## Guide for Permits

## Development adjacent to Provincial Highways



## Manitobass

Infrastructure
Engineering \& Operations Division
Highway Planning and Design Branch
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## 1 INTRODUCTION

Under The Traffic and Transportation Modernization Act (TTMA), a permit is required from the Minister of Infrastructure for development adjacent to provincial highways, where provincial highways include provincial trunk highways, provincial roads and provincial access roads. This authority to issue permits for development adjacent to provincial highways is delegated to the Highway Planning and Design Branch of Manitoba Infrastructure (MI).

The purpose of this guide is to inform developers on:

- when, where and why permits are required
- permit requirements for accesses, structures, signage and trail development
- MI's process for reviewing permit applications

This guide also outlines how permits contribute to The Road to Zero: Manitoba Road Safety Plan.

### 1.1 THE TRAFFIC AND TRANSPORTATION MODERNIZATION ACT

The Manitoba Government passed The Traffic and Transportation Modernization Act (TTMA) on June 4, 2018. It will come into force on March 1, 2019. TTMA is legislation that:

- repeals two existing acts: The Highways and Transportation Act and The Highways Protection Act
- creates a new act: The Transportation Infrastructure Act
- amends other existing acts, including The Highway Traffic Act and The Drivers and Vehicles Act

The goals of the TTMA are to:

- reduce red tape and eliminate duplication
- give municipalities more say
- streamline processes, both external and internal to government.

Before the TTMA, the Highway Traffic Board (HTB) issued permits for accesses, structures, advertising signs and trail development along provincial trunk highways (PTHs), and MI issued similar permits on provincial roads (PRs) and provincial access roads. This resulted in confusion for developers who did not know which process to use. The board was also required to hold public hearings before making decisions, which caused the HTB permitting process to take several weeks.

Changes made under the TTMA also dissolve the Highway Traffic Board. MI will review requests for permits to place accesses to (as well structures, signage and trails adjacent to) PTHs, PRs, and provincial access roads. This will result in better service to the public, as applicants will no longer
have to go to different providers for essentially the same services, nor will applicants appear before the HTB.

### 1.2 MANITOBA ROAD SAFETY PLAN

The Manitoba Road Safety Plan highlights the importance of a Safe Systems Approach to improving road safety.

## A Safe Systems Approach focuses on:

- designing infrastructure that is forgiving of mistakes and protects vulnerable road users;
- ensuring that speed limits are safe and appropriate, and speeds are managed so other parts of the system work as intended;
- educating the public on the preventability of collisions and instilling a traffic safety culture;
- ensuring that vehicles are designed,
 manufactured, and repaired as safely as possible.

A Safe Systems Approach requires commitment and collaboration between all levels of government and private sector stakeholders with a mutual interest in road safety. It also requires strategic planning, long-term thinking, and sustained funding commitments.

## Here are some examples of how permits contribute to a Safe Systems Approach:

- Unsafe highway accesses can result from inappropriately located and frequently placed accesses, as highway vehicles may have limited time to react to vehicles entering, exiting or crossing a highway (especially at unexpected or confusing locations). High speed highways have a higher potential for more severe and fatal collisions.
- Unforgiving highways also result from excessive accesses. Accesses are physical obstacles within highway rights-of-way. Should a vehicle leave the travel surface of a highway for one reason or another, the vehicle has the potential of going in the ditch and hitting an access. Therefore, fewer accesses means fewer hazards within highway rights-of-way, which ultimately leads to safer highways.
- Unforgiving highways can also result from signs inappropriately placed adjacent to highways. Highway vehicles may, in an emergency situation, use the ditches to avoid a collision, and return to the highway. Inappropriately placed signs can create hazards for these vehicles.
- By controlling signs, accesses and structures, you can reduce distracted driving occurrences and provide a safer and more efficient highway network for all users
- Unsafe trail crossing locations can create hazardous conditions for trail users (who are vulnerable road users) and motorists, especially where high traffic volumes and high speeds may not allow trail users to cross safely at a particular location.


## 2 THE PROVINCIAL HIGHWAY NETWORK

The provincial highway network enables the connectivity of people and goods across the province, facilitating Manitoba's social and economic well-being. Permits are a way for MI to ensure that provincial connectivity needs are met, while guiding local development.

### 2.1 WHAT IS ACCESS MANAGEMENT

Access management is the systematic control of the location, spacing, design and operation of driveways, intersections, and active transportation facilities on, along, or adjacent to a highway. The primary purpose of access management is to provide vehicular access to land development in a manner that preserves the safety and functional integrity of the highway system. It can also take into account access to land development via other modes of travel (e.g. walking, cycling).

The appropriate degree of access control varies according to the functions and traffic characteristics of a highway, the use of the abutting land and long term planning objectives. The following priorities guide MI in making access management decisions:

- Highways are an important public resource
- Highways are costly to build, improve, replace and maintain
- By managing access, the life of highways can be extended, acceptable levels of public safety maintained and traffic congestion reduced
- Long term property values and the viability of abutting development will be maintained

The purpose of access control is not intended to prevent development, but rather to guide development while managing the highway corridor's efficiency and safety.

### 2.2 WHEN PERMITS ARE NEEDED

Permits are required from MI for any of the following purposes:

- development occurring within the controlled area of a provincial highway (i.e. any structure above, below or on the ground)
- municipal roads and/or trails accessing a provincial highway
- private accesses on provincial highways
- trails or utilities within controlled areas
- signs within controlled areas


## General Recommendations for Developers and Applicants

1. Engage with MI at the earliest possible stages of your planning process to ensure requirements are met. In some cases, engagement with MI is recommended before land is purchased.
2. All MI permits are required before commencing construction.
3. The following provincial acts may apply to developers (note: additional acts may apply):
a. The Highway Traffic Act
b. The Off Road Vehicles Act
c. The Municipal Act
d. The Environment Act
e. The Water Rights Act

### 2.3 WHERE PERMITS ARE NEEDED: HIGHWAY RIGHTS-OF-WAY VERSUS CONTROLLED AREAS

Land is allocated for provincial highways to ensure the safe operations of provincial traffic. Crown land used for provincial highway operations is formally called highway right-of-way. Highway right-of-way includes the roadway as well as the ditches, drainage facilities and highway related signage. The highway controlled area is created for the protection of future highway expansions and improvements and future operations.

Highway controlled areas are made up of lines and circles, depending on whether they are applied to a highway segment or intersection, respectively (see Appendix A for a map of controlled areas). The following dimensions apply:

- control lines: 38.1 m on all PR's and some PTH's, 76.2 m wide on the PTH's that are not 38.1 m
- highway control circles: $457.2 \mathrm{~m}, 304.8 \mathrm{~m}$ or 152.4 m radius depending on the long term requirements of the intersection


Figure 1: Highway right-of-way versus controlled area (see Appendix A for maps of controlled areas)

### 2.4 HIGHWAY CLASSIFICATIONS

Manitoba provincial highways are classified to enable strategic design, operations and maintenance decisions. The functional classification system specifically addresses access and mobility, as described in this section (see Appendix B for a map of provincial highway functional classifications). Note: this section specifically applies to the rural context.

- Freeways: a fully access-controlled highway with grade separations at all crossroads and railways crossings.
- Expressways: generally multi-lane, divided highways (or highways that may or should be multi-lane in the next 30 years) that carry large traffic volumes at high speed under close to free-flow conditions. They connect (and sometimes bypass) cities and large towns. To maintain the flow and safety of through-traffic, direct property access is normally eliminated.
- Arterials (primary and secondary): generally a two-lane highway or, in some cases, multilane highway that carry large traffic volumes at high speeds. To maintain the flow and safety of through-traffic, direct access to abutting land may be restricted, joint/combined, or eliminated.
- Collectors: generally, collectors are two-lane roads that collect traffic from local roads and feed it to arterials, or distribute it from arterials to local roads. They provide direct service for developments. Collectors equally serve the functions of traffic movement and land access.
- Local Roads: these roads provide direct service for residences and other developments, serving a local function.

Some highways under MI jurisdiction serve a local road and/or urban road function. These are typically PR access roads or other low speed highways (posted speed less than 70 km per hour) that pass through local communities. The main function of a local road or urban road is access. The intended service function of these roads is to allow vehicles to reach properties. While a higher number of access points can be allowed in these cases, a proliferation of accesses should be avoided. Geometric design constraints should be considered in locating access points on local roads.

## Mobility versus Access

The key differences among these classifications focus on mobility and land access. For example, the priority for expressways is mobility with controlled facility access and limited land access. For local roads, the priority becomes land or facility access, with mobility a secondary consideration.


Figure 2: Relationship between accessibility and mobility for highway classifications

## 3 SITE DEVELOPMENT

### 3.1 SITE DEVELOPMENT PLANNING STRATEGIES AND REQUIREMENTS:

The location of a development in relation to the highway network is an important consideration in the early stage of planning. Generally, provincial highways are intended for accommodating interregional and interprovincial traffic. The role of providing access to individual developments is best suited for internal roads (i.e. not provincial highways). When planning a development, the following should be considered to determine the most appropriate location and design:

1. Think land use AND transportation: before approving a subdivision or rezoning, consider what road design and improvements will be needed to support the development and link it to the surrounding areas.
2. Identify and plan for growth areas: incremental and uncoordinated development will not lead to a liveable community or a healthy business climate. Support economic growth by planning and investing in a local network to support development.
3. Develop a complete hierarchy of roads: a viable community requires a variety of roadways organized as an integrated system. Freeways, expressways and arterials are needed for longer, higher speed trips and are meant to move large volumes of traffic efficiently. Local streets and collectors are typically lower volume roads that provide access to homes and businesses. Recognize that different roads serve different purposes.
4. Avoid strip development: commercial development can be adjacent to and visible from the highway but should be accessed via a system of local roads that complement the provincial highway system. Strip development, or development that contributes to the evolution of a row of lots, that front on and require direct connection to a provincial highway, is not permitted.

## Strip Development

Strip development, or development that contributes to the evolution of a row of lots fronting on and requiring direct connection to a provincial highway, is not permitted.
5. Connect local streets between subdivisions: give residents convenient options for travel from one neighbourhood to another by connecting local streets from one subdivision to the next, without necessarily relying on the provincial highway network.
6. Design subdivisions with access to local streets: avoid lot designs with driveways that enter onto highways. Orient business and residential driveways to local streets that feed onto the highway at carefully designed and spaced intersections.
7. Practice good site planning principles: locate entrances away from intersections and turn lanes. Provide adequate space on the site for trucks to manoeuvre and for vehicles to queue without backing up to a highway. Ensure adequate sightlines in all directions from an access and approaching the access. Adjacent businesses should provide shared driveways and cross-access, so customers can make multiple stops without entering an arterial. Accesses with high traffic volumes (such as those associated with major
residential or commercial subdivision development) may require intersection illumination.

## Existing and Future Highway Operations and Safety

Developers must consider more than existing highway operations and safety. Future highway upgrades, and developments or redevelopments may influence site and land developments. For example, MI may consider relocating, removing or replacing existing access connections.

### 3.2 ACCESS SPACING

The local road system exists to access adjacent land, whether for economic, residential or recreational purposes. The main function of the highway system is to allow people to travel safely, whether their travel is intraregional, interregional or interprovincial. Highway safety and efficiency decreases as access density increases, and may increase the costs of future highway upgrades. Access management standards extend the service life and minimize costs of highway infrastructure.

When developing adjacent to the provincial highway network, it is preferable for all access to be from the internal road network (i.e. not from provincial highways) or from the lowest classification of highway. Direct access to highways may not be approved. If highway access is possible and practical, MI will look to approve accesses at property lines for shared use.

## Existing and Future Highway Operations and Safety

When a development cannot use an existing provincial highway access and a new access is the only alternative, MI encourages:

- maximizing the spacing between new and existing access
- placing any new accesses at a joint property line
- relocating existing accesses to provide access to land at a better location

Developers should undertake the planning of a site to ensure spacing between highway accesses meets the desirable distance for a specific highway classification. As described in section 2.4, each highway classification has a different role in providing access to developments and ensuring mobility for interregional and interprovincial traffic.

- Expressways: have no direct property access. All access is achieved at approved public road connections only, with a minimum spacing of 1600 m , and ideally 6.5 to 9.5 km spacing. All connections require proper intersection treatments.
- Primary arterials: desirable intersecting road spacing is 1.6 km . Consideration is given to private accesses at a minimum spacing of 800 m .
- Secondary arterials: desirable access spacing is 800 m . Consideration is given to allow private accesses at a minimum spacing of 400 m .
- Collectors: desirable accesses is 400 m . Consideration is given to allow private accesses at a minimum spacing of 200 and 100 m .
- Locals: a higher number of access points can be allowed, although proliferation of accesses should be avoided.

A number of factors, in combination with unique site conditions, are considered in determining highway access locations:

- distance from curves
- distance from bridges
- distance from railways
- distance from an intersection or interchange
- influence on active transportation facilities/trails
- sightline distances in all directions (from an access and approaching it)
- topographical conditions


### 3.3 STRUCTURES

Structure setback requirements are considered on a case-by-case basis and are dependent on several factors, including:

- existing and future highway right-of-way requirements
- driver sight line requirements
- the local context (i.e. urban or rural environment, location of existing adjacent structures, clear zone requirements, posted speeds, active transportation activities, etc.)


### 3.4 DEVELOPER REQUIREMENTS

MI may request the following from a developer, as a requirement or condition of a permit. Developers are generally responsible for all costs associated with these, including construction of any required on-highway and highway right-of-way improvements necessitated by their development:

- preliminary traffic information or a traffic impact study, to better understand the impacts of a development on provincial highways and provincial highway traffic.
- Preliminary traffic information may include the amount of traffic, the type of vehicles and their directional split.
- Traffic impact studies approximate the future traffic a development may generate, and consider the adequacy of existing infrastructure in accommodating this traffic. These studies are to be prepared by a qualified professional engineer.
- on-highway improvements, where the proposed development requires a direct private access or public road connection to the highway.
- drainage information to ensure new development does not impact provincial highway drainage.
- active transportation accommodation


## 4 PRIVATE ADVERTISING SIGNS

The placement, design and illumination of signs is important to ensure vehicles can travel safely without obstruction, and to minimize distractions to motorists. This section applies to all signs within the controlled area.

### 4.1 SIGN LEGIBILITY AND DRIVER DISTRACTION

All signs should be easy to read, and should not distract drivers. The face of the sign must be readily legible by a driver 100 m away, with ordinary vision. The location of the sign must not obscure another sign or a traffic control device.

The following should be avoided:

1. Signs which have variable illumination, including any moving, flashing, scintillating, blinking or travelling lights, or reflective paint or material.
2. A sign, any portion of which is capable of, or is intended to move.
3. Signs containing running or changing messages.
4. Signs containing chevrons or arrows, whether or not lighted.
5. A sign which is located so close to another sign as not to allow a reasonable reader to read and understand it when travelling at the maximum rate of speed permitted on the highway

### 4.2 CONSTRUCTION, LOCATION AND POSITIONING SAFETY

All signs must be constructed and positioned to minimize the chance of impacts to highway safety and operations, particularly in the case of damages to the sign. The following requirements ensure this is achieved:

1. The sign must be supported and anchored in such a manner as to withstand wind and other elements.
2. The sign must not be erected or located closer than:
a. three metres to the highway right-of-way
b. a distance as directed by MI
c. a distance which is sufficiently far from the travelled portion of any adjacent highway that, if the sign fell, it would not result in the sign falling on that portion of the highway
d. whichever is the greater of the above

### 4.3 OFF-PREMISES SIGN POSITION, LOCATION AND DESIGN

For off-premises signs (a sign that is not within land where the business or activity referred to in the sign is conducted, or to which the subject matter of the sign relates), the following requirements apply:

1. A sign must face on-coming traffic on the same side of the highway as the direction of the traffic, unless the highway adjacent to the sign is a modified speed zone or restricted speed area.
2. A sign must not be erected or located closer than:
a. 200 metres to a major intersection (measured from the start and end of turning lanes, acceleration lanes, etc.)
b. 200 metres measured along the centre line of the straight portion of a highway from the point where a curve in a highway commences, unless the curve is in a modified speed zone or restricted speed area
c. two kilometres to an interchange (measured from the start and end of turning lanes, acceleration lanes, etc.)
d. 200 metres to a railway crossing
e. 200 metres to any other sign, including those signs outside the controlled area; or
f. one metre to the ground
3. A sign must not contain more than 12 words or symbols.

## 5 TRAILS

### 5.1 TRAIL PLANNING STRATEGIES

MI will work with local governments and trail developers to ensure that active transportation facilities are well planned and designed to protect highway safety and operations. For additional information on planning trails within highway rights-of-way and controlled areas, see Guidelines for the Construction of Recreational Trails on or in Proximity to a Departmental Road.

When planning a trail, consider prioritizing the following characteristics to ensure a safe, and enjoyable experience.

1. Safe: A safe network minimizes intersections and interfaces with motorists, and is free of hazards to AT users
2. Well-connected: A well-connected network is continuous, direct and convenient, so people can move easily through natural areas or to specific destinations, without using provincial roadways.
3. Attractive: Scenery, lighting, art, landscaping and other amenities and design features create a comfortable, safe and enjoyable environment that is inviting to users.
4. Accessible: An accessible trail keeps all users in mind, including various modes, children, the elderly, and those with mobility limitations. While not all trails may be designed for all users, appropriate information should be provided to ensure all users are aware of risks.

### 5.2 HIGHWAY CROSSINGS AND SIGNAGE

MI approval is required for all highway crossings. MI may consider highway crossings if they meet the following minimum criteria:

1. All crossing locations must be visible to highway drivers, providing a safe distance for drivers to react to crossing trail users.
2. The crossing should normally intersect the highway at a 90-degree angle.
3. The trail must approach and meet the highway at the same elevation as the adjacent highway lanes.
4. Crossing more than three driving lanes is not permitted, unless a refuge island is available or the crossing is located at a signal-controlled or all-way stop controlled intersection.
5. If possible, the crossing should be located at an existing intersection.
6. The highway crossing should be designed to maintain existing ditch drainage patterns to the satisfaction of MI and Manitoba Sustainable Development.

Signage for trails within the highway controlled area requires a permit from MI.

## 6 PERMITTING PROCESS

This document details the process, as shown in the following flow chart (Figure 3), by which Manitoba Infrastructure (MI) will review applications for access to and placement of structures, signs and trails adjacent to provincial highways.

## Application Submission

Application forms for accesses to or structures and signs adjacent to a provincial highway can be submitted:

- online
- by mail
- in person at any MI Regional office
- in person at MI's Highway Planning and Design (HPD) Branch at 1420-215 Garry Street, Winnipeg, Manitoba R3C 3P3


## Initial Review

HPD staff will review the application for completeness and accuracy.

## Data Collection, Analysis and Recommendation

HPD will send the application to MI regional staff for a site inspection and the preparation of a permit sketch. The site plan will identify any topographical or existing concerns that may affect the decision regarding approval (or otherwise).

## Clarification

If required, MI will contact the applicant for further information or clarification (e.g. certificate of title, location of proposed structures, access, signs, landowner permission)

## Reviewed

HPD staff will review the sketch plan and the recommendations from the regional staff. If further information is required from the regional staff, HPD will request it. HPD will make a preliminary decision based on the information gathered.

## Approval

If the application meets all internal policies and standards, a permit is issued with appropriate conditions. These conditions may include general standards for access construction, a requirement to contact the local maintenance superintendent, and an expiration date - along with other possible conditions specific to the permit.

## Recommended Denial

If the application does not meet the policies and standards, HPD staff will contact the applicant and discuss alternatives that would meet these policies and standards. If there are no alternatives that work for both parties, the application is sent to an interdepartmental committee for review.

## Committee Review

A committee consisting of directors or executive directors from MI and Manitoba Municipal Relations will review the file and render a decision. The appropriate correspondence will then be sent to the applicant.

- If approved, a permit will be sent to the applicant.
- If the application is denied, the correspondence to the applicant will provide an explanation for the denial.

PROCESS FOR REVIEWING DEVELOPMENT APPLICATIONS
(for accesses, structures, and signs) ON DECLARED HIGHWAYS
TRANSPORTATION INFRASTRUCTURE ACT


Figure 3: Process for evaluating permits

## 7 CONTACT INFORMATION

For more information regarding TTMA, as well as the regulations included in those acts, please visit the Traffic and Transportation Modernization website at:
https://www.gov.mb.ca/mit/ttm/
For more information on highway development permits, please visit the Highway Planning and Development website at:
https://www.gov.mb.ca/mit/hpd/index.html
Please contact your local MI office or the Roadside Development Section of MI at 204-945-3457 for information on accesses, structures and signs on or adjacent to the highway of your proposed development.

## APPENDIX A - CONTROLLED AREA MAP



## APPENDIX B - PROVINCIAL HIGHWAY NETWORK - DRAFT FUNCTIONAL CLASSIFICATION MAP



