class 1 freeways/expressways or Class 2 staged freeways/expressways except when the posted speed limit is 80 km or less.
- e. An inflatable advertising display may be internally illuminated, but must not:
  - be allowed to move or turn mechanically or by other means,
  - have flashing lights or intermittent or activated lighting of any kind, including searchlights.
- f. An inflatable advertising display shall not be located on any property where in the opinion of the Ministry the display would block the vision of any motorist entering or exiting the property.
- g. One permit for a maximum of six months per calendar year will be issued.

#### **5.4.3 Banners, Streamers and House Flags**

Banners, streamers, strings of flags or multiple flag installations, lights, or other such devices shall be subject to the general restrictions for signs, and shall be subject to the approval of the Ministry.

##### **5.4.3.1 Banners, Pennants and House Flags Adjacent to all Highways:**

The Ministry will allow banners, pennants or house flags adjacent to all highways, except banners across Class 1 and 2 highways. No messages will be allowed on the banner, pennant, or house flag. These devices are intended to attract attention to the site without conveying any messages.

Banners, pennants, and flags shall be set back at least 3.0 m (10 feet) behind the Ministry property line, with a support or pole height restriction of 7.6 m (25 feet) above property ground elevation.

The number of banners or pennants permitted on a site will be determined by the property frontage along the highway. A maximum of three banners, pennants, or house flags are allowed for every 15 m (50 feet) of highway frontage.



#### **5.4.3.2 Banners Across Two - Lane Class 3, 4 and 5 Provincial Highways**

The Ministry will allow banners marking occasions such as jubilees, anniversaries, and special occasions sponsored by town councils, service clubs, chambers of commerce, etc. to be placed under the following conditions:

- a. An application to place a banner over or across a 2-lane highway shall be made on an application for encroachment permit.
- b. An approved banner shall be allowed for a period of time not exceeding four weeks. At the end of that time the banner is to be removed by the applicant.
- c. The applicant shall be responsible for ensuring that the banner is kept in good repair at all times while it is in use.
- d. The applicant shall be responsible for obtaining any and all other required approvals which relate to the erection of the banner, such as, Hydro One, Bell Canada, municipality, etc.
- e. Approved banners must be placed a minimum of 7.6 m (25 ft.) in height above the centre line of the highway.
- f. Approved banners must be supported at the top and bottom by a cable not less than 6 mm (1/4") in diameter, or a rope not less than 13 mm (1/2") in diameter.
- g. Approved banners must be placed as close as possible to the limits of the built-up areas of the city, town or village in question.
- h. Banners must be constructed or manufactured so that they can withstand the elements.
- i. Banners must not be attached to any part of a bridge or other highway facility.
- j. Banners will not be permitted over or across Class 1 and 2 highways.

#### **5.4.3.3 Pole Mounted Event Banners**

The Ministry will allow banners located on the highway right-of-way attached to existing poles to mark occasions such as jubilees, anniversaries, special occasions sponsored by the town council, service clubs, chambers of commerce, etc. to be placed under the following conditions:

- a. An application to place a banner along a 2-lane highway shall be made on an application for encroachment permit.
- b. Third party advertising will not be permitted on the banners.

- c. An approved banner shall be allowed for a period of time not exceeding six months. At the end of that time the banner is to be removed by the applicant.
- d. The applicant shall be responsible for ensuring that the banner is kept in good repair at all times.
- e. The applicant shall be responsible for obtaining any and all other required approvals, which relate to erection of the banner, such as Hydro One, Bell Canada, Municipal, etc.
- f. Approved banners must not exceed 0.61 metres (2 feet) in width and 1.83 metres (6 feet) in length and shall be placed on an existing pole a minimum of 3.66 metres (12 feet) off the ground.
- g. Approved banners must be placed within the limits of a built-up area of the city, town or village in question and the posted speed limit must be less than 70 km/h.
- h. Banners must be constructed or manufactured so that they can withstand the elements.
- i. Banners will not be permitted along Class 1 and 2 highways.

#### **5.4.4 National/Provincial Flags**

Flag poles shall be set back behind the property limits a sufficient distance, such that they cannot fall on to the travelled portion or shoulder of the highway.

There are no restrictions on the size and number of flags, unless in the opinion of the Delegated Authority the flags are causing a traffic hazard. No permits are required.

#### **5.4.5 Advertising Messages on Trucks, Trailers etc.**

Trucks, trailers etc. bearing an advertising message or business or private identification shall be classified according to use.

A sign of this nature must not be placed in the controlled area where the message, if displayed on a standard type sign, would be contrary to this policy (i.e. billboard signs adjacent to a Class 1 or 2 highway).

If trucks, trailers etc. carrying advertising or other messages are placed adjacent to a highway in contravention of this policy, the Delegated Authority shall discuss the matter with the owner of the advertising device and/or the property owner regarding the removal of the advertising device.

## 5.5 Temporary Signs

### 5.5.1 Temporary Signs Subject to Approval of the Ministry

Each temporary sign shall be subject to the approval of the Ministry. The general restrictions regarding signs shall apply to each temporary sign. The location of temporary signs shall be restricted as specified in this policy. A Letter of Approval will be required for certain types of temporary signs as specified herein. Each request for a temporary sign(s) must state the maximum number of signs the applicant proposes to place. A fee will not be required for a Letter of Approval.

### 5.5.2 Types of Temporary Signs

Temporary signs shall include:

- a. agricultural society signs, plowmen's association signs, plowing match, exhibition and fall fair signs, and the signs placed by recognized organizations of a similar nature to advertise a particular event. Certain approved signs may be placed by the Ministry to direct persons to temporary events, e.g., a plowing match, etc.
- b. the signs of recognized service clubs and religious and charitable organizations and of other recognized public service organizations, where signs are placed to advertise a particular event
- c. private auction sale signs
- d. Election signs, Canadian Forces Convoy Route markers, snowmobile crossing signs, real estate/development signs, and mobile signs.

**Note:** Commercial auction sale signs are prohibited as a temporary sign.

### 5.5.3 Requirements Regarding Temporary Signs

A temporary sign must not:

- a. exceed 3.0 m<sup>2</sup> (32 sq. ft.) in size
- b. be affixed to another sign or to a guide rail or other highway facility or structure
- c. be placed adjacent to a Class 1 or a Class 2 highway, excepting certain real estate signs or other signs as specifically permitted by this policy
- d. be placed within the highway right-of-way except where this policy specifically states that this may be done

- e. be placed where it may interfere with an official sign, traffic signal or safety device
- f. be in place for longer than a four week period
- g. remain in place more than three days after the expiry date in the Letter of Approval
- h. exceed one sign facing in each direction of travel on any 2.0 km section of a Provincial Highway
- i. be further than 8.0 km from the site of the event being advertised.

#### **5.5.4 Maximum of Two Temporary Signs on One Property**

A maximum of two temporary signs shall be permitted upon any one property at any one time.

#### **5.5.5 Temporary Signs Shall Face Traffic**

Each temporary sign shall not be located on the left hand side facing the motorist.

Only one Letter of Approval shall be required to cover all temporary signs placed by one person or organization to advertise one event etc. within one Area Office of the Ministry. Each Letter of Approval shall stipulate the maximum number of temporary signs which may be placed under the conditions of that Letter of Approval.

#### **5.5.6 Separate Approval Required in each MTO Area Office**

When temporary signs advertising one event etc. are to be placed in locations involving more than one Ministry Area Office, a separate Letter of Approval shall be required from each Ministry Area Office in which the signs are to be placed.

Multiple requests submitted by the same organization within the same calendar year will be required to follow the billboard guidelines.

#### **5.5.7 Certain Signs Prohibited if Event Advertised Operated for Private Profit**

Temporary signs must not be placed by (or on behalf of) a person or organization to advertise an event that is conducted for private profit. These restrictions shall apply to a circus, midway, thrill show, automobile and horse racing signs etc., except when the function is sponsored by a recognized public service or charitable organization, to which a percentage of the gross receipts will accrue under the terms of a signed contract.

#### **5.5.8 Letter of Approval may be Withdrawn if Sign Placed in Contravention of Instructions**

A Letter of Approval for temporary signs may be cancelled if the person or organization to whom the approval was issued (or their agent) places a sign(s) in a manner that is contrary to the conditions approved by the Ministry.

#### **5.5.9 If Event Advertised is Postponed Expiry Date may be Extended**

If an event advertised by means of temporary signs has been postponed due to rain or other reasons, the date of expiry of the original approval may be extended by the Delegated Authority. The holder of the Letter of Approval must notify the Delegated Authority of the postponement, and the new date that the event is expected to be held.

#### **5.5.10 Election Signs**

An election sign must not be placed upon or adjacent to the right-of-way of a Class 1 Freeway or Class 2 Staged Freeway.

Election signs may be erected on the right-of-way or adjacent to a Class 2 undivided Staged Freeway, a Class 3 Special Controlled Access highway, a Class 4 Major highway or Class 5 Minor highway after an official election has been called.

Signs up to 0.7 m<sup>2</sup> (8 sq. ft.) in size must be placed a minimum of 4m (12 ft.) from edge of pavement. Signs over 0.7 m<sup>2</sup> (8 sq. ft.) and up to 3.7 m<sup>2</sup> (40 sq. ft.) must be placed at the outer limit of the highway right-of-way.

Election signs may be placed on the right-of-way of a highway other than a Class 1 Freeway and Class 2 divided Staged Freeway, but must be placed at least 4m (12 ft.) from edge of pavement.

An election sign must not be affixed to a permanent or an official sign, or to the guide rail or other highway structure or facility. It must not be placed where it may interfere with visibility, an official sign, traffic signal, or other safety device.

Portable read-o-graph sign trailers are prohibited on the right-of-way of a highway. Such read-o-graph sign trailers may be utilized, providing they are erected on private property, and meet the requirements of the Ministry for portable read-o-graph signing.

Permits or Letters of Approval for any election signs erected under this policy are not required.

Candidate committees or workers shall be allowed three working days after election day to remove candidate advertising (election signs) from the Ministry right-of-way and adjacent properties.

Signs not retrieved by this time will be picked up by the Ministry patrol forces and stored in a safe place (patrol yard, etc.,) for a period of two weeks. After this time they will be disposed of.

#### **5.5.11 Canadian Forces Convoy Route Markers**

Route markers in the form of tack signs, approximately 36 cm by 25 cm (14 in. by 10 in.) will be permitted affixed to trees, posts and Ministry Official Signs.

These markers may be placed one day before the convoy is to pass, and should be removed within one day after the convoy has passed. The markers shall be erected and removed by military personnel.

The Canadian Forces shall notify the Ministry of their intention to erect convoy markers and the location of these markers, prior to their installation.

#### **5.5.12 Snowmobile Crossing Sign**

This sign shall be used to warn motorists of the location of a snowmobile crossing, where there is a large volume of snowmobiles crossing a highway from an organized trail. Only approved organized snowmobile trail crossings will be signed. Visibility at the crossing must meet the requirements for a commercial entrance.

Snowmobile clubs are to submit their request to the Ministry on an annual basis for consideration.

The sign shall be erected prior to November 1 and shall be removed during the month of April. The sign shall be located approximately 150 m in advance of the crossing.

The complete cost of manufacturing, erection, and removal of this sign will be the Ministry's responsibility.

#### **5.5.13 Development/Real Estate/Construction Signs**

Development/Real Estate/Construction Signs adjacent to all highways are subject to the following requirements:

- a. A development/real estate/construction sign which does not exceed 3.0 m<sup>2</sup> (32 sq. ft.) shall require a letter of approval.

- b. A development/real estate/construction sign which exceeds 3.0 m<sup>2</sup> (32 sq. ft.) but does not exceed the maximum of 46 m<sup>2</sup> (500 sq. ft.) shall require a permit.
- c. Signs shall be set back a minimum distance of 3 m (10 ft.) behind the property line.
- d. Signs must not exceed 8 m (25 ft.) in height above the ground.
- e. The signs must be removed when an application for a permanent location or on-premise sign is received.
- f. A development/real estate/construction sign may be illuminated.
- g. For development signs, supporting documentation must be submitted with the sign application (e.g. site plan, letter of intent, proof of ownership).
- h. A permit shall be issued for a two year period.

#### **5.5.14 Portable Signs (Mobile)**

A portable trailer, ground, mobile, movable, or framed read-o-graph sign is a sign which is movable, and which is not permanently attached to the ground, a structure or any other sign or building.

Portable signs are subject to the following requirements:

- a. A sign permit is required for every portable sign adjacent to Class 3, 4 and 5 highways. No portable signs are permitted adjacent to Freeways or Expressways (Class 1 and 2 highways 4 lane).
- b. The maximum size of a portable sign will be 8.9 m<sup>2</sup> (96 sq. ft.), representing 4.4 m<sup>2</sup> (48 sq. ft.) per side.
- c. A one-time fee payable to the Minister of Finance is required.
- d. One portable sign will be allowed for each business property, with the exception of plazas and industrial complexes (i.e. three or more units). Plazas and industrial complexes will be allowed a maximum of three portables based on one sign per 46 m (150 ft.) of frontage.
- e. The portable sign shall be allowed within the total allowable square metres of location signing allotment available for the site.
- f. The sign permit will only be issued to the property owner, not the portable sign company. Any instructions for compliance will be directed to the property owner.
- g. Portable signs must be kept back a minimum of 3 m (10 ft.) from the property line.
- h. Signs must not be placed to cause a visibility problem.

- i. Signs must not have flashing, intermittent, or actuated lighting of any kind.
- j. The sign must be on the property where the business is conducted, and only advertise what is related to that property.
- k. Portable signs are not to be used as billboard signs.
- l. The property owner shall be responsible for obtaining all other municipal approvals.

## 5.6 Location Signing

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A location sign identifies, advertises, promotes or directs attention to a business, service and/or activity available at the premise the sign is located on. See Glossary for detailed definition.

### 5.6.1 Individual Business

An individual business consists of two units or fewer on a property.

These instructions do not apply to:

- a. shopping centres, shopping malls, mews, plazas, industrial centres, etc. as they are covered separately under the commercial plaza or industrial complex
- b. portable read-o-graph trailer signs as they are covered separately
- c. any sign not visible from the highway. There are no restrictions to such signs nor is a permit required.

Location signing is subject to the following criteria:

- a. Location signing will be allowed to be freestanding or affixed to a building or landscape.
- b. The amount of location signing approved for any one location may consist of any number of either freestanding signs and/or affixed to the building and/or landscape signing. Refer to Section 5.6.2 for the total area of signage allowed for a site of business.
- c. Each location sign shall not be restricted as to size, as long as the total location signing on the property does not exceed the Ministry's standards.
- d. Location signing may all face in the same direction, or may face in different directions.
- e. The use of logos, logograms, pictures, picture grams, maps, catch phrases, etc. will be acceptable.



- f. All displays of words, diagrams, pictures, etc. must be in good taste.
- g. Location signs shall be allowed to be painted on a building.
- h. A permit shall be required for all location signing which exceeds 3.0 m<sup>2</sup> (32 sq. ft.) in total area. A letter of approval shall be required for a sign measuring between 0.18 m<sup>2</sup> (2 sq. ft.) and 3.0 m<sup>2</sup> (32 sq. ft.) in area.
- i. Freestanding and landscape signs must not be placed closer to the highway property line than 3 m (10 ft.) behind the property line with the exception of signing with no advertising, such as entrance, exit, no trespassing, utility location, etc. which shall be placed at appropriate locations. However, these signs must be kept clear of the shoulder of the highway and, if possible, off the right-of-way. Where a service road exists, freestanding signs must not be placed closer to the highway property line than 1.5 m (5 ft.) behind the service road property limit, also with the above-noted exception.
- j. This policy is subject to all municipal by-laws, and does not supersede such by-laws.
- k. Location signs will be permitted to be luminous or illuminated by direct or indirect lighting or may contain reflective material or luminous paint. However, such signs must not cause direct or indirect glare that may interfere with traffic safety. It shall be at the discretion of the Delegated Authority to decide whether the sign is creating a traffic hazard.
- l. A sign mounted on top of a building (roof top) must not exceed the maximum allowable height above the ground, according to sign setback from highway property as noted in Section 5.6.2.
- m. All sign dimensions shall include borders and trim in the measurements, but shall exclude supports. Letters affixed to the building shall be blocked out per letter, excluding the spacing between each letter.
- n. Every sign shall be prohibited within the sight triangle of an intersection, according to the sight triangle requirements specified in Chapter 9 of the TAC GDG and Appendix 9 of the MTO DS, unless the sign is affixed to the commercial establishment and approved by the Ministry.
- o. Location signs shall not be:
  - affixed to, or mounted upon a tree, public utility pole or utility standard
  - painted or pasted upon, or made to form a part of a rock face, other signboard or structure such as a hydro tower or water tower, except as approved by the Ministry
  - placed within, or allowed to overhang a daylighting area
  - placed in a manner in which the sign, or any part thereof, encroaches upon or overhangs the right-of-way of the highway, except in a built-up area when the sign is affixed to a building which abuts the right-

of-way of the highway, or is approved by the Ministry, as in the case of utility location signing or fare zone

- placed in a manner in which the sign (or any part thereof) overhangs the travelled portion of the highway
  - placed facing a sharp change in horizontal or vertical alignment, rock-cut or in any other location, where it may create a distraction and cause a traffic hazard
  - allowed to move or turn by mechanical or other means. This shall apply to any part or parts of such sign standard or pylon.
  - a sign or device having flashing lights or intermittent or activated lighting of any kind, including searchlights which are used solely as a means of attracting attention
  - erected to extend beyond the end of the wall or roof which the sign is attached to or mounted upon.
- p. For situations where developments are located adjacent to more than one Provincial Highway, the amount of signing permitted as noted in Section 5.6.2 is the amount of signing permitted per highway.
- q. The amount of signing allowed on a pylon is based on a double-sided sign. A one-sided pylon sign cannot exceed 50% of the total permitted sign area as noted in Categories A, B and C of section 5.6.2.
- r. The total land area as noted in Section 5.6.2 is the land area currently under active development which includes the building(s) footprint and permanent parking area(s) (i.e. site plan control).
- s. A sign structure exceeding 8 m (25 ft.) in height requires a stamp of approval by a professional engineer as set out in the Ontario Building Code.

## 5.6.2 Amount of Signing Permitted on Property (Individual Business)

### Category A:

Individual Business - Under 27,870 m<sup>2</sup> (300,000 sq. ft.) of total land area under active development.

This policy is applicable to all highways. An individual business adjacent to a highway shall be permitted one pylon sign. One additional pylon sign is permitted adjacent to an intersecting road. This shall be in addition to affixed to a building sign as noted in Category D of this section.

**Table 5.6.1: Amount of Signing Permitted for Individual Business – Category A**

Group No.	Distance from Property Line to Sign Closest to Highway	Maximum Signing Allowed "1 Pylon"	Maximum Height from Centre Line or Ground Elevation
1	61 m (200 ft.) or less	46 m <sup>2</sup> (500 sq. ft.)	9 m (30 feet)
2	over 61 m (200 ft.) up to 183 m (600 ft.)	56 m <sup>2</sup> (600 sq. ft.)	10 m (35 feet)
3	over 183 m (600 ft.) and within 400 m (1,320 ft.)	65 m <sup>2</sup> (700 sq. ft.)	12 m (40 feet)

### Category B:

Individual Business - 27,870 m<sup>2</sup> – 92,900 m<sup>2</sup> (300,000 - 1,000,000 sq. ft.) of total land area under active development.

This policy is applicable to all highways. An individual business adjacent to a highway shall be permitted one pylon sign. One additional pylon sign is permitted adjacent to an intersecting road. This shall be in addition to affixed to a building sign as noted in Category D of this section.

**Table 5.6.2: Amount of Signing Permitted for Individual Business – Category B**

<b>Group No.</b>	<b>Distance from Property Line to Sign Closest to Highway</b>	<b>Maximum Signing Allowed "1 Pylon"</b>	<b>Maximum Height from Centre Line or Ground Elevation</b>
1	61 m (200 ft.) or less	56 m <sup>2</sup> (600 sq. ft.)	10 m (35 feet)
2	over 61 m (200 ft.) up to 183 m (600 ft.)	65 m <sup>2</sup> (700 sq. ft.)	12 m (40 feet)
3	over 183 m (600 ft.) and within 400 m (1,320 ft.)	75 m <sup>2</sup> (800 sq. ft.)	13 m (45 feet)

**Category C:**

Individual Business - over 92,900 m<sup>2</sup> (1,000,000 sq. ft.) of total land area under active development.

This policy is applicable to all highways. An individual business adjacent to a highway shall be permitted one pylon sign. One additional pylon sign is permitted adjacent to an intersecting road. This shall be in addition to affixed to a building sign as noted in Category D of this section.

**Table 5.6.3: Amount of Signing Permitted for Individual Business – Category C**

<b>Group No.</b>	<b>Distance from Property Line to Sign Closest to Highway</b>	<b>Maximum Signing Allowed "1 Pylon"</b>	<b>Maximum Height from Centre Line or Ground Elevation</b>
1	61 m (200 ft.) or less	65 m <sup>2</sup> (700 sq. ft.)	12 m (40 feet)
2	over 61 m (200 ft.) up to 183 m (600 ft.)	75 m <sup>2</sup> (800 sq. ft.)	13 m (45 feet)
3	over 183 m (600 ft.) and within 400 m (1,320 ft.)	85 m <sup>2</sup> (900 sq. ft.)	14 m (50 feet)

## **Category D: Affixed to a Building Sign**

This policy is applicable to all highways. Signing allocation shall be calculated based on the total area of the individual businesses' exterior elevation visible to the highway. The total sign area shall not exceed 20 percent (20%) of the area of the exterior elevation on which they are erected. This shall be in addition to the pylon signing as noted in Categories A, B and C of Section 5.6.2.

### **5.6.3 Commercial Plaza or Industrial Complex Sign**

A commercial plaza or industrial complex shall consist of three units or more.

Location signing for a commercial plaza or industrial complex is subject to the following criteria:

- a. Location signing will allowed to be freestanding or affixed to a building or landscape.
- b. The amount of location signing approved for any one location may consist of any number of either freestanding signs and/or affixed to the building signing and/or landscape signing. Refer to Section 5.6.4 for total area of signage allowed for site of business.
- c. A commercial plaza or industrial complex shall be permitted "entrance", "exit" and "no parking" signs on the property at appropriate locations as required. These signs shall consist of only the words "entrance", "exit" or "no parking", and a symbol or trademark of the commercial or industrial complex involved. The maximum size of these signs shall be approximately 0.9 m<sup>2</sup> (10 sq. ft.).
- d. All signs located at major commercial or industrial complexes will be permitted to be luminous or illuminated by direct or indirect lighting, or may contain reflective material or luminous paint. However, these signs must not cause direct or indirect glare that may interfere with traffic safety. It shall be at the discretion of the Delegated Authority to decide whether the sign is creating a traffic hazard.
- e. Where a service road exists adjacent to a highway, all setback distances specified in this policy, except for the 400 metre outer limit of the controlled area, shall be determined from the service road property line instead of from the highway property limit.
- f. These directions do not apply to portable read-o-graph signs, as they are covered separately.
- g. A sign mounted on top of a building (roof top) must not exceed the maximum allowable height above the ground according to sign setback from the highway property line as noted in Section 5.6.4.
- h. Freestanding and landscape signs must not be placed closer to the highway property line than 3 m (10 ft.) behind the property line with the

exception of informational signing such as entrance, exit, no parking, etc. which shall be placed at appropriate locations. Where a service road exists, freestanding signs must not be placed closer to the highway property line than 2 m (6.5 ft.) behind the service road property line, also with the above-noted exception.

- i. These directions are subject to all municipal by-laws and do not supersede such by-laws.
- j. A directory board or sign(s) indicating tenant identification and location within a commercial or industrial complex shall be permitted, but should not be legible from the highway. Any such directory board should consist of individual panels, each panel not exceeding 20 cm (8 in.) by 0.91 m (3 ft.), identifying individual business establishments forming a part of the complex. These directory signs should be located within 3 m (10 ft.) of the building in question, preferably near the building entrance.
- k. Any sign located at a commercial plaza or industrial complex, providing either complex identification or individual commercial establishment identification, must not:
  - be allowed to move or turn by mechanical or other means. This shall also apply to any part or parts of such signs, standard or pylon
  - have flashing lights, or intermittent, or activated lighting of any kind, including searchlights which are used solely as a means of attracting attention
  - be longer than or extend beyond the wall of that part of the building to which the sign is affixed.
- l. The building/structure related to the freestanding sign adjacent to the highway shall be visible from the highway. The displayed message must be related to the business located on that property. The signs must be placed in an area projected by a line running 76 m (250 ft.) from either side of the building in question to the highway.
- m. A sign erected on a building to identify a commercial or industrial individual unit forming a part of a commercial complex may also contain other wording such as advertising, logos, logograms, catch phrases or pictures etc., as long as the total sign area does not exceed Ministry standards.
- n. Signs shall be prohibited within the sight triangles of an intersection. This applies to all types of signs. For sight triangle requirements refer to Chapter 9 of the TAC GDG and Appendix 9 of the MTO DS, unless the sign is affixed to the commercial establishment and approved by the Ministry.
- o. The permit for a pylon sign is to be issued to the property owner.
- p. For situations where developments are located adjacent to one or more Provincial Highways, the amount of signing permitted as noted in

Categories A, B, C and D of Section 5.6.4 is the amount of signing permitted per highway.

- q. The amount of signing allowed on a pylon is based on a double-sided sign. A one-sided pylon sign cannot exceed 50% of the total permitted sign area as noted in Categories A, B and C of Section 5.6.4.
- r. The maximum size of a double-faced pylon sign or industrial complex identification sign shall not exceed the total area indicated in Categories A, B and C. This shall be in addition to the signing affixed to a building as noted in Category D of Section 5.6.4.
- s. The total land area as noted in Section 5.6.4 is the land area currently under active development which includes the building(s) footprint and permanent parking area(s) (i.e. site plan control).
- t. A sign structure exceeding 8 m (25 ft.) in height requires a stamp of approval by a professional engineer, as set out in the Ontario Building Code.

#### 5.6.4 Amount of Signing Permitted on Property – Commercial Plaza or Industrial Complex

##### Category A: Pylon Signs

Less than 27,870 m<sup>2</sup> (300,000 sq. ft.) of total land area under active development

This policy is applicable to all highways. A commercial plaza or industrial complex adjacent to a highway shall be permitted one pylon sign. One additional pylon sign is permitted adjacent to an intersecting road. This shall be in addition to affixed to a building sign as noted in Category D of this section.

**Table 5.6.4: Amount of Signing Permitted for Commercial Plaza or Industrial Complex – Category A**

Group No.	Distance from Property Line to Sign Closest to Highway	Maximum Signing Allowed "1 Pylon"	Maximum Height from Centre Line or Ground Elevation
1	61 m (200 ft.) or less	46 m <sup>2</sup> (500 sq. ft.)	9 m (30 feet)
2	over 61 m (200 ft.) up to 183 m (600 ft.)	56 m <sup>2</sup> (600 sq. ft.)	10 m (35 feet)
3	over 183 m (600 ft.) and within 400 m (1,320 ft.)	65 m <sup>2</sup> (700 sq. ft.)	12 m (40 feet)

##### Category B: Pylon Signs

27,870 m<sup>2</sup> – 92,900 m<sup>2</sup> (300,000 – 1,000,000 sq. ft.) of total land area under active development

This policy is applicable to all highways. A commercial plaza or industrial complex adjacent to a highway shall be permitted two pylon signs adjacent to a highway. One additional pylon sign is permitted adjacent to an intersecting road. This shall be in addition to the signing affixed to a building as noted in Category D of this section.



**Table 5.6.5: Amount of Signing Permitted for Commercial Plaza or Industrial Complex – Category B**

<b>Group No.</b>	<b>Distance from Property Line to Sign Closest to Highway</b>	<b>Maximum Signing Allowed "2 Pylons"</b>	<b>Maximum Height from Centre Line or Ground Elevation</b>
1	61 m (200 ft.) or less	56 m <sup>2</sup> (600 sq. ft.)	10 m (35 feet)
2	over 61 m (200 ft.) up to 183 m (600 ft.)	65 m <sup>2</sup> (700 sq. ft.)	12 m (40 feet)
3	over 183 m (600 ft.) and within 400 m (1,320 ft.)	75 m <sup>2</sup> (800 sq. ft.)	13 m (45 feet)

### **Category C: Pylon Signs**

Over 92,900 m<sup>2</sup> (1,000,000 sq. ft.) of total land area under active development

This policy is applicable to all highways. A commercial plaza or industrial complex adjacent to a highway shall be permitted three pylon signs adjacent to a highway. One additional pylon sign is permitted adjacent to an intersecting road. This shall be in addition to the signing affixed to a building as noted in Category D of this section.

**Table 5.6.6: Amount of Signing Permitted for Commercial Plaza or Industrial Complex – Category C**

<b>Group No.</b>	<b>Distance from Property Line to Sign Closest to Highway</b>	<b>Maximum Signing Allowed "3 Pylons"</b>	<b>Maximum Height from Centre Line or Ground Elevation</b>
1	61 m (200 ft.) or less	65 m <sup>2</sup> (700 sq. ft.)	12 m (40 feet)
2	over 61 m (200 ft.) up to 183 m (600 ft.)	75 m <sup>2</sup> (800 sq. ft.)	13 m (45 feet)
3	over 183 m (600 ft.) and within 400 m (1,320 ft.)	85 m <sup>2</sup> (900 sq. ft.)	14 m (50 feet)

## **Category D: Affixed to a Building Sign**

This policy is applicable to all highways. Signing allocation shall be calculated based on the total area of the individual units' exterior elevation visible to the highway. The total sign area shall not exceed 20 percent (20%) of the area of the exterior elevation on which they are erected. The sign area per unit can be shared amongst other tenants within the property provided it's within the maximum allowable signing allocation. This shall be in addition to the pylon signing as noted in Categories A, B and C of Section 5.6.4.

### **5.6.5 Home Occupation Sign**

Most municipalities permit home occupations to locate in all residential and rural/agricultural zoning categories, without specific amendment to the local zoning by-law.

The size of the home occupation, namely whether it occupies 25% or 30% of the total floor area, should be of no consequence to the Ministry. It is the responsibility of the municipality to determine whether the proposed use qualifies as a home occupation under the local by-laws.

The home occupation sign shall consist of one sign no greater than 3 m<sup>2</sup> (32 sq. ft.), or a two-sided sign with a total area no greater than 3 m<sup>2</sup> (32 sq. ft.) to identify the business.

A letter of approval is required with no fee.

### **5.6.6 Environmental/Greening Initiative Sign**

Government agencies (including municipalities and conservation authorities) will be permitted a sign to be placed adjacent to any highway to identify an environmental and/or greening initiative, on the same property on which the sign is located. The sign is subject to the following requirements:

- a. The sign is located on the property that is owned or managed by the government agency or conservation authority.
- b. The message content must be related to the initiative on that property.
- c. The sign must not be placed within 3 m of the property line and no higher than 5 m above the grade in the vicinity of the sign.
- d. A two-sided sign not exceeding 1.22 m by 2.44 m (4 ft. by 8 ft.) will be permitted.
- e. The sign must be removed when the management or ownership of the property changes. The permit shall be issued to the property owner and is not transferable to a new owner.
- f. A letter of approval is required with no fee.

- g. Proof that the property is a designated environmental or greening initiative shall be submitted.

### **5.6.7 Guideline for Farm and Agricultural Product Signing**

For the purposes of this section, an agricultural product that is processed on a farm in Ontario from an agricultural food product shall be deemed to be produced on the premises on which the agricultural food product is produced.

The policy applies to all highways except Class 1 Freeways and Class 2 Staged Freeways.

#### **5.6.7.1 Signs Permitted on a Farm**

Signs permitted on a farm include:

- a. one sign not more than 0.6 m by 0.3 m (2' by 1') in size displaying the name or the name and occupation of the owner of the premises where it is displayed or the name of the premises, or
- b. a maximum of two single-sided signs, each being not more than 1.22 m by 1.22 m (4' by 4') in size and facing in different directions, or one single-sided sign not more than 1.22 m by 2.44 m (4' by 8') in size.

The signs must display information about the sale of agricultural products, (other than tobacco) that are produced and offered for sale on the premises where the signs are displayed.

The signs must be displayed on premises zoned for agricultural uses and not owned by the Crown in right of Canada or the public sector as defined in subsection 2 (1) of the *Public Sector Salary Disclosure Act, 1996*.

#### **5.6.7.2 Permitted Directional Sign (off premises)**

Signs displaying directions to a place where agricultural products (other than tobacco) produced in Ontario and offered for sale are permitted, if the following conditions are met:

- a. a maximum of two single-sided signs, each being not more than 1.22 m by 1.22 m (4' by 4') in size and facing in different directions, or one single-sided sign not more than 1.22 m by 2.44 m (4' by 8') in size
- b. the signs display directions to a place where agricultural products (other than tobacco) produced in Ontario are offered for sale or information about the sale
- c. the owner of the signs also owns or rents the land on which the agricultural products mentioned in sub-subclause (a) were produced

- d. the signs are displayed on premises that is zoned for agricultural uses and that is not owned by the Crown in right of Canada or the public sector as defined in subsection 2 (1) of the *Public Sector Salary Disclosure Act*, 1996
- e. the signs are displayed only during the season that the agricultural products mentioned in sub-subclause (a) are offered for sale.

### **5.6.8 Decorative Municipal Displays**

Towns and cities may place Decorative Municipal Displays (signs) off the highway right-of-way, using a combination of such materials as flowers, plantings, wood, rocks, berms, painted signs and/or mounted lettering, to advertise to the travelling public that they are now entering the town or city limits.

For Decorative Municipal Displays (signs) on the highway right-of-way, please refer to OTM Book 8, Guide and Information Signs.

Decorative Municipal Displays (signs) adjacent to all highways off the highway right-of-way may be permitted subject to the following criteria:

- a. Location:
  - Displays are to be erected on the right hand side of the highway and within the municipality limits.
  - Displays must be set back a minimum of 3 m (10 feet) behind the property line if at all possible.
- b. Qualifications:
  - The municipality is required to submit to the Ministry for each location:
    - a completed application for a sign permit and, if applicable, an application for an encroachment permit
    - a plan of the display.
- c. Restrictions:
  - The display must not exceed 3 m (10 ft.) in height above the ground or highway elevation, whichever is higher and must not exceed 6 m (20 ft.) in width.
  - Lighting must be shielded and must not emit glare onto the Provincial Highway.
  - The display must consist of a combination of such materials as flowers, plantings, wood, rocks, berms, painted signs and/or mounted lettering.

- The message must generally be restricted to the name of the municipality.
- Construction and location of displays must be in accordance with approved drawings. Any deviation is to receive prior approval from the Ministry before commencing that portion of the work.
- Whenever possible, construction and or maintenance of the display should be carried out from a road or street other than the travelled portion of the highway. Any work that affects the travelled portion of the highway must conform to the OTM Book 7, Temporary Conditions and the *Occupational Health and Safety Act*.
- A maximum of two displays, one per direction on each highway.

**Note:** The municipality is allowed only one display location, either on the right-of-way or off the right-of-way for Class 1 and 2 highways.

### 5.6.9 Changeable Message Sign (Location Sign)

#### 5.6.9.1 Definition

A Changeable Message Sign is a sign that:

- is not animated and does not include video.
- has the capability of content changes by means of mechanical or electronic input.
- displays changing static messages for a fixed duration.

Changeable Message Signs include the following:

- Mechanical – a changeable sign where the display surface physically changes to reveal alternate messages, such as tri-vision or flip disc signs.
- Electronic – a changeable sign where the content can be changed by means of an electrically energized display matrix, such as an LED pixel board.

A changeable message sign may be fully or partially incorporated as a component into any location sign.

#### 5.6.9.2 Specifications

The following specifications must be applied to all changeable message signs.

- a. Minimum Dwell Time (MDT) – is the minimum amount of time, in seconds, which a static message must be displayed for.

- b. Maximum Transition Time (MTT) – is the maximum amount of time, in seconds, which shall be allowed between consecutively displayed static messages.

**Table 5.6.7: Changeable Message Sign – Dwell and Transition Times**

<b>Changeable Message Sign Type</b>	<b>MDT (sec)</b>	<b>MTT (sec)</b>
Mechanical	20	2
Electronic	20	1

- c. The purpose of the MTT is to ensure a near instantaneous change between fully displayed messages. Transition effects such as wipe, slide, fade, or pixelate shall not be allowed.
- d. A changeable message sign that alternates solely between current time and current temperature shall be permitted a MDT equal to 15 seconds. The MTT shall be as listed in the previous table, dependant on whether the sign is mechanical or electronic in nature.
- e. All changeable messages signs must be designed to ensure that in the event of a malfunction, the displayed image becomes fixed or blacks out.
- f. Changeable message signs may be illuminated per the specifications of this policy.
- g. Changeable message signs will be subject to all the other requirements of this policy that apply to freestanding signs.
- h. Changeable message signs are permitted for Billboard Signs.
- i. Changeable message signs are not permitted for Bush Country Billboard Signs and Community Business Message Boards.

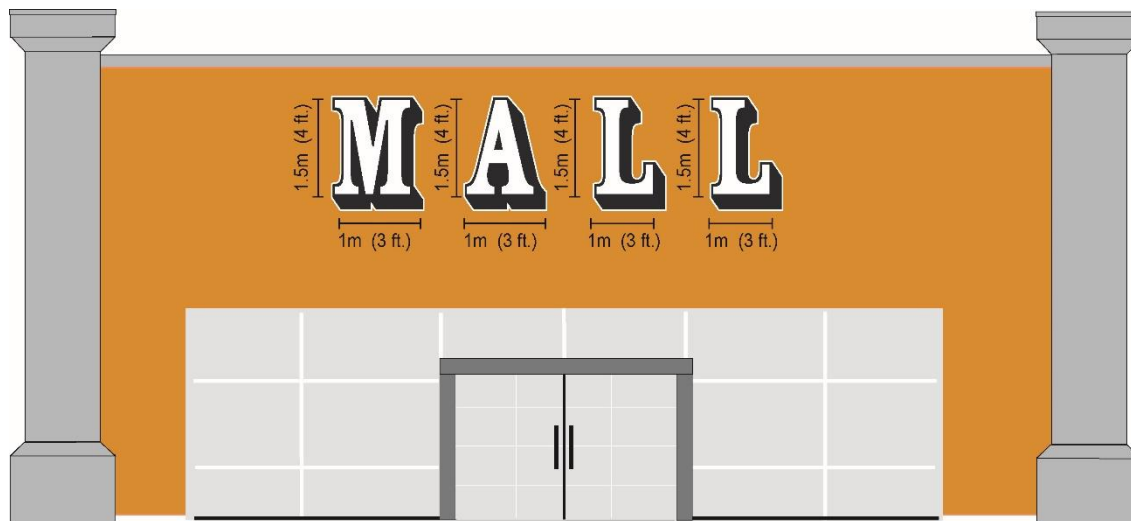
### 5.6.10 Diagrams: Methods of Determining Area of Sign

The diagrams depicted in this section are intended to serve as a guide for determining the area of a sign. These diagrams are examples, and do not necessarily reflect the full range of signs.



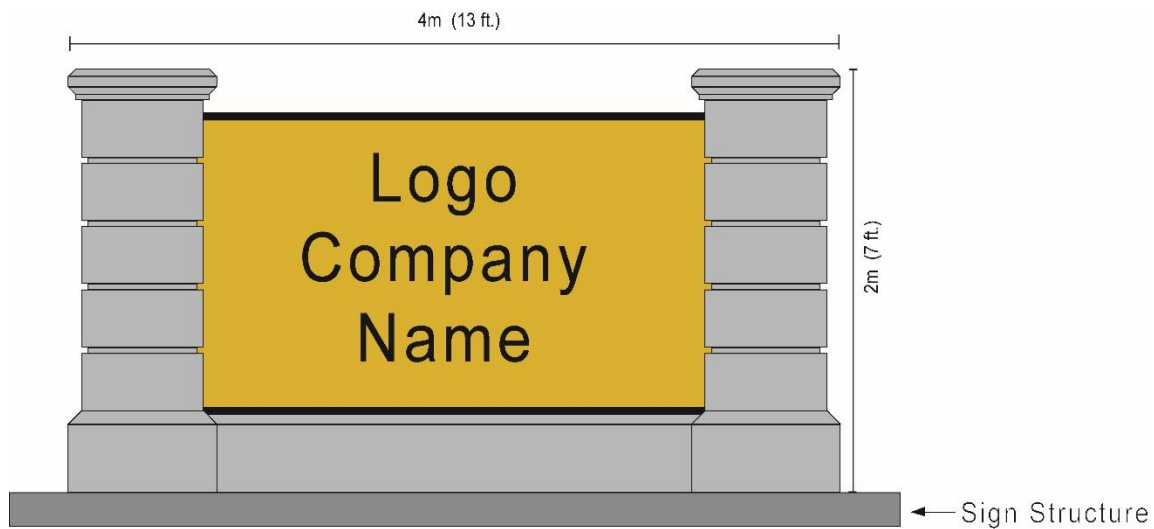
**Area:**  $1\text{m} \times 6\text{m} = 6\text{m}^2$  or  $3' \times 20' = 60 \text{ sq. ft.}$

**Figure 5.6.1: Determining Area of Box Sign**



**Area:**  $(1.5\text{m} \times 1\text{m}) \times 4 = 6\text{m}^2$  or  $(4' \times 3') \times 4 = 48 \text{ sq. ft.}$

**Figure 5.6.2: Determining Area of Channel Letter Sign**



**Area:**  $4\text{m} \times 2\text{m} = 8\text{m}^2$  or  $13' \times 7' = 91 \text{ sq. ft.}$

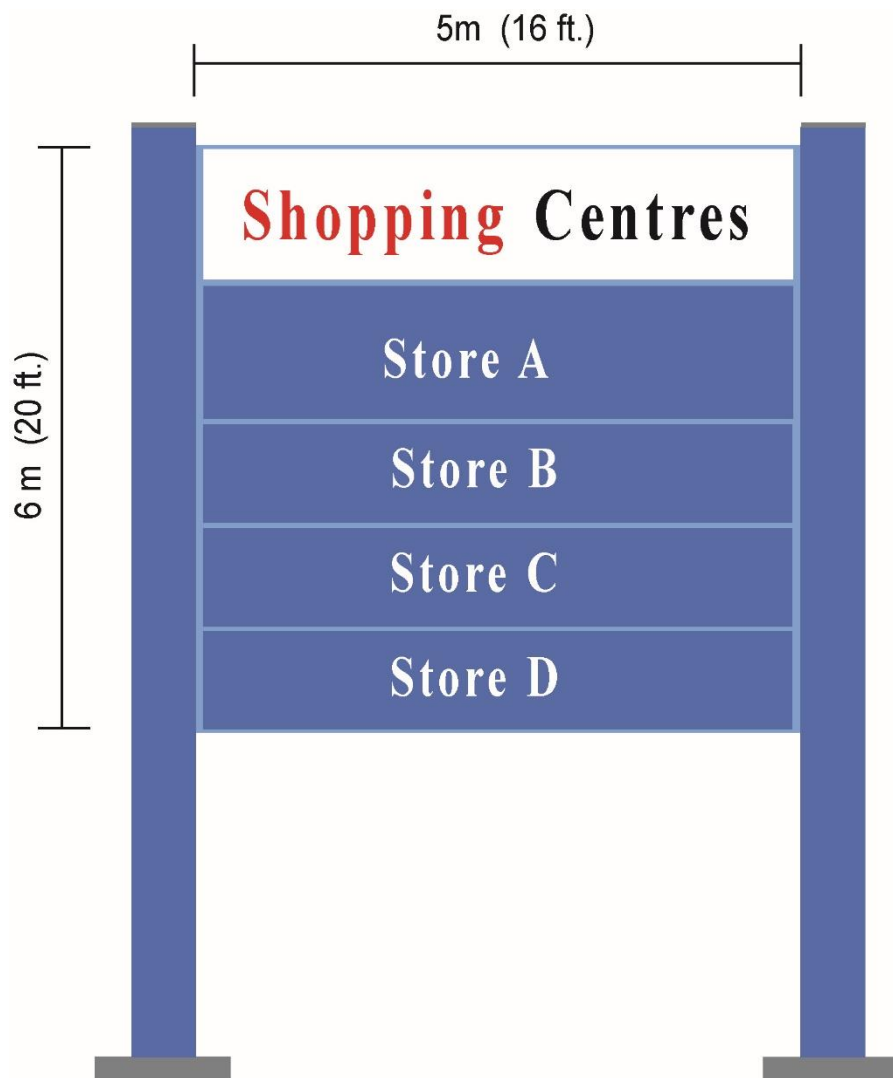
**Figure 5.6.3: Determining Area of Ground Mount Sign**



**Area:**  $3\text{m} \times 6\text{m} = 18\text{m}^2$  or  $10' \times 20' = 200 \text{ sq. ft.}$

**Figure 5.6.4: Determining Area of Landscape Sign**





**Area:**  $5\text{m} \times 6\text{m} = 30\text{m}^2$  or  $16' \times 20' = 320 \text{ sq. ft.}$

**Figure 5.6.5: Determining Area of Pylon Sign**

## 5.7 Billboards

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A billboard sign is a sign which contains a message that is not related to the property where the sign is located.

Billboard signs are not permitted within the controlled area adjacent to Class 1 and 2 highways. Refer to Section 5.8 for policies regarding Bush Country billboards.

### **5.7.1 Message on the Billboard**

The message on the billboard must not promote violence, hatred, or contempt against any identifiable group. "Identifiable group" means any section of the public distinguished by colour, race, ancestry, religion, ethnic origin, sexual orientation, or disability.

### **5.7.2 Billboard Requirements in Rural Area**

A billboard sign located in an area designated as a rural area with a posted speed limit of more than 70 km/h or more must not:

- a. exceed 8 m (25 ft.) in height above the ground
- b. exceed 60 m<sup>2</sup> (650 sq. ft.) in area
- c. be placed within the controlled area adjacent to a Class 1 and 2 highways
- d. be placed in or be allowed to overhang a daylighting area
- e. be placed within 305 m (1000 ft.) of another billboard sign per direction, provided there are no left hand billboard signs facing the motorist
- f. be affixed to or mounted upon or be made to form part of a fence
- g. be placed within 91 m (300 ft.) of the limit of a road, street, or railway that intersects a highway at grade
- h. be placed adjacent to a curve where the radius is less than 1165 m radius (1.0 degree 30 minutes)
- i. contravene federal/provincial legislation, or advertise restricted products (e.g. tobacco).

### **5.7.3 Billboard Requirements in Built-Up or Urban Area**

A billboard sign which is located in an area designated as a built-up or urban area, with a posted speed limit of less than 70 km/h, must not:

- a. exceed 8 m (25 ft.) in height

- b. exceed 60 m<sup>2</sup> (650 sq. ft.) in area
- c. be placed within the controlled area adjacent to a Class 1 and 2 highways
- d. be placed in, or be allowed to overhang, a daylighting area
- e. be placed within 75 m (250 ft.) of another billboard sign per direction, provided there are no left hand billboard signs facing the motorist
- f. be made to form a part of a building
- g. be placed within 45 m (150 ft.) of the limit of a road, street or railway that intersects a highway at a grade.

#### **5.7.4 Location of Billboard Signs Related to Direction of Travel of Vehicles**

In situations where billboard signs have been placed to be viewed on the left hand side of the highway, no additional billboard signs will be permitted within the spacing requirements on the opposite side of the highway (refer to Figure 5.7.1: Billboard Signing - Spacing Requirements).

#### **5.7.5 Angle of Billboard Sign as Related to Highway**

The angle of a billboard sign as it relates to the centre line of a highway shall be equal to or greater than 45 degrees, whether or not the sign is affixed to a building. That is, if the plane forming the face of the sign was extended in a straight line to intersect the centre line of the highway, the angle formed would be at a minimum of 45 degrees.

#### **5.7.6 Billboard Signs in City, Town, and Village etc.**

Billboard signs located within the limits of a city, town or village and adjacent to an assumed highway shall be subject to this policy. Billboard signs located adjacent to a connecting link are not controlled by the Ministry.

#### **5.7.7 Setback Distance for Billboard Signs**

The following setback distances shall apply to billboard signs:

- a. No signs are to be placed within 23 m (75 ft.) of the highway property line, except location signs and Bush Country signs
- b. Signs up to and including 11.9 m<sup>2</sup> (128 sq. ft.) must be set back 23 m (75 ft.) from the highway property line
- c. Signs over 11.9 m<sup>2</sup> (128 sq. ft.), but not over 18.60 m<sup>2</sup> (200 sq. ft.), must be set back 30 m (100 ft.) from the highway property line

- d. Signs over 18.60 m<sup>2</sup> (200 sq. ft.), but not over 30.19 m<sup>2</sup> (325 sq. ft.), must be set back 46 m (150 ft.) from the highway property line
- e. Signs over 30.19 m<sup>2</sup> (325 sq. ft.), but not over 60.39 m<sup>2</sup> (650 sq. ft.), must be set back 84 m (275 ft.) from the highway property line
- f. Signs greater than 60.39 m<sup>2</sup> (650 sq. ft.) will not be allowed within the controlled area

#### **5.7.8 Basic Setback Distances must be Maintained**

The setback distances for billboard signs located other than in a built-up area must not be reduced to less than the setback distances set out in section 5.7.7- *Setback Distance for Billboard Signs*, regardless of the width of the right-of-way of the highway.

#### **5.7.9 Setback Distance for Billboards in Built-Up Area**

A billboard sign located within a built-up area must not be reduced to less than the setback distances set out in section 5.7.7 - *Setback Distance for Billboard Signs*, except when a building line approved by the Delegated Authority has been established. In such cases, the billboard sign may, if approved by the Ministry, be placed at less than the basic setback distance for billboard signs of a similar size, but not closer to the highway than the approved building line.

#### **5.7.10 Requirements Regarding Billboard Affixed to a Building**

A billboard sign located adjacent to a highway may be affixed to a building, providing the height of the sign does not exceed 8 m (25 ft.) above the ground. A billboard sign which is affixed to a building shall be on the right side of the highway, facing the motorist. Each such sign must conform to the basic setback provisions as set out above.

#### **5.7.11 Each Billboard must be Covered by a Permit up to Five Years**

A sign permit, issued by the Ministry, must be obtained for each billboard sign and is valid for five years from the date of permit approval. A new permit must be obtained prior to expiry of an existing billboard sign permit. Approval of subsequent applications is subject to location availability and any new policies applicable at the time of application. All sign permits issued prior to September 24, 1994, are not affected by the five-year requirement, and will remain until such time as the sign site becomes available.

The sign permit will be issued in the name of the registered property owner for a sign located on private property. However, when the owner of the property has a documented arrangement with the advertiser/sign operator, the sign permit may then be issued to the advertiser/sign operator.

#### **5.7.12 Signs must be Placed within Six Months of Issuance of Permit**

When a sign permit has been issued, the sign to which the permit applies must be placed or erected within six months of the date of issuance of the permit. Otherwise the permit shall be void and cancelled. When a permit is cancelled in accordance with this procedure, the fee shall not be refunded.

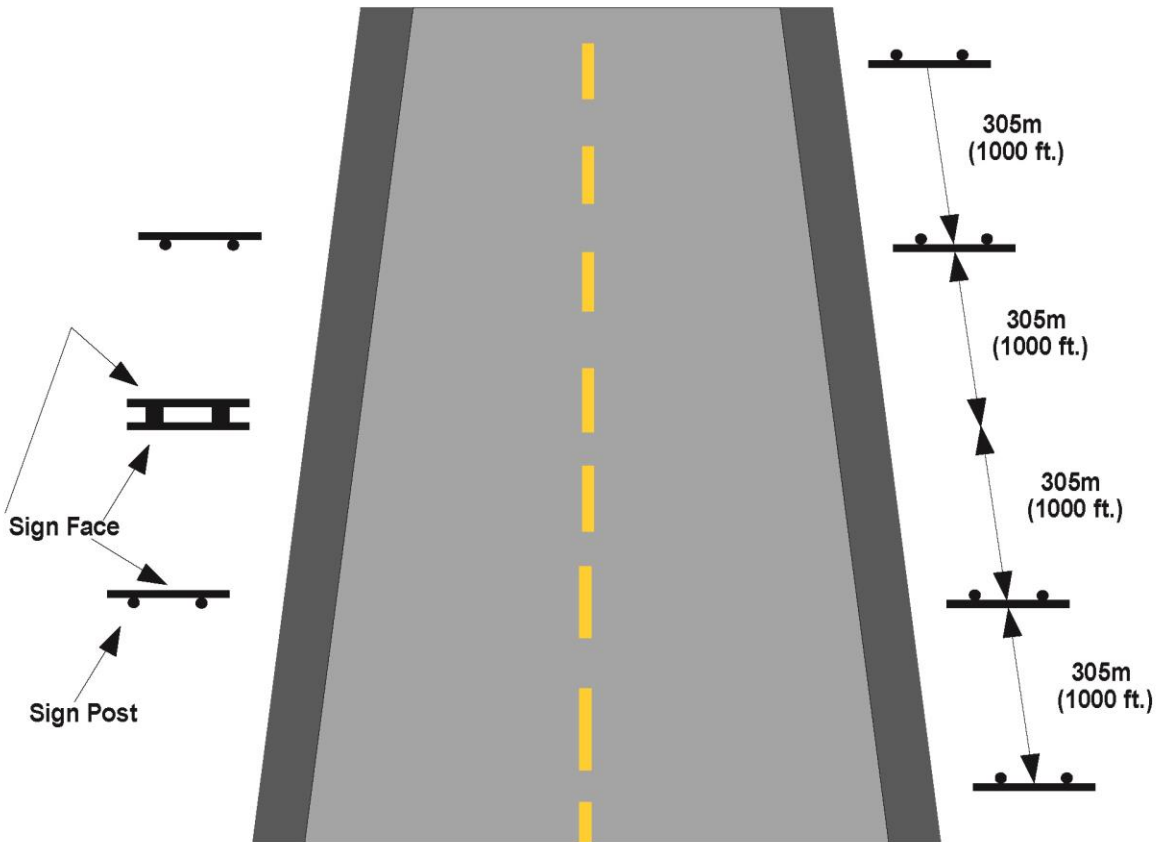
#### **5.7.13 Message on Sign may be Changed**

The message on a billboard for which a permit has been issued may be changed from time to time (poster panels). A new permit is only required when the size or setback has been changed.

#### **5.7.14 Changeable Message Sign**

Changeable message signs are permitted for billboards, and must conform to the specifications and requirements set out in section 5.6.9 of this policy. The issuance of a permit will be based on the size and location of the sign, and not the number of individual advertisements. There is no restriction as to the number of individual advertisements displayed on any one changeable message sign.

### 5.7.15 Billboard Signing – Spacing Requirements



**Figure 5.7.1: Billboard Signing – Spacing Requirements**

## 5.8 Bush Country Highway Signs

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Location and billboard signs may be placed within the highway right-of-way (ROW) on designated Bush Country highways, providing they meet the requirements as outlined in this policy. Any new “Bush Country” designations shall be approved by the respective Regional Director.

### 5.8.1 Location Signs

The instructions regarding location signs adjacent to Bush Country highways shall be applied only on highways (or parts of highways) that have been designated as Bush Country highways. The instructions shall not be applied to overcome obstructions blocking the view of signs adjacent to highways (or parts of highways) which have not been designated as Bush Country highways.

Brush shall not be interpreted as “bush” for the purposes of this section. Under no circumstances shall a sign be located upon the highway ROW of a highway because the view of the sign in the normal location is obscured by brush. To give a clear view of approved business identification signs located on private property, brush on the highway ROW shall be cleared with Ministry approval (Brush Removal Permit) by the sign owner, as required. The Ministry shall not clear brush that is off the highway ROW. Arrangements for clearing brush that is off the highway ROW shall be made between the owner of the property and the owner of the sign(s).

Where a highway has been designated as a Bush Country highway, the location signs of a commercial establishment may be moved nearer to the highway ROW, if these signs would be hidden from the view of approaching traffic by bush. Where location signs adjacent to a Bush Country highway are hidden from the view of approaching traffic by bush on the highway ROW, they may be moved onto the highway right-of-way, under a sign permit.

A location sign that is moved nearer to or onto the highway ROW of a Bush Country highway in accordance with this policy shall be kept in good repair, and in a condition satisfactory to the Ministry.

#### Location Sign Requirements

Location signs moved closer to or onto the highway right-of-way of a Bush Country highway in accordance with this policy shall not:

- a. be more than 11.9 m<sup>2</sup> (128 sq. ft.) in total area.

- b. be placed such that the front edge of the sign is more than 0.9 m (3 ft.) in front of the bush line, and the location of each such sign shall be as approved by the Ministry. Where bush on the highway ROW is removed, each location sign shall be moved back so that it will be not more than 0.9 m (3 ft.) from the new bush line.
- c. exceed two in number, and each sign shall face in a direction different from the other.
- d. be placed less than 46 m (150 ft.) from the sign of another establishment which sign is located upon the highway ROW or less than 46 m (150 ft.) from an official highway sign.
- e. be placed until a permit for the sign(s) has been obtained.
- f. be placed where there is an official guide sign erected to identify the establishment or to direct traffic to the establishment.

### **5.8.2 Billboard Signs**

Billboard signs are permitted on the highway ROW or on private property adjacent to Bush Country highways, providing the requirements as outlined are met.

A billboard sign is a sign which contains a message that is not related to the property that the sign is located on.

#### **5.8.2.1 Message on the Billboard**

A billboard sign on private property adjacent to a Bush Country Highway must meet the messaging requirements set out in Section 5.7.1.

A billboard sign on the highway ROW must meet the following requirements in addition to the messaging requirements set out in Section 5.7.1:

- a. Shall only promote goods and services or authorized local events offered by, or related to, businesses, municipalities, charities, not-for-profit organizations, or Indigenous communities.
- b. Shall not demean, denigrate, or disparage one or more identifiable persons, group of persons, firms, organizations, industrial or commercial activities, professions, entities, products or services, or attempt to bring it or them into public contempt or ridicule.
- c. Shall not undermine human dignity; or display obvious indifference to, or encourage, gratuitously and without merit, conduct or attitudes that offend the standards of public decency prevailing among a significant segment of the population.
- d. Shall be in accordance with the Canadian Code of Advertising Standards.



- e. Shall have no adverse effect on public safety or liability to the Ontario government.

#### **5.8.2.2 Billboard Sign Requirements**

A billboard sign must not be:

- a. more than 11.9 m<sup>2</sup> (128 sq. ft.) in area on highway ROW.
- b. located on the left-hand side or median of the highway facing the motorist.
- c. located within 305 m (1,000 ft.) of another billboard sign per direction.
- d. located where the left edge of the sign will be less than the setback as identified in Section 5.8.2.3 and 5.8.2.4 of this policy.
- e. placed within 91 m (300 ft.) of the limit of a road, street, or railway that intersects a highway at grade.
- f. placed within 300 m (985 ft.) of an at-grade intersection on a class 1 and 2 highway
- g. be placed within 3 km in advance of an interchange on a class 1 and 2 divided highway
- h. placed within 300 m (985 ft.) from the end of the acceleration lane on a class 1 and 2 divided highway
- i. placed adjacent to a curve where the radius is less than 1000 m
- j. located on highway ROW where the billboard sign is visible to an adjacent residential dwelling unit
- k. as a blank poster panel, advertise “for rent” or contain the name/number of the advertiser/sign operator in lieu of an advertisement on highway ROW for more than six months
- l. affixed to or mounted upon or be made to form part of a fence
- m. a contravention of federal/provincial legislation (e.g. advertise restricted products such as tobacco).
- n. erected before a permit for the sign has been obtained
- o. located within the limits of a Provincial park
- p. a changeable message sign on highway ROW.
- q. a changeable message sign on private property adjacent to Class 1 and 2 highways

#### **5.8.2.3 Setback Distance for Billboards on Highway Right-of-Way**

The following setback distance shall apply for signs up to and including 11.9 m<sup>2</sup> (128 sq. ft.):

- a. Must be set back 10 m (33 ft.) from the edge of pavement on class 1 and 2 divided highways.
- b. Must be set back 9 m (30 ft.) from the edge of pavement on class 1 and 2 (undivided highways) and class 3, 4 and 5 highways.
- c. Where enhanced clear zones are present, the appropriate setback shall apply.

#### **5.8.2.4 Setback Distance for Billboards on Private Property Adjacent to Bush Country Highways**

The following setback distances shall apply:

- a. Signs up to and including 11.9 m<sup>2</sup> (128 sq. ft.) must be set back 3 m (10 ft.) from the highway property line
- b. Signs over 11.9 m<sup>2</sup> (128 sq. ft.), but not over 18.60 m<sup>2</sup> (200 sq. ft.), must be set back 30 m (100 ft.) from the highway property line
- c. Signs over 18.60 m<sup>2</sup> (200 sq. ft.), but not over 30.19 m<sup>2</sup> (325 sq. ft.), must be set back 46 m (150 ft.) from the highway property line
- d. Signs over 30.19 m<sup>2</sup> (325 sq. ft.), but not over 60.39 m<sup>2</sup> (650 sq. ft.), must be set back 84 m (275 ft.) from the highway property line
- e. Signs greater than 60.39 m<sup>2</sup> (650 sq. ft.) will not be allowed within the controlled area.

#### **5.8.2.5 Waiting List**

A waiting list will be commenced by the respective Area Office, when it is determined that there are no available sites on the highway ROW and private property (combined).

When a waiting list is created, the following shall apply:

- a. One list per highway, per Area Office
- b. Applicants will appear only once on the list for each highway, per Area Office
- c. When an applicant is offered a site and accepts, the applicant will be removed from the list. Should the applicant require an additional site, they will be required to re-apply and will be placed at the bottom of the list

- d. When an applicant declines a site, the applicant will retain their position on the list.

#### **5.8.2.6 Multiple Applications**

No one advertiser/sign operator can hold more than one permit per every five consecutive sites, per highway (includes highway ROW and private property).

#### **5.8.2.7 Municipal Exemptions**

Municipal by-law matters pertaining to highway ROW (i.e. scenic corridors, heritage areas, etc.) may be applied at the discretion of the Regional Director.

#### **5.8.2.8 Angle of Billboard Sign as Related to Highway**

The angle of a billboard sign as it relates to the centre line of a highway shall be equal to or greater than 45 degrees, whether or not the sign is affixed to a building. That is, if the plane forming the face of the sign was extended in a straight line to intersect the centre line of the highway, the angle would be a minimum of 45 degrees.

#### **5.8.2.9 Billboard Signs in City, Town and Village, etc.**

Billboard signs which are located within the limits of a city, town or village and adjacent to an assumed highway shall be subject to this policy. Billboard signs located adjacent to a connecting link are not controlled by the Ministry.

#### **5.8.2.10 Requirement Regarding Billboard Affixed to a Building**

A billboard sign located adjacent to a Bush Country highway may be affixed to a building, providing the height of the sign does not exceed 8 m (25 ft.) above the ground. A billboard sign which is affixed to a building shall be on the right side of the highway, facing the motorist. Each such sign must conform to the basic setback provisions as set out in Section 5.8.2.4.

#### **5.8.2.11 Signs Must be Placed within Six Months of Issuance of Permit**

When a sign permit has been issued, the sign to which the permit applies must be placed or erected within six months of the date of issuance of the permit. Otherwise, the permit shall be void and cancelled. When a permit is cancelled in accordance with this procedure, the fee shall not be refunded.

#### **5.8.2.12 Message on Sign May Be Changed**

The message on a billboard for which a permit has been issued may be changed from time to time (poster panels), provided it conforms to Section 5.8.2.1. A new permit is only required when the sign location or size will change.

#### **5.8.2.13 Changeable Message Signs**

Changeable message signs are only permitted for billboards on private property, except adjacent to Class 1 and 2 highways. These signs must conform to the requirements set out in section 5.6.9 of this policy. The issuance of a permit will be based on the size and location of the sign and not the number of individual advertisements. There is no restriction as to the number of individual advertisements displayed on any one changeable message sign.

#### **5.8.2.14 Permit Administration**

A sign permit, issued by the Ministry, must be obtained for each billboard sign which is valid for five years from the date of permit approval. A new permit must be obtained prior to expiry of an existing billboard sign permit. Approval of subsequent applications is subject to location availability and any new policies applicable at the time of application. All sign permits issued prior to September 24, 1994, are not affected by the five-year requirement, and will remain until such time as the sign site becomes available.

For a sign located on highway right-of-way, the sign permit will be issued in the name of the advertiser/sign operator.

For a sign located on the highway ROW, the business, municipality, charity, not-for-profit organization, or Indigenous community to which the message pertains, must provide the following with the permit application:

- Business: a valid business number assigned by the Canada Revenue Agency.
- Charity or Not-for-Profit Organization: a valid registration number assigned by the Canada Revenue Agency.
- Municipality: must be recognized by the Association of Municipalities of Ontario.
- Authorised Local Event: applicant must obtain municipal and/or provincial permits as appropriate before scheduling the event.
- Indigenous Community: further documentation may be requested by the MTO, if needed.

For a sign located on private property adjacent to a Bush Country highway, the sign permit will be issued in the name of the registered property owner. However, when the owner of the property has a documented arrangement with

the advertiser/sign operator, the sign permit may be issued to the advertiser/sign operator.

### **5.8.3 Bush Country Highway Designation List**

The following highways are designated as Bush Country highways. The Local Area Offices maintain current listings and exact designation limits.

#### **Central Region**

No highways are designated.

#### **Eastern Region**

The following highways are designated:

- Highway 28 from Lakefield County Road 6 northerly to Highway 41.
- Highway 35 northerly from Fenelon Falls County Road 8.
- Highway 41 from Kaladar Highway 7 northerly to Highway 60 (north junction).
- Highway 60 from Renfrew County Line Easterly to Killaloe.
- Highway 62 from Madoc Highway 7 northerly to Highway 127.
- Highway 118 westerly from Highway 28.
- Highway 127 from Maynooth Highway 62 northerly to Highway 60.

#### **Northeast Region**

All highways are designated, except the following:

- Highway 11 North Bay By-Pass.

#### **Northwest Region**

All highways are designated, except the following:

- Thunder Bay Expressway composed of Highway 61, from Chippewa Road northerly to Highway 11/17, and Highway 11/17, from Highway 61 easterly to Lakeshore Road.
- Highway 11/17 (New) from Vibert Road easterly to the Harbour Expressway.
- Highway 17A - Kenora Bypass.

## West Region

No highways are designated.

### 5.9 Community Business Message Board

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A Community Business Message Board is a sign that advertises local businesses within a municipality.

Community Business Message Boards are subject to the following criteria:

- a. allowed on Class 1 and 2 highways where a new highway alignment has bypassed a community
- b. the advertiser on the sign must not qualify for a Canadian TODS sign or any other Ministry signing programs
- c. the closest community to the highway will be allowed a Community Business Message Board
- d. signing allocations will be based on the following population thresholds
  - Population less than 500  
one Community Business Message Board per direction
  - Population 500 – 2000  
two Community Business Message Boards per direction
  - Population over 2000  
three Community Business Message Boards per direction
- e. the community will be responsible for the message content (business identification)
- f. the businesses or services advertised must be located within the municipality for which the Community Business Message Board is intended
- g. up to four (4) local businesses will be allowed on the Community Business Message Board
- h. must be located on private property or highway right-of-way provided the highway has been designated a Bush Country highway
- i. must not exceed 8 m (25 ft.) from the ground to the top of the Community Business Message Board
- j. must not exceed 4.9 m (16 ft.) in width
- k. must not exceed 2.4 m (8 ft.) in height
- l. the exit number must be located at the bottom portion of the Community Business Message Board

- m. the community must supply further directional signing on their own road allowances to the businesses being advertised on the Community Business Message Board
- n. each Community Business Message Board is subject to an annual fee.
- o. the permit will be issued in the name of the municipality/city/town
- p. a sign permit fee is required for each sign location
- q. must not be located within 305 m (1,000 ft.) of another Community Business Message Board sign per direction
- r. a Community Business Message Board located on the highway right-of-way must not be:
  - located where there are available sites in a clear area
  - placed more than 0.91 m (3 ft.) in front of the bush line to the front edge (right) of the sign
  - located where the left edge of the sign will be less than 9 m (30 ft.) from the edge of the highway pavement
  - located on the left hand side of the highway facing the motorist.
- s. application for Sign Permit is required
- t. a Community Business Message Board must be located within the geographic boundaries of the municipality
- u. must not be a changeable message sign.

## Appendix 5A - Classifications

For the purpose of this policy, each type of sign shall be placed in one of the classes under classification of signs. The following types are classified, and may be used as a guide to the classification of other signs.

### Sign Classification Guide

Type	Description	Classification
Advertising	at a place where the goods and services advertised are available on the property	Location
	at place where the goods and services advertised are not available on the property	Billboard
	a sign or notice of a temporary nature, under 3.0 m <sup>2</sup> (32 sq. ft.) in size	Temporary
Advertising Devices	see Devices	
Agricultural	to identify members of agricultural groups and clubs	Location
	to identify field crops, sale of crops, etc.	Location
	to identify the location where crops are for sale	Temporary
Agricultural Society	to identify the property of the society	Location
	to advertise annual or special event	Temporary
Association, Miscellaneous	on member's property and of approved size	Location
Auction Sale	See Sale, Auction	
Awning	advertising or other message on an awning is classified as a sign	Classify according to use
Banner	in any location off the right-of-way	Advertising Device
	on or over Class 1 and 2 highways	Prohibited
	on or over the right-of-way	Temporary
Breed Association (cattle, horse, sheep, swine, etc.)	see Association, Miscellaneous	
Bunting	in any location off the right-of-way	Advertising Device



<b>Type</b>	<b>Description</b>	<b>Classification</b>
Bunting	on or over the right-of-way	Prohibited
	used to advertise at place where item advertised is not available on the property	Billboard
	used to advertise at place where item advertised is available on the property	Location
	used to identify, or name, a business located on the property	Location
Camp or Lodge, etc.	used to identify or name private camp or lodge and located on the property	Location
	used to identify or name public camp or lodge and located on the property	Location
	used to advertise, or give directions for reaching any public camp or lodge and not located on the property	See Policy on Guide Signs
	used at entrance to trail or road other than a named road to give directions for reaching a private camp or lodge	See Policy on Guide Signs
Canopy or Marquee	see Marquee or Canopy	Location
Car Race Posters	temporary, used to advertise race meet etc.	Temporary
Charitable or Religious Organization	See Agricultural Society etc.	Location
Chimney or Smokestack	using a chimney or smokestack as a sign mounting restricted. Only business identification and municipality names allowed. Must not exceed height or width of chimney.	Location
Church	to name and identify church	Location
	to convey message regarding church services	Location
Circus, Posters, Tack Signs	if event conducted solely for private profit; See Temporary Signs	Prohibited
Construction	placed on site during construction for any purpose other than signs placed, required or approved by the Ministry for construction projects or projects on the right-of-way of a highway	Temporary
	placed, required or approved by the Ministry for highway construction projects or projects on the right-of-way	Official

<b>Type</b>	<b>Description</b>	<b>Classification</b>
Contractors	on construction site naming general and sub-contractor(s) and/or architect for convenience of persons making deliveries etc.	Location
Crop Association	on member's property	Location
Crop Identification	on farm, etc. to identify crop, seed strain etc.	Location or Temporary
Device	a permanent device, other than a recognized type of sign, advertising an item available on the property	Location
	a permanent device, other than a recognized type of sign, advertising an item not available on the property	Prohibited
	temporary advertising devices, other than a recognized sign, advertising an item available on the property without a message	Location
Election	used by or on behalf of a candidate or party, temporary or permanent construction	Temporary
Entrance or Exit	used to mark the entrance to, or exit from, a property	Location
Fascia	a sign placed parallel to and facing a highway	Classified according to use
Fare Zone	used to mark the limits of transportation company fare zones	Location
Fingerboard	other than official	Prohibited
Fire Route Marker	refer to King's Highway Guide Signing Policy Manual	Official
First Aid	placed by the Ministry to identify the location of authorized First Aid Post	Official
	placed by the Ministry to direct the public to an authorized First Aid Post	Official
Flags	with advertising or message	Advertising Device
Forestry	to identify provincial, county, etc. forestry, reforestation or conservation project(s) etc.	Official
Fraternal Organization	located on property on which the organization has its headquarters	Location

<b>Type</b>	<b>Description</b>	<b>Classification</b>
Fraternal Organization	located on other than the property on which the organization makes its headquarters	Prohibited
Horse Race Posters and Track Signs	temporary, used to advertise racing events	Temporary
Hotel or Motel	used solely to name or identify the hotel or motel, bearing only the name of the establishment and located on the property or affixed to the establishment	Location
	used to convey a message in addition to the name of the establishment and located on the property or affixed to the establishment	Location
Identification	used to identify, or name an occupant, owner, property or residence, other than a commercial establishment and located off the right-of-way of a highway	Location
	used to identify, or name a commercial establishment and located off the right-of-way - see Policy on Guide Signs erected by the Ministry	Location
	used to identify a newspaper	Location
Inflatable Device	Cold or Hot Air Balloon, Balloons inflated with other gases	Temporary
Marker, Pipe Line, Cable, Bell etc.	on the right-of-way and approved and required by the Ministry	Official
Marquee or Canopy	used to identify or name a business	Location
	used for advertising product for sale on the property	Location
Midway, Posters, Tack Signs	temporary, used to advertise midway rides and shows	Prohibited
Notice, posters and Tack signs (Election Signs are excepted)	temporary notices on highway right-of-way	Prohibited
	military convoys	Temporary
	temporary notices off the highway right-of-way	Temporary
No Vacancy	see Vacancy	

Type	Description	Classification
Official	a sign placed, or required to be placed, by the Ministry	Official
	a sign placed by another ministry of the Ontario Government on a highway right-of-way and approved by the Ministry	Official
	required or permitted by the <i>Election Act</i> or other Federal Government Legislation, other than individual candidate signs which are covered under election signs	Official
Oil Company Service Station Identification	approved oil company identification sign used on service station property to identify the oil company whose products are dispensed at the station	Location
Oil Company Miscellaneous	used at a service station to advertise products, services etc., available at the station	Location
Overhanging	used for business identification	Location
	used for advertising	Location
	overhanging signs, canopies, marquees and similar devices	Location
Posted Panel	posted paper used for advertising, etc. other than where product or service available on the property	Billboard
Private	a sign placed on a private or residential property used solely to identify the property, or name the occupant or owner	Location
	an entrance or exit sign	Location
	to direct persons to private camp, etc. in resort area and located off the right-of-way of a highway	Official - see Policy on Guide Signs
	to advertise	According to use and location
Professional (Doctors etc.)	to identify office or place of business and type of service	Location
Public Assembly	to name and identify public assembly hall i.e., town hall, community hall and community owned halls of a similar nature	Location
	to convey message regarding public or community meetings	Location

<b>Type</b>	<b>Description</b>	<b>Classification</b>
Pylon	Freestanding sign used to identify or name a business, product or service on the property	Location
Real Estate	when located on the property and under 3.0 m <sup>2</sup> (32 sq. ft.) in area and advertising a property for lease, rent, sale or trade or advertising a real estate development or subdivision	No Restrictions
	when located on property other than that advertised, regardless of size of sign	Billboard
	when located on the property and over 3.0 m <sup>2</sup> (32 sq. ft.) and under 46 m <sup>2</sup> (500 sq. feet) in area and advertising a property for lease, rent, sale or trade or advertising a real estate development	Location
	leased, rented, sold or traded	Prohibited
Reforestation	see Forestry Signs	
Restaurant	used solely to identify or name the business and located on the same property	Location
	used to advertise and located on the same property	Location
Roads Identification	other than official, within 3 m (10 ft.) of highway right of-way	Prohibited
- see King's Highway Guide Signing Policy Manual	3 m (10 ft.) or more from highway right-of-way	Location
Running or String	a series of two or more signs placed one after the other along a highway with each sign conveying portion of a message	Prohibited
Sale, Auction, etc.	to advertise the sale of private goods or property when such sale is not held at a public sale barn etc.	Temporary
	commercial auction	Billboard or Location
Service Clubs	used on the right-of-way within the limits of the city, town, village or police village in which the organization makes its headquarters to convey information regarding service clubs and service club meetings etc.	Encroachment
	alone or combined with Chamber of Commerce signs located outside the limits of a city, town, village or police village and located off the highway right-of-way	Billboard

<b>Type</b>	<b>Description</b>	<b>Classification</b>
Service Clubs	temporary notices used for advertising functions sponsored, or the services provided, by a club	Temporary
Shopping Centre	used to identify the centre or plaza	Location
	used to identify a commercial establishment forming part of centre or plaza	Location
Snowmobile	refer to King's Highway Guide Signing Policy Manual	
Sold	indicating real estate, etc. has been sold	Prohibited
String or Running	see Running or String Signs	
Sub-Contractors	on construction site naming the general and sub-contractor(s) and/or architect for the convenience of persons making deliveries	Temporary
Subdivision	see Development/Real Estate	
Theatre	canopy, marquee and other theatre signs used solely to identify the theatre by name	Location
	to advertise the plays or other business of the theatre	Location
Tourist Information - see Policy on Guide Signs	when placed by the Ministry of Culture, Tourism and Recreation	Official
	when approved by the Ministry of Economic Development, Trade and Tourism placed or authorized by the Ministry	Official
	when placed by other than the Ministry for the purpose of advertising accommodations, attractions or service not available on the property on which the sign is located	Billboard
Tower	affixed to a tower. Must not exceed height of tower. Location sign or a municipality name/logo only allowed. This does not include a tower (structure) built specifically to carry a sign	Location
Trucks/ Trailers	advertising a message	According to use
Utility	on right-of-way of highway to indicate location of pipe lines, pipe line valves, hydro and telephone sub-stations etc. off right-of-way	Location
Vacancy and No Vacancy	used to indicate availability of accommodation at hotel, motel, camp etc.	Location
Water Tower	see Tower Signs	

# Highway Corridor Management **Manual**



## **Glossary**

**Corridor Management Office**  
Ministry of Transportation

**April 2025**

## Glossary

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<b>TERM</b>	<b>DEFINITION</b>
<b>abut</b>	To border on, touch.
<b>access</b>	Entrance, intersecting road, egress or ingress.
<b>access connection</b>	An entrance to a Provincial Highway or to a public road in the vicinity of a Provincial Highway (within MTO's permit control areas).
<b>access connection depth</b>	The distance that should exist between the end of a turning radius at a corner and the next available turnoff.
<b>access density</b>	The number of access connections per kilometre on each side of a highway.
<b>access management</b>	Preserves the safety and efficiency of Provincial Highways. The process that manages access connections (entrances to Provincial Highways and to roads in the vicinity of a Provincial Highway) within MTO's permit control areas.
<b>access management classification system</b>	Based on, and intended to protect the functional classification system, by preserving the intended role, function, mobility and design characteristics of each Provincial Highway. Classifies Provincial Highways according to the level of access control, and the applicable access connection standards.
<b>adjacent</b>	Lying near, neighboring
<b>adjoining</b>	Bordering, touching
<b>advertising or decorative devices</b>	A device (other than a recognized or standard type of sign) that is placed or affixed to advertise, attract attention, or promote an individual firm, organization, product, or event. These include devices of a decorative nature (e.g. landscaping), banners, bunting, streamers, strings of flags or multiple flag installations, lights, or other such devices. They are all subject to the approval of the Ministry.
<b>agency</b>	Other ministry, municipality or approving authority.
<b>agricultural product</b>	An agricultural product that is not edible, an agricultural food product, or a food product that is processed on a farm in Ontario from an agricultural food product.



<b>TERM</b>	<b>DEFINITION</b>
<b>applicant</b>	Includes the registered property owner or his authorized agent and may include developers and proponents.
<b>area of a sign</b>	The number of square metres (square feet) on the surface of a sign, including the border and/or frame. Where a sign has no border and/or frame, the area will be composed of individually installed letters, numerals or other shapes, excluding spacing. Where a sign is supported by a structure secured to the ground and which is not supported by any building or other structure, the sign area will be the number of square metres (square feet) on the surface of a sign, including the border and/or frame.
<b>arterial highway</b>	Divided or undivided highways with at-grade intersections. The role of an arterial is to provide mobility. An arterial may have sections of freeway or staged freeway within its corridor. Arterials that are fully controlled-access highways are called Principal Arterials.
<b>Authorized Local Event</b>	An authorized local event is an event that has been scheduled after securing provincial and municipal permits as appropriate.
<b>auxiliary access</b>	A secondary means of access connection to a highway from a parcel of land that is already served by another access connection type. This is typically used where internal access to the total holding is impractical due to topographical or physical features, such as a creek, municipal drain, etc.
<b>Back to Back Sign Structures Located on Private Property</b>	Either, two signs affixed directly to one another with no open space, which is visible from the highway, or two signs erected in the form of a "V", with the closed end of the "V" nearest to the highway.
<b>billboard sign</b>	A sign which contains a message that is not related to the property where the sign is located on. The message on the billboard must not promote violence, hatred, or contempt against any identifiable group. Identifiable group means any section of the public distinguished by colour, race, ancestry, religion, ethnic origin, sexual orientation, or disability.
<b>building</b>	Includes any barn, factory, residence, store, warehouse or any part thereof.

TERM	DEFINITION
<b>building line</b>	The basic minimum distance at which buildings and installations of various types may be placed from a highway, road, street or restricted area, or a line established by a municipality or by the Ministry for use in locating buildings, or a line determined by the position of existing buildings.
<b>built-up area</b>	<p>A territory lying near or bordering a highway not within a city, town, village or police village where,</p> <p>a) not less than 50% of the frontage upon one side of the highway for a distance of not less than 183 m is occupied by dwellings, buildings used for business purposes, schools or churches, or</p> <p>b) not less than 50% of the frontage upon both sides of the highway for a distance of not less than 91 m is occupied by dwellings and buildings used for business purposes, schools, or churches, or</p> <p>c) not more than 183 m of the highway separates any territory described in subparagraph (a) or (b) from any other territory described in subparagraphs (a) or (b), or</p> <p>d) any other area which the Ministry designates as a built-up area for the purposes of these instructions.</p> <p>Such an area shall be supported by a recommendation submitted by the Field Services Engineer or other person concerned along with all pertinent detail to the Senior Policy Adviser of Corridor Management and Property Office.</p> <p>The limits of an area that has been designated by the Ministry as a built-up area shall be determined by taking the two buildings at the opposite ends of the area and considering the lines formed by the two walls of these two buildings which two walls are most distant one from the other, extend these lines horizontally to intersect the limit of the highway. The two lines thus extended indicate the limits of the area that has been designated as a built-up area.</p> <p>The width of a building not having direct access to the highway under consideration and the width of highways, roads, streets, etc. which intersect that highway are not considered when computing the built-up density of the area.</p>
<b>bypass</b>	A highway or any part thereof, built to carry traffic through or around a municipality with minimum delay and minimum interference from the local traffic. A bypass may be designated as a controlled-access highway.

<b>TERM</b>	<b>DEFINITION</b>
<b>Business</b>	Business includes every trade, occupation, profession, service or venture carried on with a view to profit
<b>centre line of highway</b>	Normally the centre line of construction as shown on the plan of the highway. However, in some cases such as "stage" construction of a four-lane highway or when extra widening is purchased on one side of a highway only, the plan of the highway must be consulted to determine the centre line.
<b>changeable message sign</b>	<p>A changeable message sign is a sign with the capability of content changes by means of mechanical or electronic input. This type of sign displays changing static messages for a fixed duration. It includes the following:</p> <ol style="list-style-type: none"> <li>1) Mechanical – a changeable sign whose display surface physically changes to reveal alternate messages, such as tri-vision or flip disc signs.</li> <li>2) Electronic – a changeable sign whose content can be changed by means of an electrically energized display matrix, such as an LED pixel board.</li> </ol>
<b>channelization</b>	The separation of right turn and left turn traffic flow by means of traffic markings and islands.
<b>Charity (Registered)</b>	<p>Registered charities are charitable organizations, public foundations, or private foundations that are created and resident in Canada. They must use their resources for charitable activities and have charitable purposes that fall into one or more of the following categories:</p> <ul style="list-style-type: none"> <li>• the relief of poverty</li> <li>• the advancement of education</li> <li>• the advancement of religion</li> <li>• other purposes that benefit the community</li> </ul> <p>Examples of registered charities:</p> <ul style="list-style-type: none"> <li>• relief of poverty (food banks, soup kitchens, and low-cost housing units)</li> <li>• advancement of education (colleges, universities, and research institutes)</li> <li>• advancement of religion (places of worship and missionary organizations)</li> <li>• purposes beneficial to the community (animal shelters, libraries, and volunteer fire departments)</li> </ul>

<b>TERM</b>	<b>DEFINITION</b>
<b>clear vision</b>	The distance between two objects which distance is clear of obstruction of any kind that might interfere with a clear view of the extremities from any point within the limits being considered.
<b>collector highway</b>	Undivided highway with at-grade intersections. Its role is to balance mobility and access, but access is secondary to mobility.
<b>commercial</b>	Any form of activity that has for its end the buying, exchanging, manufacturing, producing, selling, supplying, warehousing of commodities or services.
<b>commercial access</b>	A private access connection to a highway from a parcel of land zoned for commercial, industrial, institutional, or multi-residential land use.
<b>commercial area</b>	An area where business and commercial establishments are predominant.
<b>commercial building</b>	Any building used other than solely for residential or home occupation purposes is classified as a commercial building or commercial establishment. A building occupied as a dwelling consisting of five or more units.
<b>commercial establishment</b>	All or part of a building or all or part of a group of buildings in which is conducted a commercial enterprise or business operated by one or more owners or firms; or a building used other than solely as a residence.
<b>Community Business Message Board</b>	A sign that advertises local businesses within a municipality.
<b>connecting link</b>	The Minister may designate a highway as a connecting link. (a) the municipal highway provides connection between the Provincial Highway system through an urbanized area and the highway is deemed provincially significant; (b) the municipal highway extends the Provincial Highway system to a significant international or inter-provincial boundary crossing, or (c) the municipal highway is an extension of the King's Highway.

TERM	DEFINITION
<b>Controlled Access Highway (CAH)</b>	<p>That part of the King's Highway or proposed highway, which has been designated as a controlled-access highway under the <i>Public Transportation and Highway Improvement Act</i> and to which direct access is limited or prohibited. The restrictions the Ministry applies to controlled-access highways are more numerous and stringent than the restrictions it applies to other highways.</p> <p>Controlled-access highways fall into three classes for the purposes of these instructions:</p> <p>freeways or expressways are highways with fully controlled-access to which no private or commercial access is allowed except service centres in locations owned and approved by the Ministry.</p> <p>staged freeways or staged expressways are those highways identified as possible future freeways being constructed in stages with either two or four lanes with both at grade intersections and interchanges.</p> <p>special controlled access highways are highways with limited control to which access is allowed in varying degrees according to the circumstances.</p>
<b>controlled area</b>	The area over which the Ministry exercises control under the <i>Public Transportation and Highway Improvement Act</i> . This definition is qualified and limited in some instances for the purposes of these instructions.
<b>cornice</b>	The cap or crown of the wall of a building, the top of the wall.
<b>daylighting</b>	The clearing of trees, buildings and other obstructions that tend to limit the view at an intersection, railway crossing, curve, sharp turn.
<b>daylighting area</b>	The area owned by the Ministry or intersecting road authority and maintained free of obstruction or means of access to permit a clear view at an intersection, railway crossing, curve, and sharp turn. See "Sight Triangle".
<b>Delegated Authority</b>	Delegated Authority shall mean the individual within the Ministry who has the authority to issue permits under the PTHIA. These include the Heads, Regional Corridor Management Sections, and any alternate or person occupying such position in an acting capacity. The Delegated Authority is responsible for reviewing permit applications, resolving conflicts, issuing permits, and enforcing policies if violations occur.

<b>TERM</b>	<b>DEFINITION</b>
<b>design speed</b>	A selected speed used to determine the appropriate geometric design elements for a particular section of highway.
<b>development/ real estate/ construction sign</b>	a sign which may consist of a message which identifies any property which is for sale, lease, rent, trade or under development. It may identify the developer, contractor, architect, or engineering consultant, or include the name of the future occupant or owner of the site or property.
<b>egress</b>	The means of entering a highway from an access connection (entrance) or intersection.
<b>election sign</b>	Election signs are placed by, or on behalf of, a candidate or a political party, and include signs designed to encourage citizens to vote.
<b>encroachment</b>	Works or other installations that are placed upon, under, or over which in any way interferes with, or infringes upon the right-of-way of a highway.
<b>entrance</b>	A private road, entranceway, gate or other structure or facility used as a means of access to, or exit from, a highway; and shall include any curbs, gutters or other works relative thereto.
<b>entrance permit</b>	Formal MTO authorization for an access connection (entrance) to be constructed to a Provincial Highway.
<b>farmstead access</b>	An access connection to a highway from a farmstead residence.
<b>fence</b>	Includes any board, masonry, ornamental, or wire fence, excluding wire farm fence.
<b>field access</b>	An access connection to a highway from a vacant lot of record or auxiliary access for a Farmstead lot.
<b>Field Services Engineer</b>	Head, Regional Highway Corridor Management Section
<b>freeway</b>	Highways that are built to accommodate the movement of large volumes of traffic at high speed under free flow conditions, with full control of access. Opposing traffic lanes are separated and access is provided by grade-separated interchanges only.
<b>freeway ramp terminal – entrance or exit</b>	That part of an entrance or exit ramp that intersects with the crossing road.

<b>TERM</b>	<b>DEFINITION</b>
<b>freight-supportive</b>	Transportation systems and facilities that facilitate the movement of goods.
<b>frontage</b>	The front boundary line of a property that borders on a highway, or the face of a building parallel to a highway.
<b>frontage road</b>	A road adjoining and parallel to a highway, built to carry local traffic between interchanges.
<b>functional classification system</b>	The foundation for highway system planning, design, engineering, and other classification systems. Separates different types of highways on the basis of: differences in traffic service and land service; design features, and; operational needs.
<b>functional interchange area</b>	The section of highway or crossing road that extends both upstream and downstream from the physical freeway ramp terminal area. This enables a motorist to enter and pass through the freeway ramp terminal intersection before having to consider a potential conflict at a subsequent access connection.
<b>functional intersection area</b>	The section of highway or crossing road that extends both upstream and downstream from the physical intersection area. This enables a motorist to enter and pass through an intersection before having to consider a potential conflict at a subsequent access connection.
<b>HAMP</b>	Highway Access Management Plan.
<b>HCMM</b>	Highway Corridor Management Manual.
<b>height of a sign</b>	The height of a sign (with border or frame) shall be the vertical distance from the ground on which it stands to the highest extremity of the sign. The height of a sign (without border or frame) that is affixed to or mounted upon any building or other approved mounting shall be the vertical distance from the ground to the top of the letter, symbol, or other part of the sign that is the highest point. The height of any roof sign shall be measured from the ground at the building wall nearest to the highway.
<b>highway</b>	Means of common public highway, or any part thereof, and includes a street, bridge or any other structure incidental thereto and any part thereof.
<b>highway limit</b>	The boundary line of the right-of-way of a highway.
<b>I-HAMP</b>	Interchange Highway Access Management Plan.

<b>TERM</b>	<b>DEFINITION</b>
<b>illuminate</b>	To throw light upon by floodlighting, indirect lighting, or to decorate with lights.
<b>illuminated sign</b>	A sign that is lit by floodlights, indirect lighting, etc.
<b>infilling</b>	Where the pattern of development and the building line are well established and where the posted speed is less than 70 km/h.
<b>inflatable device</b>	An inflatable device may consist of a cold/hot air balloon and balloons inflated with other gases.
<b>ingress</b>	The means of entering an access connection (entrance) or intersection from a highway.
<b>intensification</b>	The development of a property, site or area at a higher density than currently exists.
<b>interchange</b>	A grade separated intersection with a structure designed to facilitate the free flow of traffic between intersecting highways and roads and any ramps, roadways incidental thereto.
<b>intersection</b>	<p>The general area where a road, street, railway or another highway joins or crosses a highway, or the area embraced within the prolongation or connection of the lateral curb lines or, if none, then of the lateral boundary line of two or more highways which join one another at an angle, whether or not one highway crosses the other.</p> <p>The <i>Public Transportation and Highway Improvement Act</i> establishes that "except as otherwise designated by the Lieutenant Governor in Council, where the King's Highway, other than a proposed highway, intersects a highway that is not the King's Highway, the continuation of the King's Highway and to its full width across the highway so intersected is the King's Highway and shall be deemed to be vested in the Crown and under the jurisdiction and control of the Ministry".</p>
<b>intersection of right-of-way</b>	The area where the right-of-way of a road, street, railway, or of another highway joins the right-of-way of a highway.
<b>intersection sight distance</b>	The sight distance to the left and right available to a driver intending to execute a manoeuvre onto a through roadway from an intersecting roadway.
<b>King's Highway</b>	Any highway or proposed highway in Ontario, designated by the Lieutenant Governor in Council as a King's Highway.



<b>TERM</b>	<b>DEFINITION</b>
<b>land area under active development</b>	The total land area as noted in this policy is the land area currently under active development. This includes the building(s) footprint and permanent parking area(s) (i.e. site plan control).
<b>land use</b>	The purpose for which the property is used. It also refers to the development or change in use of land for any purpose other than a use defined by an existing building or structure. Roads, pipelines, public utilities, earth berms, stormwater management facilities adjacent to a Provincial Highway are subject to land use restrictions.
<b>landscape sign</b>	Any arrangement of natural materials and/or conventional signing that displays the name of the business or property owner, and is typically located on the ground or a berm. The area of the sign shall be calculated by the square footage of the message content and/or logo within the display.
<b>large traffic generator</b>	Any activity or land use causing people to congregate in large numbers.
<b>Letter of Credit</b>	A guarantee from a major Canadian financial institution. MTO reserves the right to request a Letter of Credit as a condition of issuing a Highway Corridor Management permit.
<b>level of service</b>	A qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to manoeuvre, traffic interruptions, comfort, and convenience.
<b>local highway</b>	Undivided highway with at-grade intersections. Its role is to serve through traffic, but mobility is secondary to access.
<b>location sign</b>	A location sign shall be any sign that is located on a property, either freestanding or attached to, or placed or mounted upon a building, or landscaped that either names or identifies the property, occupant(s) or owner(s) or identifies, advertises, promotes or directs attention to a business, service and/or activity available at the premise.
<b>lot of record</b>	A parcel of land that is described in a deed or other legal document, or that is shown as a lot or block within a registered subdivision plan.
<b>luminous sign</b>	a) A sign lit by internal lighting b) A sign whose content can be changed by means of electrically energized display matrix, such as a light-emitting diode (LED).
<b>Ministry</b>	The Ministry of Transportation of Ontario.

<b>TERM</b>	<b>DEFINITION</b>
<b>mobility</b>	The level and degree of uninterrupted traffic movement along a highway.
<b>MTO</b>	The Ministry of Transportation of Ontario.
<b>MTO DS</b>	The Ministry of Transportation's Design Supplement to the TAC GDG.
<b>MTO Work Project</b>	MTO planning and design studies such as MTO Planning and Environmental Assessment Studies, Preliminary Design and Environmental Assessment Studies, or Work Projects on the 5-year Capital Construction Program for Provincial Highways.
<b>Municipality</b>	A municipality is a geographic area whose inhabitants are incorporated.
<b>mutual access</b>	An access connection (entrance) to a highway from two or more lots of record that all have highway frontage.
<b>Not-for-Profit Organization</b>	<p>Not-for-Profit organizations are associations, clubs, or societies that are not charities and are organized and operated exclusively for social welfare, civic improvement, pleasure, recreation, or any other purpose except profit.</p> <p>Examples of non-profit organizations:</p> <ul style="list-style-type: none"> <li>• social, recreational, or hobby groups (bridge clubs, curling clubs, and golf clubs)</li> <li>• certain amateur sports organizations (hockey associations, baseball leagues, and soccer leagues)</li> <li>• certain festival organizations (parades and seasonal celebrations)</li> </ul>

<b>TERM</b>	<b>DEFINITION</b>
<b>official sign</b>	<p>Official signs shall include:</p> <ol style="list-style-type: none"> <li>1) Signs placed by the Ministry, such as: <ol style="list-style-type: none"> <li>a) route markers, assurance signs etc.</li> <li>b) roadway identification signs, directional signs, and other guide signs.</li> </ol> </li> <li>2) Signs which the Ministry requires a person, firm, or organization to place for reasons of safety, information, guidance, or for any other reason. Signs required by the Ministry shall include signs and safety devices required during the construction or maintenance of a highway, or during (or because of) an encroachment upon a highway etc.</li> <li>3) Signs approved by the Ministry and placed by another ministry of the Ontario Government or federal government, such as: <ol style="list-style-type: none"> <li>a) signs placed by the Ministry of Natural Resources: fire area, game preserve, park area, forest area, conservation area etc.</li> <li>b) signs placed by the Ministry of Culture, Tourism and Recreation: tourist information</li> <li>c) signs placed by the Ministry of Agriculture and Food: experimental plot, horticultural station, inspection station etc.</li> <li>d) signs placed by the Ministry of Economic Development and Trade: conservation area etc.</li> </ol> </li> <li>4) Signs required by federal government legislation (e.g. signs required by the <i>Canada Elections Act.</i>)</li> <li>5) Official signs related to the armed forces.</li> <li>6) Signs related to conservation areas which have been approved by the Ministry and have been placed by appropriate municipal officials.</li> </ol>
<b>permit control area</b>	The area in the vicinity of a Provincial Highway within which any development requires an MTO Highway Corridor Management permit.
<b>Planning and Design Section</b>	Highway Engineering Office (in Central Region only)
<b>planting</b>	Includes any hedge, shrub, tree or landscaping.
<b>portable sign</b>	A sign or advertising device that is not permanently attached to the ground, a building, or a structure, and that is designed to be moved from place to place.

<b>TERM</b>	<b>DEFINITION</b>
<b>posted speed</b>	The maximum legal vehicular speed allowed within a section of highway.
<b>principal arterial highway</b>	Highways that are fully controlled-access highways but are not freeways.
<b>private access connection</b>	An access connection (entrance) from a lot of record to a Provincial Highway or to a public road in the vicinity of a Provincial Highway within MTO's permit control areas.
<b>private road</b>	A road or entrance under the jurisdiction, control and ownership of a person, an authority, a corporation, an association, etc. (not under the jurisdiction of any duly constituted road authority) that provides access to one or more lots of record, or to multiple owners of units located on one parcel of land, as is the case of a condominium, and which public funds are not expended upon.
<b>property line</b>	The boundary line of a highway right-of-way, or the boundary line of a property.
<b>property owner</b>	Includes a mortgage, lessee, tenant, occupant, person entitled to a limited estate or interest, and a guardian executor, administrator, or trustee in whom land or any interest therein is vested.
<b>Provincial Highway</b>	Any highway under the jurisdiction of the Ministry of Transportation, including King's Highways and any part of these designated as controlled-access highway, and any roadway under the jurisdiction of the Ministry.
<b>provincial plan</b>	A provincial plan within the meaning of section 1 of the <i>Planning Act</i> .
<b>PTHIA</b>	The <i>Public Transportation and Highway Improvement Act</i> R.S.O. 1990, c.P.50 – sections of this act give the Ministry the authority to issue permits within control areas within the vicinity of a designated highway.
<b>public road</b>	A road that is under governmental jurisdiction and on which public money has been spent for its repair and maintenance.
<b>pylon</b>	A structure, or part of a structure, erected to support or decorate a building; or a structure from a building and erected to support a sign or support or frame a gateway; or a structure erected solely for decorative purposes.

<b>TERM</b>	<b>DEFINITION</b>
<b>Regional Corridor Control Office</b>	Regional Highway Corridor Management Section
<b>Regional Office</b>	Regional Highway Corridor Management Section
<b>residence</b>	A building used solely as a residence or home. A building housing more than five families is classified as a commercial building.
<b>residential access</b>	An access connection (entrance) to a highway from a residential lot of record.
<b>resource access</b>	An access connection (entrance) to a highway for logging operations, mining explorations, gravel pit, etc.
<b>restricted</b>	Limited, controlled.
<b>restricted area</b>	An area within the Controlled Area within which certain specific controls are exercised by the Ministry.
<b>roadway</b>	That part of the highway designed or intended for use by vehicular traffic.
<b>rural area</b>	A section of any highway that is not defined as a built up area.
<b>secondary highway</b>	Any road or portion of a road in Ontario, designated by the Lieutenant Governor in Council as a Secondary Highway.
<b>Senior Policy Advisor</b>	Senior Project Manager - Policy
<b>service road</b>	A road located parallel and adjacent to, but not necessarily adjoining a highway, which carries local traffic and provides access to adjacent properties.
<b>setback distance</b>	The distance between the nearest extremity of an object under consideration and the centre line/property line of a highway.
<b>sight distance</b>	From any given point, the unobstructed distance a driver can see, usually along the roadway ahead.
<b>sight triangle</b>	The triangle formed by the line of sight and the two sight distances of drivers, cyclists or pedestrians approaching an intersection on two intersecting streets.

<b>TERM</b>	<b>DEFINITION</b>
<b>sign</b>	Any sign, notice, name, identification, description, advertising device, illustration, or any part thereof (whether it contains text or not) which is used to attract attention or direct attention to an object, product, place, activity, person, institution, organization or business.
<b>staged freeway</b>	Highways that are projected to become freeways at some time in the future. Staged freeway corridors have full control of access connections, with access provided via either grade-separated interchanges or public road only at approved locations for future grade-separated interchanges.
<b>stakeholder</b>	A property owner, developer or agency.
<b>stopping sight distance</b>	The distance between a vehicle and an object, for which the driver decides to stop, to the instant the vehicle begins to come into view.
<b>structure</b>	Includes any above or below ground installation not defined as a building (e.g. parking garages, detention ponds, swimming pools, illumination fixtures, wells, septic systems, satellite dishes, storage tanks).
<b>subdivision</b>	A parcel of land divided into building lots or blocks before or after development or improvement and approved by the appropriate planning authority as defined in the <i>Planning Act</i> .
<b>TAC GDG</b>	Transportation Association of Canada (TAC) June 2017 Geometric Design Guide (GDG) for Canadian Roads
<b>temporary sign</b>	A sign or notice of a temporary nature (e.g. charitable functions, special events). The sign must not exceed 3.7 m <sup>2</sup> (40 sq. ft.) in size, and must not be in place for longer than four weeks. Signs exceeding 3.7 m <sup>2</sup> (40 sq. ft.) in size should be classified as either location signing or billboard signing according to their location. They are subject to the applicable restrictions. Approval or any required permits must be obtained before erection of these signs.
<b>transportation system</b>	A system consisting of facilities, corridors and rights-of-way for the movement of people and goods, and associated transportation facilities including, but not limited to, transit stations, bus lanes, high occupancy vehicle lanes, parking facilities, carpool lots.
<b>unit or establishment</b>	A unit is an individual business having its own name and identity, which occupies space of more than 200 sq. ft. within a commercial building. The ownership of the unit is not a factor.
<b>urban area</b>	A section of any highway where the posted speed is less than 80 km/h.

<b>TERM</b>	<b>DEFINITION</b>
<b>urban/rural settlement area</b>	Urban settlement areas and rural settlement areas within municipalities (such as cities, towns, villages and hamlets) that are built-up areas, where development is concentrated and which have a mix of land uses.
<b>visibility triangle</b>	See "sight triangle"

# Highway Corridor Management **Manual**



## **Revisions Table**

**Corridor Management Office**

Ministry of Transportation

**April 2025**



## Highway Corridor Management Manual (original version date: September 2018)

<b><u>Date</u></b> <b><u>(mm/yyyy)</u></b>	<b><u>Section/ Figure/ Table</u></b>	<b><u>Revision</u></b>
04/2022	5.2.12	<ul style="list-style-type: none"> <li>Removed reference to annual renewals for billboard and private roadway signs; replaced with reference to expiry date of 5 years from date of permit approval</li> </ul>
04/2022	5.2.13	<ul style="list-style-type: none"> <li>Removed section as it referred to sign permit renewal notice</li> </ul>
04/2022	5.6	<ul style="list-style-type: none"> <li>Updated definition of a location sign</li> </ul>
04/2022	5.6.2 Category A	<ul style="list-style-type: none"> <li>Added 2<sup>nd</sup> paragraph with updated details about sign allocation</li> </ul>
04/2022	Table 5.6.1	<ul style="list-style-type: none"> <li>Added '1 pylon' under 'maximum signing allowed'</li> </ul>
04/2022	5.6.2 Category B	<ul style="list-style-type: none"> <li>Added 2<sup>nd</sup> paragraph with updated details about sign allocation</li> </ul>
04/2022	Table 5.6.2	<ul style="list-style-type: none"> <li>Added '1 pylon' under 'maximum signing allowed'</li> </ul>
04/2022	5.6.2 Category C	<ul style="list-style-type: none"> <li>Added 2<sup>nd</sup> paragraph with updated details about sign allocation</li> </ul>
04/2022	Table 5.6.3	<ul style="list-style-type: none"> <li>Added '1 pylon' under 'maximum signing allowed'</li> </ul>
04/2022	5.6.2	<ul style="list-style-type: none"> <li>Added new category D with updated details on calculation of sign allocation</li> </ul>

04/2022	5.6.4	<ul style="list-style-type: none"> <li>Revised wording under category D with updated details on calculation of sign allocation</li> </ul>
04/2022	Table 5.6.7	<ul style="list-style-type: none"> <li>Revised table with updated minimum dwell times for changeable message signs</li> </ul>
04/2022	5.7.11	<ul style="list-style-type: none"> <li>Revised 1<sup>st</sup> paragraph to remove reference to annual renewal process</li> <li>Removed 3<sup>rd</sup> paragraph with reference to renewal process and renewal notice</li> </ul>
04/2022	5.8.8.2	<ul style="list-style-type: none"> <li>Added item 'q' at the end of the list of requirements to specify that billboard signs cannot be a changeable message sign on private property adjacent to Class 1 and 2 highways</li> </ul>
04/2022	5.8.2.14	<ul style="list-style-type: none"> <li>Revised 1<sup>st</sup> paragraph to remove reference to annual renewal process</li> <li>Removed last sentence with reference to renewal notice</li> </ul>
04/2022	5.8.2.13	<ul style="list-style-type: none"> <li>Revised wording of 1<sup>st</sup> sentence to specify that billboard signs cannot be a changeable message sign on private property adjacent to Class 1 and 2 highways</li> </ul>
04/2022	Glossary	<ul style="list-style-type: none"> <li>Updated definition of a location sign</li> </ul>
04/2025	5.8.2.1	<ul style="list-style-type: none"> <li>Expanded and clarified the messaging requirements for bush country billboard signs on the highway right-of-way</li> </ul>
04/2025	5.8.2.12	<ul style="list-style-type: none"> <li>Added clarification on when the message on a bush country sign may be changed, and that changes must conform to other applicable messaging requirements</li> </ul>
04/2025	5.8.2.14	<ul style="list-style-type: none"> <li>Added information about the documentation that must be provided by the Business, Charity, Not-For-Profit Organization, Municipality, Authorized Local Event, or Indigenous community that the sign pertains to.</li> </ul>

04/2025	5.8.3	<ul style="list-style-type: none"> <li>• Revised designation limits in Eastern Region to reflect more precise limits.</li> <li>• Removed Highway 6 from Wiarton northerly to Tobermory, in West Region.</li> </ul>
04/2025	Glossary	<ul style="list-style-type: none"> <li>• Added definitions for Business, Registered Charity, Not-for-Profit Organization, Municipality and Authorized Local Event</li> </ul>