Ontario

Book 5

Ontario Traffic Manual

December 2021

Regulatory Signs

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Ontario Traffic Manual

Foreword

The purpose of the Ministry of Transportation’s (MTO) Ontario Traffic Manual (OTM) is to provide information and guidance to transportation practitioners and to promote uniformity of treatment in the design, application and operation of traffic control devices and systems across Ontario. The objective is safe driving behaviour, achieved by a predictable roadway environment through the consistent, appropriate application of traffic control devices. Further purposes of the OTM are to provide a set of guidelines consistent with the intent of the *Highway Traffic Act* and to provide a basis for road authorities to generate or update their own guidelines and standards.

The OTM is made up of a number of Books, which have been generated over a period of time, and for which a process of continuous updating is ongoing. Through the updating process, the OTM is becoming more comprehensive and representative by including many traffic control devices and applications specific to municipal use. Some of the Books in the OTM series are new, while others incorporated updated material from the Ontario Manual of Uniform Traffic Control Devices (MUTCD) and the King’s Highway Guide Signing Policy Manual (KHGSPM).

The OTM is directed to its primary users, traffic practitioners. The OTM incorporates current best practices in the Province of Ontario.

The interpretations, recommendations and guidelines in the OTM are intended to provide an understanding of traffic operations and they cover a broad range of traffic situations encountered in practice. They are based on many factors which may determine the specific design and operational effectiveness of traffic control systems. However, no manual can cover all contingencies or all cases encountered in the field. Therefore, field experience and knowledge of application are essential in applying the direction stated in this Book, in deciding what to do in the absence of specific direction from the Book itself, and in overriding any recommendations in this Book.

The traffic practitioner’s fundamental responsibility is to exercise engineering judgement and experience on technical matters in the best interests of the public and workers. Guidelines are provided in the OTM to assist in making those judgements, but they should not be used as a substitute for judgement.

Design, application and operational guidelines and procedures should be used with judicious care and proper consideration of the prevailing circumstances. In most designs, applications, or operational features,

the traffic practitioner's judgement is to meet or exceed a guideline while in others a guideline might not be met for sound reasons, such as space availability, yet still produce a design or operation which may be judged to be safe. Every effort should be made to stay as close to the guidelines as possible in situations like these, and to document reasons for departures from them.

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NOTE: A training package may be available at a future date. For more information, contact:

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1. Introduction

OTM Book 5 (Regulatory Signs) is one of a series of volumes that make up the Ontario Traffic Manual (OTM). OTM Book 5 (Regulatory Signs) addresses the selection and application of regulatory signs. It should be read in conjunction with OTM Book 1 (Introduction to the Ontario Traffic Manual) and its appendices, which contain considerable essential information about the fundamental principles and policies behind the design and application of traffic control signs, signals, markings and delineation devices.

OTM Book 5 (Regulatory Signs) is not intended to provide sufficient detailed information on the design, fabrication or installation of individual signs. For these purposes, refer to OTM Book 1B (Introduction to the Ontario Traffic Manual), OTM Book 2 (Sign Design, Fabrication & Patterns) and OTM Book 3 (Ground-Mounted Sign Support and Installation).

Other Books in the OTM series provide practical guidance on a full range of traffic control devices and their application. A complete list of the planned and currently available volumes is found in OTM Book 1.

Different terms are used in OTM Book 5 to refer to different road users. A “road user” is anyone who uses the road, including the sidewalk or boulevard, such as a pedestrian, cyclist, motorist, etc. The word “driver” is intended to include the operator of a motor vehicle, bicycle, transit vehicle, and any other vehicle legally operating on the road or public right-of-way. “Motorist” means only the operator of a motor vehicle. When the word “cyclist” is used, it is specific to the operator of a bicycle. This Book also, on occasion, considers the specific type of road user being dealt with. Road users may be separated into drivers of different types of vehicles, such as light vehicles, heavy trucks, buses, taxis, bicycles, or recreational vehicles (off-road vehicles or snowmobiles); or they may be pedestrians or transit users.

1.1 Application of Regulatory Signs

Regulatory signs are intended to instruct road users on what they must do (or not do) under a given set of circumstances. The term “regulatory sign” describes a range of signs that are used to indicate or reinforce traffic laws, regulations or requirements which apply either at all times or at specified times or at specific locations upon a street or highway, the disregard of which constitutes a violation.

The regulatory signs described in this Book have different levels of legal status, enforcement regime and penalties for violation, depending on their individual governing authority. Some signs are enforceable directly under specific sections of the *Highway Traffic Act (HTA)* or other legislation, others under more general provisions of the HTA and its regulations and still others only under duly enacted municipal by-laws. Some of the regulatory signs in this Book are not directly enforceable themselves but are used to reinforce regulatory conditions contained in legislation, such as *HTA Part X (Rules of the Road)*. A final group of signs is not enforceable at all.

The term “prescribed signs” refers to signs described in HTA regulations, while the term “official signs” refers to signs not included in the HTA regulations, but approved by MTO and appearing in the Ontario Traffic Manual.

All applicable references to the HTA or other Ontario legislation and regulations in this Book refer to the Revised Statutes of Ontario (R.S.O.) 1990 and Revised Regulations of Ontario (R.R.O.) 1990.

The official definitions for these terms, as they appear in the Introduction to the Ontario Traffic Manual, are as follows:

Prescribed Signs

The *HTA, Section 182*, provides for the regulation of various signs, their type and location on the roadway. The criteria and specifications for application, dimension, location and orientation are prescribed and illustrated under *HTA Ontario Regulations 402/15, 581, 599, 608, 615,* and *620/05* and are indicated as such in this Book. Signs installed in accordance with the regulations, and pursuant to the HTA, are enforceable under provisions of the Act. Enforcement is permitted under a particular section under the authority of which a prescribed sign may be installed to indicate a traffic regulation, or *HTA Section 182*, which requires obedience to prescribed signs.

Official Signs

Under the *HTA, Section 1,* official signs are any signs approved by MTO. Official signs are required to be used under certain sections of the HTA which become effective on the use of an official sign (for example, *HTA Sections 153 (1)* and *154 (1) (c)*). Such signs are enforceable only under the particular provisions of the HTA which apply to their use.

In many cases, regulatory signs are essential to indicate the applicability of legal requirements that would not otherwise be apparent to the motorist (e.g., speed limits, turn restrictions, parking restrictions). Due care must be exercised to ensure that they are installed wherever needed to fulfil this purpose, in accordance with the prescribed location criteria, and mounted so as to be easily visible to the motorist. The message on the sign must clearly indicate the requirements imposed by the regulation.

To aid users of this Book, where applicable, reference is made to the appropriate section of the HTA or regulation which provides the legal authority for that sign. It must be noted that this reference is an indication only and is not intended to be a definitive listing. Legal advice should be sought whenever dealing with matters of legal authority.

In order to retain the public credibility of all traffic control devices, unnecessary restrictions should be avoided. Signs that have been installed but are no longer applicable must be removed.

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All regulations indicated by the signs should be actively enforced. Otherwise, no matter how effectively the signs may be designed and placed, the desired results may not be obtained.

The type of regulatory signing and the sign size are impacted by the classification of highway or road to which the signs apply. Road classifications (Arterial, Collector and Local Roads) are defined in Appendix A (Definitions). For determining sign size, the following three speed ranges have been adopted:

(1) Speed limits of 60 km/h or lower;

(2) Speed limits of 70 or 80 km/h; and

(3) Speed limits of 90 km/h or higher.

Where various sign sizes are shown in the OTM, the standard sign size is recommended as the minimum sign size. It is typically the sign size that will apply for the lowest speed range. Where specific sign sizes are recommended for the other speed ranges, they should also be regarded as minimum sizes for those speeds. For some sign designs, only one or two sign sizes are shown. In this case, two or more of the three speed ranges are combined into one. Where, in the traffic practitioner's judgement, it is felt that the recommended minimum size is too small, and/or greater emphasis is needed, a larger sign size may be used. More information on sign size is provided in OTM Book 1B (Introduction to the Ontario Traffic Manual).

This edition of OTM Book 5 (Regulatory Signs) contains signs that are currently approved for use based on the current provisions of the HTA. Signs for new provisions introduced in the HTA after publication of this Book will be included in future editions of this Book. A number of additional signs currently in use in various jurisdictions in Ontario and across Canada are also included in this Book.

Where French language or bilingual versions of signs are available, they have not been illustrated in OTM Book 5 (Regulatory Signs), but are contained in the Ministry of Transportation's Master Sign Library (MSL).

The *French Language Services Act*, R.S.O, 1990, c. F.32 has designated areas in which bilingual signs are required for highways under the jurisdiction of MTO. The act does not require municipalities to provide services in the French language. Therefore, municipalities are not obligated to provide bilingual signs on the roadways under their jurisdictions. However, municipalities located in the designated areas may pass a by-law to provide services in the French language, in which case bilingual signs under their jurisdictions would be required. Information on how to install bilingual signs is provided in Section 13 of OTM Book 1B (Introduction to the Ontario Traffic Manual).

1.2 Classification of Regulatory Signs

Regulatory signs are divided into the following three sub-classes. Each sign has been assigned a unique reference number within that sub-class:

(1) Sub-class Ra, Right-of-Way Control Signs.

This sub-class contains those signs which control the right-of-way for vehicles and/or pedestrians, including:

- Vehicular stop and yield control;
- Pedestrian crossings within intersections;
- Designated pedestrian crossovers; and
- Cyclist related yield signs.

(2) Sub-class Rb, Road Use Control Signs.

This sub-class contains those signs which indicate the permitted or prohibited use of, or movement on, a street or highway by all vehicles or by a class or classes of vehicle, including:

- Speed control;
- Turn control;
- One-way traffic control;
- Two-way and multi-lane traffic control;
- Lane designation;
- Managed lanes;
- Parking control;
- Movements permitted;
- Specific vehicle class control;
- Traffic signal supplementary information;
- Construction zone traffic control;
- Bus By-pass shoulders; and
- Specific off-roadway facility control.

(3) Sub-class Rc, Miscellaneous Control Signs.

This sub-class includes those signs which indicate regulations not otherwise provided for in Class Ra or Rb, including:

- Miscellaneous pedestrian-related signs;
- Railway signs;
- Littering;
- Seat belt use; and
- Off-roadway facility control signs.

1.3 Design of Regulatory Signs

Except for a few signs, such as the STOP, YIELD and ONE-WAY signs, regulatory signs are rectangular in shape, usually with the longer dimension in the vertical direction. They generally contain a black, red and/or green legend on a white background.

The design of regulatory signs has evolved over a long period of time and

has been undertaken with a great deal of care and attention to detail with regard to shape, dimensions, font, letter height and spacing, symbol design and colour. These design parameters have considerable effect on the driver's ability to notice, read, understand and react to the sign while travelling, particularly in a complex driving environment. Signs must therefore be fabricated to comply with the detailed patterns contained in OTM Book 2 (Sign Design, Fabrication & Patterns) Master Sign Library (MSL). Sign patterns can be obtained by clicking on the following link:

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and opening the OTM Book 5 Sign Design Pattern Files zip file. This link also includes the file for the Book.

For those using the printed version of this Book, please email OTM@ontario.ca for instructions on how to download the MSL files for signs in this book.

Due to the completeness of this version of OTM Book 5 (Regulatory Signs), it is not expected that the design of new regulatory signs will be a common occurrence. If the need for a new sign does emerge, it must be designed in accordance with the specifications set out in OTM Book 1 (Introduction to the Ontario Traffic Manual), (Sections 2.5 and 5.12) and OTM Book 1B (Introduction to the Ontario Traffic Manual).

Minimum overall dimensions for each sign are presented below each sign image in this Book. In each case, the smaller dimension is stated first. This convention follows the current practice for specifying sign blanks and other aspects of sign design and fabrication.

Where conditions require standard sign sizes to be altered, for example, increased to improve visibility or conspicuity, or decreased due to space restrictions, the regulations under the *Highway Traffic Act* must first be consulted. Signs included in regulations are very prescriptive and, in some cases, can only be increased proportionately to the minimum size prescribed (e.g. Regulation 615 (SIGNS)). Other regulations may allow the sign to be scaled proportionately, either larger or smaller, or may prescribe an exact size that must be used in order to be in compliance. For signs not prescribed in regulations, where a non-standard size sign is required, normally the size of the sign is altered proportionately.

In some cases, specific sign size recommendations are made in this Book to correspond with particular speed or other road operating characteristics.

Most sign sizes have been chosen to match readily available sign blanks, but some signs, particularly those defined in regulations, may require unusual sign substrate sizes.

1.4 Reflectivity / Luminance

With the exception of parking control signs located in illuminated areas, all regulatory signs are required to be reflectorized or internally illuminated so as to show the same shape, colour and message by night as by day.

As of January 1, 2022, all newly installed regulatory signs, with the exceptions noted below, should be fabricated using materials with higher levels of reflectivity, sometimes referred to as high intensity sheeting, with a minimum sheeting level of Type III or IV.

As of January 1, 2029, all existing and new regulatory signs, with the exceptions noted below, must meet the minimum Type III or IV sheeting requirement.

The only exceptions to the reflectivity requirements are parking control signs in non-illuminated areas and internally or externally illuminated KEEP RIGHT (Rb-25R) and KEEP LEFT (Rb-25L) signs. The minimum sheeting level requirements for parking control signs in non-illuminated areas and externally illuminated KEEP RIGHT (Rb-25R) and KEEP LEFT (Rb-25L) signs remain as Type I. Reflectivity for parking control signs in illuminated areas and internally illuminated signs is not required.

The optional use of Type IX or XI sheeting may be considered for locations experiencing an unusually high number of night-time collisions with evidence that lack of visibility of signs could be a contributing factor. Other traditional responses (larger signs, additional signs, alternate locations) should be tried first and only if they are not successful in addressing the problem, should higher reflectivity be considered. Some examples where higher reflectivity may be considered include:

- Overhead signs, signs located far off the roadway, and signs on curves where an approaching vehicle's headlights are pointed away from the sign or are at a severe angle to the sign;
- Signs in areas without street lighting but where glare is present from other roadside light sources such that the sign may be difficult to read with the basic Type III or Type IV sheeting; and
- Specific unusual operational situations that need to be highlighted to the driver (e.g. non-standard intersection geometry).

Such locations may be identified through an over-representation analysis by statistically comparing proportions of night-time collisions at the subject location with those of similar locations in the jurisdiction. For more information on over-representation analysis, refer to *Transportation Association of Canada (TAC) Canadian Guide to In-Service Road Safety Reviews.*

The use of higher reflectivity on rural roads should be considered very carefully. Being 'blinded' by signs with very high reflected light, especially under high beam headlight use, is a possible condition.

The sheeting levels identified above for fabricating OTM Book 5 signs must conform to the *ASTM (American Society for Testing and Materials) Standard Specification D 4956-19* or its subsequent versions.

1.5 Location

Regulatory signs shall normally be located in accordance with Section 12 (Sign Position) of OTM Book 1B (Introduction to the Ontario Traffic Manual).

However, specific or additional requirements for certain regulatory signs may pre-empt directions or specifications prescribed under the general standards in OTM Book 1B. Such deviations or exceptions from OTM Book 1B location principles are noted in this Book under the heading “Location Criteria” for the respective signs to which they apply. If exceptions are not noted under this heading for a given sign, the OTM Book 1B location principles apply.

HTA Ontario Regulation 615 (SIGNS) identifies the prescribed regulatory signs which must be placed in such a way that they remain visible to approaching traffic at all times for a distance of at least 60 m.

For all signs, good practice suggests that the visibility of the sign should be based on the speed limit and the function of the sign. A viewing distance greater than 60 m, preferably stopping sight distance (SSD), should be considered for speeds higher than 50 km/h. The guidelines on SSD are provided in *(TAC) Geometric Design Guide for Canadian Roads.*

For guidance pertaining to the use of ground-mounted sign supports, refer to OTM Book 3 (Ground-Mounted Sign Support and Installation).

For guidance pertaining to the use of overhead sign supports, refer to MTO’s Sign Support Manual.

1.6 Supplementary Flashing Beacons

Red or amber flashing beacons may sometimes be required to draw the driver’s attention to the presence of a regulatory sign, (e.g., a STOP sign, a KEEP RIGHT or SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING sign), particularly when visibility distance is reduced due to severe roadway geometry, or other circumstances are present which suggest that greater emphasis is required.

The use of flashing beacons should be restricted to critical situations only, in order to ensure that their impact is not lost due to overuse or to ensure that they do not become a distraction to the driver. A red flashing beacon is only used in conjunction with a STOP sign.

Further information on the correct use of flashing beacons may be found in OTM Book 12 (Traffic Signals) in the section entitled “Flashing Beacons”.

1.7 Dynamic Sign Technologies

Recent advances in technology have resulted in the capability to display messages to the driver through the use of dynamic or variable display signs. In general, these signs are not appropriate for use in displaying regulatory type messages, as it is difficult to ensure a consistent and reliable display, in accordance with the text and graphics requirements of the regulations or by-laws. At the present time, the regulations do not include any provision for displaying such messages as variable speed limits.

Certain specific applications of dynamic sign technologies are permitted in the HTA (see *HTA Ontario Regulation 615 (SIGNS), Section 49*). Where regulations such as turn restrictions or lane designations take effect only during specific hours, it may be desirable under some circumstances to install dynamic signs which may be changed to show a different display at different times of day or days of the week. Dynamic sign use is limited to turn and U-turn prohibition signs, with or without time restrictions, and to lane designation signs. Typically, such signs employ a dot or disc matrix construction (fibre optic or light emitting diode) or louvers or shutters to modify the display. Where such signs are employed, they are required to be legible to drivers only during the prescribed hours of operation and to comply as nearly as practicable with the prescribed design and dimensions.

A full discussion of the design and application of dynamic signs may be found in OTM Book 10 (Changeable Message Signs). Further information on the application of such signs within an automated traffic management or control system may be found in OTM Book 19 (Advanced Traffic Management Systems).

2. STOP Signs

STOP Sign (Ra-1)

Ra-1	**600 mm x 600 mm** **750 mm x 750 mm** **900 mm x 900 mm** **1200 mm x 1200 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – White Reflective** **Background – Red Reflective**
Minimum Sheeting	**Type III or IV**

ALL-WAY Tab Sign (Ra-1t)

Ra-1t	**150 mm x 300 mm** **300 mm x 600 mm**
Font	**Helvetica Bold Condensed**
Colour	**Legend & Border – Red Reflective** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

Where no traffic control device is present at an intersection of two roadways, the basic rules of the road apply. The HTA assigns priority to vehicles already within the intersection or, in the event that two or more vehicles are approaching the intersection at approximately the same time, the HTA requires the driver on the left to yield to the vehicle on the right. A number of traffic control devices are available to assist in the allocation of right-of-way between vehicles in an intersection, increasing in level of control from YIELD signs to STOP signs to full traffic signal control.

The purpose of the STOP sign is to clearly assign right-of-way between vehicles approaching an intersection from different directions when traffic signals are not warranted or not yet installed, and it has been determined that a YIELD sign is inadequate. The STOP sign requires the driver to stop the vehicle before entering the intersection, yield to any traffic in or approaching the intersection and then proceed when it is safe to do so.

The introduction of STOP sign control can reduce the frequency of certain types of collisions (e.g. right-angle or turning), but also results in delay to motorists and may increase some other types of collisions (e.g., rear-end). STOP signs should, therefore, not be used indiscriminately.

STOP signs must not be used on the same approach to an intersection where traffic control signals are operating, as the conflicting commands of two types of control devices would be confusing.

Portable or part-time STOP signs must not be used except in emergency or temporary situations, such as in conjunction with Traffic Control Persons or at intersections where traffic signals are inoperative.

STOP signs are not to be used as speed control devices. Their usage should be limited to the control of right-of-way conflicts.

In general, all-way stop control should only be used where traffic engineering studies considering such factors as traffic volumes, restricted sight lines and collision experience, indicate that this form of control is warranted.

Sign Types

The **standard size (600 mm x 600 mm) STOP sign (Ra-1),** is the minimum size permitted, and may generally be used where the posted speed is 60 km/h or less.

The **oversize (750 mm x 750 mm) STOP sign (Ra-1)** should be used where the posted speed is 70 km/h or greater. This sign may also be installed at lower speed locations where the prevailing traffic conditions warrant greater visibility or emphasis, e.g., roadway geometry, complex visual environments where many signs and other devices compete for driver attention, or at high traffic volume locations where drivers must concentrate more on the driving task.

The **oversize (900 mm x 900 mm) STOP sign (Ra-1)** should be used where the oversize 750 mm x 750 mm STOP sign has been found not to provide sufficient emphasis. As with the smaller oversize sign, this may be due to roadway geometry, complex visual environments where many signs and other devices compete for driver attention, or at high traffic volume locations where drivers must concentrate more on the driving task. The sign should only be used after other methods of gaining compliance (e.g. left-hand side STOP signs) have been tried without success. The 900 mm x 900 mm size is not used on provincial highways.

Specific situations where the **special oversize (1200 mm x 1200 mm) STOP sign** must be used include:

- At the junction of two King's Highways in rural areas; or
- At the junction of any public road with a King's Highway in rural areas.

The special oversize **(1200 mm x 1200 mm) STOP sign** may be used in locations where two relatively major roads (e.g. Regional or County Roads) intersect, particularly in high speed rural locations where such an intersection may be unexpected, or at other locations where special emphasis is required.

In addition to the STOP sign, there are a number of other supplementary traffic control devices which may be considered, to provide added emphasis in selected circumstances.

On paved roads, the STOP sign may be supplemented with a stop line. For information on appropriate pavement markings, refer to OTM Book 11 (Pavement, Hazard and Delineation Markings).

Where the presiding road authority has determined that all-way stop control (see below) is required, the STOP signs should be supplemented with an **ALL-WAY tab sign (Ra-1t)** directly below the STOP sign (Ra-1).

The **standard size (150 mm x 300 mm) ALL-WAY tab sign** should be used with STOP signs that are 600 mm x 600 mm or 750 mm x 750 mm.

The **oversize (300 mm x 600 mm) ALL-WAY tab sign** should be used with STOP signs that are 900 mm x 900 mm or 1200 mm x 1200 mm.

The use of the TWO-WAY tab sign found in the last MUTCD is not recommended, as it is ambiguous and could lead to confusion. Consistency and uniformity throughout Ontario in this practice will help distinguish all-way stop situations from conventional stop control, and facilitate driver understanding of what is required in each case.

Where necessary for increased emphasis, a supplementary red flashing beacon may be used to reinforce a STOP sign. Such flashing beacons may be installed overhead within the intersection proper, or mounted directly above the STOP sign itself. For information regarding flashing beacons, refer to OTM Book 12 (Traffic Signals).

In cases of restricted visibility or other special conditions affecting the STOP sign, a **STOP AHEAD sign (Wb-1)** may be required or recommended. For information regarding STOP AHEAD signs, refer to OTM Book 6 (Warning Signs).

Guidelines for Use

Two-Way Stop Control

There are some lower volume intersections for which the current type of traffic control is either no control (following the right-of-way rules in the *Highway Traffic Act*) or Yield control. The next higher level of control for these intersections is two-way stop control (or one-way stop at a three-leg intersection where the stop control on the stem of a "Tee" intersection).

In the event of congestion, driver confusion, substandard sight distance for the uncontrolled or Yield approach legs or an unsatisfactory collision history, two-way stop operation should be implemented, unless countermeasures such as sight line improvements, street lighting, parking prohibitions, enforcement, or geometric revisions have the potential to improve operations and/or safety to a satisfactory level and can be implemented reasonably quickly.

There are certain circumstances under which a minimum of two-way stop must be implemented:

- At the intersection of two King's Highways;
- At the intersection of a County or Regional road with a King's Highway in a rural area;
- At the intersection of a County or Regional road with a King's Highway in a built-up area;
- At the intersection of a city street or township road with a King's Highway; or
- At the intersection of a minor street or road with a through street or highway.

All-Way Stop Controls

In some circumstances, it may be appropriate to install STOP signs on all approaches to an intersection. This results in an all-way stop condition. All-way stop controls disrupt the flow of traffic and introduce delays to all drivers using the intersection and should only be considered at the intersection of two relatively equal roadways having similar traffic volume demand and operating characteristics (see Minimum Volume Warrants below). The approaches should be directly opposing (i.e., not offset), should preferably approach at right angles (i.e. no skewed approaches) and have an equal number of lanes. For the vehicle volume counts, bicycles are considered vehicles under the HTA.

All-way stop controls should be considered under the following situations:

- As an interim measure, where traffic control signals are warranted but cannot be implemented immediately. For information on traffic signal control, refer to OTM Book 12 (Traffic Signals);
- At locations having a high collision frequency where less restrictive measures have been tried and found to be inadequate or impractical (see All-Way Stop Collision Warrant below); or
- As a means of providing a transition period to accustom drivers to a change in intersection right- of-way control from one direction to another. Installation under this warrant must conform with the Amendment of Intersection Control, discussed under Special Considerations at the end of Section 2.

All-Way Stop Minimum Volume Warrant (Urban Arterial Roads)

All-way stop control may be considered on urban arterial roads where the following conditions are met:

- The total vehicle volume on all intersection approaches exceeds 500 vehicles per hour for each of the highest eight hours of the day; and,
- The combined vehicle and pedestrian volume on the minor street exceeds 200 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with an

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average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period; and,

- The volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway. For three-legged intersections a volume split of 75/25 is permissible.

All-Way Stop Minimum Volume Warrant (Collector Roads and Rural Arterial Roads)

All-way stop control may be considered on collector roads, or rural arterial roads, where the following conditions are met:

- The total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest eight hours of the day; and,
- The combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with an average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period; and,
- The volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway. For three-legged intersections a volume split of 75/25 is permissible.

All-Way Stop Minimum Volume Warrant (Local Roads)

All-way stop control may be considered on minor or local roads where the following conditions are met:

- The total vehicle volume on all intersection approaches exceeds 200 vehicles per hour for each of the highest four hours of the day; and,
- The combined vehicle and pedestrian volume on the minor street exceeds 75 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same four hours as the total volume; and,
- The volume split does not exceed 70/30 (that is the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire four-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles plus any pedestrians wishing to cross the major roadway. For three-legged intersections a volume split of 75/25 is permissible.

All-Way Stop Collision Warrant

All-way stop control may be warranted for a location experiencing an unusually high number of right-angle or turning collisions, as defined by comparison with similar locations through network screening (T*AC Guidelines for Network Screening of Collision-Prone Locations*) or over-representation analysis (*TAC Canadian Guide to In-Service Road Safety Reviews*) by conducting a statistical comparison in proportions of target collisions (right-angle/turning movement collisions) of the subject location with that of similar locations in the jurisdiction.

If data and procedures are available, employ a methodology that removes regression to the mean and identifies locations that are clearly operating with below average safety compared to similar intersections within a jurisdiction.

If frequency data is the only data that is available, use the following thresholds:

- Local/Collector/Rural Arterial: 3 collisions/year over three years (i.e. 9 collisions in 36 months)
- Urban Arterial: 4 collisions/year over three years (i.e. 12 collisions in 36 months)

Only those collisions susceptible to improvement through multi-way stop control must be considered (i.e., right-angle and turning type collisions).

All-Way Stop Visibility Warrant

Under some circumstances, sufficient sight distance is not available for traffic exiting the stop-controlled approaches of a two-way stop intersection, based on geometric design requirements. If all efforts to improve the sight distance have been exhausted and the sight distance cannot be brought up to the guidelines, conversion of the intersection to all-way stop operation may be considered. Special advance warning or overhead flashing lights may be necessary to augment the control if vertical or horizontal alignment is a factor.

Inappropriate Use of All-Way Stop Control

All-way stop controls should not be used under the following conditions:

- Where the protection of pedestrians, school children in particular, is a prime concern and the concern cannot be directly addressed by other means;
- On roads within urban areas having a posted speed limit in excess of 60 km/h;
- At intersections that are not roundabouts having fewer than three, or more than four, approaches;
- At intersections that are offset, poorly defined or geometrically substandard;

- On truck or bus routes, except in an industrial area or where two such routes cross;
- On multi-lane approaches where a parked or stopped vehicle on the right will obscure the STOP sign;
- Where traffic would be required to stop on grades;
- As a means of deterring the movement of through traffic in a residential area;
- Where visibility of the sign is hampered by curves or grades, and sufficient safe stopping distance does not exist; or
- Where any other traffic device controlling right-of-way is permanently in place within 250 m, with the exception of a YIELD sign. If required closer than 250 m, all-way stop control should be supported by a traffic operations study and sound engineering judgement.

All-way stop controls must not be used under the following conditions:

- As a speed control device (or a traffic calming tool); and
- On roads where progressive signal timing exists.

Location Criteria

A STOP sign must be installed in accordance with the regulations in order to be effective and enforceable.

The STOP sign must be installed on the right side of the roadway, facing traffic, no closer than 1.5 m and no further than 15 m from the edge of the intersecting roadway, unless it is clearly not practicable to locate the STOP sign closer to the intersection.

The left edge of the STOP sign must be no more than 4 m from the edge of the roadway for all applications. The bottom edge of the STOP sign must not be less than 1.5 m and not more than 2.5 m above the level of roadway.

On divided highways and one-way roadways with visibility problems, a supplementary STOP sign should be installed on the left side of the roadway.

For two-way roadways, if collision records show an unusually high proportion of failure to stop collisions at the STOP sign on an intersection approach, a supplementary STOP sign on the left-hand side of the roadway or in the median may be installed. However, practitioners are reminded that overuse of traffic control devices tends to lessen their effectiveness.

Where one roadway intersects another roadway at an acute angle, the STOP sign on the intersecting roadway should be turned or shielded so that motorists travelling on the higher priority roadway cannot read it.

Typical locations of STOP signs are illustrated in Figure 1.

Legal Status

HTA, Sections 136 and 137.

HTA Ontario Regulation 615 (SIGNS).

HTA Ontario Regulation 623 (STOP SIGNS AT INTERSECTIONS).

HTA Ontario Regulation 624 (STOP SIGNS IN TERRITORY WITHOUT MUNICIPAL ORGANIZATION).

On roadways under the jurisdiction of a municipality, a municipal by-law is required before the STOP sign becomes enforceable.

Special Considerations

Amendment of Intersection Right-of-way Control

Where right-of-way is being reassigned from one roadway to another crossing roadway, through the elimination of an existing STOP sign control and the installation of STOP sign control on the previously uncontrolled roadway, an introductory period is required to safely carry out the transition.

The recommended procedure for completing such a reversal is described below. For information on the warning signs noted in the procedure, reference should be made to OTM Book 6 (Warning Signs).

(1) Install new STOP signs on the previously uncontrolled approaches along with stop lines and crosswalk markings, if required. Oversize STOP signs and/or additional left side installations may be provided where conditions warrant. Install ALL-WAY tabs on all approaches. A painted "STOP" legend on the roadway, in advance of the stop line, may be added for additional emphasis.

Install 900 mm x 900 mm CROSS TRAFFIC DOES NOT STOP signs (Wa-19), on the newly controlled roadway, in advance of the STOP signs. This is the standard size of sign. A larger size sign may be used where prevailing traffic conditions warrant greater visibility or emphasis, e.g., in complex visual environments where many signs and other devices compete for driver attention.

Install NEW signs (Wb-3) above, and AFTER (month and day) tab signs (Wa-19t) below the CROSS TRAFFIC DOES NOT STOP signs, in black letters on a yellow reflective background, stating the date that the old control will be removed. The warning sign positions must be such that they do not block the approaching motorist's view of the STOP signs but command attention and should be read as the driver approaches the stop line. A location approximately 30 m in advance of the stop line is recommended, in low speed applications.

Install STOP AHEAD (Wb-1) signs, with NEW signs above, at the proper location in advance of the intersection on the newly controlled approaches. An oversize STOP AHEAD sign, and a STOP AHEAD roadway marking legend may be provided for additional warning where warranted.

(2) After at least 15 days, remove the STOP AHEAD signs, if any, the STOP signs, stop lines and any crosswalk lines from the previously controlled roadway. Remove the ALL-WAY tabs from all approaches. Remove the NEW signs attached to the CROSS TRAFFIC DOES NOT STOP signs, and the STOP AHEAD signs. Remove the AFTER tabs. Any roadway marking legends, if provided, should be allowed to fade and not be replenished unless local conditions warrant the continued provision of this additional warning.

(3) After an additional period of at least 15 days, the CROSS TRAFFIC DOES NOT STOP signs should be removed. Any oversize STOP signs may now be replaced with standard sized signs unless the continued additional emphasis is warranted. STOP AHEAD signs should be reduced from oversize to standard size or removed if their continued presence is unwarranted.

Where existing all-way stop control is to be removed and a through roadway created, the following procedure is recommended:

(1) Install 900 mm x 900 mm CROSS TRAFFIC DOES NOT STOP signs on the approaches where the STOP control is to remain, at least 15 days before the removal of control.

Install NEW signs over the CROSS TRAFFIC DOES NOT STOP signs and AFTER (month and day) tab signs below, stating the date when the control on the crossing roadway will be removed.

(2) On the appointed date, remove the STOP AHEAD signs, if any, on the crossing roadway. Remove the STOP signs, stop lines and any crosswalk lines on these approaches. Remove all of the ALL-WAY tabs at the intersection. Remove the AFTER (month and day) tabs from the warning signs.

(3) After an additional period of at least 15 days, the NEW signs and the CROSS TRAFFIC DOES NOT STOP signs should be removed.

In all cases, information regarding the change in right-of-way control should be publicized via local print and electronic media, particularly using radio stations which provide traffic coverage in commuter areas. Local residents should be advised of the revisions, and law enforcement agencies requested to provide stepped-up enforcement and more frequent patrols of the location. Advance notification should also be provided to local ambulance services, transit authorities, bus companies, taxi companies and trucking firms known to use the intersection frequently.

Any actual removal or revision of the control at an intersection should occur prior to the start of the morning peak on the specified date, both to preserve the integrity of the AFTER (month and day) tab message and to permit the revision to take place during a period of reduced demand.

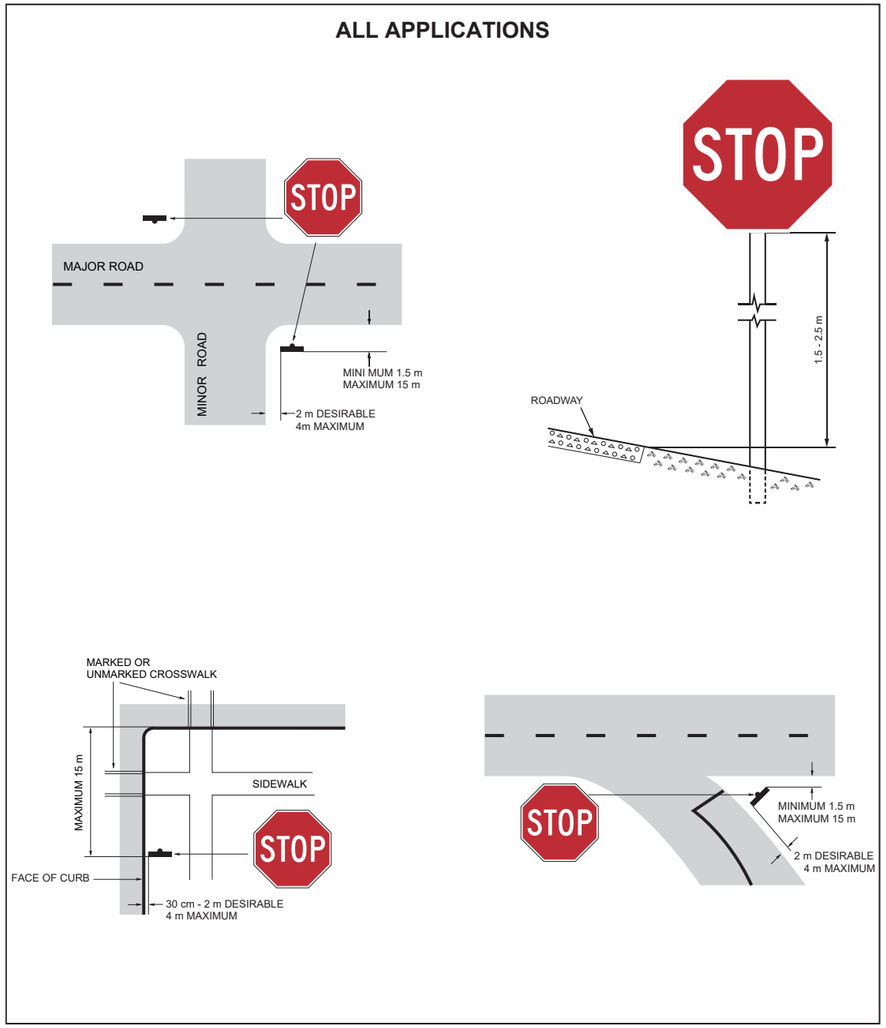

Figure 1 - Typical Locations of STOP Sign

3. YIELD RIGHT-OF-WAY Signs

YIELD Sign (Ra-2)

Ra-2	**750 mm** **900 mm** **(dimensions measured along one edge)**
Font	**N/A**
Colour	**Legend – Red Reflective** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

YIELD Tab Sign (Ra-2t)

Ra-2t	**225 mm x 450 mm** **300 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Red Reflective** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the YIELD sign is to regulate right-of-way control.

A YIELD sign can be an effective control device at intersections, roundabouts or right turn channels, if it is found that:

- The normal right-of-way rule does not provide safe, convenient and efficient traffic movement; and
- A stop regulation at one or more of the approaches is too restrictive.

Vehicles approaching the sign must yield the right-of-way at an intersection to oncoming vehicles on the priority road, and at a roundabout to vehicles inside the facility, stopping if necessary.

A YIELD sign can be used to accommodate pedestrians at right-turn channels. More information on the use of YIELD sign as a pedestrian crossing treatment is provided in OTM Book 15 (Pedestrian Crossing Treatments).

Sign Types

The **standard size (750 mm) YIELD sign (Ra-2**) should be used where posted speed is 60 km/h or less.

The oversize **(900 mm) YIELD sign (Ra-2)** should be used where posted speed is 70 km/h or greater. This sign may also be installed at lower speed locations where prevailing traffic conditions warrant greater visibility or emphasis, e.g., in complex visual environments where many signs and other devices compete for driver attention, or at high traffic volume locations where drivers must concentrate more on the driving task.

The educational **YIELD tab sign (Ra-2t)** may be used where it has been determined that motorists are still unfamiliar with the meaning of the symbol. Motorist familiarity can be assessed according to factors such as collision experience, incidences of near-collisions, observation and presence of similar signs in the area.

If an educational **YIELD tab sign** is used, **the standard size (225 mm x 450 mm) YIELD tab sign (Ra-2t)** should be used with the standard size YIELD sign.

The **oversize (300 mm x 600 mm) YIELD tab sign (Ra-2t)** should be used with the oversize YIELD sign.

In cases of restricted visibility or other special conditions affecting the YIELD sign, a **YIELD AHEAD sign (Wb-1A)** may be required or recommended. For information regarding YIELD AHEAD signs, refer to OTM Book 6 (Warning Signs).

Guidelines for Use

Before using a YIELD sign as a substitute for the normal right-of-way rule or for a STOP sign, the sight distance must be explicitly reviewed. The sight distance available must meet the minimum requirements of *TAC Geometric Design Guide for Canadian Roads.* For four-legged intersections with the YIELD control on the minor road, two separate pairs of approach sight triangles should be provided. One set of approach sight triangles is needed to accommodate crossing the major road and a separate set of sight triangles is needed to accommodate left and right turns onto the major road. Both sets of sight triangles should be checked for potential sight obstructions. The sight lines must not be blocked by objects, such as trees, poles, signs, posts, etc. In addition, the YIELD sign must be suitable in relation to traffic volume, speed, and the collision record of the intersection related to right-of-way control.

The use of a YIELD sign should be considered under the following circumstances:

(1) On a minor road approaching an intersection with a major road, where it is intended for the major road to have the clearly defined right-of-way:

- Stopping on the minor road is not always required; and
- The safe approach speed on the minor road exceeds 15 km/h;

(2) Within an intersection of a road with a divided highway, where:

- There is a STOP sign approaching the intersection with the roadway upstream of the median;
- Further control is necessary at the approach to the intersection of the roadway downstream of the median; and
- Where the median width exceeds 10 m.

(3) At each approach to a roundabout to provide right-of-way to vehicles on the roundabout;

(4) On an entrance ramp to a freeway or expressway, where the acceleration lane or taper is less than specified in Table 1 below; or

(5) Where there is a separate or channelized right- turn lane, and the acceleration lane or taper is less than specified in Table 1 below.

Table 1 – Maximum Acceleration Lane and/or Taper Length for YIELD Signs

Posted Speed for Through Road	Length of Acceleration Lane and/or Taper
km/h	m
50	50
60	60
70	65
80	70
90	80
100	85
110	90

YIELD signs should not be used for the following applications:

(1) To control the major flow of traffic at an intersection;

(2) At an intersection of a County or Regional Road with a King's Highway, so as to provide uniformity of driver expectancy on major highways;

(3) On more than two opposing approaches of an intersecting street or highway;

(4) At an intersection where there are STOP signs on one or more approaches except, under special circumstances, to provide minor movement control within complex intersections, e.g., a divided highway;

(5) On the through roadway of freeways or expressways; or

(6) On entrance ramps that are designed to, or exceed, standards.

Location Criteria

A YIELD sign must be installed in accordance with the regulations in order to be effective and enforceable. The YIELD sign must be installed on the right side of the roadway, facing traffic, no closer than 1.5 m and no further than 15 m from the edge of the intersecting roadway, unless it is clearly not practicable to locate the YIELD sign closer to the intersection.

The left edge of the YIELD sign must be no more than 4 m from the edge of the roadway for all applications. The bottom edge of the YIELD sign must be no less than 1.5 m and no more than 2.5 m above the level of the roadway.

On divided highways and one-way roadways with visibility problems, a supplementary YIELD sign should be installed on the left side of the roadway.

When approaching a YIELD sign, the sign must be continually visible to the approaching driver for a minimum of 60 m. If the above condition is not met, a supplementary YIELD sign must be installed on the left side of the roadway, provided it is not a two-way roadway. Another option is to use a YIELD AHEAD (Wb-1A) warning sign as per OTM Book 6 (Warning Signs).

Typical locations of YIELD signs are illustrated in Figure 2.

Legal Status

HTA, Section 138.

HTA Ontario Regulation 615 (SIGNS).

HTA Ontario Regulation 631 (YIELD RIGHT-OF-WAY SIGNS IN TERRITORY WITHOUT MUNICIPAL ORGANIZATION).

HTA, Sections 135, 138 and *139* for general rules of yielding.

Special Considerations

N/A

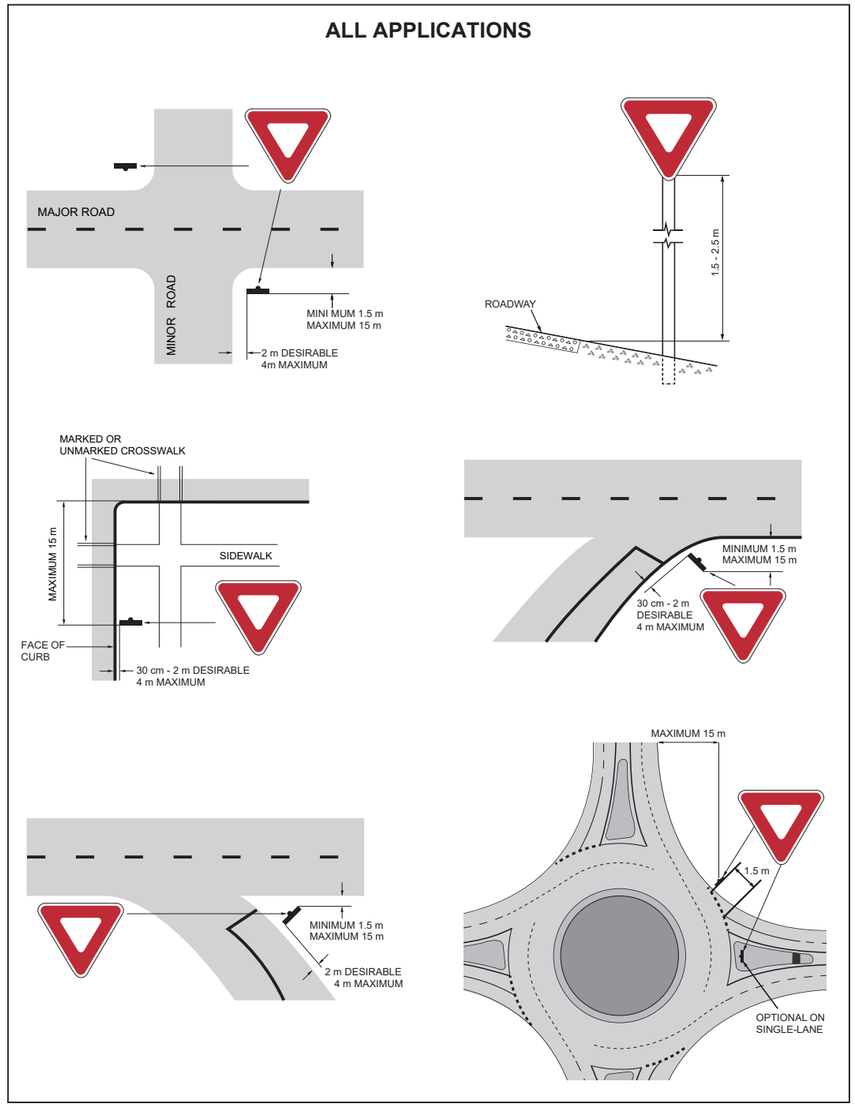

Figure 2 - Typical Locations for YIELD Sign

4. Pedestrian Crossing Signs

4.1 General Pedestrian Crossing Signs

CROSS ON GREEN LIGHT ONLY Sign (Ra-6)

Ra-6	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

CROSS ON WALK SIGNAL ONLY Sign (Ra-7)

Ra-7	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

CROSS ONLY AT CROSSOVER Sign (Ra-8)

Ra-8	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

CROSS OTHER SIDE Sign (Ra-9, Ra-9A)

Ra-9	**300 mm x 300 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Ra-9A	**300 mm x 450 mm**
Font	**FHWA Series D**
Colour	**Interdictory Symbol – Red** **Reflective** **Legend & Border – Blac** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

PEDESTRIAN PUSHBUTTON Sign (With Directional Arrow) (Ra-12)

Ra-12	**130 mm x 200 mm**
Font	**N/A**
Colour	**Legend – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

PEDESTRIAN MUST PUSH BUTTON TO RECEIVE WALK SIGNAL Sign (Ra-13)

Ra-13	**450 mm x 600 mm**
Font	**N/A**
Colour	**Legend – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of pedestrian crossing signs is to regulate and safely direct pedestrians crossing roads.

Pedestrian crossing signs may be used to supplement traffic signal controls where unusual conditions exist or where specific information needs to be provided. Pedestrian crossing signs may also be used to limit pedestrian crossings to safe locations. For example, a road authority may elect to use pedestrian crossing signs where experience has shown that pedestrians interfere with traffic by crossing against signals, where the length of the pedestrian phase is relatively short, where pedestrians cross at undesignated locations or where the crossing configuration is different than normal.

Sign Types

The **CROSS ON GREEN LIGHT ONLY sign (Ra-6)** and **CROSS ON WALK SIGNAL ONLY sign (Ra-7)** are used at signalized intersections. The CROSS ON GREEN LIGHT ONLY sign is used where there is no pedestrian signal head.

The **CROSS ONLY AT CROSSOVER sign (Ra-8)** may be used in areas where it is necessary to limit pedestrian crossings to a safe crossing location.

The **CROSS OTHER SIDE sign (Ra-9)** or preferably its symbolic alternate, **(Ra-9A)**, may be used where crossings are prohibited on one leg of an intersection. This may be the case where there are two adjacent left-turn lanes and it is desirable to facilitate the vehicle flow by eliminating the need for vehicles to yield to pedestrians.

The **PEDESTRIAN PUSHBUTTON (with directional arrow) sign (Ra-12)** and the **PEDESTRIAN MUST PUSH BUTTON TO RECEIVE WALK SIGNAL sign (Ra-13)** indicate to pedestrians that pushbuttons are available to be used for controlling pedestrian signal indications at traffic signal controlled intersections. The pedestrian pushbuttons initiate the pedestrian signal phase, and in some cases extend the timing of the pedestrian phase.

Guidelines for Use

The following guidelines refer to pedestrian crossing signs in general:

- OTM Book 15 contains detailed information on the various pedestrian crossover (PXO) systems, including application criteria and installation information.
- Pedestrian crossing signs are targeted at pedestrians and the application, size and placement of these signs should take into account the requirements of pedestrians, which are different than those of drivers.
- Pedestrian signal heads or crossover signing and crossing pavement markings should be provided at controlled pedestrian crossings.

The PEDESTRIAN PUSHBUTTON sign (with directional arrow) must be used where pedestrian signal pushbuttons are present unless this information is already included as part of the pushbutton device.

The PEDESTRIAN MUST PUSH BUTTON TO RECEIVE WALK SIGNAL sign may be used where research or field studies have shown that pedestrians are failing to push the pedestrian pushbutton to obtain a walk signal prior to crossing at a signalized intersection.

Location Criteria

Pedestrian crossing signs (with the exception of pushbutton signs) should be placed on the far side of the intersection on the traffic signal pole, where pedestrians would normally look to find pedestrian signal heads. Pedestrian crossing signs must face pedestrians about to cross the road.

The PEDESTRIAN MUST PUSH BUTTON TO RECEIVE WALK SIGNAL sign (Ra-13) is intended to be placed by the pedestrian signal head on the far side of the crossing. On divided roadways, consideration should be given to installing two additional signs, mounted back-to- back on the traffic signal pole in the median, facing pedestrians about to cross in both directions.

The above general location guidelines apply to all pedestrian crossing signs except the CROSS ONLY AT CROSSOVER sign and the PEDESTRIAN PUSHBUTTON symbol sign (with directional arrow).

The CROSS ONLY AT CROSSOVER sign should be placed on the far side of the street at locations where research or field studies have shown that pedestrians are crossing illegally at unsafe locations.

The PEDESTRIAN PUSHBUTTON symbol sign (with directional arrow) must be placed directly above the pushbutton, with the arrow indicating the crossing to which the sign and button apply.

Legal Status

No HTA reference.

Signs must be supported by municipal by-law to be enforceable in municipalities. Typically, only the CROSS OTHER SIDE, and the CROSS ONLY AT CROSSOVER signs would be supported by by-laws.

The general rules for pedestrian crossings are in the *HTA, Subsections 144 (22 to 28)*). The CROSS ON GREEN LIGHT ONLY and the CROSS ON WALK SIGNAL ONLY signs reinforce these regulations.

Special Considerations

N/A

4.2 Pedestrian Crossover Signs

Ground-mounted and overhead pedestrian crossover signs are used to indicate the presence of a pedestrian crossover (PXO), which is a protected pedestrian crossing at an unsignalized location. *HTA Ontario Regulation 402/15 (PEDESTRIAN CROSSOVER SIGNS)* defines two types of PXOs (Level 1 and Level 2) based on signs and pavement markings. Level 1 corresponds to PXO Type A, and Level 2 includes PXO Types B, C, and D.

In addition to the regulatory signs described below, the OVERHEAD X sign (Wc-20) and the ADVANCED PEDESTRIAN CROSSOVER AHEAD sign (Wc-27R) (see OTM Book 6 (Warning Signs)), flashing amber beacons, rectangular rapid flashing beacons (RRFBs) and pavement markings are all components of PXOs.

For further details on PXO installation criteria and how the various components comprising a PXO are combined, see OTM Book 15 (Pedestrian Crossing Treatments).

All pedestrian facilities must be designed for accessibility. For legislative requirements in the *Accessibility for Ontarians with Disabilities Act, 2005* (AODA), refer to OTM Book 15 (Pedestrian Crossing Treatments).

PEDESTRIAN X (Crossover) Sign (Ra-4)

Ra-4	**600 mm x 750 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

STOP FOR PEDESTRIANS Tab Sign (Ra-4t)

Ra-4t	**450 mm x 600 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

NO PASSING HERE TO CROSSING Sign (Ra-10)

Ra-10	**600 mm x 750 mm**
Font	**FHWA Series C**
Colour	**Top Section of Sign:** **Legend – White Reflective** **Border – Black** **Background – Red Reflective** **Bottom Section of Sign:** **Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

LEFT SIDE PEDESTRIAN CROSSWALK Sign (Ra-5L)

Ra-5L	**600 mm x 750 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

RIGHT SIDE PEDESTRIAN CROSSWALK Sign (Ra-5R)

Ra-5R	**600 mm x 750 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of PXO signs is to indicate to drivers, pedestrians and other road users that a specific portion of roadway has been designated as a PXO. Since pedestrians are especially vulnerable at PXOs, it is important that drivers see and recognize the signs in time to respond in a manner that ensures the safety of pedestrians. The signs have a distinctive appearance, with the Pedestrian X sign having a large “X” legend and Pedestrian Crosswalk signs having a “walking person”.

The signs are targeted primarily at drivers, and instruct drivers on what they must and must not do at PXOs: stop for pedestrians and do not pass other vehicles.

Sign Types

The **PEDESTRIAN X (Crossover) sign (Ra-4)** identifies the presence and location of the PXO to drivers, pedestrians and other road users. It is a required component for Level 1 PXOs.

The **LEFT SIDE PEDESTRIAN CROSSWALK sign (Ra-5L)** and the **RIGHT SIDE PEDESTRIAN CROSSWALK sign (Ra-5R)** identify the presence and location of the PXO to drivers, pedestrians and other road users. These are required components for Level 2 PXOs.

The **STOP FOR PEDESTRIANS tab sign (Ra-4t)** is a mandatory educational tab sign that must be attached below the PEDESTRIAN X (Crossover) sign (Ra-4) or PEDESTRIAN CROSSWALK signs (Ra-5L, Ra-5R). This sign is a required component for all type of PXOs.

The **NO PASSING HERE TO CROSSING sign (Ra-10)** prohibits passing within a 30 m stretch upstream of the pedestrian crossover. This sign is a required component for all PXOs.

Guidelines for Use

Since it is critical that drivers notice and respond appropriately to PXOs, a certain amount of repetition is required in the application of PXO signs and is achieved by the following means:

- PEDESTRIAN X (Crossover) signs must be ground-mounted on both sides of the road for Level 1 Type A PXOs, as per typical layouts provided in OTM Book 15 (Pedestrian Crossing Treatments);
- PEDESTRIAN CROSSWALK Signs must be ground-mounted on both sides of the road for Level 2 PXOs, as per typical layouts provided in OTM Book 15 (Pedestrian Crossing Treatments);
- The STOP FOR PEDESTRIANS tab sign must always accompany the ground-mounted PEDESTRIAN X (Crossover) sign or PEDESTRIAN CROSSWALK Sign for both Level 1 and Level 2 PXOs as per typical layouts provided in OTM Book 15 (Pedestrian Crossing Treatments);
- Additional PEDESTRIAN CROSSWALK Signs must be posted overhead for Level 2 Type B PXOs as per typical layouts provided in OTM Book 15 (Pedestrian Crossing Treatments); and
- The NO PASSING HERE TO CROSSING sign provides advance warning of the upcoming PXO and indicates to drivers that passing is prohibited from the sign to the crossing location.

Location Criteria

The location of PXO signs for various application environments are shown in typical layouts provided in OTM Book 15 (Pedestrian Crossing Treatments).

The PXO signs must be installed along with relevant pavement markings and warning signs as specified in OTM Book 15 (Pedestrian Crossing Treatments) with the following additional considerations:

- The lateral placement of all pedestrian crossover signs must not exceed 4 m from the edge of the roadway.
- The pedestrian crossover sign assemblies consisting of the PEDESTRIAN X (Crossover) sign, PEDESTRIAN CROSSWALK signs, and STOP FOR PEDESTRIANS tab sign, for pedestrian crossovers as shown in OTM Book 15 layouts should be installed within 2 m upstream of the crosswalk. In exceptional cases, due to site constraints, the sign assemblies may be required to be installed downstream of a crosswalk.

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In these situations, they should be kept as close to the crosswalk as practicable with a maximum of 1 m.

Legal Status

HTA, Section 140.

HTA Ontario Regulation 402/15 (PEDESTRIAN CROSSOVER SIGNS).

Special Considerations

N/A

5. Bicycle Signs

This section includes information on regulatory bicycle signs that are related to the road environment. Information on regulatory bicycle signs that are related to off-road bicycle facilities is included in Section 19 - Off-roadway Facility Control Signs. OTM Book 5 (Regulatory Signs) includes only limited information on bicycle related signs. For more detailed information, refer to OTM Book 18 (Cycling Facilities).

BICYCLES YIELD TO PEDESTRIANS Sign (Ra-16)

Ra-16	**300 mm x 600 mm**
Font	**FHWA Series Em**
Colour	**Legend & Border – Black & Red Reflective** **Background - White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The BICYCLES YIELD TO PEDESTRIANS sign indicates to cyclists that they are required to yield to pedestrians in areas where it is placed.

Sign Types

There is one type of **BICYCLES YIELD TO PEDESTRIANS sign (Ra-16).**

Guidelines for Use

The BICYCLES YIELD TO PEDESTRIANS sign should be used at locations where cycling facilities come in conflict with exclusive pedestrian facilities, for example at a cycling facility adjacent to a bus stop where there is a potential of conflict between cyclists and passengers boarding, alighting or waiting. The sign may be used where cyclists are required to cross or share a facility used by pedestrians, such as cyclists crossing a sidewalk intersecting a multi-use path or a school drop-off/pick-up zone, and cyclists are required to yield to pedestrians. This sign may be installed to remind cyclists that they are approaching a pedestrian zone. The sign may also be used when a bicycle facility is too narrow to meet the design standard for a shared facility (i.e. a pinch point).

Location Criteria

The BICYCLES YIELD TO PEDESTRIANS sign should be ground-mounted on the right side of the cycling facility in advance of locations where there is a potential of conflict between cyclists and pedestrians. The sign should be placed within 5 m of the conflict point and should be continuously visible to cyclists for 35 m.

Legal Status

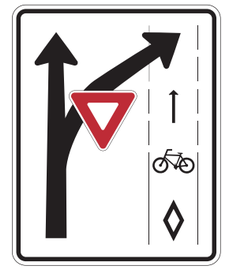
No HTA reference.

Bicycle lanes or facilities must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

TURNING VEHICLES YIELD TO BICYCLES Sign (Ra-18)



Ra-18	**600 mm x 750 mm**
Font	**N/A**
Colour	**Legend & Border – Black & Red Reflective** **Background - White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The TURNING VEHICLES YIELD TO BICYCLES sign may be used at conflict zones where motorists are required to cross a cycling facility and are required to yield to cyclists.

Sign Types

There is one type of **TURNING VEHICLES YIELD TO BICYCLES sign (Ra-18)**.

Guidelines for Use

The TURNING VEHICLES YIELD TO BICYCLES sign should be used where there is a designated bicycle facility and significant conflicts have been identified or are anticipated due to high volumes of cyclists, high volumes of turning vehicles, high speeds and/or high levels of driver workload.

In the case of conventional bike lanes, this may occur where there is unusually heavy bicycle traffic on the bike lane approaching an intersection, such that it is preferred that right-turning vehicles do not encroach on the bike lane prior to turning.

For separated bike lanes, this will coincide with locations where the barrier is discontinued to allow for turning vehicles.

The sign should be considered where a raised cycle track transitions to a conventional bike lane on the approach to an intersection.

The practitioner should also consider installing the sign at any major commercial or institutional driveways where the vertical separation of the raised cycle track has been reduced and there is a significant movement of right turning vehicles across the bicycle facility.

In addition to or instead of the TURNING VEHICLES YIELD TO BICYCLES sign (Ra-18), practitioners may consider applying green surface treatment as described in OTM Book 18 (Cycling Facilities). See OTM Book 18 (Cycling Facilities) for further information on the sign.

Location Criteria

The TURNING VEHICLES YIELD TO BICYCLES may be used for right side or, by reversing the graphic, left side use. The sign image may also reflect one-way, bi-directional or contra-flow cycling movements. The sign should be ground-mounted on the same side of the travel lane in advance of the location where there is a potential of conflict between vehicles and cyclists. The sign should be placed in advance of the conflict point at 50 m to 75 m, if practicable, with the larger distance for the higher speed roads, valid for posted speeds up to 80 km/h. Shorter distances may be used if there are multiple locations with potential of conflict between vehicles and cyclists and this distance cannot be achieved.

Legal Status

No HTA reference.

Bicycle lanes or facilities must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

TURNING VEHICLES YIELD TO BIKES AND PEDESTRIANS Sign (Ra-19)

Ra-19	**600 mm x 750 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black & Red Reflective** **Background - White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The TURNING VEHICLES YIELD TO BIKES AND PEDESTRIANS Sign requires that motorists making a right or left turn to yield the right-of-way to cyclists in bike lanes or off-road/multi-use trails and to yield to pedestrians directly to the right of the turning vehicles.

Sign Types

There is one type of **TURNING VEHICLES YIELD TO BIKES AND PEDESTRIANS sign (Ra-19).**

Guidelines for Use

The TURNING VEHICLES YIELD TO BIKES AND PEDESTRIANS sign should only be used where the basic right-of-way rule has been shown not to provide for safe and efficient movement of bicycles and pedestrians. For example, this sign may be used on a roadway at the approach to an unsignalized intersection with a side street where a parallel in-boulevard facility crosses the side street close to the through road; or where there is a right turn channel before or at a signalized intersection.

Location Criteria

The TURNING VEHICLES YIELD TO BIKES AND PEDESTRIANS sign may be used for either left or right turn movements. The sign should be ground-mounted on the side of the through roadway in advance of the location where there is a potential of turning vehicles conflicting with cyclists and pedestrians.

For left turns, an additional far-left sign may be considered.The sign should be installed, facing traffic, no closer than 1.5 m and no further than 15 m from the edge of the intersecting roadway, unless it is clearly not practicable.

Legal Status

No HTA reference.

Bicycle lanes or facilities must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

BICYCLES YIELD TO VEHICLES Sign (Ra-17)

Ra-17	**450 mm x 750 mm**
Font	**FHWA Series E**
Colour	**Legend & Border – Black & Red Reflective** **Background - White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The BICYCLES YIELD TO VEHICLES sign indicates to cyclists in a designated cycling facility that they must yield the right-of-way, stopping if necessary, before crossing or entering a roadway (e.g. a ramp).

Sign Types

There is one type of **BICYCLES YIELD TO VEHICLES sign (Ra-17).**

Guidelines for Use

The BICYCLES YIELD TO VEHICLES sign may be used where there is an uncontrolled crossing of a roadway from a designated bicycle facility and significant conflicts have been identified or are anticipated due to high volumes of cyclists, high volumes of vehicles, high speeds and/or high levels of driver workload.

Location Criteria

The BICYCLES YIELD TO VEHICLES Sign should be ground-mounted on the right side of the cycling facility in advance of the location where there is a potential of conflicts between entering bicycles and vehicles. The sign should be placed within 5 m of the conflict point and should be continuously visible to cyclists for 35 m.

Legal Status

No HTA reference.

Bicycle lanes or facilities must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

BICYCLES PERMITTED Sign (Rb-69)

Rb-69	**600 mm x 600 mm**
Font	**N/A**
Colour	**Permissive Symbol – Green Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the BICYCLES PERMITTED sign is to provide direction to cyclists indicating where bikes are permitted in areas where they would be otherwise prohibited.

Sign Types

There is one type of **BICYCLES PERMITTED sign (Rb-69).**

Guidelines for Use

The BICYCLES PERMITTED sign may be used to advise cyclists that bicycles are permitted to use the facility. The use of BICYCLES PERMITTED sign is specific to locations where there is no designated bicycle route.

The BICYCLES PERMITTED sign may be

used to supplement the NO BICYCLES sign (Rb-67), where it is required to direct cyclists to the permitted areas.

Location Criteria

The sign should be placed at locations to provide assurance to cyclists that bicycles are permitted on the roadway in that area.

Legal Status

Official sign: not enforceable. However, the prohibitive version of this sign is enforceable under:

- *HTA, Subsections 185.(1) and (2).*
- *HTA Ontario Regulation 615 (SIGNS).*
- *HTA Ontario Regulation 630 (VEHICLES ON CONTROLLED-ACCESS HIGHWAYS).*
- *Municipal by-law.*

Special Considerations

For signs to identify a designated bicycle route, refer to the BICYCLE ROUTE MARKER sign (M511), found in OTM Book 18 (Cycling Facilities).

NO BICYCLES Sign (Rb-67)

Rb-67	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

NO PEDESTRIANS OR BICYCLES Sign (Rb-68)

Rb-68	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The NO BICYCLES sign and the NO PEDESTRIANS OR BICYCLES sign prohibit the access of bicycles and/or pedestrians to designated freeways, highways, tunnels or bridges where their presence may create a hazard both to the riders and/or pedestrians and to motorized traffic.

Sign Types

There is one type of **NO BICYCLES sign (Rb-67).**

There is one type of **NO PEDESTRIANS OR BICYCLES sign (Rb-68).**

Guidelines for Use

The NO BICYCLES sign and the NO PEDESTRIANS OR BICYCLES sign must be used on approach ramps to freeways, highways or bridges where the use of the facility by bicycle riders and pedestrians is prohibited by HTA regulation or municipal by-law for safety or other reasons (e.g. outdoor pedestrian malls).

The sign may be used in specific situations where bicycle riding is prohibited by by-law

The NO BICYCLES sign may be used to supplement a permissive signing system for continuous bicycle routes.

See OTM Book 15 (Pedestrian Crossing Treatments) and OTM Book 18 (Bicycle Facilities) for further information on the sign.

Location Criteria

The signs must be placed so that they are visible primarily to cyclists and/or pedestrians about to enter the prohibited area, rather than to motorists. The signs should be placed on the right side within 5 m in advance of the prohibited area.

Legal Status

HTA, Subsections 185.(1) and (2).

HTA Ontario Regulation 615 (SIGNS).

HTA Ontario Regulation 630 (VEHICLES ON CONTROLLED-ACCESS HIGHWAYS).

Sign is also enforceable in municipalities by municipal by-law.

Special Considerations

N/A

DO NOT PASS BICYCLES Sign (Rb-66)

Rb-66	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or IV**

DO NOT PASS BICYCLES Tab Sign (Rb-66t)

Rb-66t	**300 mm x 600 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or IV**

ENDS Tab Sign (M204)

M204	**300 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The purpose of DO NOT PASS BICYCLES sign and the DO NOT PASS BICYCLES tab sign is to restrict passing manoeuvres in areas where the passing of cyclists by motorists is hazardous due to limited sight distance or other considerations. The termination of this zone is indicated with the use of the DO NOT PASS BICYCLES sign with the supplementary ENDS tab sign.

Sign Types

The **DO NOT PASS BICYCLES sign (Rb-66)** indicates to drivers that they must not overtake a cyclist within a specified zone.

The **DO NOT PASS BICYCLES tab sign (Rb-66t)** may be used with the DO NOT PASS BICYCLES sign (Rb-66). It conveys the meaning of the MOTOR VEHICLE PASSING PROHIBITED sign.

The DO NOT PASS BICYCLES sign (Rb-66) appended with the **ENDS tab sign (M204)** is used to indicate the end of prohibitive passing zone.

Guidelines for Use

The passing prohibition takes effect at the point where the DO NOT PASS BICYCLES sign is located. The ENDS tab sign should be used with the DO NOT PASS BICYCLES sign to indicate the termination of the restriction.

The sign may be used in the following situations, for example:

- Construction zones where overtaking is hazardous or temporarily prohibited;
- No passing zones where collision statistics have established that the pavement markings are not being obeyed; or
- A specific narrowing of the road where motor vehicles passing bicycles might result in head-on or sideswipe conflicts.

Consideration should be given to the regulatory 1m spacing required between bicycles and motorized vehicles passing them.

In locations with high percentages of large vehicles or trucks, where these vehicles may obstruct adequate visibility of the sign, it may be necessary to place another sign on the left side of the roadway.

Location criteria

The DO NOT PASS BICYCLES signs must be placed so that each sign is continuously visible to motorists for 60 m. The first sign should be placed on the right side in advance of the prohibited area. Subsequent signs should be placed at intervals of 300 to 1000 m along the route. The final sign with the ENDS tab should be located at end of the prohibition zone.

Legal Status

No HTA reference.

HTA Ontario Regulation 615 (SIGNS) provides meaning for the interdictory symbols.

The sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

PATHWAY ORGANIZATION (Bikes Left, Pedestrians Right) Sign (Rb-72a)

Rb-72a	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

PATHWAY ORGANIZATION (Pedestrians Left, Bikes Right) Sign (Rb-72b)

Rb-72b	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The PATHWAY ORGANIZATION signs indicate to cyclists and pedestrians the preferred organization of users on a multi-use path. See OTM Book 18 (Cycling Facilities) for further information on the sign.

Sign Types

The PATHWAY ORGANIZATION **(Bikes Left, Pedestrians Right) sign (Rb-72a)** is used when pedestrians are to be directed to the right side of the crossing or path.

The **PATHWAY ORGANIZATION (Pedestrians Left, Bikes Right) sign (Rb-72b)** is used when pedestrians are to be directed to the left side of the crossing or path.

Guidelines for Use

The PATHWAY ORGANIZATION sign may be used on a multi-use path at the approach to an intersection. The sign organizes the users where there are specific crossings such as crosswalks and crossrides. The sign is also used to generally organize users on paths due to the difference in travel speeds between pedestrians and cyclists. These signs may be installed back-to-back.

Location Criteria

A PATHWAY ORGANIZATION sign must be placed so that it is visible to cyclists and pedestrians about to enter an area where it is required to organize cyclists and pedestrians.

The sign should be placed on the right or left side of the path approaching the target area and within 5 m of the target area.

Legal Status

N/A

Special Considerations

N/A

DISMOUNT AND WALK Sign (Rb-70)

Rb-70	**300 mm x 300 mm**
Font	**N/A**
Colour	**Permissive Symbol – Green Reflective** **Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The DISMOUNT AND WALK sign indicates that cyclists are required to dismount and walk their bicycle in a specific area. See OTM Book 18 (Cycling Facilities) for further information on the sign.

Sign Types

There is one type of **DISMOUNT AND WALK sign (Rb-70)**.

Guidelines for Use

The DISMOUNT AND WALK sign should only be used in exceptional cases, such as where an in-boulevard facility ends, and cyclists would discharge onto a sidewalk, pedestrian zone, signalized crosswalk or an area where regulations prohibit cycling. For more information on guidelines for use of this sign, see OTM Book 18 (Cycling Facilities).

Location Criteria

The DISMOUNT AND WALK sign must be placed so that it is visible primarily to cyclists about to enter the area where they should dismount and walk. The sign should be placed on the right or left side of the cycling facility approaching the target area and within 5 m of the target area.

Legal Status

N/A

Special Considerations

N/A

BIKES WAIT ON SYMBOL TO TRIGGER GREEN Sign (Rb-102)

Rb-102	**130 mm x 200 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

If a signalized intersection used by bicycles is traffic responsive through inductance loops in the roadway, and the loops are designed to be sensitive to the presence of bicycles, the BIKES WAIT ON SYMBOL TO TRIGGER GREEN sign should be used to advise cyclists of where to best position their bicycles to cause the signals to change. The sign is used only in conjunction with a pavement marking stencil, Bicycle Signal Loop Detector Stencil (see OTM Book 18).

Sign Types

There is one type of **BIKES WAIT ON SYMBOL TO TRIGGER GREEN sign (Rb-102).**

Guidelines for Use

A detector loop embedded within the roadway may be used to actuate a bicycle signal or a traffic signal on a roadway used regularly by bicycles. Signage and pavement markings should be applied to provide guidance to cyclists on the appropriate positioning over the detector loop. The BIKES WAIT ON SYMBOL TO TRIGGER GREEN sign should be used in conjunction with the Signal Loop Detector Stencil marking which is placed over the detector loop. See OTM Book 18 (Cycling Facilities) for further information on the sign.

Location Criteria

The BIKES WAIT ON SYMBOL TO TRIGGER GREEN sign should be installed preferably on the right of the Signal Loop Detector pavement marking for an intersection with signals that can be actuated by bicycles. The sign should be placed within 1 m upstream or downstream of the pavement marking stencil.

Legal Status

N/A

Special Considerations

N/A

CYCLISTS STOP HERE ON RED Sign (Rb-101)

Rb-101	**300 mm x 450 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The purpose of the CYCLISTS STOP HERE ON RED sign is to indicate the place at which cyclists must stop at a traffic signal during the red phase.

Sign Types

There is one type of **CYCLISTS STOP HERE ON RED sign (Rb-101).**

Guidelines for Use

The CYCLISTS STOP HERE ON RED sign should be used at signalized intersections under the following conditions:

- Lack of signal compliance is noted;
- The stop location associated with the traffic signal is different than usual, for example where auxiliary traffic signal heads stop traffic in advance of an intersection;
- The stop location is different for bicycles than other road users (for example, a bike box);
- The physical conditions fail to indicate clearly the intended stopping position for cyclists; or
- For specialized situations, such as where a multi-use trail intersects a sidewalk.

Location Criteria

Where a cycling facility intersects a sidewalk, guidance should be provided on where cyclists should wait at the intersection. The CYCLISTS STOP HERE ON RED sign should be placed 1 m in advance of the intersecting sidewalk and should be accompanied by a stop bar.

Legal Status

No HTA reference.

Bicycle lanes or facilities must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

SIGNALIZED INTERSECTION CROSSING LEFT Sign (Ra-14L)

Ra-14L	**130 mm x 200 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

SIGNALIZED INTERSECTION CROSSING RIGHT Sign (Ra-14R)

Ra-14R	**130 mm x 200 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The purpose of the SIGNALIZED INTERSECTION CROSSING signs is to indicate to pedestrians and cyclists that they can initiate their signal phase or change signal timings to cross the road, by using pushbuttons.

Sign Types

There are two versions of SIGNALIZED INTERSECTION CROSSING signs:

SIGNALIZED INTERSECTION CROSSING LEFT sign (Ra-14L) and **SIGNALIZED INTERSECTION CROSSING RIGHT sign (Ra-14R).**

Guidelines for Use

SIGNALIZED INTERSECTION CROSSING signs must be used where pedestrians and cyclists can initiate the appropriate signal phase or adjust signal timing to cross the road. The left or right version of the sign is used as appropriate so that the arrow, bicycle and pedestrian symbols on the sign point in the direction of the crossing.

Location Criteria

SIGNALIZED INTERSECTION CROSSING signs should be mounted at each end of the crosswalk, directly above the pushbutton.

The SIGNALIZED INTERSECTION CROSSING RIGHT/LEFT signs should be placed with the arrow indicating the crossing to which the sign and

button apply. When used, these signs should replace either the PEDESTRIAN PUSHBUTTON Sign (With Directional Arrow) (Ra-12) or PEDESTRIAN MUST PUSH BUTTON TO RECEIVE WALK SIGNAL sign (Ra-13).

Legal Status

No HTA reference.

Special Considerations

N/A

CYCLING PROHIBITED ON SIDEWALK Sign (Rb-104)

Rb-104	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The CYCLING PROHIBITED ON SIDEWALK sign indicates to cyclists that cycling is prohibited on sidewalks.

Sign Types

There is one type of **CYCLING PROHIBITED ON SIDEWALK sign (Rb-104)**

Guidelines for Use

The CYCLING PROHIBITED ON SIDEWALK sign should be used where cycling on sidewalks is a concern and the sign is required to prevent cyclists from riding on the sidewalks. The sign should be used in exceptional cases.

Location Criteria

The CYCLING PROHIBITED ON SIDEWALK sign should be located at the point where cyclists would typically enter the sidewalk area. The sign should be visible to cyclists.

Legal Status

No HTA reference.

The sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

6. Speed Control Signs

The purpose of speed control signs is to indicate to motorists the maximum legal speed.

Information on determining maximum speeds and planning speed zones is provided in *TAC Canadian Guidelines for Establishing Posted Speed Limits.* The guide provides a methodology for choosing and evaluating posted speed limits, which considers various factors including geometrical characteristics, land use, roadway classification, design speed and length of corridor. The guide provides an automated spreadsheet for determining the recommended posted speed limit. Choosing and modifying posted speed limits should be evaluated using this methodology.

The minimum recommended length for speed zones at a posted speed limit of 70 km/h or higher is 1 km. Shorter lengths may be used for lower posted speed limits, but speed zone lengths of less than 500 m are not recommended.

When it is required to introduce a reduction in speed from a higher speed limit to a lower speed limit with a speed limit change of greater than 20 km/h (e.g. from 90 km/h to 50 km/h), transitional speed limits should be used in intervals of 20 km/h maximum (e.g. from 90 km/h to 70 km/h to 50 km/h). It is desirable to use a minimum transitional speed zone length of 1 km. It is recommended that a consistent approach for speed transition be used throughout a jurisdiction.

The posted speed limits should always be consistent with the characteristics of the road. The physical characteristics in the transition zone should be self-explanatory in guiding drivers to lower their speeds; the road cues and the posted speed limit should provide a uniform message.

For the purposes of OTM Book 5 speed control signs, a ‘built-up’ area is an area along a highway with frontage consisting of dwellings, businesses, schools or churches, that occupies:

- 50% or more of the road property frontage for at least 200 m on one side, or for at least 100 m if on both sides, or
- where no more than 200m of the highway separates the areas described above.

The term ‘built-up area’ does not apply to a controlled access highway. (*Reference: HTA 1(1)*).

MAXIMUM SPEED Sign (Rb-1)

Rb-1	**600 mm x 750 mm**
Font	**FHWA Series C, D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

MAXIMUM SPEED Sign with KM/H Included (Rb-1A)

Rb-1A	**600 mm x 900 mm** **900 mm x 1350 mm**
Font	**FHWA Series C, D**
Colour	**Top Section of Sign:** **Legend & Border – Black** **Background – White** **Reflective** **Bottom Section of Sign:** **Legend – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

BEGINS Tab Sign (Rb-84t)

Rb-84t	**200 mm x 600 mm** **300 mm x 900 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – White** **Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

MAXIMUM SPEED BEGINS Sign (Rb-2)

Rb-2	**600 mm x 900 mm**
Font	**FHWA Series C, D**
Colour	**Top Section of Sign:** **Legend & Border – Black** **Background – White Reflective** **Bottom Section of Sign:** **Legend – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

MAXIMUM SPEED KM/H and BEGINS Sign (On One Sign Blank) (Rb-3)

Rb-3	**600 mm x 1100 mm** **900 mm x 1650 mm**
Font	**FHWA Series C, D, E**
Colour	**Top Section of Sign:** **Legend & Border – Black** **Background – White reflective** **Bottom Section of Sign:** **Legend – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

KM/H Tab Sign (Rb-7t)

Rb-7t	**200 mm x 600 mm** **300 mm x 900 mm**
Font	**FHWA Series E**
Colour	**Legend & Border – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the MAXIMUM SPEED sign is to indicate to drivers the legal maximum speed for a given speed zone. MAXIMUM SPEED signs must be used where the speed limit is different than the statutory speeds for urban and rural environments. They may also be used to confirm and supplement the statutory speeds, especially where there is evidence of drivers violating the speed limits.

Sign Types

There is one type of **MAXIMUM SPEED sign (Rb-1)** which is the basic version of the speed limit sign.

In some cases, a supplementary “km/h” legend has been mandated by the road authority. In other cases, road authorities may opt to use the legend for some or all applications. If the decision is made to use the “km/h” legend in conjunction with basic speed limit signing, one of the following alternatives must be used:

- Attach **KM/H tab sign (Rb-7t)** to the basic MAXIMUM SPEED sign (Rb-1); or
- Use the **MAXIMUM SPEED sign with KM/H Included sign (Rb-1A)**, which incorporates the legend of the basic MAXIMUM SPEED sign (Rb-1) and the KM/H tab sign (Rb-7t) on one sign blank. This alternative is practical where problems have been experienced in maintaining the KM/H tab sign.

The **standard size (600 mm x 900 mm) MAXIMUM SPEED with KM/H Included sign (Rb-1A)** is generally used for posted speeds of 60 km/h and lower.

The **oversize (900 mm x 1350 mm) MAXIMUM SPEED with KM/H Included sign (Rb-1A)** may be used where extra emphasis is required, such as an unusual speed limit, a change in speed limit in rural areas, high traffic volume, high violation rates or lower sign conspicuity.

Where there is a change in speed limit on any road, the supplementary **BEGINS tab sign (Rb-84t)** must be used in conjunction with the basic MAXIMUM SPEED sign (Rb-1), or the combination may be replaced by the **MAXIMUM SPEED BEGINS sign (Rb-2)**.

If the decision has been made to use the “km/h” legend on speed limit signs, the **MAXIMUM SPEED KM/H and BEGINS sign (On One Sign Blank) (Rb-3)** should be used instead of the other options featuring the “BEGINS” legend but which do not include the “km/h” text (that is, instead of either the MAXIMUM SPEED BEGINS sign or the basic MAXIMUM SPEED sign with the BEGINS tab sign).

The **standard size (600 mm x 1100 mm) MAXIMUM SPEED KM/H** and **BEGINS sign (On One Sign Blank) (Rb-3)** is generally used for posted speeds of 60 km/h and lower.

The **oversize (900 mm x 1650 mm) MAXIMUM SPEED KM/H** and **BEGINS sign (On One Sign Blank) (Rb-3)** may be used where extra emphasis is required, such as an unusual speed limit, a change

in speed limit in rural areas, high traffic volume, high violation rates or lower sign conspicuity.

Guidelines for Use

All maximum speeds established by Ontario regulation or municipal by-law must be prescribed in units of km/h and are typically displayed in even multiples of 10 km/h, e.g., 50 km/h, 60 km/h.

The prescribed rate of speed must be posted at the beginning of each speed zone, and only at that location be accompanied by the “BEGINS” legend, either in tab form or as part of the Rb-2 or Rb-3 signs.

A “km/h” legend must be provided on all speed limit signs, both regulatory and advisory, on King’s Highways, because of the greater likelihood of unfamiliar interprovincial and international users.

Other road authorities may use the “km/h” legend at their discretion depending on local needs. If not explicitly required, road authorities may consider using the “km/h” legend near border locations, near airports and where violation experience or observation have shown that drivers are not understanding the units for speed restrictions.

Signs indicating new speed limits must not be installed until the new maximum speeds are approved and officially authorized. Speed zones with maximum speed different than statutory speeds must be established by a by-law.

For municipal roads, speed limits other than those prescribed in HTA Section 128 (1) must be established by by-law.

For provincial highways, all speed limits must be established through regulation.

Location Criteria

Any sign with the “BEGINS” legend (that is, the BEGINS tab sign, the MAXIMUM SPEED BEGINS sign, or the MAXIMUM SPEED KM/H and BEGINS sign (On One Sign Blank)) must be posted only at the beginning of the speed zone and must not be repeated beyond intersecting streets or highways.

MAXIMUM SPEED signs must be used where the speed limit is different than the statutory speeds for urban and rural environments.

In rural areas, MAXIMUM SPEED signs should be posted 25 m to 100 m downstream of major intersections.

In urban areas with closely spaced intersections, MAXIMUM SPEED signs should be placed downstream of major intersections. Engineering judgement should be used for placement of signs within blocks. 25 to 50 m downstream of intersections in urban arterials is generally an appropriate place for the signs.

The MAXIMUM SPEED sign must be installed on the right side of the highway with the left edge no more than 4.5 m from the edge of the roadway. The bottom edge of the MAXIMUM SPEED sign must be no less than 1.5 m and no more than 2.5 m above the level of the roadway.

Specific guidelines for placement of speed signs are provided below:

Controlled Access Highways

For controlled access highways, a MAXIMUM SPEED sign must be posted 100 m to 300 m beyond the furthest downstream on-ramp acceleration lane at each freeway interchange and must be repeated along the highway with a maximum spacing of 8 km as demonstrated in Figure 3.

Rural Highways with Speed Limit 80 km/h or More

For rural highways with a speed limit of 80 km/h or more (other than controlled access highways), MAXIMUM SPEED signs must be posted meeting the following criteria as demonstrated in Figure 4:

- For highways with speed zones over 8 km, MAXIMUM SPEED signs must be posted beyond major intersections and must be repeated along the highway with a maximum spacing of 8 km.
- For highways with speed zones 1.5 km to 8 km long, MAXIMUM SPEED signs must be posted beyond major intersections and must be repeated along the highway with a maximum spacing of 2 km.
- For speed zones less than 1 km, extend the existing speed limit through the zone.

Highways in a Local Municipality or Built-up Area with a Prescribed Speed Limit of Greater than 60 km/h and not more than 70 km/h

For a highway with a 70 km/h speed limit in a local municipality or a built-up area, the spacing of MAXIMUM SPEED signs must not exceed 900 m as demonstrated in Figure 5. Figure 5 also demonstrates a recommended signing layout for a speed reduction of greater than 20 km/h (from 80 km/h to 50 km/h) with a transitional speed of 70 km/h.

Highways in a Local Municipality or Built-up Area with a Prescribed Speed Limit of 60 km/h or Less (other than 50 km/h)

For a highway with a 60 km/h speed limit in a local municipality or a built-up area, the spacing of MAXIMUM SPEED signs must not exceed 600 m as demonstrated in Figure 6. Figure 6 also demonstrates a recommended signing layout for a speed reduction of greater than 20 km/h (from 80 km/h to 50 km/h) with a transitional speed of 60 km/h.

Built-up Areas at Statutory Speed (50 km/h)

The portions of highways passing through “built-up areas” must be signed with MAXIMUM SPEED signs for a statutory speed of 50 km/h, with spacing meeting the following criteria as demonstrated in Figure 7:

- When the length of highway in a built-up area is more than 1,500 m, the spacing of MAXIMUM SPEED signs must not exceed 900 m.

- When the length of highway in a built-up area is 1,500 m or less, the spacing of MAXIMUM SPEED signs must not exceed 300 m.

Legal Status

HTA, Section 128.

HTA Ontario Regulation 8/03 (LOCAL MUNICIPALITIES WHERE 80 KILOMETRES PER HOUR SPEED LIMIT APPLIES).

HTA Ontario Regulation 615 (SIGNS).

HTA Ontario Regulation 619 (SPEED LIMITS).

HTA Ontario Regulation 620 (SPEED LIMITS IN PROVINCIAL PARKS)

HTA Ontario Regulation 621 (SPEED LIMITS IN TERRITORY WITHOUT MUNICIPAL ORGANIZATION).

The maximum speed can be changed and enforced by municipal by-law in municipalities.

MAXIMUM SPEED BEGINS sign (Rb-2) and MAXIMUM SPEED KM/H and BEGINS sign on one sign blank (Rb-3) are not currently included in *HTA Regulation 615 (SIGNS)*, but are expected to be included in future.

Special Considerations

N/A

MAXIMUM SPEED AHEAD Sign (Rb-5)

Rb-5	**600 mm x 750 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

MAXIMUM SPEED AHEAD Sign with KM/H Included (Rb-5A)

Rb-5A	**600 mm x 900 mm** **900 mm x 1500 mm**
Font	**FHWA Series C, D**
Colour	**Top Section of Sign:** **Legend & Border – Black** **Background – White Reflective** **Bottom Section of Sign:** **Legend – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The MAXIMUM SPEED AHEAD sign provides advance information to drivers entering a section of road where the speed limit is considerably reduced.

Sign Types

The **MAXIMUM SPEED AHEAD sign (Rb-5)** is the basic version of the sign.

In some cases, a supplementary “km/h” legend has been mandated by the road authority for MAXIMUM SPEED signs. When the “km/h” legend is used in conjunction with basic speed limit signing, the **MAXIMUM SPEED AHEAD sign with KM/H Included (Rb-5A)** or the **MAXIMUM SPEED AHEAD sign (Rb-5)** with a **KM/H tab sign (Rb-7t)** must be used.

The **standard size (600 mm x 900 mm) MAXIMUM SPEED AHEAD** with **KM/H Included sign (Rb-5A)** is generally used for posted speeds of 60 km/h and lower.

The **oversize (900 mm x 1500 mm) MAXIMUM SPEED AHEAD** with **KM/H Included sign (Rb-5A)** is used for posted speeds of 70 km/h and higher, as well as locations where extra emphasis is required, either due to high violation rates or due to lower sign conspicuity.

Guidelines for Use

The MAXIMUM SPEED AHEAD sign or the MAXIMUM SPEED AHEAD with KM/H Included sign must be used to warn motorists of an upcoming posted speed reduction of 20 km/h or more. If the speed reduction is greater than 20 km/h, a transition speed limit should be used in intervals of no more than 20 km/h maximum (e.g. speed limit change from 80 km/h to 50 km/h should include a transition speed limit of 60 km/h).

The MAXIMUM SPEED AHEAD sign must be followed by a MAXIMUM SPEED sign with the “BEGINS” legend (that is, the BEGINS tab sign, the MAXIMUM SPEED BEGINS sign or the MAXIMUM SPEED KM/H and BEGINS sign (On One Sign Blank)). The MAXIMUM SPEED sign with “BEGINS” legend must be placed at the

beginning of the zone where the reduced maximum speed applies.

The MAXIMUM SPEED AHEAD sign should not be used under the following conditions:

- For speed reductions of 10 km/h (no advance speed warning is required); and
- For speed increases.

In school zones with a 20 km/h or more speed reduction, and where SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING signs (Rb-6a or Rb-6b (King's Highway version)) have been installed, a MAXIMUM SPEED AHEAD sign (Rb-5 or Rb-5A) along with a WHEN FLASHING Tab Sign (Rb-116) must be installed in advance of the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING sign.

In school zones with a 20 km/h speed reduction, and where a MUNICIPAL SCHOOL ZONES MAXIMUM SPEED WITH TIMES, DAYS, MONTHS sign (Rb-123 or Rb-124) has been installed, a MAXIMUM SPEED AHEAD sign (Rb-5 or Rb-5A) along with a TIMES, DAYS, MONTHS Tab Sign (Rb-116A or Rb-116B) must be installed in advance of the MUNICIPAL SCHOOL ZONES MAXIMUM SPEED WITH TIMES, DAYS, MONTHS sign.

Location Criteria

The MAXIMUM SPEED AHEAD sign must be placed 100 m to 250 m upstream of the reduced speed zone.

Refer to Figure 3, Figure 4, Figure 5, Figure 6, and Figure 7 for specific guidance on speed control sign placement.

Legal Status

No HTA reference. However, the MAXIMUM SPEED signs to which the MAXIMUM SPEED AHEAD signs refer to are enforceable.

Special Considerations

N/A

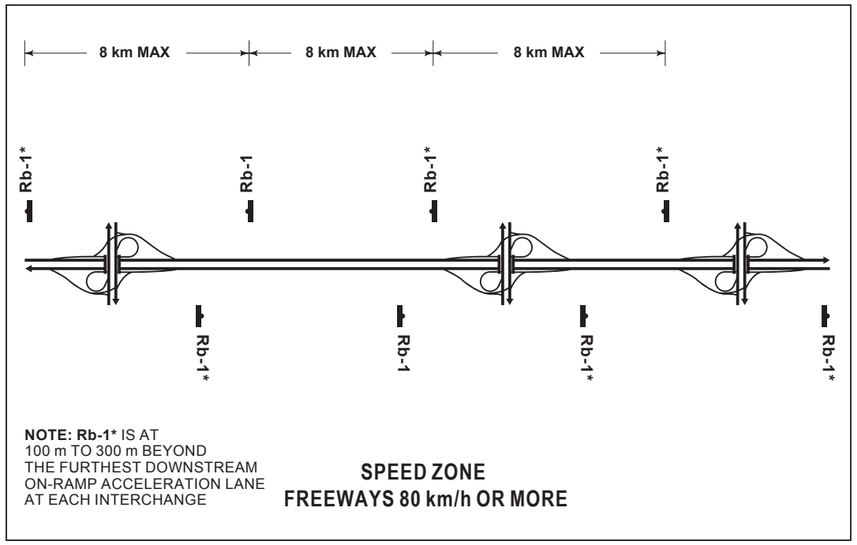


Figure 3 - Spacing of Maximum Speed Signs on Freeways

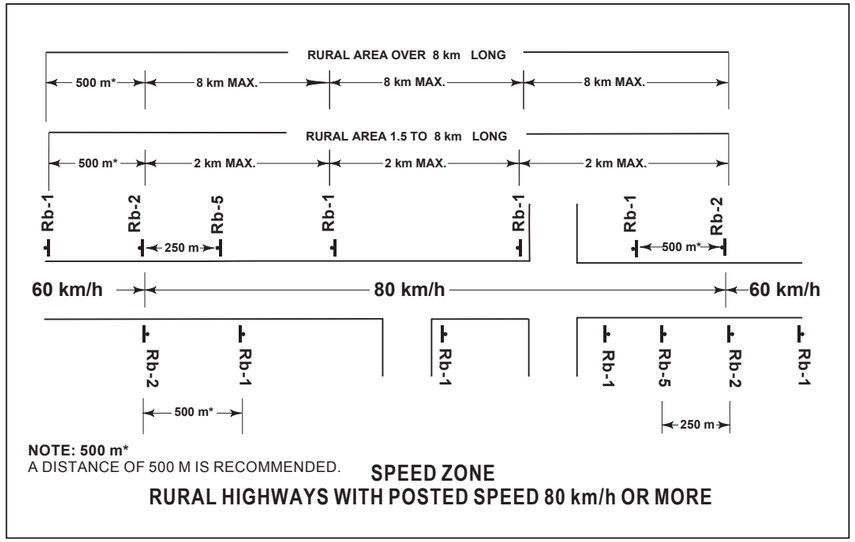


Figure 4 – Spacing of Maximum Speed Signs on Rural Highways (80 km/h or More)

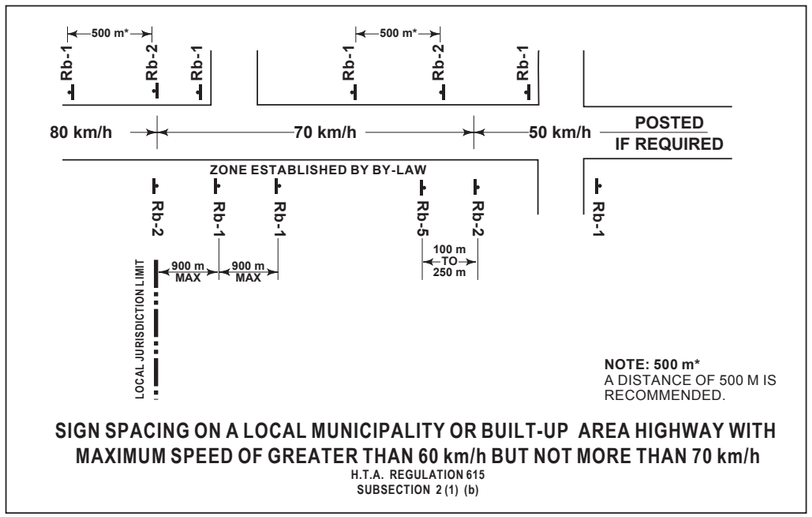


Figure 5 - Spacing of Maximum Speed Signs Local Municipality or Built-up Area Highways (Greater than 60 km/h but not more than 70 km/h)

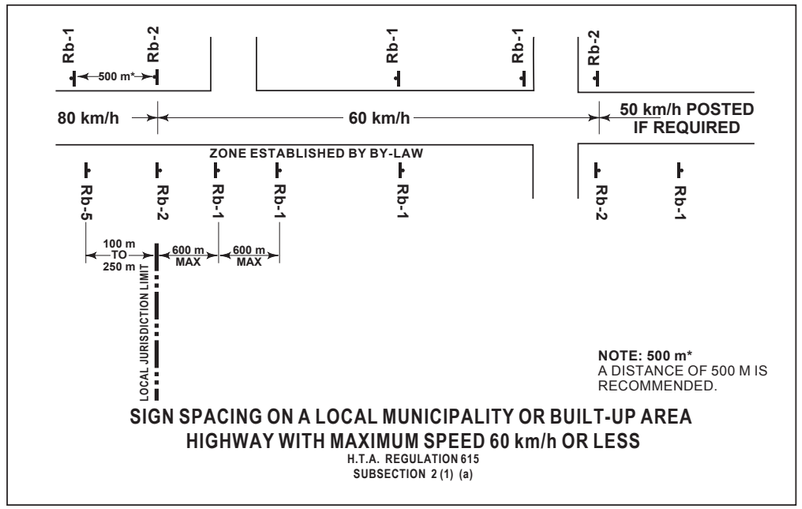


Figure 6 - Spacing of Maximum Speed Signs Local Municipality or Built-up Area Highways (60 km/h or less (except for 50 km/h which is prescribed by HTA))

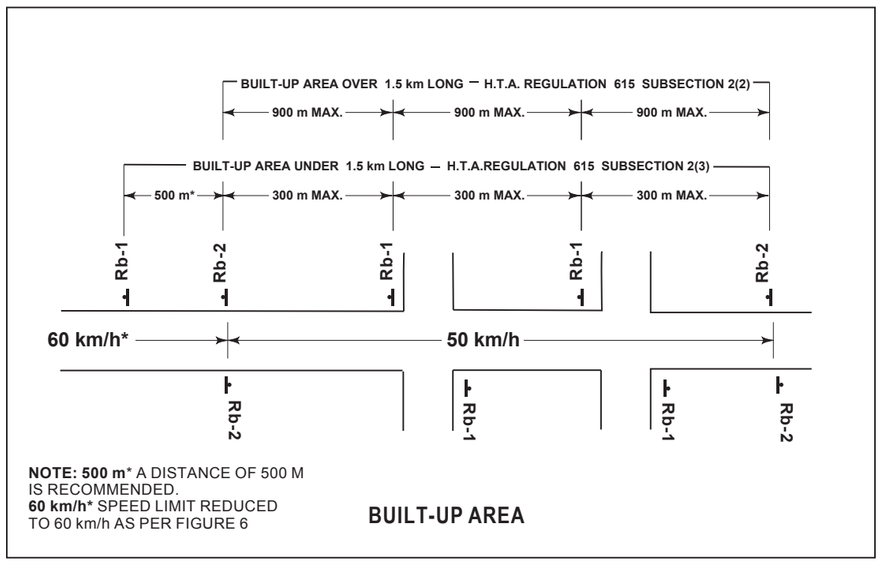


Figure 7 - Spacing of Maximum Speed Signs in Built-up Areas at Statutory Speed (50 km/h)

AREA Tab Sign (Rb-103t)

Rb-103t	**200 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Yellow Reflective** **Background - Blue Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

When a road authority, through municipal by-law, designates an entire area to have a legal speed limit lower than the default 50 km/h speed limit, a standard MAXIMUM SPEED sign with or without the 'km/h' legend, with the AREA tab sign, must be used in place of installing standard MAXIMUM SPEED signs.

Sign Types

There is one type of **AREA tab sign (Rb-103t)**.

Guidelines for Use

The AREA tab sign is only applicable to municipal roadways where the statutory speed limit was 50 km/h and a by-law has been passed designating an area in the municipality and prescribing a rate of speed that is lower than 50 km/h that applies to all roadways within the designated area.

The AREA tab sign is installed in combination with a standard MAXIMUM SPEED sign and with either a BEGINS tab sign (Rb-84t) or ENDS tab sign (Rb-85t) to indicate the boundaries of a designated area with a speed limit lower than 50 km/h.

The AREA tab sign must be attached below a standard MAXIMUM SPEED sign. A BEGINS or ENDS tab sign must also be attached below the AREA tab sign.

Where a MAXIMUM SPEED sign is installed within a designated area at locations other than a boundary, and the sign indicates the rate of speed that is prescribed for the area, the AREA tab sign must be installed below the MAXIMUM SPEED sign.

The maximum speed sign may or may not have a 'km/h' legend, as decided by the road authority.

Location Criteria

At the boundary of a designated area, on every roadway that enters the designated area, unless a roadway is specifically not part of the designated reduced speed area (such as an arterial passing through the area), the AREA tab sign must be installed in combination with a standard MAXIMUM SPEED sign and the BEGINS tab sign.

At the boundary of a designated area, on every roadway that exits the designated area, unless a roadway is specifically not part of the designated reduced speed area (such as an arterial passing through the area), the AREA tab sign must be installed in combination with a standard MAXIMUM SPEED sign and the ENDS tab sign.

The minimum required locations for the MAXIMUM SPEED with AREA tab sign (Rb-103t) are illustrated in Figure 8.

If a school zone is located within a designated reduced speed area, the selected SCHOOL ZONE MAXIMUM SPEED sign must be installed at the beginning of the school speed zone. At the end of the school zone, the MAXIMUM SPEED sign with AREA tab sign combination is used.

If an arterial or collector road passes through a designated reduced speed area, is excluded from the designated area and does not have the lowered speed limit, the local streets intersecting the arterial or collector must be signed with the MAXIMUM SPEED sign with the AREA tab sign and corresponding BEGINS or ENDS tab wherever a vehicle could turn off or on the arterial or collector. The arterial or collector road must be signed with the speed limit for the arterial or collector, using the MAXIMUM SPEED sign, at a minimum spacing, in accordance with Reg 615.

Legal Status

HTA, Subsection 128 (2.1).

HTA Ontario Regulation 615 (SIGNS).

A municipal by-law is required to designate an entire area to have a speed limit lower than 50 km/h.

Special Considerations

N/A

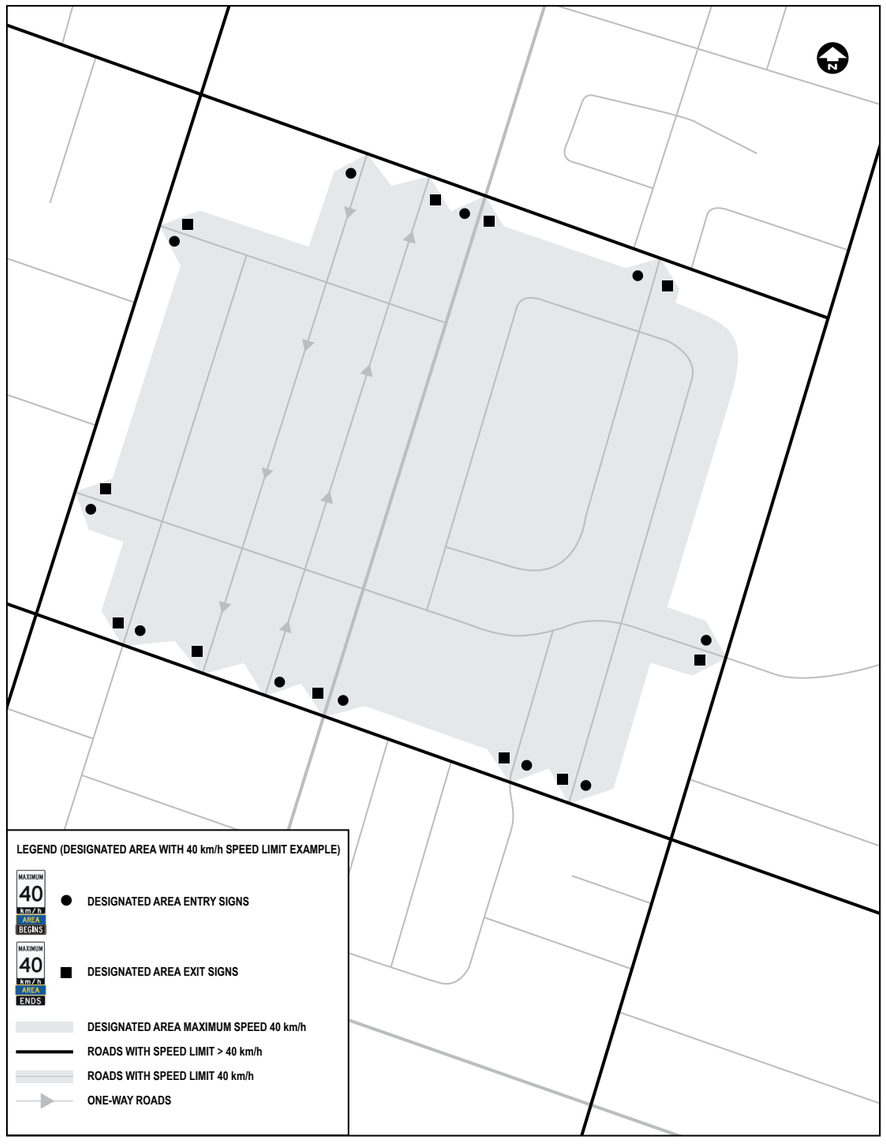
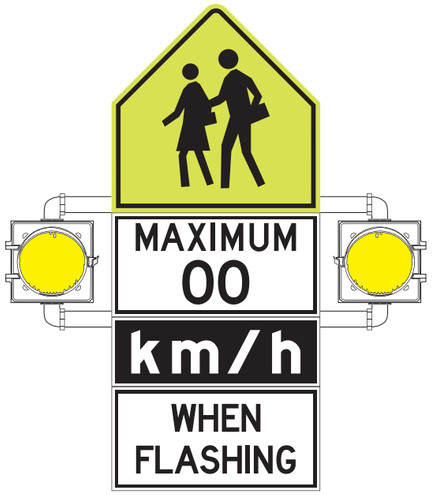


Figure 8 – Locations for the MAXIMUM SPEED Sign with AREA Tab Sign

SCHOOL ZONE MAXIMUM SPEED Sign (Rb-6) (Louvered/Internally Illuminated)

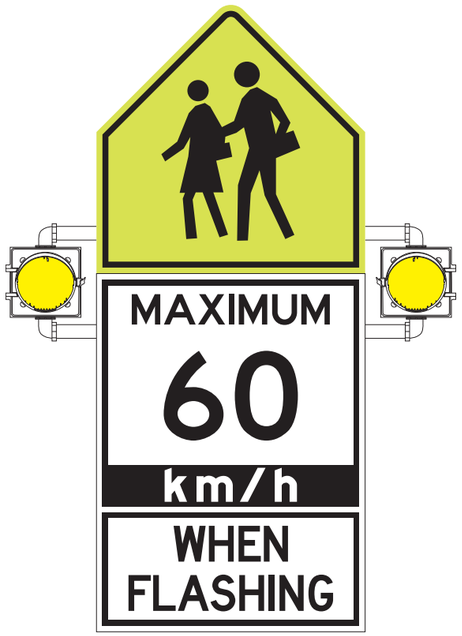
Rb-6	600 mm x 900 mm
Font	FHWA Series D, E
Colour	Top Section of Sign: Legend & Border – Black Background – Fluorescent Yellow Green Bottom Section of Sign: Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type IX/XI

SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING Sign (Rb-6a)



Rb-6a	600 mm x 1400 mm
Font	FHWA Series D, E
Colour	Top Section of Sign: Legend & Border – Black Background – Fluorescent Yellow Green 2nd Section of Sign: Legend & Border – Black Background – White Reflective 3rd Section of Sign: Legend & Border – White Reflective Background – Black Bottom Section of Sign: Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type IX/XI

SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING Sign (Rb-6b)



Rb-6b	**900 mm x 2100 mm (King's Highway version)**
Font	**FHWA Series D, E**
Colour	**Top Section of Sign: Legend & Border – Black Background – Fluorescent Yellow Green**
	2nd Section of Sign: Legend & Border – Black Background – White Reflective
	3rd Section of Sign: Legend & Border – White Reflective Background – Black
	Bottom Section of Sign: Legend & Border – Black Background – White Reflective
Minimum Sheeting	**Type IX/XI**

Purpose and Background

The SCHOOL ZONE MAXIMUM SPEED sign indicates to motorists that they must reduce their speeds at certain times because they are entering a school zone where school children are present and may be crossing the road. Both versions of the sign have variable elements which convey that the reduced speed limit applies only at certain times.

In some jurisdictions, studies have shown that SCHOOL ZONE MAXIMUM SPEED signs (especially the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING sign) are effective in decreasing speeds, although not to the extent specified on the sign. Other jurisdictions, however, have found the sign to be ineffective, unless it is visibly enforced or there are children present. The driving environment has a major impact on what drivers perceive to be reasonable restrictions, therefore the type of road, lane width, level of built-up development and other physical factors will influence driver compliance with speed reduction signing.

Sign Types

The **SCHOOL ZONE MAXIMUM SPEED sign (Rb-6)** is electrically illuminated from within or a mechanically operated louvered type sign with the maximum speed legible to approaching motorists only when it is illuminated or displaying the prescribed school zone speed. An optional **KM/H tab sign (Rb-7t)** may be appended below the SCHOOL ZONE MAXIMUM SPEED sign (Rb-6).

The **SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING signs (Rb-6a and Rb-6b (King's Highway version))** have a "WHEN FLASHING" legend shown on the bottom section of the sign and incorporate flashing amber beacons.

The **SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING sign (Rb-6a)** should be used by municipalities where the maximum prescribed school zone speed, when in effect, is lower than the posted speed on the approach to the school zone.

The **SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING sign (Rb-6b (King's Highway version))** is used on a King's Highway when the maximum prescribed school zone speed is 60 km/h.

Guidelines for Use

The SCHOOL ZONE MAXIMUM SPEED sign (Rb-6) and the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING sign (Rb-6a) should be used by municipalities when the maximum prescribed school zone speed, when in effect, is lower than the posted speed on the approach to the school zone. A municipal by-law is required to set times that the sign is in effect.

Where a speed limit of 60 km/h has been designated on a section of King's Highway adjacent to a school, the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING sign (Rb-6b (King's Highway version)) must be used.

On the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING signs (Rb-6a and Rb-6b (King's Highway version)), the double amber beacons must be activated at times when students are arriving or leaving school (on foot, by bicycle or in private auto) or school buses are entering and leaving the school property, on the days when regular school activities are taking place. School officials should be contacted to determine the appropriate hours of operation - daily, monthly and for special events such as school breaks. For more information on the operation of the flashing beacons on the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING sign, see OTM Book 12 (Traffic Signals).

The maximum speed reduction approaching a school zone should be no greater than 20 km/h. If the required speed reduction is greater than 20 km/h, a transitional speed limit should be used in intervals of up to 20 km/h maximum as per the guidelines provided in this Book.

When the school zone speed is reduced by 20 km/h, a MAXIMUM SPEED AHEAD sign (Rb-5 or Rb-5A) along with a WHEN FLASHING Tab Sign (Rb-116) should be installed in advance of the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING signs to advise motorists of the upcoming speed reduction.

A regulatory speed limit sign must be placed at the end of a school zone.

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SCHOOL ZONE MAXIMUM SPEED signs are typically used together with warning signs specific to school zones, such as the SCHOOL AREA sign (Wc-1) and SCHOOL CROSSING signs (Wc-2, Wc-2A). For more information on these signs, see OTM Book 6 (Warning Signs).

Location Criteria

The SCHOOL ZONE MAXIMUM SPEED sign (Rb-6), and the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING signs (Rb-6a and Rb-6b) must be installed at the beginning of the school zone in each direction of travel on the road. The start of the school zone is typically chosen to ensure that drivers have sufficient time to reduce their speeds and begin to monitor for the presence of students before reaching the areas of key activity such as the school entrance or driveways.

A MAXIMUM SPEED sign (Rb-1) or MAXIMUM SPEED Sign with KM/H Included (Rb-1A) must be provided to indicate the posted speed limit at the end of the school zone in each direction.

The location criteria for MAXIMUM SPEED AHEAD sign (Rb-5 or Rb-5A) is included in Section 6.

Legal Status

HTA, Subsection 128.(5).

HTA Ontario Regulation 615 (SIGNS).

HTA Ontario Regulation 619 (SPEED LIMITS), for times that the Rb-6b (for King's Highway) sign must be in effect on King's Highways.

Municipal by-law is required to designate the school zone in municipalities. A municipal by-law is also required to specify times as well as days and/or months that the SCHOOL ZONE MAXIMUM SPEED sign or the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING sign is in effect in municipalities.

Special Considerations

N/A

WHEN FLASHING Tab Sign (Rb-116)

Rb-116	**300 mm x 600 mm** **450 mm x 900 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black / White** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

A WHEN FLASHING tab sign appended to the bottom of the MAXIMUM SPEED AHEAD sign installed in advance of the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING signs provides advance information to drivers entering the section of road where they should expect considerable reduction in speed when the flashing amber beacons of the SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING signs are activated.

Sign Types

The **standard size (300 mm x 600 mm) WHEN FLASHING tab sign (Rb116)** is used with the standard size MAXIMUM SPEED AHEAD signs (Rb-5 and Rb-5A).

The **oversize (450 mm x 900 mm) WHEN FLASHING tab sign (Rb-116)** is used with the oversize MAXIMUM SPEED AHEAD signs (Rb-5 and Rb-5A).

Guidelines for Use

The WHEN FLASHING tab sign must be appended to the bottom of MAXIMUM SPEED AHEAD sign when installed in advance of SCHOOL ZONE MAXIMUM SPEED WHEN FLASHING signs to warn motorists of the upcoming posted speed reduction.

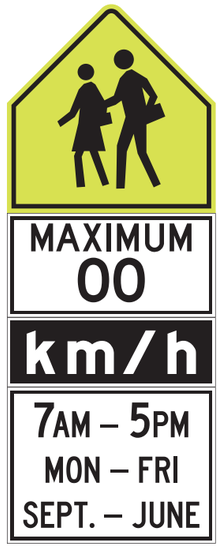
Location Criteria

A WHEN FLASHING tab sign must be appended to the bottom of a MAXIMUM SPEED AHEAD sign when installed in advance of SCHOOL ZONE MAXIMUM SPEED signs.

Legal Status

No HTA reference.

MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS Sign (Rb-123)

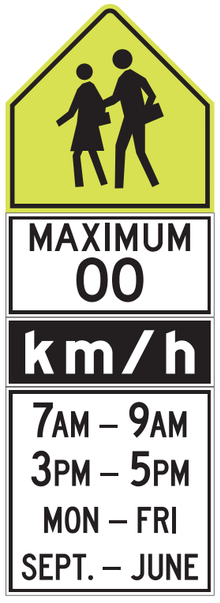


Rb-123	**600 mm x 1550 mm**
Font	**FHWA Series C, D, Em**
Colour	**Top Section of Sign:** **Legend & Border – Black** **Background – Fluorescent Yellow Green** **2nd Section of Sign:** **Legend & Border – Black** **Background – White Reflective** **3rd Section of Sign:** **Legend & Border – White Reflective** **Background – Black**

Bottom Section of Sign:
Legend & Border – Black
Background – White
Reflective

Minimum Sheeting **Type IX/XI**

MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS Sign (Rb-124)



Rb-124 **600 mm x 1700 mm**
Font **FHWA Series C, D, Em**
Colour **Top Section of Sign:**
Legend & Border – Black
Background – Fluorescent Yellow Green
2nd Section of Sign:
Legend & Border – Black
Background – White
Reflective
3rd Section of Sign:
Legend & Border – White
Reflective
Background – Black
Bottom Section of Sign:
Legend & Border – Black
Background – White
Reflective

Minimum Sheeting **Type IX/XI**

Purpose and Background

The MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS signs indicate to motorists that they must reduce their speeds at the times indicated because they are entering a school zone where school children are present and may be crossing the road. Both versions of the sign have elements that convey that the reduced speed limit applies only at certain times, days, months as prescribed by municipal by-law.

Sign Types

MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS signs (Rb-123 and Rb-124) can be used on municipal roads in place of the SCHOOL ZONE MAXIMUM SPEED signs (Rb-6 and Rb-6a) where the maximum prescribed school zone speed, when in effect, is lower than the posted speed on the approach to the school zone.

The times, days and months shown on the signs shall be prescribed by municipal by-law. Where all the months of the year are prescribed by municipal by-law, the months listed on the sign may be omitted and the vertical dimensions of the sign may be reduced accordingly.

The **MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS sign (Rb-123)** includes one time of day, days of the week and months of the year where school children are present.

The **MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS sign (Rb-124)** includes two times of day, days of the week and months of the year where school children are present.

Guidelines for Use

MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS signs are for use in designated school zones on municipal roads only and are not permitted on provincial highways.

These signs shall not be illuminated by flashing signals and shall not be accompanied by a tab sign bearing the words ‘When Flashing”.

MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS signs should be used by municipalities when the maximum prescribed school zone speed is lower than the posted speed on the approach to the school zone. A municipal by-law is required to set the times, days and months when the sign is in effect.

The maximum speed reduction approaching a school zone should be no greater than 20 km/h. If the required speed reduction is greater than 20 km/h, a transitional speed limit should be used in intervals of up to 20 km/h maximum as per the guidelines provided in this Book.

When the school zone speed is reduced by 20 km/h, a MAXIMUM SPEED AHEAD sign (Rb-5 or Rb-5A) along with a TIMES, DAYS, MONTHS Tab Sign (Rb-116A or Rb-116B) should be installed in advance of the MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS signs to advise motorists of the upcoming speed reduction.

A regulatory speed limit sign must be placed at the end of a school zone.

MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS signs are typically used together with warning signs specific to school zones, such as the SCHOOL AREA sign (Wc-1) and SCHOOL CROSSING signs (Wc-2, Wc-2A). For more information on these signs, see OTM Book 6 (Warning Signs).

Location Criteria

The MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS signs must be installed at the beginning of the school zone in each direction of travel on the road. The start of the school zone is typically chosen to ensure that drivers have sufficient time to reduce their speeds and begin to monitor for the presence of students before reaching the areas of key activity such as the school entrance or driveways.

A MAXIMUM SPEED sign (Rb-1) or MAXIMUM SPEED Sign with KM/H Included (Rb-1A) must be provided to indicate the posted speed limit at the end of the school zone in each direction.

The location criteria for MAXIMUM SPEED AHEAD sign (Rb-5 or Rb-5A) is included in Section 6.

Legal Status

HTA, Subsection 128.(5).

HTA Ontario Regulation 615 (SIGNS).

A municipal by-law is required to designate a school zone within municipalities.
A municipal by-law is also required to specify the times, days and months that a MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS sign is in effect.

Special Considerations

N/A

Times, Days, Months Tab Sign (Rb-116A)

Rb-116A	**450 mm x 600 mm** **675 mm x 900 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Times, Days, Months Tab Sign (Rb-116B)

Rb-116B	**600 mm x 600 mm** **900 mm x 900 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

A TIMES, DAYS, MONTHS Tab Sign (Rb-116A or Rb-116B) appended to the bottom of a MAXIMUM SPEED AHEAD sign installed in advance of a MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS sign provides advance information to drivers entering the section of road where they should expect considerable reduction in speed during the times, days, months indicated on the sign.

Sign Types

There are two types of **TIMES, DAYS, MONTHS tab signs**.

The **TIMES, DAYS, MONTHS Tab Sign (Rb-116A)** includes one time of day, days and months where school children are present. This tab sign is used where the Rb-123 has been installed.

The **TIMES, DAYS, MONTHS Tab Sign (Rb-116B)** includes two times of day, days and months where school children are present. This tab sign is used where the Rb-124 has been installed.

The **standard size (450 mm x 600 mm) TIMES, DAYS, MONTHS tab sign (Rb116A)** or **(600 mm x 600 mm) TIMES, DAYS, MONTHS tab sign (Rb116B)** is used with the standard size MAXIMUM SPEED AHEAD signs (Rb-5 and Rb-5A).

The **oversize (675 mm x 900 mm) TIMES, DAYS, MONTHS tab sign (Rb-116A)** or **(900 mm x 900 mm) TIMES, DAYS, MONTHS tab sign (Rb-116B)** is used with the oversize MAXIMUM SPEED AHEAD signs (Rb-5 and Rb-5A).

Guidelines for Use

A TIMES, DAYS, MONTHS tab sign must be appended to the bottom of the MAXIMUM SPEED AHEAD sign when installed in advance of a MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS sign to warn motorists of the upcoming posted speed reduction.

Location Criteria

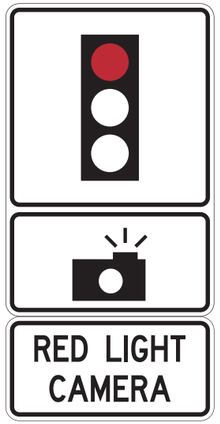
A TIMES, DAYS, MONTHS tab sign must be appended to the bottom of a MAXIMUM SPEED AHEAD sign when installed in advance of MUNICIPAL SCHOOL ZONE MAXIMUM SPEED WITH TIMES, DAYS, MONTHS sign.

Legal Status

No HTA reference.

7. Automated Enforcement Signs

RED LIGHT CAMERA Sign (Rb-134)



Rb-134	**600 mm x 1200 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black & Red Reflective** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

RED LIGHT CAMERA signs must be used in municipalities at locations where Red Light Camera Systems have been implemented at designated traffic signal locations to improve safety for all road users by reducing red light running at intersections.

The sign informs drivers that the upcoming traffic signal has cameras installed that will take a photograph of a vehicle that enters the intersection while the traffic signal is indicating red. The photo is direct evidence that an offence under the *Highway Traffic Act* has occurred and can be used to prosecute the owner of a violating vehicle.

A Red Light Camera System may be permanently or temporarily installed at an intersection.

Sign Types

There is one type of **RED LIGHT CAMERA sign (Rb-134)**.

Guidelines for Use

When a new location is selected for the placement of a Red Light Camera System within a municipality, the municipality must install a RED LIGHT CAMERA sign at that new location at least ten (10) calendar days prior to the cameras becoming operational.

If a location is removed from a Red Light Camera System enforcement rotation within the municipality, the RED LIGHT CAMERA sign at that location must be taken down by the municipality.

Location Criteria

A RED LIGHT CAMERA sign must be installed on the right side of the roadway facing traffic on every approach to an intersection under Red Light Camera surveillance, regardless of how many cameras are installed at the intersection. The sign should be placed upstream of the traffic signal, relatively close to the signal, but should not interfere with the visibility of other signs.

Legal Status

HTA, Subsection 205.15

HTA Ontario Regulation 277/99 (RED LIGHT CAMERA SYSTEM EVIDENCE)

Special Considerations

N/A

8. Turn Control Signs

NO STRAIGHT THROUGH Sign (Rb-10)

Rb-10	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

NO STRAIGHT THROUGH Sign (Times and Days) (Rb-10A)

Rb-10A	600 mm x 900 mm
Font	FHWA Series C
Colour	Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type III or IV

NO RIGHT TURN Sign (Rb-11)

Rb-11	600 mm x 600 mm
Font	N/A
Colour	Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type III or IV

NO LEFT TURN Sign (Rb-12)

Rb-12	600 mm x 600 mm
Font	N/A
Colour	Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type III or IV

NO RIGHT TURN Sign (Times and Days) (Rb-11A)

Rb-11A	600 mm x 900 mm
Font	FHWA Series C
Colour	Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type III or IV

NO LEFT TURN Sign (Times and Days) (Rb-12A)

Rb-12A	600 mm x 900 mm
Font	FHWA Series C
Colour	Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type III or IV

NO STRAIGHT THROUGH OR RIGHT TURN Sign (Rb-13)

Rb-13	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

NO STRAIGHT THROUGH OR LEFT TURN Sign (Rb-14)

Rb-14	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

NO TURNS Sign (Rb-15)

Rb-15	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

NO U-TURNS Sign (Rb-16)

Rb-16	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

BUSES EXCEPTED Tab Sign (Rb-10t)

Rb-10t	**300 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

BICYCLES EXCEPTED Tab Sign (Rb-17t)

Rb-17t	**300 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

EXCEPT AUTHORIZED VEHICLES Tab Sign (Rb-16t)

Rb-16t	**450 mm x 600 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of turn control signs is to indicate the prohibition of specific turns or manoeuvres. These are indicated symbolically on the signs using arrows and the red interdictory symbol. Examples of prohibited turns or manoeuvres include right turns, left turns, U-turns and straight-through movements. The turn control signs represent various combinations of prohibited turns which may or may not be restricted by time of day.

Sign Types

The **NO STRAIGHT THROUGH sign (Rb-10)** prohibits straight-through movements, and requires that the vehicle turn to either the left or right.

The **NO STRAIGHT THROUGH sign (Times and Days) (Rb-10A)** restricts the straight-through movements prohibition to the specified times of day and days of week.

The **NO RIGHT TURN sign (Rb-11)** prohibits right turns.

The **NO RIGHT TURN sign (Times and Days) (Rb-11A)** restricts the right turns prohibition to the specified times of day and days of week.

The **NO LEFT TURN sign (Rb-12)** prohibits left turns.

The **NO LEFT TURN sign (Times and Days) (Rb-12A)** restricts the left turns prohibition to the specified times of day and days of week.

The **NO STRAIGHT THROUGH OR RIGHT TURN sign (Rb-13)** prohibits both straight-through and right-turn movements.

The **NO STRAIGHT THROUGH OR LEFT TURN sign (Rb-14)** prohibits both straight-through and left-turn movements.

The **NO TURNS sign (Rb-15)** prohibits both right-turn and left-turn movements.

The **NO U-TURN sign (Rb-16)** prohibits a 180 degree turning manoeuvre at or near the location of the sign.

All signs in the above list may be replaced by an electrically or mechanically operated blank-out sign bearing the legend of the corresponding sign number. The legend of the electrically or mechanically operated sign must be visible only during the times that the restriction is in effect and the image and legend on the sign must comply with the HTA and bear the same dimensions and design as the static signs. If used, electrically or mechanically operated signs may be supplemented with static signs to display the regulations to road users in case of their malfunction. The use of additional static signs is optional, and the decision will be up to the road authority. For more information on electrically or mechanically operated signs, see Section 1.7 of this Book (Dynamic Sign Technologies) and see also OTM Book 10 (Changeable Message Signs).

The **BUSES EXCEPTED tab sign (Rb-10t)** may be used where the road authority wishes to permit buses to make the movements prohibited by any of the above turn control signs (Rb-10 to Rb-15, Rb-10A to Rb-12A) except the NO U-TURN sign (Rb-16). The BUSES EXCEPTED tab sign is installed directly below the turn control sign to which it applies. The BUSES EXCEPTED tab sign may also be used with LANE DESIGNATION signs (Rb-41 to Rb-48), NO LEFT/RIGHT TURN ON RED signs (Rb-79L and Rb-79R) and DO NOT ENTER signs (Rb-19).

The **BICYCLES EXCEPTED tab sign (Rb-17t)** may be used where the road authority wishes to permit bicycles to make the movements prohibited by any of the above turn control signs (Rb-10 to Rb-15, Rb-10A to Rb-12A) except the NO U-TURN sign (Rb-16). The BICYCLES EXCEPTED tab sign is installed directly below the turn control sign to which it applies.

The **BICYCLES EXCEPTED tab sign (Rb-17t)** may also be used with LANE DESIGNATION signs (Rb-41 to Rb-48), NO LEFT/RIGHT TURN ON RED signs (Rb-79L and Rb-79R) and DO NOT ENTER signs (Rb-19).

The **EXCEPT AUTHORIZED VEHICLES tab sign (Rb-16t)** may be used to supplement Turn Control signs at locations where authorized vehicles are not required to comply. Authorized vehicles are those vehicles that have special permission, such as law enforcement vehicles or emergency vehicles, or vehicles performing official business, such as maintenance, construction, or utility repairs, etc.

Guidelines for Use

Turn control signs are typically used at intersections. In the case of U-turns, however, the sign indicates that drivers are prohibited from making U-turns at or near the location of the sign.

Additional turn control signs may be used as advance signs upstream of the intersection to which they apply. There should be no other intersections, driveways or entrances between the advance sign and the intersection to which the turn control sign applies.

If entry to a restricted area is prohibited during certain time periods only, the appropriate turn control signs having an “A” suffix indicating time restrictions should be used e.g., Rb-10A, Rb-11A and Rb-12A. This application avoids the need for a DO NOT ENTER sign (Rb-19) with time restrictions, which the OTM advises against (see Guidelines for Use for DO NOT ENTER sign).

At an intersection with a one-way street, the ONE-WAY sign (Rb-21) should be used rather than a turn control sign to indicate that wrong-way entry to the one-way street is prohibited. At a signalized intersection with a one-way street, however, a turn control sign may be added to the ONE-WAY sign (Rb-21), providing the benefit of supplementary and repeated information to the driver.

In order to allow drivers more opportunity to read and carry out any necessary lane changes where times and days are shown on turn control restriction signs, a larger sign size should be used where possible. The maximum sign size may be limited by sign support structure and wind loading considerations. See OTM Book 3 (Ground-Mounted Sign Support and Installation) for further information on structural details.

The BUSES EXCEPTED tab sign must be installed directly below the turn control sign to which the exception applies. If there are two or more turn control signs at the same location applying to the same prohibited movement, each sign must have a BUSES EXCEPTED tab sign attached directly below it.

The BICYCLES EXCEPTED tab sign must be installed directly below the turn control sign to which the exception applies. If there are two or more turn control signs at the same location applying to the same prohibited movement, each sign must have a

BICYCLES EXCEPTED tab sign attached directly below it.

The EXCEPT AUTHORIZED VEHICLES tab sign may be appended directly below the turn control sign to which the exception applies. If there are two or more turn signs at the same location applying to the same prohibited movement, each sign should have a EXCEPT AUTHORIZED VEHICLES tab sign attached directly below it.

Information on permissive signs is available in the HTA, but the use of these types of signs is not recommended for turn control.

Location Criteria

At unsignalized intersections, turn control signs, other than the NO U-TURN sign, must be mounted facing traffic approaching the intersection in accordance with Figure 9.The signs should be installed, facing traffic, no closer than 1.5 m and no further than 15 m from the edge of the intersection roadway, unless this is not practicable.

At signalized intersections, turn control signs, other than the NO U-TURN sign, must be mounted adjacent to the signal heads governing the traffic to which they apply. Two signs per direction (one adjacent to the primary signal head and the other adjacent to the secondary signal head) must be provided.

A turn control sign that is mounted on a traffic signal mast arm and installed directly over any roadway must have a minimum clearance of 4.5 m above the roadway. Supplementary signs may be placed on the right side of the road immediately upstream of the intersection.

The NO U-TURN signs should be installed facing traffic at or near the location where drivers are prohibited from making U-turns.

For an unsignalized intersection with a raised median, a NO U-TURN sign should be installed on the near side within the median. For an unsignalized intersection without a raised median, a NO U-TURN sign should be installed like a NO LEFT TURN sign in accordance with Figure 9.

For a signalized intersection with a traffic pole on a raised median, the NO U-TURN sign should be installed on the traffic pole. For a signalized intersection without a traffic pole within the raised median, the No U-TURN sign should be installed like a NO LEFT TURN sign for an unsignalized intersection in accordance with Figure 9.

Legal Status

HTA, Section 143 prohibits U-turns in specific situations. In these cases, it is not necessary to use the NO U-TURN sign (Rb-16), but may be advisable to do so.

HTA Ontario Regulation 615 (SIGNS).

The application of turn control restrictions in municipalities requires legal approval through municipal by-laws.

Special Considerations

N/A

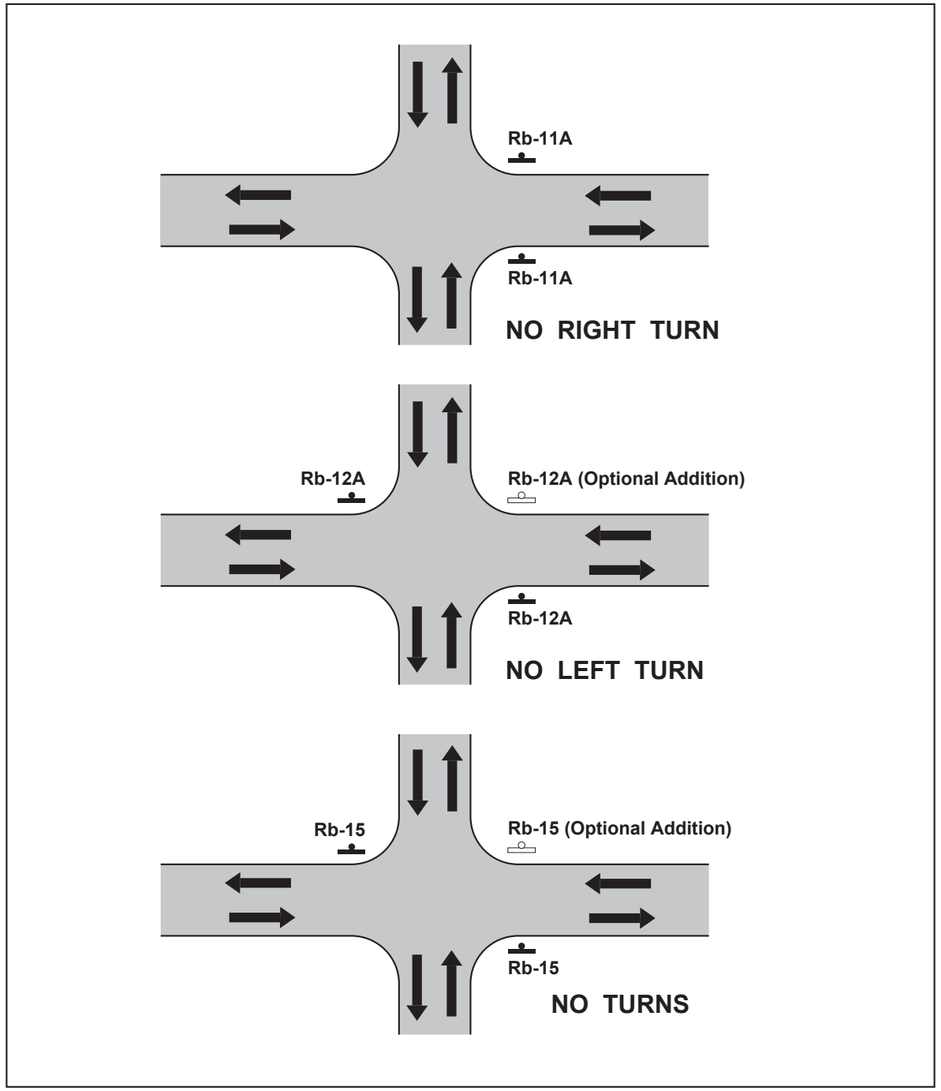


Figure 9 – Typical Locations of Turn Control Signs For Related Prohibited Movements (At Unsignalized Intersections)

9. One-way Traffic Control Signs

Motorists are only permitted to travel in one direction on one-way roads, interchange ramps, ramp-type roadways, entrances and exits to freeway service centres and other designated one-way sections of roadways. In these situations, one-way traffic control signs are used to guide traffic in the proper direction.

ONE-WAY Sign (Rb-21)

Rb-21	**300 mm x 900 mm** **600 mm x 1800 mm**
Font	**N/A**
Colour	**Legend & Border – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The ONE-WAY sign must be used to indicate roads on which traffic is allowed to travel in one direction only. The sign is typically used to prevent traffic travelling in the wrong direction from entering the one-way road.

Sign Types

The **standard size (300 mm x 900 mm) ONE-WAY sign (Rb-21)** should be used on urban streets and/or where the posted speed is 60 km/h or less.

The **oversize (600 mm x 1800 mm) ONE-WAY sign (Rb-21)** must be used at the following locations:

- Freeway off-ramps;
- Freeway ramps in rural areas;
- Freeway service centres in rural areas;
- Urban expressways accessed by one-way streets or ramps; or
- Where the driver environment is complex.

The oversize version of the sign should also be used where the posted speed is 70 km/h or greater.

The sign should be installed with the arrow pointing in the direction of the flow of one-way traffic.

Guidelines for Use

At an intersection with a one-way street, the ONE-WAY sign should be used rather than a turn control sign to indicate that entry to the one-way street is prohibited. The exception to this is the situation where a one-way street changes to two-way at an intersection, where a turn probation sign is required for clarity.

At a signalized intersection with a one-way street, however, turn control signs may be used in addition to the ONE-WAY sign, providing the benefit of supplementary and repeated information to the driver.

ONE-WAY signs placed at all freeway off ramps should be over-sized and double-sided on the post.

Location Criteria

At a four-leg intersection, any street approach intersecting a one-way street, either one-way or two-way, should face a minimum of two ONE-WAY signs. The ONE-WAY signs must be placed on the near right corner and on the far left or far right corner, depending on which is the prohibited entry direction. The far side sign should be placed at the corner closest to the prohibited entry. An additional, optional, sign may be placed on the remaining corner of the prohibited entry side. The additional sign may be of particular value for prohibiting a left turn from a one-way street. The signs should be installed, facing traffic, as close as possible on the one-way street, but no closer than 1.5 m from the nearest edge of the intersecting roadway, unless this is clearly not practicable.

At a T-intersection or at a driveway on a divided highway, when one-way traffic is along the top of the ‘T’, a ONE-WAY sign must be placed at the far side of the intersection at the top of the ‘T’, facing the traffic moving perpendicular to the one-way street. Another ONE-WAY sign may be placed on the near right side of the stem of the ‘T’, and facing traffic moving perpendicular to the

one-way street, as close as possible, but no closer than 1.5 m from the edge of the intersecting roadway, unless it is clearly not practicable.

ONE-WAY signs placed at all freeway off-ramps should be over-sized and double-sided on the post. The signs should be provided on the right side of the off-ramp facing the traffic moving perpendicular to the ramp. Additional ONE-WAY signs double-sided or single sided should be provided on the left side of the off-ramp depending upon the complexity of the situation as indicated in Figure 10. Wherever possible, ONE-WAY signs at freeway off-ramps should be combined with other signs on the same post.

Typical locations of ONE-WAY signs are illustrated in Figure 10, Figure 11 and Figure 12.

Legal Status

HTA, Section 153.

HTA Ontario Regulation 615 (SIGNS).

Special Considerations

N/A

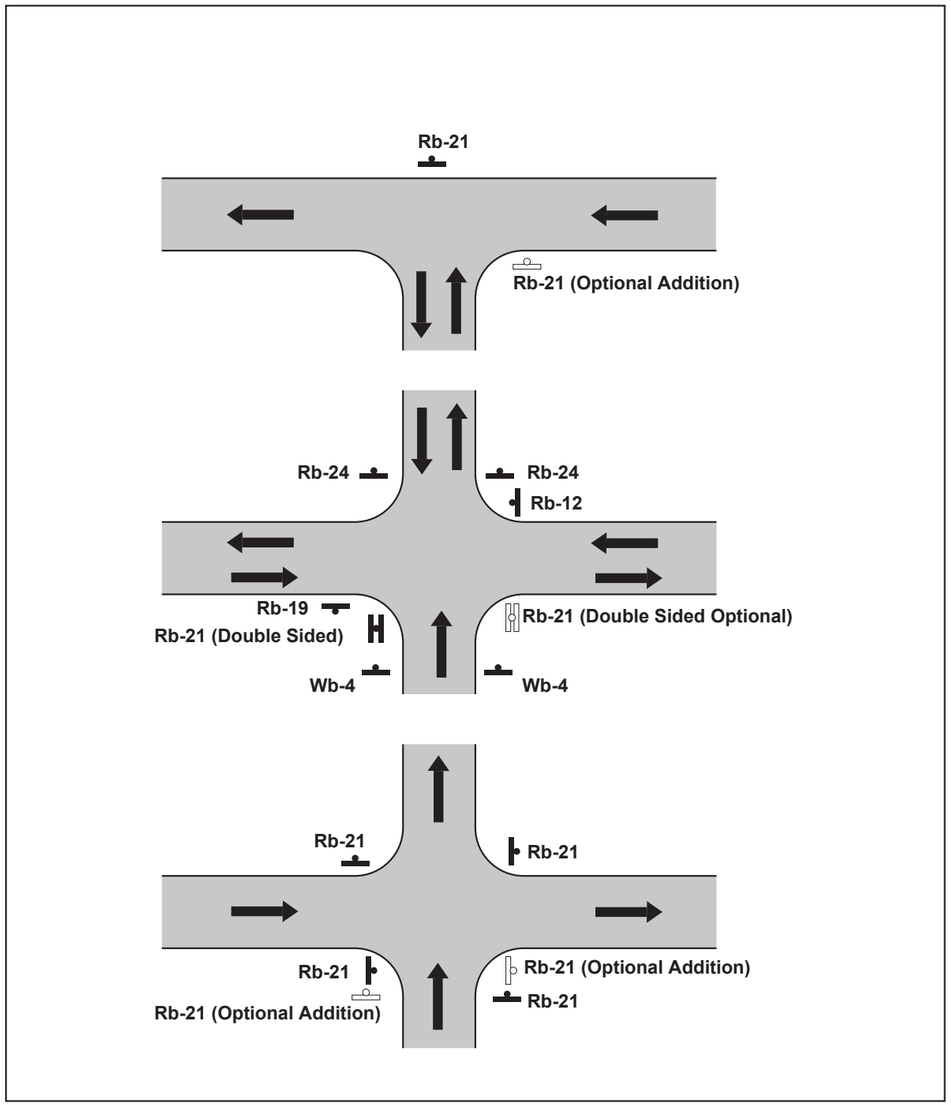


Figure 10 – Typical Locations of ONE-WAY Signs

DO NOT ENTER sign (Rb-19)

Rb-19	**600 mm x 600 mm** **900 mm x 900 mm**
Font	**N/A**
Colour	**Legend – Red Reflective** **Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

DO NOT ENTER Tab Sign (Rb-19t)

Rb-19t	**300 mm x 600 mm** **450 mm x 900 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the DO NOT ENTER sign is to prohibit vehicles from entering a restricted area. The DO NOT ENTER sign must be conspicuously placed at the potential point of illegal entry to a one-way roadway or ramp.

The driver must be given every opportunity to notice a DO NOT ENTER sign because the consequences of missing it could be serious, e.g., a high-speed head-on collision. Therefore, repeating the use of DO NOT ENTER signs is encouraged.

Sign Types

The **standard size (600 mm x 600 mm) DO NOT ENTER sign (Rb-19)** should be used on urban streets and/or where the posted speed is 60 km/h or less.

The **oversize (900 mm x 900 mm) DO NOT ENTER sign (Rb-19)** should be used at the free-way ramps. The oversize version of the sign should also be used where the posted speed is 70 km/h or greater.

The **standard size (300 mm x 600 mm) DO NOT ENTER Tab Sign (Rb-19t)** should be used with the standard size (600 mm x 600 mm) DO NOT ENTER sign.

The **oversize (450 mm x 900 mm) DO NOT ENTER Tab Sign (Rb-19t)** should be used with the oversize (900 mm x 900 mm) DO NOT ENTER sign.

The **DO NOT ENTER Tab Sign** is an educational tab that should be used if it has been determined that the motorists are unfamiliar with the meaning of the symbol. Motorist familiarity can be assessed according to factors such as collision experience, incidences of near-collisions, observation and use of similar signs in the area.

Guidelines for Use

The DO NOT ENTER sign must be used for absolute conditions with no time restrictions. If there are certain time periods for which the sign does not apply, then the condition is no longer absolute, and the special meaning of the sign is compromised. If entry to a restricted area is prohibited during certain time periods only, the appropriate turn control signs having an “A” suffix indicating time restrictions should be used e.g., Rb-10A, Rb-11A and Rb-12A.

The signs must be used at signalized and unsignalized intersections from which entry to a road or ramp is restricted (see Location Criteria).

The DO NOT ENTER sign may be used to indicate that a highway or section of highway is temporarily closed by Police. (See also the ROAD CLOSED sign (Rb-92) in Section 17 (Regulatory Construction Traffic Control Signs)).

Location Criteria

At unsignalized intersections, the DO NOT ENTER sign must be placed across the intersection on both the left and right sides in a conspicuous place, facing traffic that would otherwise illegally enter the one-way road.

At signalized intersections, the DO NOT ENTER sign should be placed adjacent to the signal heads controlling the traffic that would otherwise illegally enter the one-way road. However, if there are already signs on the signal arms (e.g. LEFT TURN SIGNAL sign) or other mitigating factors, the DO NOT ENTER sign may be ground-mounted in a conspicuous place.

The use of the sign at at-grade intersections of highways with continuous wide medians (that is those that are 10 m wide or wider) is shown in Figure 11. More information on this application is provided under Location Criteria for the DO NOT ENTER / WRONG WAY sign (Rb-20).

At right-turn channelized ramps and one-way freeway off-ramps, the sign must be mounted on the back of the YIELD sign or STOP sign, facing the merging or exiting traffic. A second sign should be placed approximately 30 m within the ramp on the opposite side of the road from the sign mounted on the back of the STOP or YIELD sign. The second sign serves as an additional warning to the motorist who has entered the ramp illegally. Figure 12 shows the typical placement of the DO NOT ENTER sign on freeway off-ramps, in conjunction with other related regulatory signs.

Legal Status

HTA Ontario Regulation 615 (SIGNS).

HTA Ontario Regulation 599 (HIGHWAY CLOSINGS).

Special Considerations

N/A

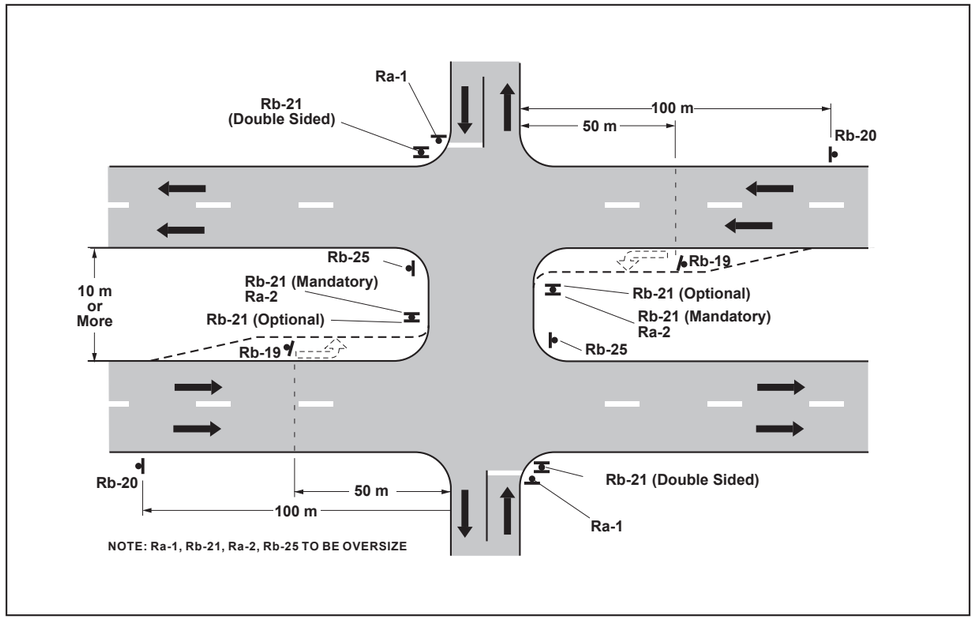


Figure 11 – Application of Signs at Continuous Wide Median (With or Without Left-turn Lanes)

DO NOT ENTER / WRONG WAY Sign (Rb-20)

Rb-20	**600 mm x 1200 mm**
Font	**FHWA Series C**
Colour	**Top Section of Sign:** **Legend – Red Reflective** **Border – Black** **Background – White Reflective** **Bottom Section of Sign:** **Legend & Border – White Reflective** **Background – Red Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The DO NOT ENTER / WRONG WAY sign is used as a last resort supplement to the DO NOT ENTER sign (Rb-19) to warn motorists again that they are illegally entering a freeway or highway against the flow of traffic. In some cases, it is a supplement to the DO NOT ENTER sign, providing yet another degree of repetition. The explicit wording of the DO NOT ENTER / WRONG WAY sign is intended to strongly alert motorists that they are about to encounter high volumes of high-speed traffic travelling in the opposite direction.

Sign Types

There is one type of **DO NOT ENTER / WRONG WAY sign (Rb-20)**.

Guidelines for Use

The DO NOT ENTER/WRONG WAY sign must be used at freeway interchanges, at freeway service centres and on highways divided by a continuous wide median (see Location Criteria).

The sign must be conspicuous to drivers travelling in the direction of traffic for which it is intended (that is, drivers travelling the wrong way), but should not be visible to drivers travelling in the correct direction.

A standard pavement arrow, but with lengthened stem, indicating the correct direction of travel should be located adjacent to the sign (see OTM Book 11 (Pavement, Hazard and Delineation Markings) for more information on pavement marking arrows).

Location Criteria

The typical sign layout for freeway use is shown in Figure 12. At freeway interchanges, the DO NOT

ENTER / WRONG WAY sign must be conspicuously placed in the bullnose of all freeway off-ramps, facing traffic illegally entering the freeway. The sign must either be mounted on the back of the post supporting the EXIT sign or supported in this position by a second post, if required to properly angle the sign.

The freeway ramp signs must be installed on the right side of the ramp, facing traffic, from the perspective of drivers illegally entering the freeway. The DO NOT ENTER / WRONG WAY sign must be angled so that it is not visible to drivers legally entering the ramp from the freeway, who may be confused by the sign. Typical sized signs are shown on Figure 12, but oversized signs may be considered for situations with non-compliance or high speeds.

Figure 11 shows the typical layout for DO NOT ENTER and DO NOT ENTER / WRONG WAY signs for at-grade intersections on highways with a continuous wide median. For this application, a wide median is defined to be 10 m or more wide. In this application, the DO NOT ENTER sign must be placed on the median and the DO NOT ENTER / WRONG WAY sign opposite the median, with both signs facing the traffic illegally entering the roadway. The signs on the median must be placed 50 m from the intersection. The signs on the side of the road opposite the median must be placed 50 m to 100 m from the intersection.

Legal Status

No HTA reference. However, the DO NOT ENTER portion of the sign is covered under:

HTA, Section 153.

HTA Ontario Regulation 615 (SIGNS).

Special Considerations

N/A

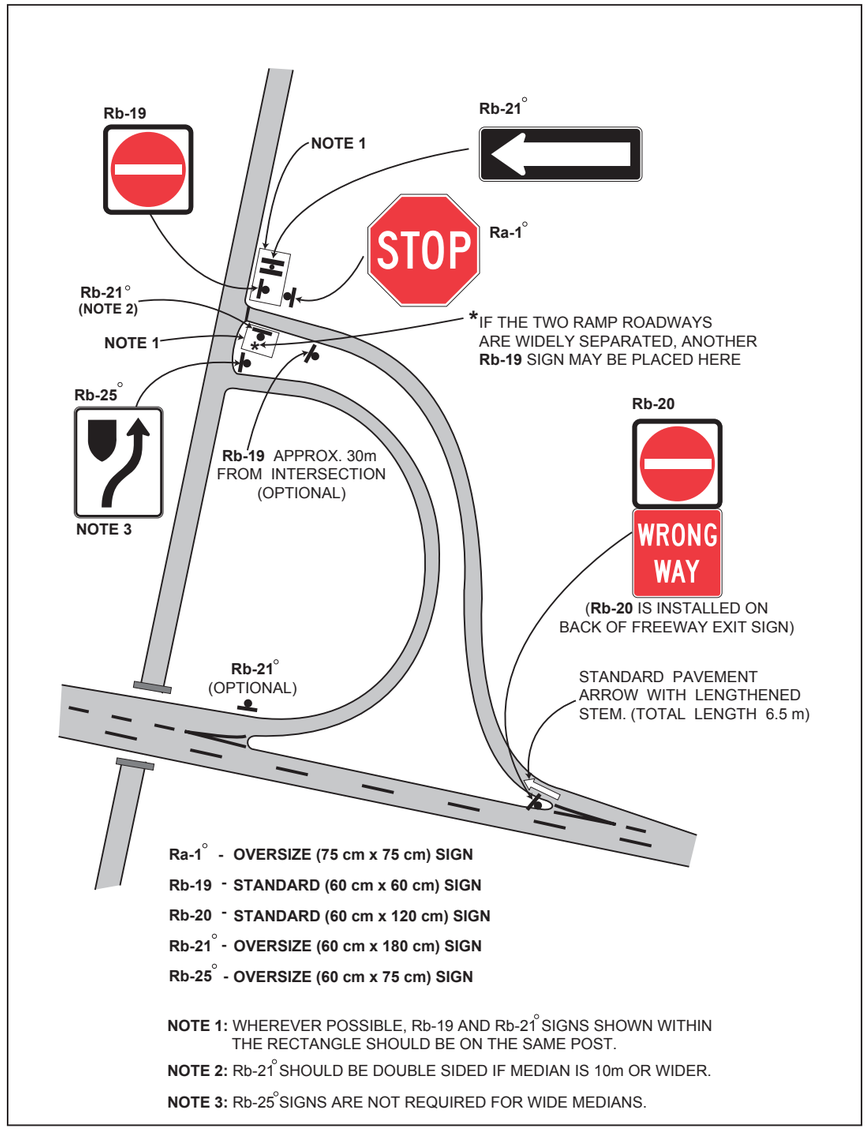
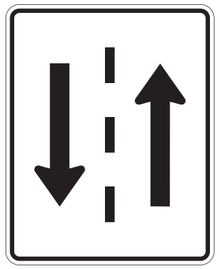


Figure 12 - Typical Application of DO NOT ENTER/WRONG WAY Signs and Pavement Arrow Placement on Freeway Off-Ramps

10. Two-way Traffic and Multi-lane Traffic Control Signs

Two-way and multi-lane traffic control signs are specifically for regulating traffic on bi-directional roads and roads with more than one lane. This group also includes signs related to passing and opposing traffic. Due to the risks associated with passing vehicles in lanes where oncoming traffic is present, as well as the potential for collisions during lane changes, it is important that the signs be well-designed and positioned so that drivers can read, understand and respond to them safely.

TWO-WAY TRAFFIC Sign (Rb-24)



Rb-24	**600 mm x 750 mm** **600 mm x 900 mm** **900 mm x 1200 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The TWO-WAY TRAFFIC sign indicates to drivers who have been travelling on a one-way street, or on one half of a divided highway, that they are now travelling on a two-way section of highway and they are no longer protected from immediately adjacent oncoming traffic and their ability to pass freely may now be restricted by opposing traffic. The message must be conveyed to drivers in time, especially in high speed situations where drivers will need considerable distance to notice and read the sign and then manoeuvre their vehicles into the correct travel lane, if required.

Sign Types

The **standard size (600 mm x 750 mm) TWO-WAY TRAFFIC sign (Rb-24)** should be used where the posted speed is 60 km/h or less.

The **oversize (600 mm x 900 mm) TWO-WAY TRAFFIC sign (Rb-24)** should be used where the posted speed is 70 km/h or 80 km/h.

The **special oversize (900 mm x 1200 mm) TWO-WAY TRAFFIC sign (Rb-24)** should be used where the posted speed is 90 km/h or greater.

Guidelines for Use

Where speeds are 70 km/h or greater, it may be necessary to install oversize (600 mm x 900 mm) or special oversize (900 mm x 1200 mm) TWO-WAY TRAFFIC signs. In certain circumstances, such

as unusual geometric conditions or a demonstrated evidence of drivers failing to comply with the change in road operations, it may be necessary to add a second or additional sets of signs. All pairs installed should be supplemented with two-way arrow pavement marking symbols. In urban areas and on lower-speed roads, a pair of standard size signs, with one sign placed on each side of the road, is usually sufficient.

The TWO-WAY TRAFFIC AHEAD sign (Wb-4) must be used in conjunction with TWO-WAY TRAFFIC signs to warn motorists on a one-way road that they are approaching a road section where two-way traffic is permitted (see OTM Book 6 (Warning Signs) for more details on the Wb-4 sign).

Location Criteria

The TWO-WAY TRAFFIC sign must be placed on each side of the road at the commencement of two-way traffic operation. Where additional signs are considered for installation, the signs should be installed in pairs at approximately 300 to 500 m downstream.

When the two-way traffic operation begins at an intersection, the signs should be placed as close to the intersecting road as possible, but no closer than 1.5 m and no further than 15 m from the edge of the intersecting roadway, unless this is clearly not practicable.

Figure 10 illustrates the placement of the TWO-WAY TRAFFIC signs at an intersection, in conjunction with the ONE-WAY sign (Rb-21) and the TWO-WAY TRAFFIC AHEAD sign (Wb-4).

Legal Status

HTA, Subsection 148(1).

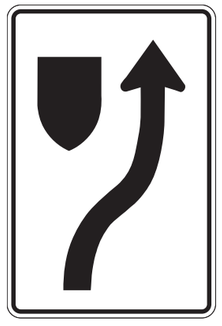
No HTA regulation supports this sign.

The sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

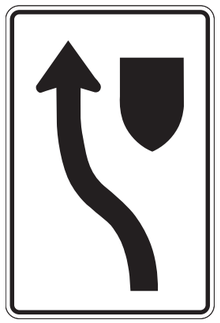
N/A

KEEP RIGHT Sign (Rb-25R)



Rb-25R	**600 mm x 750 mm** **600 mm x 900 mm** **900 mm x 1200 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV if sign is not illuminated** **Type I if sign is illuminated**

KEEP LEFT Sign (Rb-25L)



Rb-25L	**600 mm x 750 mm** **600 mm x 900 mm** **900 mm x 1200 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV if sign is not illuminated** **Type I if sign is illuminated**

Purpose and Background

The purpose of the KEEP RIGHT sign and the KEEP LEFT sign is to indicate to drivers that they must keep their vehicles to the right or left, respectively, of obstructions or roadway features.

Examples include:

- Raised or depressed median strips;
- Loading islands;
- Refuge islands;
- Traffic islands; and
- Central piers.

The KEEP RIGHT sign must appear at the approach end (upstream end) of the obstruction to indicate that vehicles must keep to the right.

The KEEP LEFT sign must appear at the approach end (upstream end) of the obstruction to indicate that vehicles must keep to the left.

The KEEP RIGHT sign and KEEP LEFT sign define the upstream end of the obstruction and must not be used to direct traffic into different or opposing lanes.

Sign Types

The **standard size (600 mm x 750 mm) KEEP RIGHT sign (Rb-25R)** or **KEEP LEFT sign (Rb-25L)** should be used where posted speed is 60 km/h or less.

The **oversize (600 mm x 900 mm) KEEP RIGHT sign (Rb-25R)** or **KEEP LEFT sign (Rb-25L)** should be used where posted speed is 70 km/h or 80 km/h. The sign should also be used at lower speed locations where prevailing traffic conditions warrant greater visibility or emphasis,

e.g., in complex visual environments where many signs and other devices

compete for driver attention or at high traffic volume locations where drivers must concentrate more on the driving task.

The **special oversize sign (900 mm x 1200 mm) KEEP RIGHT sign (Rb-25R)** or **KEEP LEFT sign (Rb-25L)** should be used where posted speed is 90 km/h or greater.

Guidelines for Use

In order to avoid vehicle conflicts with the obstructions indicated by KEEP RIGHT or KEEP LEFT signs, drivers must be aware of their presence. Clearly seeing a non-reflectorized obstruction in the middle of the roadway presents a challenge at night.

Low beam headlights do not provide sufficient light for all drivers to see non-reflectorized obstructions at night in time to stop at speeds above approximately 50 km/h. Therefore, it is particularly important that obstructions extending substantially beyond the width of the KEEP RIGHT or KEEP LEFT sign be reflectorized to indicate their width. The OBJECT MARKER sign (Wa-33L) must be used with the KEEP RIGHT sign and the OBJECT MARKER sign (Wa-33R) must be used with the KEEP LEFT sign to identify fixed object hazards within 2 m of the roadway edge. The marker must be placed with the stripes sloping at a 45 degree angle down toward the travel lanes of the roadway (for the KEEP RIGHT application this is down to the right, for the KEEP LEFT application this means down to the left) (see OTM Book 6 (Warning Signs) for more information on the use of the OBJECT MARKER sign).

To improve driver awareness of the obstruction during hours of darkness and within complex visual environments, some applications of KEEP RIGHT and KEEP LEFT signs may require the use of amber flashing beacons and/or additional sign illumination. Traffic practitioners should use engineering judgement to evaluate the need of amber flashing beacons and additional illumination.

For more information on the operation of flashing beacons, see OTM Book 12 (Traffic Signals). Further background and details on illumination and reflective sheeting can be found in OTM Book 1B (Introduction to the Ontario Traffic Manual). Beacons must flash at all times. If illumination is used, it is only required during the hours of darkness.

The use of the KEEP RIGHT sign, the flashing beacon, the appropriate OBJECT MARKER sign and pavement markings are shown in Figure 13. A similar typical layout showing the use of the KEEP LEFT sign is shown in Figure 14.

If vehicles can pass on both sides of an obstruction, a KEEP RIGHT or KEEP LEFT sign is not used. In this case a DOUBLE ARROW sign (Wa-17) with an OBJECT MARKER sign (Both Directions) (Wa-33LR) should be used (see OTM Book 6 (Warning Signs) for more information on the use of the DOUBLE ARROW sign with OBJECT MARKER sign (Both Directions)).

More information on pavement markings and delineation for obstructions is found in OTM Book 11 (Pavement, Hazard and Delineation Markings).

Location Criteria

The KEEP RIGHT sign and KEEP LEFT sign must be placed within 1.5 m of the upstream end of the obstruction facing motorists travelling towards the obstruction.

The mounting location of the sign depends on the type of obstruction, as follows:

- At channelized traffic islands or on pedestrian islands, the sign must be placed at the upstream end of the island or close to it as possible.
- On raised or depressed median strips, the sign should be placed not more than 1.5 m beyond the upstream end of the median. If a traffic signal pole is present on the median (which may be more than 1.5 m beyond the upstream end of the island), the sign may be placed on the pole.
- At piers, at dividing strips between two ramps or at obstructions in the centre of the roadway, the sign should be placed on the face of, or immediately upstream of, such obstructions.

Where the obstruction impacts both directions of traffic on a two-way road, the upstream ends of the obstruction as perceived from the two directions of approach, must each be signed with a KEEP RIGHT / KEEP LEFT sign.

On wide medians, the KEEP RIGHT sign should be offset from the median centreline in order to place it more directly within the driver's line of sight.

Figure 13 illustrates the placement of the oversize KEEP RIGHT sign together with other regulatory signs, in the context of a freeway off-ramp.

Figure 15 shows typical placement of the KEEP RIGHT sign at a signalized intersection.

Legal Status

Official sign: not enforceable.

Special Considerations

N/A

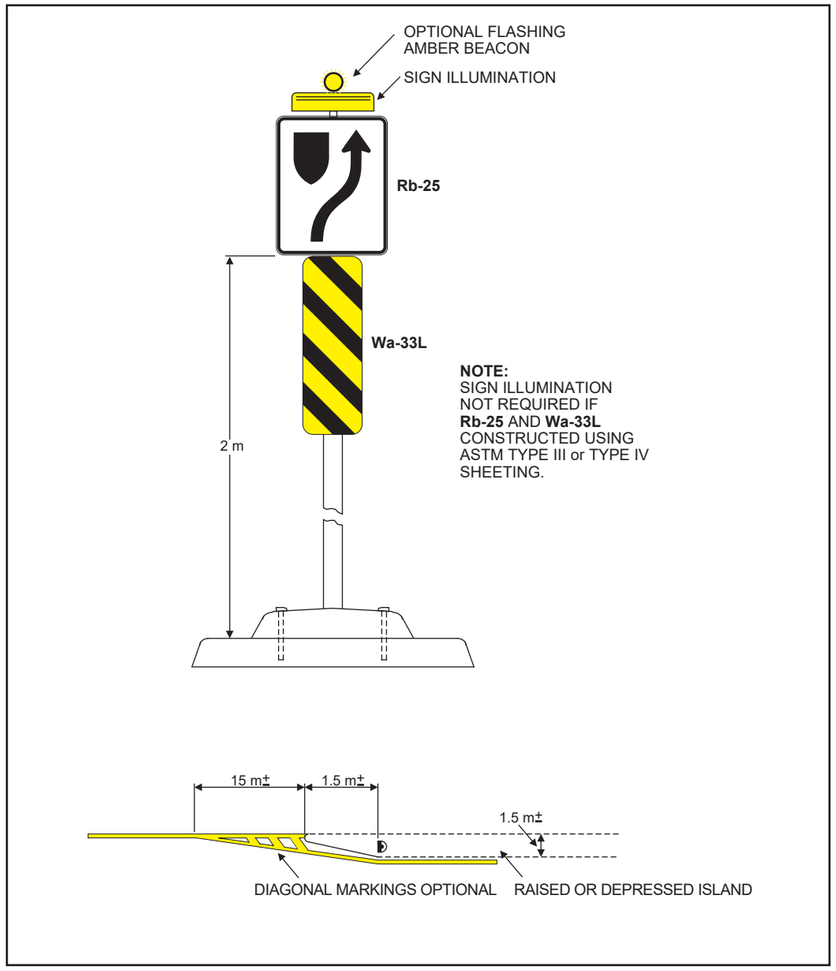


Figure 13 – KEEP RIGHT Sign and End Protection for Raised or Depressed Safety Zone

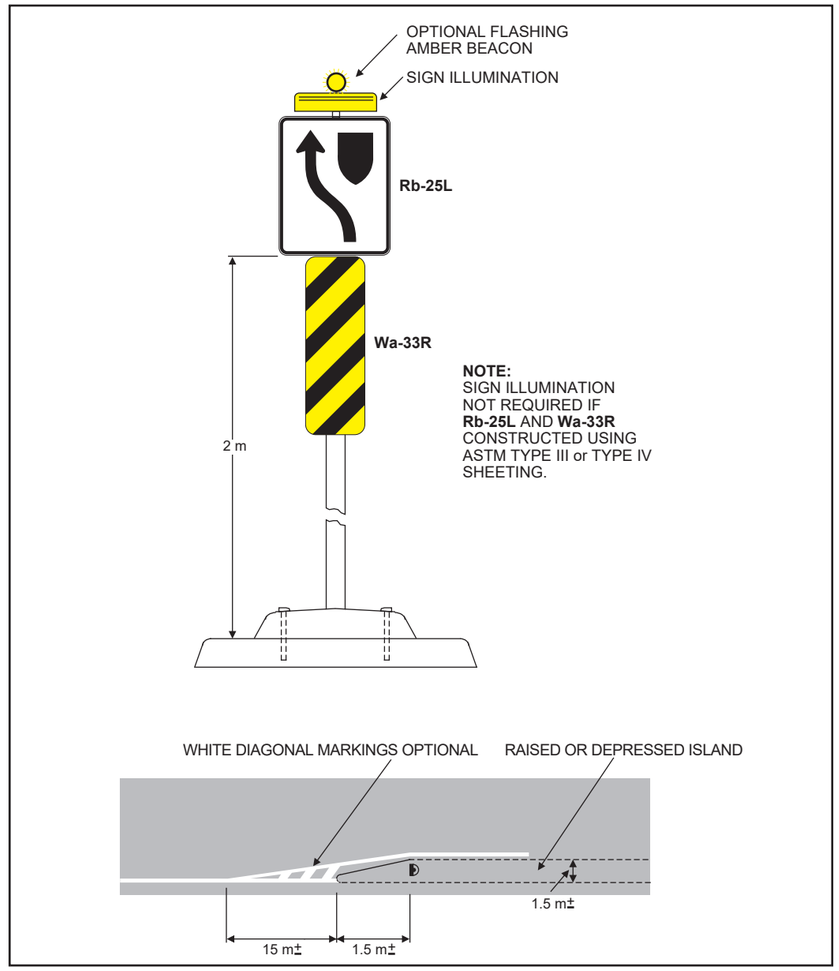


Figure 14 - KEEP LEFT Sign and End Protection for Raised or Depressed Safety Zone

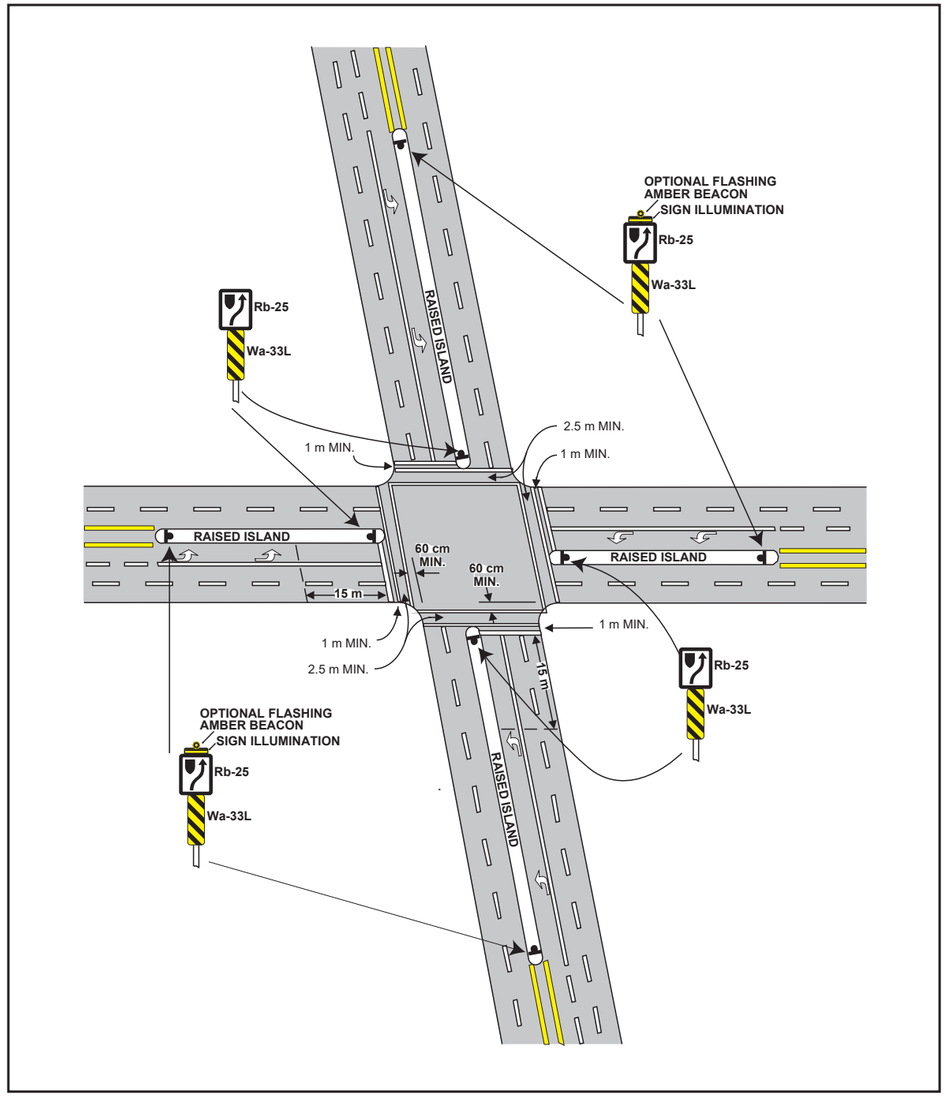


Figure 15 - Location of KEEP RIGHT Sign at Signalized Urban Intersection

THROUGH TRAFFIC KEEP RIGHT Sign (Rb-27)

Rb-27	**600 mm x 750 mm** **900 mm x 1200 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the THROUGH TRAFFIC KEEP RIGHT sign is to direct straight through traffic into the right lane so that it is not impeded by traffic turning left. The sign is intended to alleviate conflicts and congestion that would result if both through traffic and left-turn traffic shared the left lane.

Sign Types

The **standard size (600 mm x 750 mm) THROUGH TRAFFIC KEEP RIGHT sign (Rb-27)** should be used where posted speed is 60 km/h or less. The sign should be used:

- In urban areas; and
- In rural areas at low speed T-intersections on local roads, where there is a separate left-turn storage lane.

The **oversize (900 mm x 1200 mm) THROUGH TRAFFIC KEEP RIGHT sign (Rb-27)** should be used where posted speed is 70 km/h or more. In addition, the sign should be used at high speed T-intersections.

Guidelines for Use

The THROUGH TRAFFIC KEEP RIGHT sign should be used at T-intersections on the through roadway, where a centre lane is provided for left turns.

The sign may also be used at other intersections where conflicts arise due to vehicles travelling straight through in the left-turn lane.

The sign should be used at other locations where the through lane geometrics are adequate to permit vehicles to safely negotiate them at the posted speed limit i.e., good road alignment, adequate lane width.

Location Criteria

If an additional lane is created to accommodate left-turn traffic, the THROUGH TRAFFIC KEEP RIGHT sign should be placed at the beginning of the additional lane.

If an existing through lane converts to a left-turn lane, the THROUGH TRAFFIC KEEP RIGHT sign should be placed before the beginning of left-turn pavement marking arrows and the lane designation signs.

Legal Status

HTA, Section 150.

No HTA regulations support this sign.

Special Considerations

N/A

DO NOT PASS Sign (Rb-31)

Rb-31	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The DO NOT PASS sign may be used under exceptional circumstances to warn motorists that conditions are not safe for overtaking vehicles.

Sign Types

There is one type of **DO NOT PASS sign (Rb-31)**.

Guidelines for Use

Typically, pavement markings are sufficient to handle no-passing zones in conventional situations, such as the following:

- Travelling uphill;
- Around curves or bends; or
- Environments with poor visibility, e.g., in tunnels and under bridges.

There are exceptional situations for which the DO NOT PASS sign may be used in addition to pavement markings. Examples include:

- Construction zones where overtaking is hazardous; or
- No passing zones where collision statistics have established that the pavement markings are not being obeyed.

The passing prohibition takes effect at the point where the DO NOT PASS sign is located and should also be consistent with pavement markings in the vicinity.

The PASSING PERMITTED sign (Rb-35) should be used to indicate the end of the zone denoted by the DO NOT PASS sign.

Where a portable lane control signal system is used for temporary conditions, the DO NOT PASS sign must be used as one of a group of regulatory and warning signs supporting the temporary system (see OTM Book 7 (Temporary Conditions)).

Location Criteria

The DO NOT PASS sign must be placed on the right side of the roadway just before the beginning of the no-passing zone.

In locations with high percentages of large vehicles or trucks, where these vehicles may obstruct adequate visibility of the sign, it may be necessary to place another sign on the left side of the roadway.

The sign should be repeated every 500 to 1000 m if necessary, to maintain the emphasis required.

Legal Status

HTA, Section 149.

HTA Ontario Regulation 615 (SIGNS).

HTA Ontario Regulation 606 (PORTABLE LANE CONTROL SIGNAL SYSTEMS).

Special Considerations

N/A

PASSING PERMITTED Sign (Rb-35)

Rb-35	**600 mm x 600 mm**
Font	**N/A**
Colour	**Permissive Symbol – Green Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

PASS WITH CARE Tab Sign (Rb-35t)

Rb-35t	**300 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the PASSING PERMITTED sign is to inform motorists that they are no longer in the no-passing zone indicated upstream by the DO NOT PASS sign and that passing is permitted when safe to do so.

Sign Types

There is one type of **PASSING PERMITTED sign (Rb-35)**.

The **PASS WITH CARE tab sign (Rb-35t)** may be used where it has been determined that motorists are still unfamiliar with the meaning of the symbol. Motorist familiarity can be assessed according to factors such as collision experience, incidences of near-collision, observation and use of similar signs in the area.

Guidelines for Use

The PASSING PERMITTED sign must be used only at the end of a no passing zone that is properly signed with the DO NOT PASS sign (Rb-31).

The no-passing/passing permitted pavement markings in the area must be consistent with the sign information and placement.

Location Criteria

The PASSING PERMITTED sign must be placed on the right side of the roadway just after the end of the no-passing zone.

In locations with high percentages of large vehicles or trucks, where these vehicles may obstruct adequate visibility of the sign, it may be necessary to place another sign on the left side of the roadway.

Legal Status

No HTA reference. However, the DO NOT PASS sign which must always be used together with the PASSING PERMITTED sign is referenced in *HTA Ontario Regulation 615 (SIGNS)*.

Special Considerations

N/A

SLOWER TRAFFIC KEEP RIGHT Sign (Rb-34)

Rb-34	**900 mm x 1200 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the SLOWER TRAFFIC KEEP RIGHT sign is to alert or advise slow-moving traffic to drive in the right lane and allow vehicles travelling at higher speeds to pass.

Sign Types

There is one type of **SLOWER TRAFFIC KEEP RIGHT sign (Rb-34)**.

Guidelines for Use

The SLOWER TRAFFIC KEEP RIGHT sign should be used on multi-lane divided and undivided provincial highways, where it is necessary to direct slower moving vehicles to travel in the right lane. The sign may be used on other highways and roads for the same purpose.

The sign may also be used in other areas where problems have been experienced with slow-moving vehicles congesting the left lane, possibly provoking erratic passing behaviour.

The sign must not be used on sections of two-lane highway where a third intermittent lane has been added for passing (e.g., a truck climbing lane or another passing lane). Instead, PASSING LANE AHEAD signs (Rb-30 and Rb-30A) must be used for this purpose. For information regarding PASSING LANE AHEAD signs, refer to OTM Book 8 (Guide and Information Signs).

Location Criteria

The SLOWER TRAFFIC KEEP RIGHT sign is placed along a multi-lane section of a highway to direct slower moving vehicles to travel in the right lane. The sign may be used on continuous segments of four lane rural highway where drivers have been shown not to be following the basic requirements of the *Highway Traffic Act*.

The sign must be placed on the right side of the roadway. Where possible, a supplemental sign should be placed on the left side of the roadway, facing approaching traffic.

Where required for non freeway multi-lane highways, the sign should be installed 100 m to 150 m beyond the start of the multi-lane section and a short distance beyond each major intersection. Additional signs, if required, should be installed approximately 1 km beyond the first and approximately 2 km thereafter.

Where required for freeways, the sign should be installed downstream of freeway interchanges, addressing each direction of traffic, with a maximum spacing of 8 km between signs.

Legal Status

HTA, Sections 132 and 147.

No HTA regulation to support this sign.

Special Considerations

N/A

YIELD CENTRE LANE TO OPPOSING TRAFFIC Sign (Rb-36)

Rb-36	**900 mm x 1500 mm**
Font	**FHWA Series C, D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The YIELD CENTRE LANE TO OPPOSING TRAFFIC sign is used for three-lane sections of highway, where the centre lane is a passing lane on the two-lane section of roadway (e.g. truck climbing lane). The purpose of the sign is to advise motorists travelling in the single-lane direction to exercise caution when passing because they are using a lane assigned to oncoming traffic which expects to have the right-of-way and that they must move out of the passing lane, if necessary, so as not to obstruct oncoming traffic travelling in the centre lane.

Sign Types

There is one type of **YIELD CENTRE LANE TO OPPOSING TRAFFIC sign (Rb-36)**.

Guidelines for Use

The YIELD CENTRE LANE TO OPPOSING TRAFFIC sign must be used:

- On three-lane sections of highway with centre passing lanes (e.g., roads with truck climbing lanes or road sections with other passing lanes), addressing vehicles in the single-lane direction; and
- Only where passing is permitted in the single-lane direction by pavement markings.

The decision to permit passing in the single lane direction, and consequently the use of the supporting pavement markings and the Rb-36 sign, should be carefully considered by the road authority. Passing should not be permitted if:

- Volumes of heavy vehicles and other traffic in the two-lane direction are large;
- There are other passing opportunities in the single lane direction relatively close to the passing lane section, either before or after the section being considered; or
- The truck climbing lane or other passing lane is relatively short, either at or just beyond the minimum lengths specified in OTM Book 11 (Pavement, Hazard, and Delineation Markings).

Location Criteria

The sign must be placed to face traffic travelling in the single-lane direction where passing is permitted by pavement markings. The sign must be located at the start of every passing opportunity in that single-lane direction, and at intervals of approximately 800 m throughout the three-lane section. Refer to OTM Book 11 for details on sign placement and the overall signing and pavement marking system required for three-lane operation.

Legal Status

Official sign: not enforceable.

Special Considerations

N/A

STOP FOR SCHOOL BUS WHEN SIGNALS FLASHING Sign (Rb-37)

Rb-37	**1200 mm x 2400 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

BOTH DIRECTIONS Tab Sign (Rb-37t)

Rb-37t	**300 mm x 2400 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the STOP FOR SCHOOL BUS WHEN SIGNALS FLASHING sign is to advise motorists travelling on a four-lane undivided highway that both directions of traffic must stop when school bus signals are flashing to enable the safe loading and unloading of school buses on certain school bus routes. Motorists travelling in the opposite direction to the school bus may be uncertain as to whether they are required to stop when school bus signals flash. The sign is intended to alleviate any confusion in this regard.

The sign also reinforces to motorists that they are on a School Bus Route.

A School Bus Route is the sequence of roads travelled by a school bus for the purpose of picking up and dropping off school children at their schools and residences. Additional caution is required on these routes, because school children may be crossing the road on their way to or from school bus loading / unloading locations.

Sign Types

There is one type of **STOP FOR SCHOOL BUS WHEN SIGNALS FLASHING sign (Rb-37)**.

The **BOTH DIRECTIONS tab sign (Rb-37t)** is used to convey that both directions of traffic must stop when the school bus signals flash.

Guidelines for Use

The STOP FOR SCHOOL BUS WHEN SIGNALS FLASHING sign together with the BOTH DIRECTIONS tab sign must be used on all School Bus Routes located on four-lane undivided highways:

- With a singing strip (rumble strip) of 3 m or less; and
- Where posted speed is 70 km/h or greater.

These signs may also be used on two lane roadways where motorists have not been stopping for school buses.

These signs should be placed at locations where they are highly visible.

Location Criteria

For rural areas, the STOP FOR SCHOOL BUS WHEN SIGNALS FLASHING sign and its accompanying BOTH DIRECTIONS tab sign should be installed downstream of major intersections along a School Bus Route with a maximum spacing of 8 km between signs.

For urban areas, the STOP FOR SCHOOL BUS SIGNALS FLASHING sign and accompanying BOTH DIRECTIONS tab sign should be considered at locations where it has been identified that motorists are not stopping for school buses when required.

Legal Status

HTA, Subsection 175 (1).

No HTA regulation to support this sign.

Special Considerations

N/A

11. Lane Designation Signs

Lane designation signs indicate turning movements and through movements permitted in specific lanes.

Lane designation signs can be either installed overhead, directly above the lane to which each sign refers, or ground-mounted. While overhead signs convey more clearly the intent of the signs, they are also more expensive. Therefore, guidelines are provided on conditions under which ground-mounted signs are suitable and those under which overhead mounting is preferred or required.

LEFT TURN ONLY Sign (Rb-41)

Rb-41	**600 mm x 600 mm** **750 mm x 750 mm** **900 mm x 900 mm**
Font	**N/A**
Colour	**Legend & Border – White** **Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

LEFT LANE Tab Sign (Rb-41t)

Rb-41t	300 mm x 600 mm
Font	FHWA Series C
Colour	Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type III or IV

RIGHT LANE Tab Sign (Rb-42t)

Rb-42t	300 mm x 600 mm
Font	FHWA Series C
Colour	Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type III or IV

RIGHT TURN ONLY Sign (Rb-42)

Rb-42	600 mm x 600 mm 750 mm x 750 mm 900 mm x 900 mm
Font	N/A
Colour	Legend & Border – White Reflective Background – Black
Minimum Sheeting	Type III or IV

STRAIGHT THROUGH OR LEFT TURN ONLY Sign (Rb-43)

Rb-43	600 mm x 600 mm 750 mm x 750 mm 900 mm x 900 mm
Font	N/A
Colour	Legend & Border – White Reflective Background – Black
Minimum Sheeting	Type III or IV

STRAIGHT THROUGH OR RIGHT TURN ONLY Sign (Rb-44)

Rb-44	600 mm x 600 mm 750 mm x 750 mm 900 mm x 900 mm
Font	N/A
Colour	Legend & Border – White Reflective Background – Black
Minimum Sheeting	Type III or IV

ALL MOVEMENTS PERMITTED Sign (Rb-46)

Rb-46	600 mm x 600 mm 750 mm x 750 mm 900 mm x 900 mm
Font	N/A
Colour	Legend & Border – White Reflective Background – Black
Minimum Sheeting	Type III or IV

LEFT or RIGHT TURN ONLY Sign (Rb-45)

Rb-45	600 mm x 600 mm 750 mm x 750 mm 900 mm x 900 mm
Font	N/A
Colour	Legend & Border – White Reflective Background – Black
Minimum Sheeting	Type III or IV

STRAIGHT THROUGH ONLY Sign (Rb-47)

Rb-47	600 mm x 600 mm 750 mm x 750 mm 900 mm x 900 mm
Font	N/A
Colour	Legend & Border – White Reflective Background – Black
Minimum Sheeting	Type III or IV

Purpose and Background

The purpose of lane designation signs is to indicate, using single or multiple arrow symbols, the permitted movements designated to each lane on the approach to an intersection.

Lane designation signs must be used on the approaches to intersections where the permitted movement in one or more of the lanes on a given approach is contrary to the normal unsigned rules of the road. This may include permission for a normally prohibited movement, prohibition of a normally permitted movement, or both.

Normal rules of the road, which may be overridden by lane designation signs, include the following:

- Where straight-through movements are usually allowed in all continuous lanes, except if leading to a road restricted by a DO NOT ENTER sign (Rb-19) or NO STRAIGHT THROUGH sign (Rb-10, Rb-10A);
- Where left-turn movements are usually permitted from the left-most lane only; and
- Where right-turn movements are usually permitted from the right-most lane only.

Sign Types

The **LEFT TURN ONLY sign (Rb-41)** designates a lane for left-turn movements only.

The **RIGHT TURN ONLY sign (Rb-42)** designates a lane for right-turn movements only.

The **STRAIGHT THROUGH OR LEFT TURN ONLY sign (Rb-43)** designates a lane for both straight-through movements and left-turn movements.

The **STRAIGHT THROUGH OR RIGHT TURN ONLY sign (Rb-44)** designates a lane for both straight-through movements and right-turn movements.

The **LEFT OR RIGHT TURN ONLY sign (Rb-45)** designates a lane for both left- and right-turn movements.

The **ALL MOVEMENTS PERMITTED sign (Rb-46)** designates a lane for left- and right-turn movements and straight-through movements.

The **STRAIGHT THROUGH ONLY sign (Rb-47)** designates a lane for straight-through movements only.

Each of the lane designation signs are available in three sizes.

The **standard size (600 mm x 600 mm) sign** should be used for ground-mounted applications.

The **oversize (750 mm x 750 mm) sign** should be used for urban overhead applications, especially on lower speed urban roads. The **oversize 750 mm x 750 mm sign** may also be used in ground-mounted application where extra emphasis is required due to travel speeds, conflicting background which reduce conspicuity or unusual geometry.

The **oversize (900 mm x 900 mm) sign** should be used for overhead applications, on higher speed roadways and where sign conspicuity is not high, due to completing backgrounds.

The **LEFT LANE tab sign (Rb-41t)** and **RIGHT LANE tab sign (Rb-42t)** may be used where observation or collision experience has shown that vehicles are using the wrong lane for turning and that clarifying the meaning of the symbol will alleviate further problems.

If applicable, the BUSES EXCEPTED tab sign (Rb-10t) must be installed directly below the lane designation sign(s) to which the exception applies.

All signs in the above list may be replaced by an electrically or mechanically operated blank-out sign bearing the legend of the corresponding sign number. The legend of the electrically or mechanically operated sign must be visible only during the times that the restriction is in effect and the image and legend on the sign must comply with the HTA and bear the same dimensions and design as the static signs.

If used, electrically or mechanically operated signs may be supplemented with static signs to display the regulations to road users in case of their malfunction. The use of additional static signs is optional, and the decision will be up to the road authority.

For more information on electrically or mechanically operated signs, see Section 1.7 (Dynamic Technologies) in this Book and OTM Book 10 (Changeable Message Signs).

Guidelines for Use

Lane designation signs may be installed overhead or ground-mounted.

The decision on whether to use overhead or ground-mounted lane designation signs is at the discretion of the road authority.

Overhead signs:

- Overhead signs should be used at locations with four or more approach lanes, unless one of the lanes is a single lane mandatory right turn.
- Overhead signs should be considered where ground-mounted signs are ineffective (for approaches with fewer than four lanes), as a result of visibility restrictions or other site and traffic characteristics, resulting in low driver compliance or collisions related to lane designation.
- Where dual left-turn lanes are provided at signalized at-grade intersections without medians, with the exception of ramp terminals, overhead lane designations must be provided for the left-turn lanes as a minimum and may be provided for all lanes on the approach.

- Where dual left-turn lanes are provided at signalized at-grade intersections with medians, the preferred method of signing is with overhead lane designation signs, but ground-mounted signs may be used.
- Where overhead signs are used on freeway off-ramps, each lane must have an overhead lane designation sign.
- Overhead signs must be used at freeway off-ramps with four or more lanes.
- Overhead signs may be considered at three-lane freeway off-ramps terminating in a four-way intersection, where combined movements are permitted from the centre lanes (e.g., left-turn, right-turn and straight-through movements).

Ground-mounted signs:

- Ground-mounted signs may be used at freeway off-ramps or at other locations with up to three approach lanes, where physical conditions such as road alignment, sight distance and visual complexity make the placement of ground-mounted signs practical. Ground-mounting must not compromise the effectiveness, visibility or lane correlation of the sign message.
- A ground-mounted sign may be used for a mandatory right turn of a single lane that has been continuous for some distance (i.e., not a pick-up lane).
- Ground-mounted signs should be used at three-lane off-ramps terminating in a T-intersection, where there is multi-lane usage (e.g., two left-turn lanes or two right-turn lanes).

Pavement marking arrows must be used to supplement both overhead and ground-mounted lane designation signs (see OTM Book 11 (Pavement, Hazard and Delineation Markings) for more details on pavement markings).

Location Criteria

Lane designation signs must be located in such a way that they remain visible to approaching drivers for a distance of at least 60 m.

Lane designation signs must be located in such a way that they remain visible to approaching drivers for a distance of at least 60 m.

Overhead signs

Overhead lane designation signs should be mounted so that the bottom of the sign is a minimum of 4.5 m to 5.3 m above the roadway (see OTM Book 1B, Section 12.3, Vertical Mounting Offset). Each sign should be centred over the lane it governs.

For overhead mounting (with the exception of freeway off-ramps), the individual lane designation sign must be placed either:

- Over the lane or lanes where the movement is contrary to the normal rules of the road; or
- Over all lanes.

For freeway off-ramps, overhead signs should be placed beyond the location where all lanes have fully developed and on a tangent approach meeting the above noted 60 m visibility criteria so that drivers can determine permitted movements for individual lanes. Each lane must have an overhead lane designation sign and the signs should be installed over the pavement marking symbols in each lane. Only one set of overhead lane designation signs should be provided.

Figure 16 illustrates the placement of overhead lane designation signs for freeway off-ramps.

For intersections, overhead lane designation signs should be placed at a distance of 5 m to 25 m in advance of the stop bar of the intersection over pavement marking symbols. Only one set of overhead lane designation signs should be provided.

Figure 17 illustrates the placement of overhead lane designation signs for intersections.

Ground-mounted signs:

For ground-mounting, except for single right-lane mandatory turn conditions, sets of two or three individual lane designation signs must be attached together side-by-side, so that they represent the turning movement configuration for the lanes closest to the side of the road where the sign is mounted. On a two-lane approach, sets of two attached signs should be used.

On a three-lane approach, sets of either two or three attached signs should be used.

Ground-mounted signs are located as follows:

- For single lane mandatory right turns, typically due to a lane terminating beyond an intersection, on the right side of the road.
- For double left turns designated by LEFT TURN ONLY signs or STRAIGHT THROUGH or LEFT TURN ONLY signs, lane designation signs must be located on the left side of the roadway. An optional set of relevant signs may be used on the right side in areas with high commercial traffic, where signs may get blocked by traffic.

- For double right turns designated by RIGHT TURN ONLY signs or STRAIGHT THROUGH or RIGHT TURN ONLY signs, lane designation signs must be located on the right side of the roadway. An optional set of relevant signs may be used on the left side in areas with high commercial traffic, where signs may get blocked by traffic.
- For shared left-right turns designated by LEFT or RIGHT TURN ONLY signs, lane designation signs must be located as follows:
- On the left side of the roadway to indicate the left turn only lane designation and the shared left-right turn lane designation.
- On the right side of the roadway to indicate the shared left-right turn lane designation and the right turn only lane designation.
- An optional set of relevant signs on each side may be used in areas with high commercial traffic, where signs may get blocked by traffic.

Figure 18, Figure 19, and Figure 20 illustrate the placement of ground-mounted lane designation signs for typical configurations.

Ground-mounted signs must be placed beside the fully developed lanes. The signs should be mounted at a distance of 15 m to 50 m in advance of the stop bar of the intersection beside pavement marking symbols. If the signs are not continuously visible to approaching drivers for 60 m, another set of signs should be placed beside the pavement marking symbols where the turning lanes become fully developed. The signs should be placed in advance of the intersection to which they apply and should not be placed in advance of any other intersecting roads or entrances.

Legal Status

HTA, Sections 141, 152, 153 and 154.

HTA Ontario Regulation 615 (SIGNS).

The application of lane designation signs in municipalities requires legal approval by municipal by-laws.

Special Considerations

If used in a municipality, the STRAIGHT THROUGH ONLY sign indicates a roadway that changes alignment at or beyond the intersection, the arrow symbol may be angled to indicate the actual alignment of the roadway.

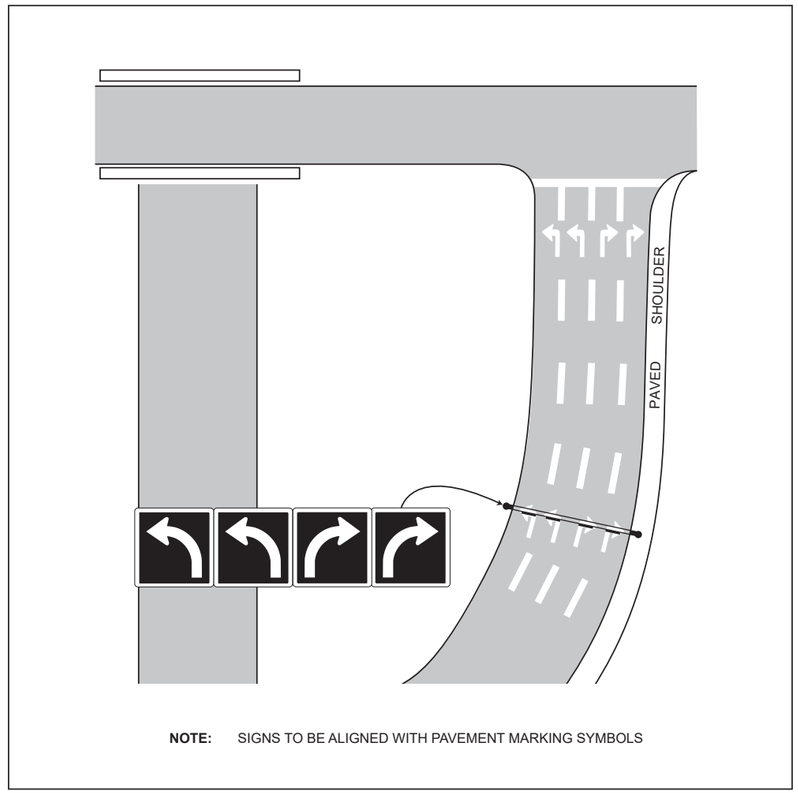


Figure 16 - Placement of Overhead Turn Lane Designation Signs for Freeway Off-ramps

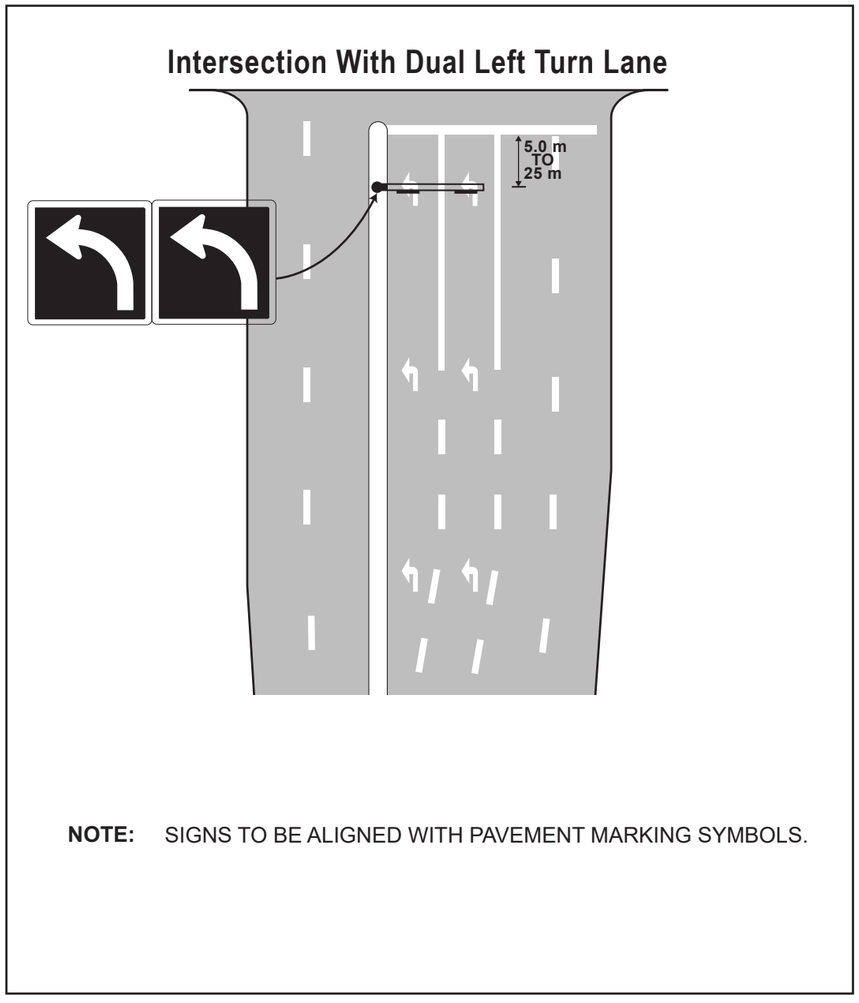


Figure 17 - Placement of Overhead Turn Lane Designation Signs for Intersections

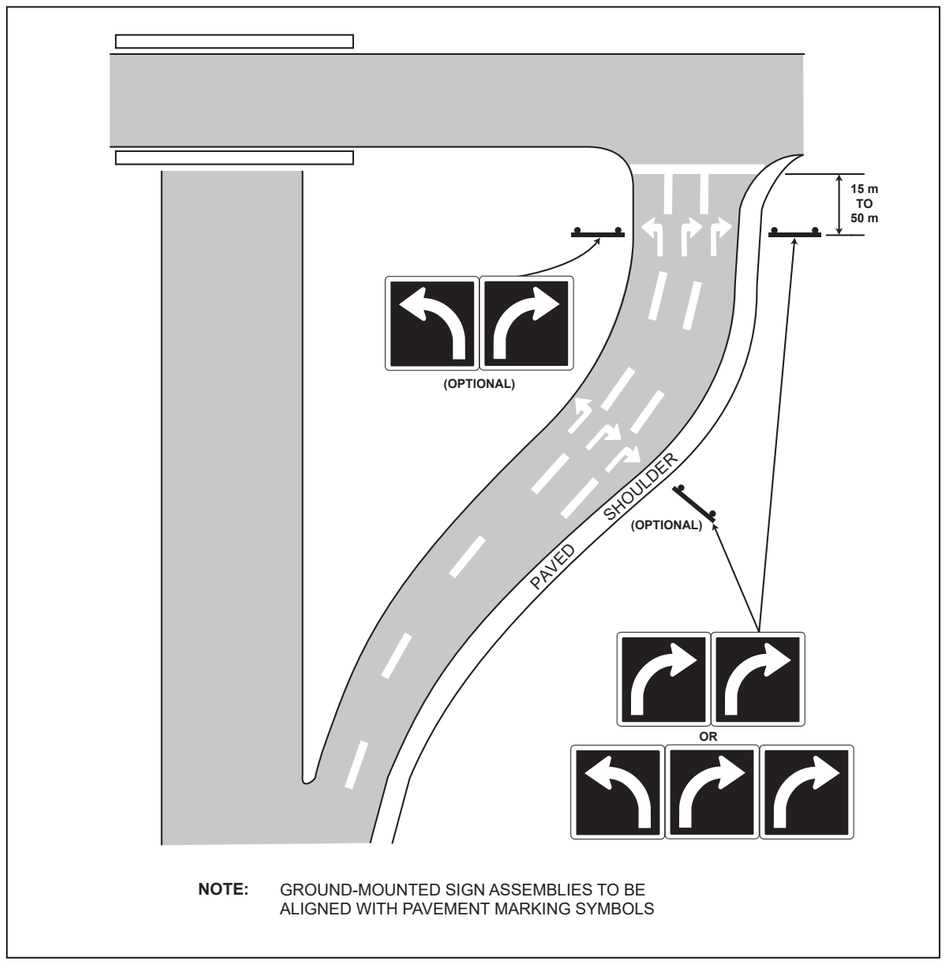


Figure 18 - Placement of Ground-mounted Turn Lane Designation Signs for Double Right Turns

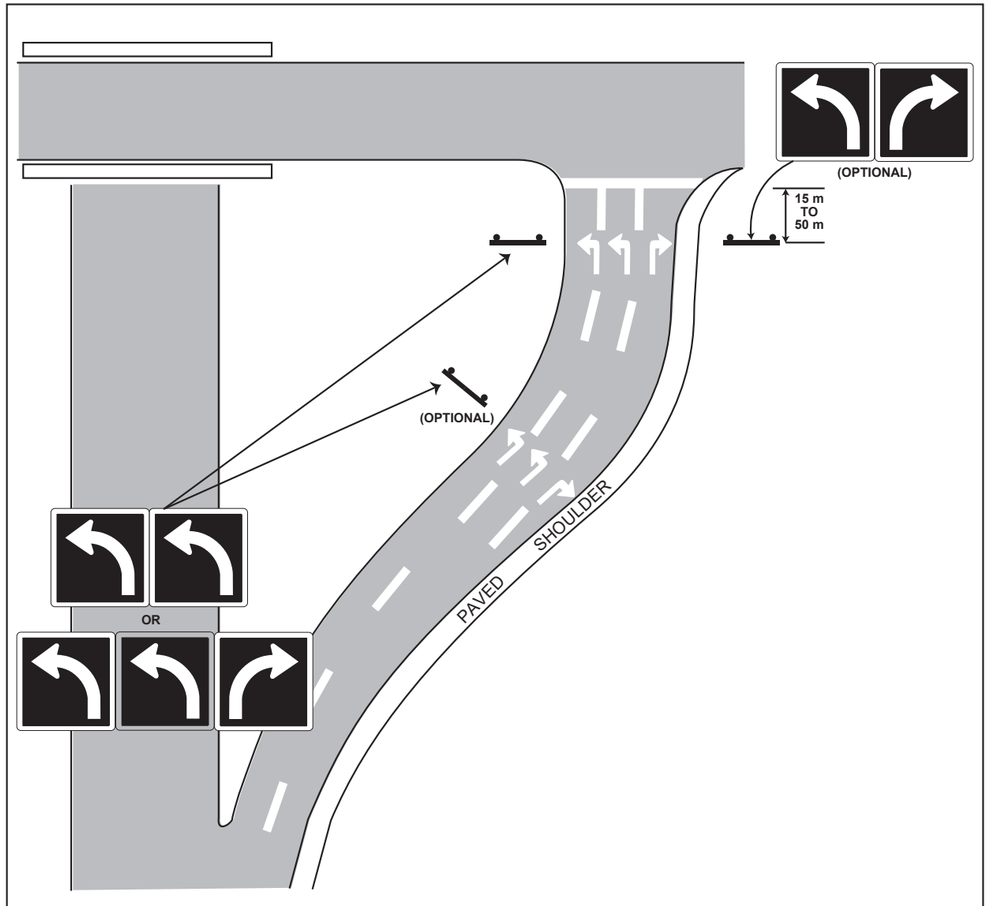


Figure 19 - Placement of Ground-mounted Turn Lane Designation Signs for Double Left Turns

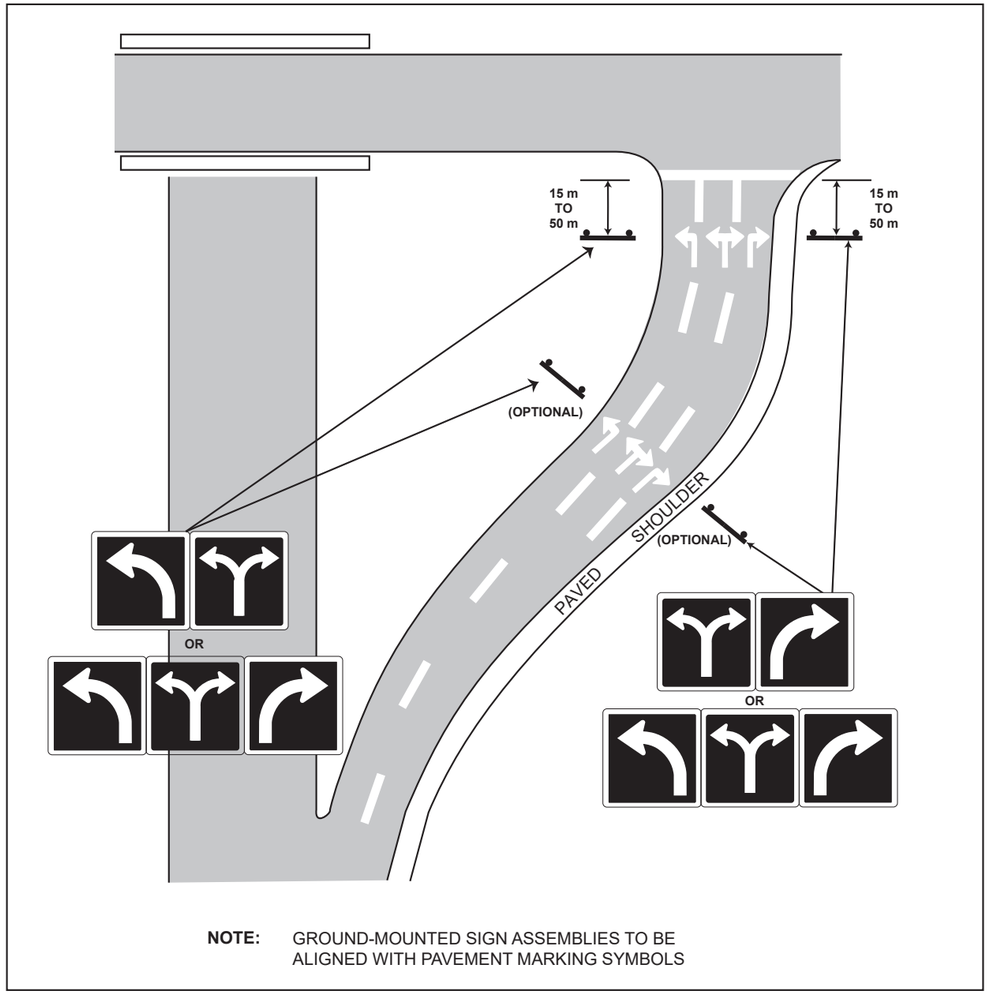


Figure 20 - Placement of Ground-mounted Turn Lane Designation Signs for Centre Lane Optional

TWO-WAY LEFT-TURN LANE Sign (Rb-48)

Rb-48	**900 mm x 900 mm**
Font	**N/A**
Colour	**Legend & Border – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

TWO-WAY LEFT-TURN LANE, CENTRE LANE ONLY Sign (Rb-48A)

Rb-48A	**900 mm x 1500 mm**
Font	**Helvetica Medium**
Colour	**Top Section of Sign:** **Legend - White Reflective** **Background & Border – Black** **Bottom Section of Sign:** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The TWO-WAY LEFT-TURN LANE sign specifically applies where one centre lane separates opposing traffic flows on multi-lane roadways, and where it is desirable to reserve the centre lane for left-turn movements in both directions. The sign may be used between intersections or other points along the roadway (e.g., side streets, shopping malls, driveways, etc.).

Sign Types

The **TWO-WAY LEFT-TURN LANE sign (Rb-48)** designates the centre lane on a road without a median for left-turn movements by traffic in both directions. The sign is intended for overhead mounting.

The **TWO-WAY LEFT-TURN LANE, CENTRE LANE ONLY sign (Rb-48A)** combines the symbolic legend of the **TWO-WAY LEFT-TURN LANE sign** with a text legend on one blank. The sign is intended for ground-mounting.

Guidelines for Use

In areas where driver exposure to two-way left-turn facilities is limited, TWO-WAY LEFT-TURN LANE signs should be mounted overhead. Ground-mounted Rb-48A signs may be used in urban areas where drivers are more familiar with this type of facility.

Signs should be mounted overhead on facilities with more than five lanes.

Within a continuous section of TWO-WAY LEFT-TURN LANE signs, the signs should either be all mounted overhead or all ground-mounted. To avoid driver confusion and support driver expectation, it is recommended that the mounting type be consistent throughout an area or network.

Pavement marking arrows must be used to supplement both overhead and ground-mounted TWO-WAY LEFT-TURN LANE signs (see OTM Book 11 (Pavement, Hazard, and Delineation Markings) for more details on pavement markings).

Location Criteria

With either version of the sign (TWO-WAY LEFT-TURN LANE sign or TWO-WAY LEFT-TURN LANE, CENTRE LANE ONLY sign), the first sign should be placed at the beginning of the designated centre left-turn lane, and subsequent signs should be placed downstream of all major intersections, and in between intersections at intervals of no more than 300 m.

The overhead TWO-WAY LEFT-TURN LANE sign should be mounted so that the bottom of the sign is from 4.5 m to 5.3 m above the roadway (see OTM Book 1B, Section 12.3, Vertical Mounting Offset). The sign should be centred over the two-way left-turn lane.

Legal Status

HTA, Sections 141, 152, 153 and 154.

HTA Ontario Regulation 615 (SIGNS).

The application of sign in municipalities requires legal approval by municipal by-laws.

Special Considerations

N/A

12. Managed Lanes

With the demand for transportation services in urban areas continually rising, managed lane projects are gaining popularity among road authorities as a potential congestion management tool. Managed lanes are a cost-effective intervention that help agencies play an active role in managing demand. Drivers are offered the choice of using a managed lane, with the potential benefit being a faster trip or more reliable travel time, while the potential cost being the inconvenience of carpooling or paying a toll or combination thereof.

Managed lane is a broad term that refers to any lane or corridor that controls usage by vehicle, eligibility, price, or access management. The types of managed lanes commonly seen are:

- **High Occupancy Vehicle (HOV) Lane**: a managed lane designated for exclusive use by vehicles with more than just the driver, most commonly two or more occupants (including driver) for all or part of the day. The objective of dedicated lanes for high occupancy vehicles is to discourage the use of private vehicles with one occupant, and encourage the use of public transit and carpools, to make better use of road facilities, alleviate congestion, increase safety, reduce energy consumption, and improve air quality. High Occupancy Vehicle (HOV) lanes provide high occupancy vehicles, such as buses and cars with two or more persons, with a dedicated uncongested or less congested lane on an otherwise congested facility;
- **High Occupancy Toll (HOT) Lane:** a type of managed lane that is available for use by either HOVs for free or at discounted rate or by single occupancy vehicles that must pay a toll for the use of the lane. Unlike toll roads, along corridors with HOT lanes, drivers have the choice of using the adjacent general-purpose lanes (GPL) which are free, although they may be more congested during peak hours, or using the HOT lanes depending on vehicle occupancy or willingness to pay. The regulatory signing requirements for HOT lanes are not currently covered in OTM Book 5 (Regulatory Signs);
- **Toll Lane**: a type of managed lane distinguished from HOT lanes by charging all vehicles, regardless of occupancy. Typically, the entire facility is governed by tolling. Highway 407 Express Toll Route (ETR) in Ontario is an example of this type of facility; and
- **Reserved Lane**: a type of managed lane which is restricted for use by specified vehicle types such as buses, bicycles, taxis, etc.

The regulatory signing requirements for managed lanes in Ontario are covered in this section as follows:

- The regulatory signing requirements for reserved lanes and HOV lanes on non-freeway facilities are covered in section: Non-Freeway Reserved Lane Signs.
- The regulatory signing requirements for HOV lanes on freeways are covered in section: Freeway HOV Lane Signs.
- The regulatory signing requirements for Toll Lanes such as Highway 407 ETR are included in a separate section.
- The regulatory signing requirements for HOT Lanes are not currently provided. These will be considered in future updates of OTM Book 5 (Regulatory Signs).

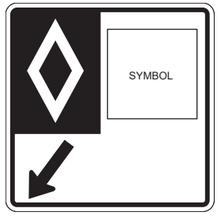
12.1 Non-Freeway Reserved Lane Signs

This section covers the regulatory signs for reserved lanes and HOV lanes on municipal roadways.

RESERVED BICYCLE LANE Sign (Overhead) (Rb-84)

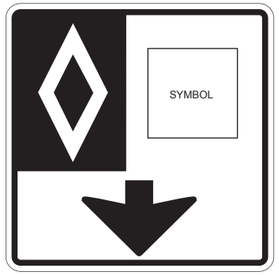
Rb-84	**600 mm x 600 mm** **900 mm x 900 mm**
Font	**N/A**
Colour	**Diamond Symbol – White Reflective** **Diamond Background – Black** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

RESERVED BICYCLE LANE SIGN (Ground-mounted) (Rb-84A)



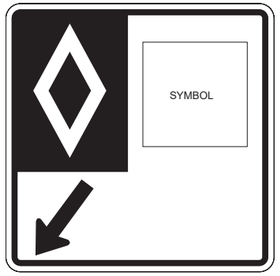
Rb-84A	**600 mm x 600 mm** **900 mm x 900 mm**
Font	**N/A**
Colour	**Diamond Symbol – White Reflective** **Diamond Background – Black** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

RESERVED LANE Sign (One Vehicle Class, Overhead, No Days and Times) (Rb-85)



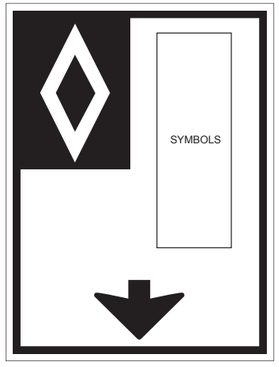
Rb-85	**900 mm x 900 mm**
Font	**N/A**
Colour	**Diamond Symbol – White Reflective** **Diamond Background – Black** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

RESERVED LANE SIGN (One Vehicle Class, Ground-mounted, No Days and Times) (Rb-85A)



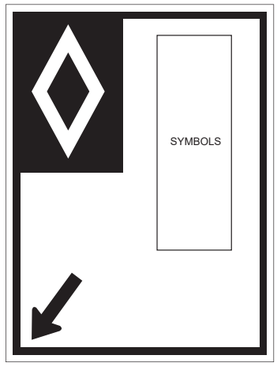
Rb-85A	**900 mm x 900 mm**
Font	**N/A**
Colour	**Diamond Symbol – White Reflective** **Diamond Background – Black** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

RESERVED LANE Sign (Multiple Vehicle Classes, Overhead, No Days and Times) (Rb-86)



Rb-86	**900 mm x 1200 mm**
Font	**N/A**
Colour	**Diamond Symbol – White Reflective** **Diamond Background – Black** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

RESERVED LANE Sign (Multiple Vehicle Classes, Ground-mounted, No Days and Times) (Rb-86A)



Rb-86A	**900 mm x 1200 mm**
Font	**N/A**
Colour	**Diamond Symbol – White Reflective** **Diamond Background –Black** **Legend & Border –Black** **Background –White Reflective**
Minimum Sheeting	**Type III or IV**

RESERVED LANE Sign (One or Multiple Vehicle Class(es), Overhead, Days and Times) (Rb-87)

Rb-87	**900 mm x 1500 mm**
Font	**FHWA Series D**
Colour	**Diamond Symbol – White Reflective** **Diamond Background – Black** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

RESERVED LANE Sign (One or Multiple Vehicle Class(es), Ground-mounted, Days and Times) (Rb-87A)

Rb-87A	**900 mm x 1500 mm**
Font	**FHWA Series D**
Colour	**Diamond Symbol – White Reflective** **Diamond Background – Black** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

3 OR MORE PERSONS Sign (Rb-88)

Rb-88	**600 mm x 900 mm**
Font	**FHWA Series D, E**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

ENDS Tab Sign (Rb-85t)

Rb-85t	**200 mm x 600 mm** **300 mm x 900 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – White Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of reserved lane signs is to designate specific lanes on the road exclusively for high occupancy and/or special use traffic. These vehicles can include buses, cars carrying at least three (in some cases, at least two) or more persons, taxis and bicycles. Reserved lane signs can be mounted overhead or ground-mounted. A reserved lane condition can be permanent, or can be in effect only during specified times of the day and/or days of the week.

Reserved lanes go beyond the concept of HOV lanes by allowing, in addition to high occupancy vehicles, other road users with specific needs which may conflict with the main stream of traffic. For example, taxis which make frequent stops in city traffic have unique requirements. Also, in areas where many people travel by bicycle, bicycles may be included in reserved lane use because of their vulnerability and slow speed relative to other traffic. Providing reserved lanes that include bicycles also has the impact of concentrating cyclists on those streets with reserved lanes and simplifying traffic flows on other streets in the vicinity.

Reserved lanes have a unique function within the set of regulatory signs and are therefore distinguished by a unique symbol: the outline of a diamond in reversed colours from the rest of the sign (that is, the main sign has a black legend on a white background, while the diamond symbol is white on a black background). Reserved lanes are therefore also referred to as diamond lanes.

Supplementary details on bicycle facilities are available in OTM Book 18 (Bicycle Facilities).

Sign Types

Reserved Bicycle Lane Signs

RESERVED BICYCLE LANE signs must be used to designate on-road lanes reserved exclusively for bicycles with no time-of-day conditions.

The **standard size (600 mm x 600 mm) RESERVED BICYCLE LANE sign (overhead) (Rb-84)** includes an arrow pointing straight down at the designated lane and is mounted overhead.

The **standard size (600 mm x 600 mm) RESERVED BICYCLE LANE sign (ground-mounted) (Rb-84A)** includes an arrow pointing diagonally down to the left, intended to be pointing to the lane for which it is to be installed and is ground-mounted.

The **oversize (900 mm x 900 mm) RESERVED BICYCLE LANE sign (Overhead) (Rb-84)** and **(Ground-mounted) (Rb-84A)** may be used at locations where prevailing traffic conditions warrant greater visibility or emphasis, e.g., in complex visual environments where many signs and other devices compete for driver attention, or at high traffic volume locations where drivers must concentrate more on the driving task.

Reserved Lane Signs for One or Multiple Vehicle Class(es)

The **RESERVED LANE signs for one or multiple vehicle class(es)** must be used to designate on-road facilities for one or more classes of vehicles, including (but not restricted to) buses, taxis, cars with three or more (or two or more) persons and/or bicycles.

The **RESERVED LANE sign (one vehicle class, overhead, no days and times) (Rb-85)** designates a reserved lane for one vehicle class. The sign includes an arrow pointing straight down at the designated lane and is mounted overhead. The reserved lane condition is in effect at all times.

The **RESERVED LANE sign (one vehicle class, ground-mounted, no days and times) (Rb-85A)** designates a reserved lane for one vehicle class. The sign includes an arrow pointing diagonally down to the left, intended to be pointing to the lane for which it is to be installed, and is ground-mounted. The reserved lane condition is in effect at all times.

The **RESERVED LANE sign (multiple vehicle classes, overhead, no days and times) (Rb-86)** designates a reserved lane for two or more vehicle classes. The sign includes an arrow pointing straight down at the designated lane and is mounted overhead. The reserved lane condition is in effect at all times.

The **RESERVED LANE sign (multiple vehicle classes, ground-mounted, no days and times) (Rb-86A)** designates a reserved lane for two or more vehicle classes. The sign includes an arrow pointing diagonally down to the left, intended to be pointing to the lane for which it is to be installed, and is ground-mounted. The reserved lane condition is in effect at all times.

The **RESERVED LANE sign (one or multiple vehicle class(es), overhead, days and times) (Rb-87)** designates a reserved lane for one or more vehicle classes. The sign includes an arrow pointing straight down at the designated lane and is mounted overhead. The reserved lane condition is in effect only during the days and times specified on the legend.

The **RESERVED LANE sign (one or multiple vehicle class(es), ground-mounted, days and times) (Rb-87A)** designates a reserved lane for one or more vehicle classes. The sign includes an arrow pointing diagonally down to the left, intended to be pointing to the lane for which it is to be installed, and is ground-mounted. The reserved lane condition is in effect only during the days and times specified on the legend.

Supplementary Reserved Lane Signs

The **standard size (200 mm x 600 mm) BEGINS tab sign (Rb-84t)** and **ENDS tab sign (Rb-85t)** must be attached below the first and last standard size (600 mm x 600 mm) RESERVED BICYCLE LANE signs in a reserved bicycle lane facility, or the first and last RESERVED LANE signs for single or multiple vehicle classes, to indicate the beginning and end of the facility, respectively.

The **oversize (300 mm x 900 mm) BEGINS tab sign** and **ENDS tab sign** must be attached below the first and last oversize RESERVED BICYCLE LANE signs in a reserved bicycle lane facility, and the first and last RESERVED LANE signs for single or multiple vehicle classes in a reserved lane facility, to indicate the beginning and end of the facility, respectively.

The **3 OR MORE PERSONS educational sign**, may be used with RESERVED LANE signs including the symbol for cars with three or more persons. (A variation of the sign can be used to address the specific requirements of a road authority). The sign assists initial comprehension of the symbol, which studies have shown may be poorly understood when first applied. The sign may be used where it has been determined that motorists are still unfamiliar with the meaning of the symbol. Motorist familiarity can be assessed according to factors such as observed lane use and presence of similar signs in the area.

Guidelines for Use

Reserved lane signing must be used where municipal by-law or regulation designates lanes for exclusive use by specific classes or types of vehicles, either permanently or during certain times of the day and/or days of the week.

Reserved lane signs may be either ground-mounted or placed overhead.

Reserved lane sign numbers having an "A" suffix are ground-mounted versions of the overhead signs with the corresponding numbers.

Ground-mounted signs may be used when the designated lane is adjacent to a curb, the opportunity to install signs is available and sufficient visibility is assured. Otherwise, overhead reserved lane signs should be used. Where a reserved lane or bicycle lane is on the left side of a one-way street, the ground-mounted sign design can be used, with the arrow pointing to the right and the rest of the sign design the same as the standard configuration.

Reserved lane signs should be used together with the corresponding pavement markings for diamond lanes. Details on pavement markings for reserved lanes are provided in OTM Book 11 (Pavement, Hazard, and Delineation Markings).

The RESERVED LANE sign (one or multiple vehicle class(es), overhead, days and times) and RESERVED LANE sign (one or multiple vehicle class(es), ground-mounted, days and times) must not be used if the bicycle symbol is the only vehicle class depicted. If this sign was used in this way, the sign would become a RESERVED BICYCLE LANE sign with time restrictions, which is not advisable because bicycle lanes typically have narrow lane widths, and are not suitable for other purposes such as parking or vehicular travel.

Location Criteria

On non-freeway reserved lane facilities, reserved lane signs must be installed as follows:

- At the beginning of the facility with the BEGINS tab sign;
- Immediately downstream of intersections; and
- At the end of the facility with the ENDS tab sign.

Additionally, on non-freeway reserved lane facilities, reserved lane signs should be installed throughout the full length of the facility at suggested intervals of 300 m or less.

If the 3 OR MORE PERSONS educational sign, or a variant, is used in the context of overhead RESERVED LANE signs, the sign should be mounted on the vertical support of the mounting arm for the overhead sign. If the 3 OR MORE PERSONS sign is used in the context of ground-mounted RESERVED LANE signs, the sign should be ground-mounted on its own support approximately midway between two ground-mounted RESERVED LANE signs.

Appropriate pavement markings should be installed in conjunction with reserved lane signing, enabling drivers to more clearly comprehend the restrictions imposed as per OTM Book 11 (Pavement, Hazard, and Delineation Markings).

Legal Status

HTA, Sections 154 and *155*.

Reserved lane signs must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

12.2 Freeway HOV Lane Signs

HOV – LANE 2 or MORE Sign (Ground-mounted) (HOV-1)

HOV-1	900 mm x 1500 mm
Font	FHWA Series C, F
Colour	Diamond Symbol – White Reflective Diamond Background - Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – LANE ELIGIBILITY Sign (Overhead) (HOV-2)

HOV-2	1525 mm x 1830 mm
Font	FHWA Series F
Colour	Diamond Symbol – White Reflective Diamond Background - Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – DO NOT CROSS LEFT Sign (Ground-mounted) (HOV-4aL)

HOV-4aL	900 mm x 1200 mm
Font	FHWA Series C
Colour	Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – DO NOT CROSS RIGHT Sign (Ground-mounted) (HOV-4aR)

HOV-4aR	900 mm x 1200 mm
Font	FHWA Series C
Colour	Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – DO NOT CROSS LEFT Sign (Overhead) (HOV-4L)

HOV-4L	1525 mm x 1525 mm
Font	FHWA Series D
Colour	Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

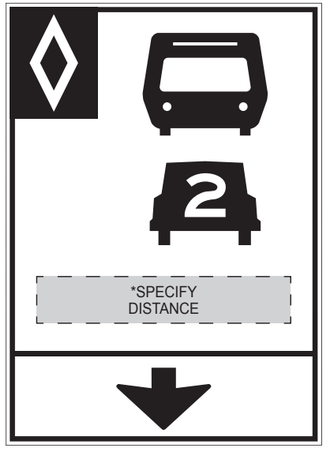
HOV – DO NOT CROSS RIGHT Sign (Overhead) (HOV-4R)

HOV-4R	1525 mm x 1525 mm
Font	FHWA Series D
Colour	Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – TAXI MOTORCYCLE GREEN PLATE PERMITTED Sign (Ground-mounted) (HOV-17)

HOV-17	900 mm x 1500 mm
Font	FHWA Series C Plate – Arial Bold
Colour	Symbol – White Reflective / Black / Green Diamond Background - Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – LANE CONVERSION AHEAD (with distance) Sign (Overhead) (HOV-6)

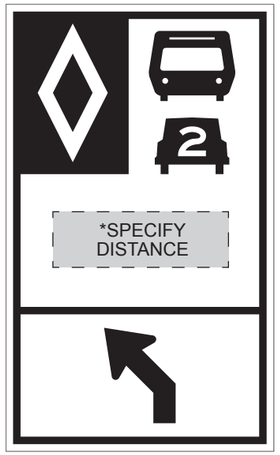


HOV-6	1525 mm x 2135 mm
Font	FHWA Series F
Colour	Diamond Symbol – White Reflective Diamond Background - Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – NEW LANE AHEAD 1 KM Sign (Overhead) (HOV-7)

HOV-7	1525 mm x 1830 mm
Font	FHWA Series F
Colour	Diamond Symbol – White Reflective Diamond Background - Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – NEW LANE AHEAD (with left arrow and distance) Sign (Ground-mounted) (HOV-13)



HOV-13	900 mm x 1500 mm
Font	FHWA Series E, F
Colour	Diamond Symbol – White Reflective Diamond Background - Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – LEFT LANE CONVERSION AHEAD (with distance) Sign (Ground-mounted) (HOV-15)

HOV-15	900 mm x 1500 mm
Font	FHWA Series C, E, F
Colour	Diamond Symbol – White Reflective Diamond Background - Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

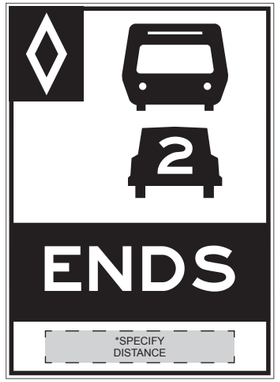
HOV – LANE BEGINS WITH ARROW Sign (Overhead) (HOV-11)

HOV-11	1525 mm x 2135 mm
Font	FHWA Series E, F
Colour	Diamond Symbol – White Reflective Diamond Background – Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – LANE BEGINS Sign (Ground-mounted) (HOV-16)

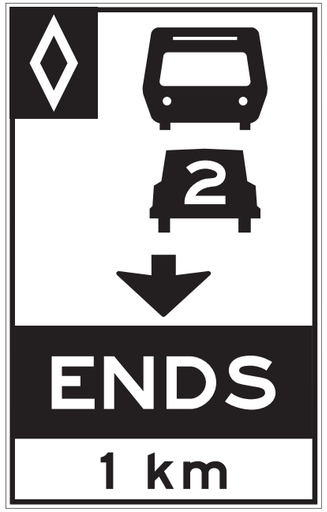
HOV-16	900 mm x 1080 mm (concrete barrier mounted) 1525 mm x 1830 mm
Font	FHWA Series E, F
Colour	Diamond Symbol – White Reflective Diamond Background – Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – LANE ENDS (with distance) Sign (Ground-mounted) (HOV-8)



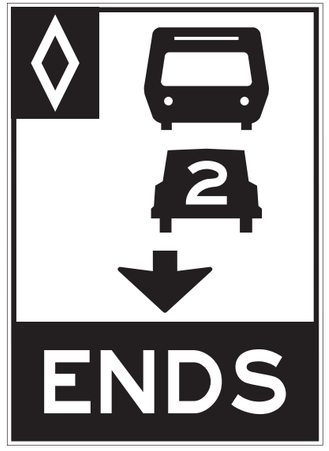
HOV-8	900 mm x 1500 mm (concrete barrier mounted) 1525 mm x 2135 mm
Font	FHWA Series F
Colour	Diamond Symbol – White Reflective Diamond Background - Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – LANE ENDS 1KM WITH ARROW Sign (Overhead) (HOV-9)



HOV-9	1525 mm x 2440 mm
Font	FHWA Series F
Colour	Diamond Symbol – White Reflective Diamond Background – Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – LANE ENDS WITH ARROW Sign (Overhead) (HOV-10)



HOV-10	1525 mm x 2135 mm
Font	FHWA Series F
Colour	Diamond Symbol – White Reflective Diamond Background - Black Legend & Border – Black Background - White Reflective
Minimum Sheeting	Type III or IV

HOV – LANE ENDS Sign (Ground-mounted) (HOV-12)

HOV-12	**900 mm x 1080 mm (Concrete Barrier mounted) 1525 mm x 1830 mm**
Font	**FHWA Series F**
Colour	**Diamond Symbol – White Reflective** **Diamond Background - Black** **Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

Freeway High Occupancy Vehicles (HOV) Lane Signs are used to identify specific lanes on a section of the freeway that have been designated for high occupancy vehicles (carrying at least two people including driver). Permitted vehicles include cars (with 2 or more persons), buses of all types, licensed taxis, motorcycles, and vehicles with green license plates. Other vehicles, for example, emergency vehicles, tow trucks and construction and maintenance vehicles are also permitted (as per Regulation 620/05).

The objective is to discourage the use of private vehicles carrying only one occupant, and encourage the use of public transit and carpools, to make better use of highway facilities, alleviate congestion, increase safety, reduce energy consumption and improve air quality.

In Ontario, the far left lane of some segments of some freeways are designated as HOV lanes. Freeway HOV Lanes are differentiated from the general-purpose lanes by pavement markings and supplemented by overhead and ground-mounted regulatory signs. The HOV lane is separated from the adjacent general-purpose lane by a painted buffer to limit access to the HOV lane at designated entry and exit points known as ingress/egress zones.

Details on pavement markings for HOV lanes are available in OTM Book 11 (Pavement, Hazard, and Delineation Markings).

Sign Types

The **HOV - LANE 2 OR MORE sign (HOV-1)** is placed on the left- and right-hand side of the freeway to help road users understand the qualifications required to use the HOV lane. This sign should be installed in advance of the start of an HOV lane, repeated after each freeway interchange. This sign is ground-mounted.

The **HOV - LANE ELIGIBILITY sign (HOV-2)** indicates vehicle eligibility and must be installed along the entire length of an HOV lane at a maximum spacing of 4 km between signs. This sign is mounted overhead.

The **HOV - DO NOT CROSS LEFT / RIGHT signs (HOV-4aL / HOV-4aR** and **HOV-4L / HOV-4R)** are placed on the left- and right- hand side of the freeway to notify motorists that crossing the buffer zone is prohibited. HOV-4aL / HOV-4aR are ground-mounted signs. HOV-4L / HOV-4R are overhead versions of HOV-4aL / HOV-4aR signs. These signs (either ground-mounted or overhead) must be provided along the entire length of the HOV lane.

The **HOV - TAXI MOTORCYCLE GREEN PLATE PERMITTED sign (HOV-17)** should be installed in advance of the start of an HOV lane and placed on the left- and right- hand side of the freeway to indicate that taxis, motorcycles, and vehicles with green license plates are permitted in the HOV lane. This sign is ground-mounted.

The **HOV - LANE CONVERSION AHEAD (with distance) sign (HOV–6)** should be used to notify motorists that the left general-purpose lane will become an HOV lane within the specified distance. This sign should be provided at 1 km and approximately 500 m in advance of the start of the HOV lane. This sign is mounted overhead.

The **HOV - LEFT LANE CONVERSION AHEAD (with distance) sign (HOV-15)** should be installed on the right-hand side of the freeway to notify motorists that the left general-purpose lane will become an HOV lane within the specified distance. This sign should be provided at 1 km and at approximately 500 m in advance of the start of the HOV lane. This sign is ground-mounted. Under temporary conditions while work is being undertaken to an HOV facility this sign can also be installed on the left-hand side.

The **HOV – NEW LANE AHEAD 1 KM sign (HOV-7)** should be used to notify motorists that in 1 km, an additional (new) lane will be added on the left of the existing general purpose lanes to serve as an HOV lane. This sign is mounted overhead.

The **HOV – NEW LANE AHEAD (with left arrow and distance) sign (HOV-13)** should be used to notify motorists that in the specified distance, an additional (new) lane will be added on the left of the existing general purpose lanes to serve as an HOV lane. This sign should be provided at 1 km and at approximately 500 m in advance of the start of the HOV lane. This sign should be installed on the right-hand side of the freeway, and on the left-hand side of the freeway where overhead HOV-7 signs are not used. This sign is ground-mounted.

The **HOV - LANE BEGINS WITH ARROW sign (HOV-11)** must be used to indicate the beginning of an HOV lane. This sign is mounted overhead. Under temporary conditions, while work is being undertaken to an HOV facility, the HOV – LANE BEGINS sign (HOV-16) can be used in place of the overhead sign.

The **HOV - LANE BEGINS sign (HOV-16)** must be used to indicate the beginning of an HOV lane.

This sign is ground-mounted on the left-hand side of the freeway and is only used under temporary conditions where there is a change to the commencement of the HOV lane and an overhead sign cannot be installed.

The **HOV - LANE ENDS (with distance) sign (HOV-8)** should be placed on the left-hand side of the freeway to notify motorists that the HOV lane will end and become a general purpose lane within the specified distance. This sign should be provided at 1 km in advance of the end of the HOV lane. An additional (optional) sign may be considered at approximately 500 m in advance of the end of the HOV lane. This sign is ground-mounted.

The **HOV - LANE ENDS 1 KM with ARROW sign (HOV-9)** should be used to notify motorists that the HOV lane will end in 1 km. This sign is mounted overhead.

The **HOV - LANE ENDS WITH ARROW sign (HOV-10)** must be installed on the left-hand side of the freeway and used to indicate the end of an HOV lane at the point where the lane becomes a general purpose lane. This sign is mounted overhead.

The **HOV - LANE ENDS sign (HOV-12)** must be installed on the left-hand side of the freeway and used to indicate the end of an HOV lane at the point where the lane becomes a general purpose lane. This sign has two versions, one for regular ground-mounted installation and the other for concrete barrier mounted applications.

Guidelines for Use

Freeway HOV Lane signs are used:

- In advance of the start of an HOV lane where the HOV lane has either been newly developed or where the left general purpose lane has been converted to an HOV lane;
- At the start of the HOV lane;
- Throughout the HOV facility and at ingress/egress zones;
- In advance of the end of the HOV lane; and
- At the end of the HOV lane.

Freeway HOV Lane signs must be used together with HOV pavement markings. Details on freeway HOV lane pavement markings are available in OTM Book 11 (Pavement, Hazard, and Delineation Markings).

Location Criteria

Most of the HOV lane related signs listed above are for specific points along an HOV facility (advance, beginning, end) as described under sign types. The HOV-1, HOV-2, and HOV-4 signs are to be repeated at various locations along the entire length of an HOV facility.

The sequencing and spacing of HOV lane signs are demonstrated in Figure 21 to Figure 24.

Figure 21 demonstrates the signs to be installed in advance of and at the beginning of an HOV facility where the left lane is converted from a GPL.

Figure 22 demonstrates the signs to be installed in advance of and at beginning of an HOV facility where a newly developed HOV lane has been added.

Figure 23 demonstrates the signs to be installed within the HOV facility and at Ingress/Egress zones.

Figure 24 demonstrates the signs to be installed in advance of and at the end of an HOV facility.

Legal Status

HTA, Section 154.1

HTA Ontario Regulation 620/05 (HIGH OCCUPANCY VEHICLE LANES).

Special Considerations

N/A

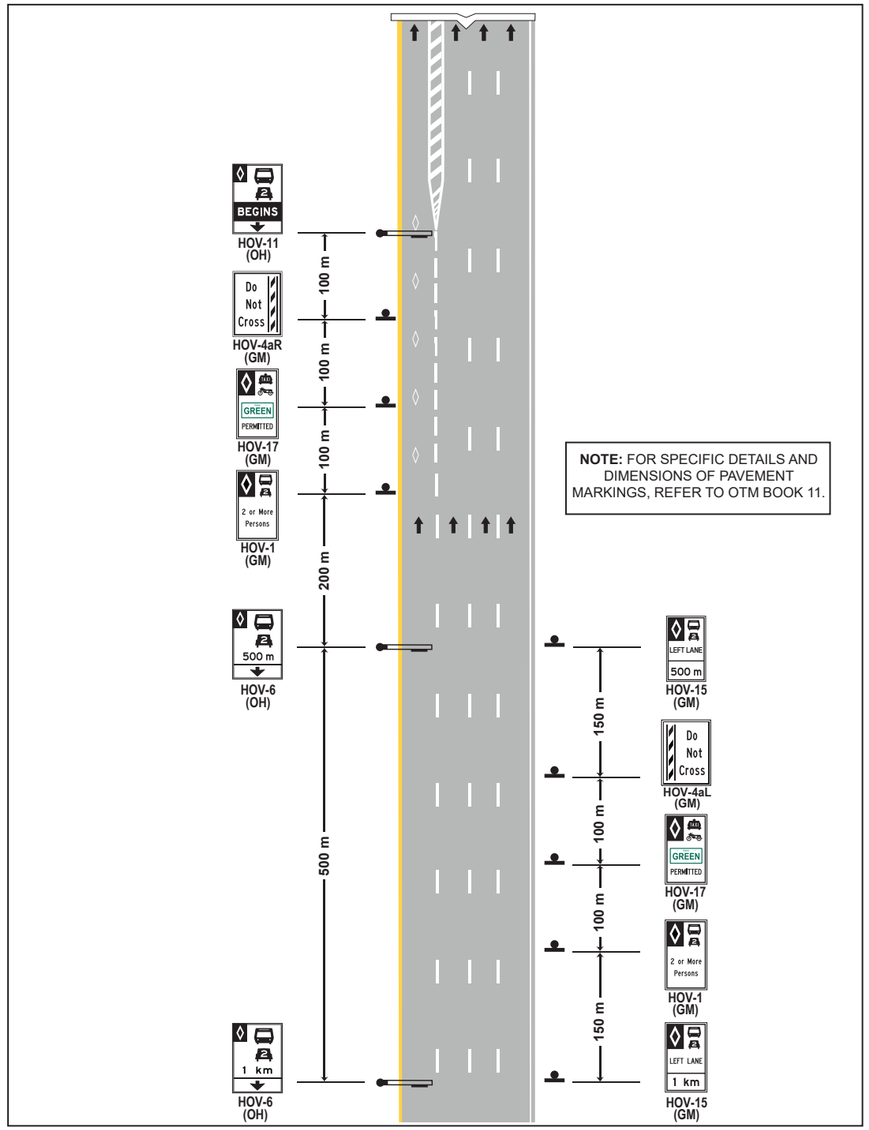


Figure 21 - Signing Requirements for Advance and Beginning of an HOV Lane Converted from a General Purpose Lane

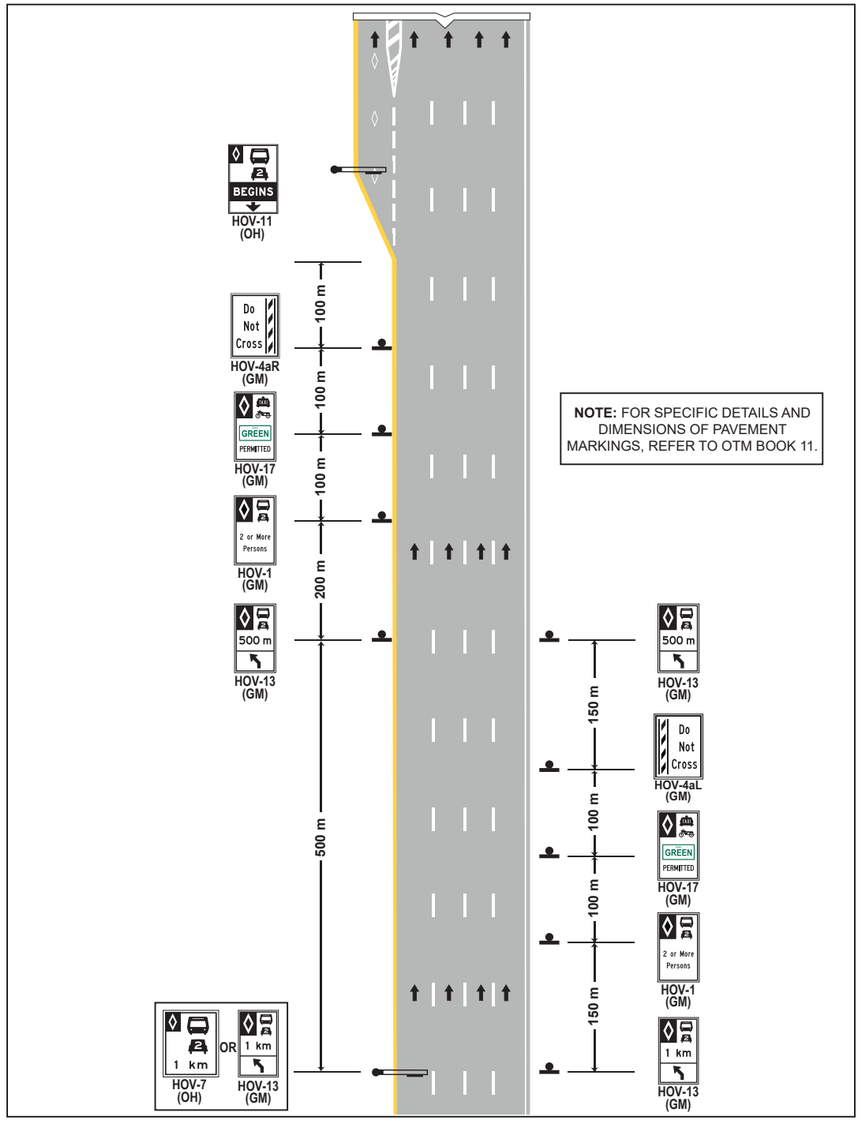


Figure 22 - Signing Requirements for Advance and Beginning of a New (Added) HOV Lane

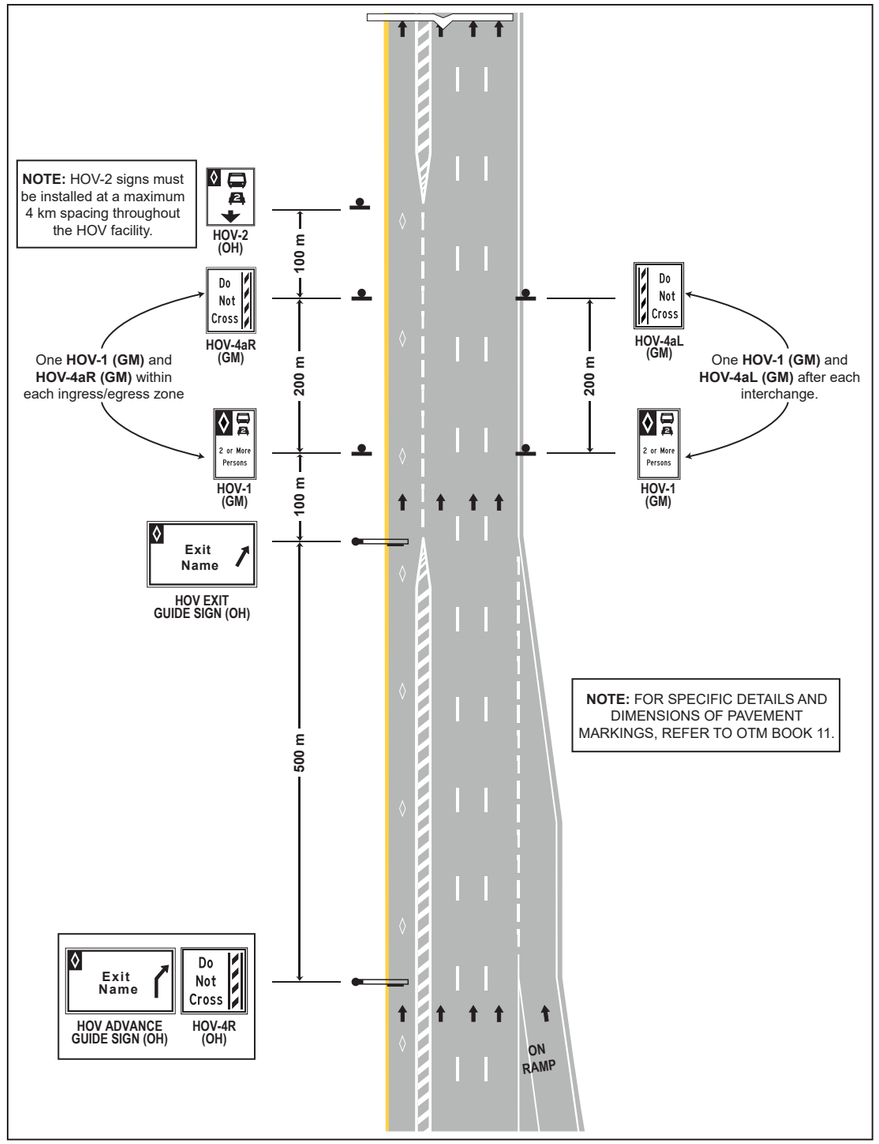


Figure 23 - Signing Requirements within HOV Facility and at Ingress/ Egress Zones

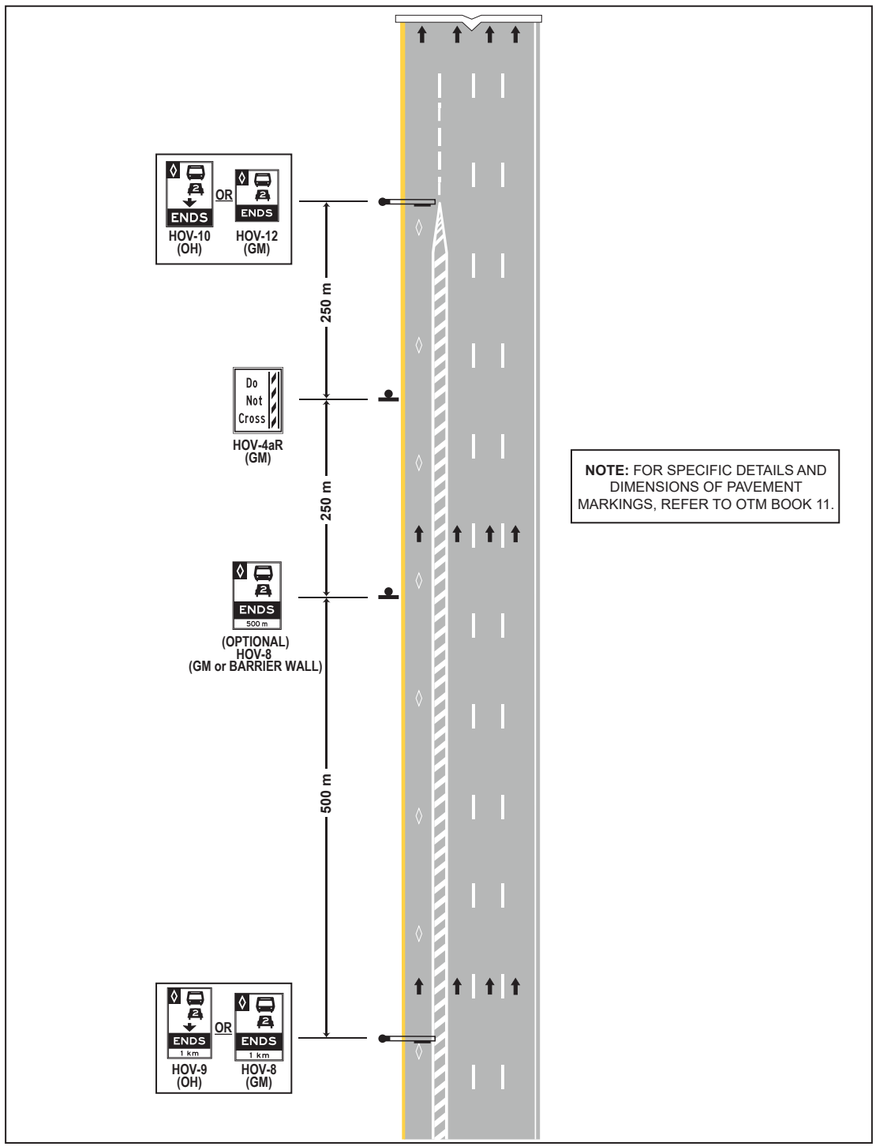


Figure 24 - Signing Requirements for End of an HOV Facility

13. Parking Control Signs

Parking control is necessary to support the rational utilization of curb lanes. The safe, unimpeded movement of traffic takes priority over curb-lane loading and unloading, which in turn takes priority over curb-lane parking.

Parking control has the following benefits:

- Prohibits parking, standing and stopping at selected locations in the curb lanes of busy thoroughfares improves traffic flow, especially at signalized intersections;
- Allocates designated curb space to bus stops or taxi zones, enables buses and taxis to manoeuvre more efficiently in and out of the traffic stream;
- Allocates designated curb space to emergency vehicles provides them with permanently available parking space close to essential equipment (e.g., fire hydrants);
- Allocates designated loading zone in a commercial or institutional pick-up/ drop-off area for the specific purpose of loading or unloading goods;
- Restricts the times when parking, standing and stopping are permitted increases roadway capacity and reduces congestion when most required, e.g., during peak periods;
- Where demand for on-street parking exceeds the supply, limits the duration of parking provides a more equitable distribution of parking space;
- Allocates designated parking space to persons with disabilities enables them close access to common destinations;
- Enhances road safety by increasing the visibility of pedestrians waiting to cross; and
- Enhances road safety for vehicular traffic by eliminating the risk of collisions involving vehicles manoeuvring in and out of the curb-lane parking.

Standing and stopping are different than parking. Standing refers to the presence of a stationary vehicle in the curb lane, for the purpose of picking up or dropping off passengers. The driver does not have to be in the vehicle during this procedure. Where there is a ‘No Standing’ regulation in effect, motorists are legally permitted to stop their vehicles to receive and discharge passengers, but not goods or materials.

Stopping refers to a driver stopping a vehicle in the curb lane for any reason, except when legally required to do so, for example at a STOP sign. Where there is a ‘No Stopping’ regulation in effect, motorists are not permitted to stop for any reason except to avoid conflict with other traffic or in compliance with the directions of a police officer or of a traffic control sign or signal.

The prohibition of stopping and/or standing at the curb during peak periods improves the ability of public streets to accommodate peak traffic volumes.

Significant improvements can be made in the flow of traffic through signalized intersections by the selective prohibition of stopping or standing.

Parking control signs in this section are covered under three categories:

- General Parking Control Signs;
- Loading Zone Signs; and
- Accessible Parking Control Exemption Signs.

13.1 General Parking Control Signs

NO PARKING Sign (Rb-51)

Rb-51	**300 mm x 300 mm** **600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type I**

NO PARKING Sign (With Days) (Rb-51A)

Rb-51A	**300 mm x 300 mm** **600 mm x 600 mm**
Font	**FHWA Series C**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type I**

NO PARKING Sign (With Days and Times) (Rb-52)

Rb-52	**300 mm x 450 mm** **600 mm x 900 mm**
Font	**FHWA Series C**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black**
Minimum Sheeting	**Type I**

NO PARKING, SNOW ROUTE Sign (Rb-57)

Rb-57	300 mm x 450 mm 600 mm x 900 mm
Font	FHWA Series C
Colour	Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type I

NO PARKING, EMERGENCY PARKING ONLY Sign (Rb-58)

Rb-58	600 mm x 900 mm
Font	FHWA Series D
Colour	Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type I

PARKING RESTRICTED Sign (With Days, Times and Duration) (Rb-53)

Rb-53	300 mm x 450 mm 600 mm x 900 mm
Font	FHWA Series C
Colour	Permissive Symbol – Green Reflective Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type I

NO STANDING Sign (Rb-54)

Rb-54	300 mm x 300 mm 600 mm x 600 mm
Font	FHWA Series C
Colour	“NO STANDING” Legend – Red Reflective Rest of Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type I

NO STANDING Sign (With Days and Times) (Rb-54A)

Rb-54A	300 mm x 450 mm 600 mm x 900 mm
Font	FHWA Series C
Colour	“NO STANDING” Legend – Red Reflective Rest of Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type I

NO STOPPING Sign (Rb-55)

Rb-55	300 mm x 300 mm 600 mm x 600 mm
Font	N/A
Colour	Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective
Minimum Sheeting	Type I

NO STOPPING Sign (With Days) (Rb-55A)

Rb-55A	**300 mm x 300 mm** **600 mm x 600 mm**
Font	**FHWA Series C**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type I**

NO STOPPING Sign (With Days and Times) (Rb-56)

Rb-56	**300 mm x 450 mm** **600 mm x 900 mm**
Font	**FHWA Series C**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type I**

Purpose and Background

The purpose of general parking control signs is to restrict parking, standing or stopping of vehicles at specified locations, to realize the benefits of parking control outlined above. General parking control signs may limit the prohibition to specified days, specified times, and/or specified durations.

General parking control signs cover the following four functions:

- Parking prohibitions;
- Parking duration restrictions;
- Stopping prohibitions; and
- Standing prohibitions.

Sign Types

Parking Prohibition Signs

The **NO PARKING sign (Rb-51**) must be used where parking is prohibited at all times.

The **NO PARKING sign (with days) (Rb-51A)** must be used where parking is prohibited 24 hours a day on specified days.

The **NO PARKING sign (with days and times) (Rb-52)** must be used where parking is prohibited at specified times on specified days.

The above-mentioned NO PARKING SIGNS (Rb-51, Rb-51A and Rb-52) are available in two sizes.

The **standard size (300 mm x 300 mm) sign** should be used where posted speed is 60 km/h or less.

The **oversize (600 mm x 600 mm) sign** should be used where posted speed is 70 km/h or greater.

The **NO PARKING, SNOW ROUTE sign (Rb-57)** must be used to prohibit parking on designated routes for purposes of snow cleaning in accordance with municipal by-law conditions. Where parking prohibitions on snow routes are required, **the standard size (300 mm x 450 mm) NO PARKING, SNOW ROUTE sign** should be used where posted speed is 60 km/h or less and **the oversize (600 mm x 900 mm) NO PARKING, SNOW ROUTE sign** should be used where posted speed is 70 km/h or greater.

The **NO PARKING, EMERGENCY PARKING ONLY sign (Rb-58)** must be used to prohibit parking, except for emergency purposes, on the shoulders of freeways downstream of all interchanges.

Emergency purposes include use by emergency vehicles (e.g., Police, Fire, Ambulance) and vehicles involved in freeway collisions and incidents. The sign may also be used in exceptional situations on other highways at designated locations, or on municipal streets where supported by municipal by-law.

Parking Duration Restriction Signs

The **PARKING RESTRICTED sign (with days, times and duration) (Rb-53)** must be used in areas where the parking period is restricted to the specified duration (e.g., 30 minutes), at specified times on specified days. The **standard size (300 mm x 450 mm) PARKING RESTRICTED sign (with days, times and duration)** should be used where posted speed is 60 km/h or less and **the oversize (600 mm x 900 mm) PARKING RESTRICTED sign (with days, times and duration)** should be used where posted speed is 70 km/h or greater.

Standing Prohibition Signs

The **NO STANDING sign (Rb-54)** must be used where standing is prohibited at all times. The **standard size (300 mm x 450 mm) NO STANDING sign** should be used where posted speed is 60 km/h or less and **the oversize (600 mm x 900 mm) NO STANDING sign** should be used where posted speed is 70 km/h or greater.

The **NO STANDING sign (with days and times) (Rb-54A)** must be used where standing is prohibited at specified times on specified days. The **standard size (300 mm x 450 mm) NO STANDING sign (with days and times)** should be used where posted speed is 60 km/h or less and **the oversize (600 mm x 900 mm) NO STANDING sign (with days and times)** should be used where posted speed is 70 km/h or greater.

Stopping Prohibition Signs

The **NO STOPPING sign (Rb-55)** must be used where stopping is prohibited at all times. The **standard size (300 mm x 300 mm) NO STOPPING sign** should be used where posted speed is 60 km/h or less and **the oversize (600 mm x 600 mm) NO STOPPING sign** should be used where posted speed is 70 km/h or greater.

The **NO STOPPING sign (with days) (Rb-55A)** must be used where stopping is prohibited 24 hours a day on specified

days. The s**tandard size (300 mm x 300 mm) NO STOPPING sign (with days)** should be used where posted speed is 60 km/h or less and **the oversize (600 mm x 600 mm) NO STOPPING sign (with days)** should be used where posted speed is 70 km/h or greater.

The **NO STOPPING sign (with days and times) (Rb-56)** must be used where stopping is prohibited at specified times on specified days. The **standard size (300 mm x 450 mm) NO STOPPING sign (with days and times)** should be used where posted speed is 60 km/h or less and **oversize (600 mm x 900 mm) NO STOPPING sign (with days and times)** should be used where posted speed is 70 km/h or greater.

Guidelines for Use

Parking Control Legends

Parking prohibition and stopping prohibition signs must use the interdictory symbol. Parking duration restriction signs, on the other hand, must use the permissive symbol, which expresses the duration limit more directly than a sign based on the interdictory concept could.

Short arrows pointing outward to the right and/or left at the bottom of some general parking control signs indicate the direction(s) in which the regulation applies.

General parking control signs should display as much of the following information as applicable, from the top to the bottom of the sign, in the order listed below:

(1) Prohibition or restriction (symbol and/or text);

(2) Duration of restriction (text);

(3) Time period (other than 24 hours a day) when prohibition or restriction applies (text);

(4) Days of week (other than seven days a week) when prohibition or restriction applies (text); and/or

(5) Direction(s) in which prohibition or restriction is applicable (arrows).

Days, Times and Durations

The days of the week for which parking control regulations apply must be shown as standard abbreviations specified in Table 2. English abbreviations are used unless the sign is in a designated bilingual area (see OTM Book 1). If no days are specified, the parking control regulation must be in effect seven days a week.

The time period(s) specified indicate when the parking control regulation applies. The preferred format for time periods is in full hours of the clock, e.g., 7 AM – 9 AM or 9 AM – 6 PM. If no times are specified, the parking control regulation must be in effect 24 hours a day on the applicable days.

Within the series of general parking control signs that apply only at specific times, the times should be consistently shown in the same position on the sign. If, on some signs in the series, one of the time periods does not apply, blank space should be left in the position where that time period would normally appear.

This convention assists motorists in determining from a distance the times during which a parking control regulation applies.

Table 2 – Standard Abbreviations for Days of Week

English		French	
Saturday	SAT	SAM	Samedi
Sunday	SUN	DIM	Dimanche
Monday	MON	LUN	Lundi
Tuesday	TUE	MAR	Mardi
Wednesday	WED	MER	Mercredi
Thursday	THU	JEU	Jeudi
Friday	FRI	VEN	Vendredi

Time limits on parking duration restriction signs must be specified as follows:

- When less than one hour, the duration must be shown in minutes, e.g., 15 minutes instead of 1 / 4 hour; and
- The duration must be specified in numerals together with the metric abbreviation for minutes or hours, e.g., 15 min, 30 min, 1 h, 2 h.

Location Criteria

The following location criteria apply to general parking control signs:

(1) Signs must be placed at the upstream and downstream limits of a parking control area, with single arrows pointing in the direction in which the regulation applies;

(2) Signs must be placed at intermediate points throughout the parking control area, with two arrows indicating that the regulation applies in each direction;

(3) A parking control regulation which applies in a given direction must terminate at an intersection with a cross street or highway or at another parking control sign. If a sign is used to terminate the regulation, a sign with one arrow must be used to indicate the termination;

(4) Signs should be installed at an angle of 30 to 45 degrees to the flow of traffic, and should always be visible to approaching traffic;

(5) In rural areas, signs should be spaced at 150 m or less;

(6) In urban areas and in business areas, signs should be spaced at 50 m or less; and

(7) If two signs are placed on the same post, the more restrictive regulation should be posted on top.

The following location criteria apply to the NO PARKING, EMERGENCY PARKING ONLY sign:

(1) The sign must be installed on freeways downstream of each interchange. If a SLOWER TRAFFIC KEEP RIGHT sign (Rb-34) is posted in this area, the NO PARKING, EMERGENCY PARKING ONLY sign must be installed approximately 150 m beyond it. Otherwise, the

NO PARKING, EMERGENCY PARKING ONLY must be installed approximately 150 m beyond the MAXIMUM SPEED sign (Rb-1, Rb-1A, Rb-84t, Rb-2, Rb-3, Rb-7t).

(2) If the distance between interchanges is greater than 8 km, additional signs must be placed so that the maximum sign spacing is 8 km.

Legal Status

HTA, Section 170.

HTA Ontario Regulation 604 (PARKING).

HTA Ontario Regulation 605 (PARKING OF VEHICLES IN TERRITORY WITHOUT MUNICIPAL ORGANIZATION).

HTA Ontario Regulation 615 (SIGNS).

HTA Ontario Regulation 622 (STOPPING OF VEHICLES ON PARTS OF THE KING'S HIGHWAY).

Municipal by-laws consistent with the provisions of the HTA may be enacted by the proper authorities for the control of parking, standing or stopping of vehicles.

Special Considerations

N/A

13.2 Loading Zone Signs

LOADING ZONE - COMMERCIAL VEHICLES Sign (Rb-122A)

Rb-122A	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Interdictory Symbol – Red Reflective** **Legend, Other Symbols & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type I**

LOADING ZONE – GENERAL VEHICLES Sign (Rb-122B)

Rb-122B	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Interdictory Symbol – Red Reflective** **Legend, Other Symbols & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type I**

Purpose and Background

The purpose of loading zone signs is to advise drivers of the parking regulations that apply to a section of street and what type of loading activities may take place in the designated zone.

The signs indicate that parking is prohibited in the direction(s) indicated by the arrow, except for the specific purpose of loading or delivery activities.

Sign Types

The **LOADING ZONE - COMMERCIAL VEHICLES sign (Rb-122A)** should be used where parking is prohibited in the direction indicated by the arrow(s), except for the specific purpose of loading or delivery activities by commercial vehicles.

The **LOADING ZONE – GENERAL VEHICLES sign (Rb-122B)** should be used where parking is prohibited in the direction(s) indicated by the arrow, except for the specific purpose of loading or delivery activities by private or commercial vehicles.

Guidelines for Use

The LOADING ZONE - COMMERCIAL VEHICLES sign is used in a commercial pick-up/drop-off area near a commercial facility where commercial vehicles need to park for the specific purpose of loading or unloading goods. Arrows pointing outward to the right and/or left at the bottom of signs indicate the direction(s) for which the regulation applies.

The LOADING ZONE – GENERAL VEHICLES sign is used in a pick-up/drop-off area near a commercial or institutional facility where vehicles need to park for the specific purpose of loading or unloading goods. Arrows pointing outward to the right and/or left at the bottom of signs indicate the direction(s) for which the regulation applies.

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Location criteria

The following location criteria apply to both categories of loading zone signs:

- Signs must be placed at the upstream and downstream limits of the loading zone area, with single arrows pointing in the direction in which the regulation applies;
- For loading zone areas exceeding 60 m in length, additional signs should be placed at intermediate points at intervals no more than 45 m, throughout the length of the loading zone, with two arrows indicating that the regulation applies in each direction;
- A loading zone sign must terminate at an intersection with a cross street or highway or at another parking/stopping sign. A sign with one arrow must be used to indicate the termination; and
- Signs should be installed at an angle of 30 to 45 degrees to the flow of traffic and should always be visible to approaching traffic.

Legal Status

No HTA reference.

Sign is enforceable in municipalities by municipal by-law.

Special Considerations

A municipality may use loading zone signs based on a municipal by-law. These signs are not used on provincial highways.

13.3 Accessible Parking Control Exemption Signs

ACCESSIBLE PARKING PERMIT Sign (Rb-93)

Rb-93	**300 mm x 450 mm**
Font	**Helvetica Bold Condensed**
Colour	**Interdictory Symbol – Red Reflective** **Symbol of Access and Symbol Border – Blue Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type I**

ACCESSIBLE STANDING EXEMPTION Sign (Rb-94)

Rb-94	**300 mm x 600 mm**
Font	**Helvetica Bold Condensed**
Colour	**“NO STANDING” Legend – Red Reflective** **Symbol of Access and SymbolBorder – Blue Reflective** **Rest of Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type I**

ACCESSIBLE STOPPING EXEMPTION Sign (Rb-95)

Rb-95	**300 mm x 750 mm**
Font	**Helvetica Bold Condensed**
Colour	**Interdictory Symbol – Red Reflective** **Symbol of Access and Symbol Border – Blue Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type I**

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VAN ACCESSIBLE Tab (Rb-93t)

Rb-93t	**150 mm x 300 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type I**

Purpose and Background

Typically, demand for parking is highest closest to common destinations such as shops, medical centres and cinemas. To ensure that persons with disabilities can access these facilities by vehicle, parking spaces need to be reserved for them. Accessible parking control exemption signs fulfill this function by prohibiting all vehicles, except those used by persons with disabilities, from parking in designated spaces. Vehicles using the reserved parking spaces must display a valid Accessible Persons Parking Permit.

Sign Types

The **ACCESSIBLE PARKING PERMIT sign (Rb-93)** must be used to exempt vehicles displaying a valid an Accessible Persons Parking Permit from parking prohibitions at designated parking spaces, thereby providing parking specifically for use by disabled persons.

The **ACCESSIBLE STANDING EXEMPTION sign (Rb-94)** must be used to exempt vehicles displaying a valid Accessible Persons Parking Permit from standing prohibitions.

The **ACCESSIBLE STOPPING EXEMPTION sign (Rb-95)** must be used to exempt vehicles displaying a valid Accessible Persons Parking Permit from stopping prohibitions.

The **VAN ACCESSIBLE tab (Rb-93t)** may be used with Accessible Parking, Standing or Stopping signs. It indicates that the accessible parking space is large enough to accommodate vans.

Guidelines for Use

Accessible parking control exemption signs may be reinforced, but not replaced, by pavement markings.

When multiple parking stalls, either parallel or perpendicular parking, are to be designated with the ACCESSIBLE PARKING PERMIT Sign, each and every parking stall must have an individual sign.

When the spaces are large enough to accommodate a van and free of encumbrances that might interfere with loading of a van for persons with disabilities, the VAN ACCESSIBLE tab may be added below the parking regulation sign.

Location Criteria

For parallel parking stalls:

- The ACCESSIBLE PARKING PERMIT sign must be placed adjacent to the stall within its longitudinal limits;
- The sign placement must indicate which stall the sign applies to;
- The sign must not interfere with passengers entering or leaving the vehicle; and
- The sign should be mounted at a height of 2 m to 3 m, measured from the top of the curb to the bottom of the sign.
- If used, the VAN ACCESSIBLE tab should be installed below each parking space that is compatible.

For angle parking or parking perpendicular to the roadway:

- The ACCESSIBLE PARKING PERMIT sign must be placed at the side of the road, midway between the lateral limits of the stall; and
- The sign should be mounted at a height of 1.5 m to 2.5 m, measured from the top of the curb to the bottom of the sign.
- If used, the VAN ACCESSIBLE tab should be installed below each parking space that is compatible.

Legal Status

HTA Ontario Regulation 581 (ACCESSIBLE PARKING FOR PERSONS WITH DISABILITIES).

Signs are also enforceable in municipalities by municipal by-law.

Special Considerations

N/A

13.4 Electric Vehicle Parking Control Signs

NO PARKING – EXCEPT WHILE CHARGING Sign (Rb-130)

Rb-130	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black, Red Reflective, Blue Reflective** **Background – White Reflective**
Minimum Sheeting	**Type I**

Purpose and Background

The NO PARKING – EXCEPT WHILE CHARGING sign is used to identify parking spaces equipped with electric vehicle (EV) charging stations where all vehicles, except electric vehicles connected to the charging station, are prohibited from parking.

Sign Types

There is one type of **NO PARKING – EXCEPT WHILE CHARGING Sign (Rb-130).**

Guidelines for Use

The NO PARKING – EXCEPT WHILE CHARGING sign can be used at publicly- or privately-owned EV parking spaces.

This sign is used by business owners and/or operators or road authorities to identify an EV charging station parking space that can only be used by an electric vehicle that is connected to the charging station.

Location Criteria

Regardless of the number of stalls equipped with EV charging stations, a NO PARKING – EXCEPT WHILE CHARGING sign must be installed at each parking stall where a business owner and/or operator or road authority would like to reserve the parking space(s) exclusively for EV charging.

Legal Status

HTA, Subsection 30.2

HTA Ontario Regulation 615 (SIGNS)

Special Considerations

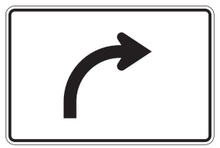
N/A

14. Movement Permitted Tab Signs

MOVEMENTS PERMITTED Tab (Left) Sign (Rb-61tL)

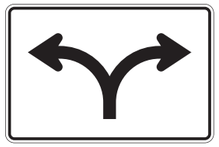
Rb-61tL	**450 mm x 600 mm** **600 mm x 900 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background - White**
Minimum Sheeting	**Type III or IV**

MOVEMENTS PERMITTED Tab (Right) Sign (Rb-61tR)



Rb-61tR	**450 mm x 600 mm** **600 mm x 900 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background - White**
Minimum Sheeting	**Type III or IV**

MOVEMENTS PERMITTED Tab (Left, Right) Sign (Rb-61tLR)



Rb-61tLR	**450 mm x 600 mm** **600 mm x 900 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background - White**
Minimum Sheeting	**Type III or IV**

MOVEMENTS PERMITTED Tab (Through) Sign (Rb-61tT)

Rb-61tT	**450 mm x 600 mm** **600 mm x 900 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background - White**
Minimum Sheeting	**Type III or IV**

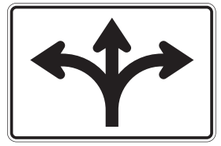
MOVEMENTS PERMITTED Tab (Through, Left) Sign (Rb-61tTL)

Rb-61tTL	**450 mm x 600 mm** **600 mm x 900 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background - White**
Minimum Sheeting	**Type III or IV**

MOVEMENTS PERMITTED Tab (Through, Right) Sign (Rb-61tTR)

Rb-61tTR	**450 mm x 600 mm** **600 mm x 900 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background - White**
Minimum Sheeting	**Type III or IV**

MOVEMENTS PERMITTED Tab (Through, Left, Right) Sign (Rb-61tTLR)



Rb-61tTLR	**450 mm x 600 mm** **600 mm x 900 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background - White**
Minimum Sheeting	**Type III or IV**

Purpose and Background

Movements Permitted tab signs, consisting of single or multiple arrow symbols, are appended to specific vehicle class control signs to indicate the permitted turning movements on the approach to an intersection for the specific vehicle type.

Sign Types

The **MOVEMENTS PERMITTED tab (LEFT) sign (Rb-61tL)** requires that the vehicle turn to the left.

The **MOVEMENTS PERMITTED tab (RIGHT) sign (Rb-61tR)** requires that the vehicle turn to the right.

The **MOVEMENTS PERMITTED tab (LEFT, RIGHT) sign (Rb-61tLR)** requires that the vehicle turn to the left or the right.

The **MOVEMENTS PERMITTED tab (THROUGH) sign (Rb-61tT)** requires that the vehicle proceed straight through.

The **MOVEMENTS PERMITTED tab (THROUGH, LEFT) sign (Rb-61tTL)** requires that the vehicle turn to the left or proceed straight through.

The **MOVEMENTS PERMITTED tab (THROUGH, LEFT, RIGHT) sign (Rb-61tTLR)** allows the vehicle to proceed straight through or turn to the left or to the right.

The **MOVEMENTS PERMITTED tab (THROUGH, RIGHT) sign (Rb-61tTR)** requires that the vehicle proceed straight through or turn to the right.

Movements Permitted tab signs are available in two sizes. The **standard size (450 mm x 600 mm)** and **oversize (600 mm x 900 mm)**. The size used will depend upon the size of sign to which a MOVEMENT PERMITTED tab sign will be appended. The appended tab sign must have the same horizontal dimension as the main sign.

Guidelines for Use

When the movement requirement applies to a particular vehicle class, such as the TRUCK ROUTE sign (Rb-61), DANGEROUS GOODS ROUTE sign (Rb-82), BICYCLE PERMITTED sign (Rb-69), and SNOWMOBILE ROUTE sign (Rb-64), the appropriate MOVEMENTS PERMITTED tab sign must be appended to the vehicle class sign to indicate the permitted movement(s) to access designated routes. By implication, movements not indicated on the tab sign are not permitted by regulation.

Location Criteria

The MOVEMENTS PERMITTED tab sign should only be appended to specific vehicle class control signs as noted in the ‘Guidelines for Use’ section. The sign does not have its own location criteria.

Legal Status

No HTA reference.

Special Considerations

N/A

15. Specific Vehicle Class Control Signs

Specific vehicle class control signs restrict or direct trucks, dangerous goods carriers, school buses and other buses on specific aspects of road use. Aspects of regulatory control in this section include permitted and prohibited routes for specific vehicle classes, weight and dimension limits and other instructions directed at vehicles of specific classes.

15.1 General Truck Control Signs

General truck control signs are used to restrict the movements or specify required actions of trucks, in general. (Dangerous Goods Carriers control signs are covered in Section 15.2). Where truck routes are designated, or certain commercial vehicles are prohibited from travelling on certain roads, these routes and/or restrictions must be indicated by general truck control signs. Restricting trucks to designated roads is necessary to protect road infrastructure that cannot bear the loads of heavy trucks, or that is otherwise unsuitable for truck traffic (e.g., residential streets, roads with narrow lanes, roads where trucks are incompatible with other road users).

Truck routes are typically identified by permissive signing (based on the permissive green annular band symbol), supplemented by prohibitive signing (based on the interdictory red annular band symbol). The permissive signs indicate a continuous route preferred for heavy truck use. If designated by municipal by-law, the permissive signs can be given a mandatory function, that is, the signs can prohibit heavy trucks from travelling anywhere but on a truck route identified by permissive signing. Whether or not a permissive signing system is enforceable by municipal by-law, supplementary prohibitive signs may be used where problems have been encountered with heavy trucks using roads from which they are prohibited. (See OTM Book 1B, Section 6.2, for a discussion of interdictory and permissive symbols.)

TRUCK ROUTE Sign (Rb-61)

Rb-61	**600 mm x 600 mm** **900 mm x 900 mm**
Font	**N/A**
Colour	**Permissive Symbol – Green Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the permissive TRUCK ROUTE sign is to indicate roads, especially continuous routes through or around an area, upon which heavy trucks are permitted to travel. When a municipality passes by-laws, trucks are expressly prohibited from travelling on any routes other than those marked by the permissive TRUCK ROUTE signs. Trucks making deliveries are typically exempted as long as they travel to and from the designated truck route system via the shortest possible distance.

The definition of a heavy truck may vary from municipality to municipality and should be specified in municipal by-law.

Sign Types

The **standard size (600 mm x 600 mm) TRUCK ROUTE sign (Rb-61)** should be used on roadways where the posted speed is 60 km/h or less.

The **oversize (900 mm x 900 mm) TRUCK ROUTE sign (Rb-61)** should be used on roadways where the posted speed is 70 km/h or greater.

The applicable **MOVEMENTS PERMITTED tab sign (Rb-61t)** must be appended to the TRUCK ROUTE sign to indicate permitted truck movements at intersections.

Guidelines for Use

The TRUCK ROUTE sign and the associated MOVEMENTS PERMITTED tab sign should only be used on continuous truck routes.

The TRUCK ROUTE sign on its own may be used to indicate that truck travel along the signed road is permitted.

The TRUCK ROUTE sign and the associated MOVEMENTS PERMITTED tab sign must be used at intersections to indicate permitted left-turn, right-turn and/or straight-through movements to access designated truck routes. By implication, only movements shown on the tab sign are permitted.

The NO HEAVY TRUCKS sign (Rb-62) may be used to supplement permissive truck route signing, where problems have been encountered with heavy trucks using roads from which they are prohibited.

Permissive truck route signing may be provided on King's Highways to support municipal signing to regulate and manage truck traffic.

Location Criteria

The TRUCK ROUTE sign must be installed along a road on which trucks are permitted to travel, at a location between 50 m and 150 m in advance of a point at which two truck routes intersect.

Where another truck route can be accessed by turning left and/or right at an intersection, the sign with tab combination must be installed immediately upstream of the intersection to which it applies.

Where the truck route only continues straight through an intersection, the sign with tab combination showing the straight-through arrow may be installed immediately upstream of the intersection to which it applies. The TRUCK ROUTE sign and the MOVEMENTS PERMITTED tab sign combination at this location confirms that the intersecting road is not a truck route. This combination is for confirmation only and is not required at most intersections. It may be required at major intersections where there is a demonstrated problem with lack of compliance or if there have not been TRUCK ROUTE signs for a significant distance.

The signs are usually installed just in advance of intersections where turns are permitted or required, but may also be used, without a MOVEMENTS PERMITTED tab sign, as reinforcement on longer straight stretches to reassure truck drivers that they are still on a designated truck route.

Legal Status

No HTA reference.

Enforceable in municipalities by municipal by-law which:

- Specifies that heavy trucks are prohibited from all roads other than truck routes indicated by the permissive truck route signing system;
- Specifies a schedule of roads on which trucks are permitted, corresponding to the roads included in the permissive truck route signing system; or
- Specifies a schedule of roads on which trucks are prohibited, corresponding to the roads excluded from the permissive truck route signing system.

Special Considerations

N/A

NO HEAVY TRUCKS Sign (Rb-62)

Rb-62	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

NO HEAVY TRUCKS Sign (With Time Restriction) (Rb-62A)

Rb-62A	**600 mm x 750 mm**
Font	**FHWA Series D**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the prohibitive NO HEAVY TRUCKS sign is to indicate roads on which heavy trucks are prohibited. A time restriction may be used in conjunction with the sign, to prohibit trucks from travelling on certain roads when they would most adversely affect other road users. The time restriction typically applies at night, when noise and vibrations could be disruptive, particularly in residential areas.

The definition of a heavy truck may vary from municipality to municipality, and should be specified under municipal by-law.

Sign Types

The **NO HEAVY TRUCKS sign (Rb-62)** applies the restriction at all times.

The **NO HEAVY TRUCKS sign (with time restriction) (Rb-62A)** applies the restriction only during the time periods specified on the sign.

Guidelines for Use

The NO HEAVY TRUCKS signs may be used to supplement a permissive signing system for continuous truck routes.

The NO HEAVY TRUCKS signs may be used to indicate restrictions on the movements of heavy trucks on highways, at all times (Rb-62) or at certain times of day (Rb-62A).

The NO HEAVY TRUCKS signs may be used at the entrance to streets, mainly in residential areas, where the municipality wishes to prohibit truck movements. Heavy trucks making deliveries on residential streets are exempt from the prohibition. Municipalities should provide information about heavy truck prohibitions on residential streets to trucking companies operating in the municipality.

The NO HEAVY TRUCKS sign can be used on provincial highways to indicate an upcoming exit or intersection to a municipal roadway where the municipality has prohibited truck movements on that roadway.

Location Criteria

The NO HEAVY TRUCKS sign should be installed at the entrance to a road on which the truck movements are prohibited, at the point where the road intersects a truck route. The sign should be used to supplement permissive truck route signing to prevent heavy trucks using roads from which they are prohibited. This provides an opportunity to ensure truck traffic remains on the appropriate route.

Legal Status

HTA Ontario Regulation 615 (SIGNS).

The sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

LANE USE RESTRICTION Sign (Trucks, Overhead) (Rb-39)

Rb-39	**900 mm x 1500 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective**
Minimum Sheeting	**Type III or IV**

LANE USE RESTRICTION Sign (Trucks, Ground-mounted) (Rb-39A)

Rb-39A	**900 mm x 1500 mm**
Font	**FHWA Series D**
Colour	**Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective**
Minimum Sheeting	**Type III or IV**

LANE USE RESTRICTION Sign (Trucks, Ground-mounted) (Rb-39B)

Rb-39B	**900 mm x 1500 mm**
Font	**FHWA Series D**
Colour	**Interdictory Symbol – Red Reflective Legend & Border – Black Background – White Reflective**
Minimum Sheeting	**Type III or IV**

LANE USE RESTRICTION Sign (Length-based, Overhead) (Rb-40)

Rb-40	**900 mm x 1500 mm**
Font	**FHWA Series D**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

LANE USE RESTRICTION Sign (Length-based, Ground-mounted) (Rb-40A)

Rb-40A	**900 mm x 1500 mm**
Font	**FHWA Series D**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

LANE USE RESTRICTION signs are used to prohibit heavy or long trucks from travelling on designated left lanes of highways with three or more lanes in each direction, where they may impede the flow and/or visibility of other traffic.

Sign Types

The **LANE USE RESTRICTION sign (trucks, overhead) (Rb-39)** restricts heavy trucks from using the restricted lane, and is mounted overhead.

The **LANE USE RESTRICTION signs (trucks, ground-mounted) (Rb-39A** and **Rb-39B)** restrict heavy trucks from using the restricted lane and are ground-mounted.

The **LANE USE RESTRICTION sign (length-based, overhead) (Rb-40)** restricts certain vehicles longer than 6.5 m from using the restricted lane, and is mounted overhead.

The **LANE USE RESTRICTION sign (length-based, ground-mounted) (Rb-40A**) restricts certain vehicles longer than 6.5 m from using the restricted lane, and is ground-mounted.

The **oversize (300 mm x 900 mm) BEGINS tab sign (Rb-84t)** is used to indicate the beginning of the restricted lane zone.

The **oversize (300 mm x 900 mm) ENDS tab sign (Rb-85t)** is used to indicate the end of the restricted lane zone.

Guidelines for Use

The lane use restrictions are organized into zones, which should be delimited by BEGINS and ENDS tab signs attached, respectively, to the first and last LANE USE RESTRICTION signs in the zone.

When lane use restriction is based on weight, the LANE USE RESTRICTION signs (Rb-39, Rb-39A or Rb-39B) must be used to restrict commercial vehicles heavier than 4.5 tonnes (or the maximum weight specified by municipal by-law) from travelling in the left or right lanes of designated zones of municipal roads, as controlled by by-law. The appropriate version of the ground-mounted sign (Rb-39A or Rb-39B) is used as applicable.

When lane use restriction is based on length, the LANE USE RESTRICTION signs (Rb-40 or Rb-40A) must be used to restrict commercial vehicles (or commercial vehicles towing other vehicles) that are longer than 6.5 m from travelling in the left lane of designated zones of King's Highways or of municipal roads, as controlled by by-law. Buses and emergency vehicles are exempt from this restriction on provincial highways.

The roads on which LANE USE RESTRICTION signs are used must have three or more lanes in each direction and a posted speed of 80 km/h or greater.

LANE USE RESTRICTION signs may either be ground-mounted or placed overhead.

LANE USE RESTRICTION sign numbers having an "A" suffix are ground-mounted versions of the overhead signs with the corresponding numbers. Ground-mounted signs may be used when there is insufficient opportunity to install overhead signs and adequate visibility is assured. Otherwise, overhead LANE USE RESTRICTION signs should be used.

BEGINS and ENDS tab signs should be attached, respectively, to the first and last LANE USE RESTRICTION signs in the zone.

Lane use restrictions do not apply:

- to road building or maintenance equipment while maintaining the road or removing snow from the lane use restriction zone; or
- in an emergency.

Location Criteria

Overhead versions of the LANE USE RESTRICTION signs must be installed directly above the left lane, in order to be visible to drivers of commercial motor vehicles entering or travelling along the highway. They may be installed on over-pass structures, or suspended by other means to be visible to drivers entering or proceeding along the highway.

Ground-mounted versions of the LANE USE RESTRICTION signs may be installed when it is not possible to install overhead signs and it can be ensured that the ground-mounted signs are sufficiently visible to heavy vehicle drivers entering or proceeding along the highway.

Spacing of LANE USE RESTRICTION signs should typically be in the range of 4 km to 8 km. They should be posted immediately downstream of each interchange or intersection.

Legal Status

HTA, Section 186.

HTA Ontario Regulation 608 (RESTRICTED USE OF LEFT LANES BY COMMERCIAL MOTOR VEHICLES).

The weight-based LANE USE RESTRICTION signs (Rb-39 and Rb-39A) are only enforceable in municipalities by municipal by-law.

The length-based LANE USE RESTRICTION signs (Rb-40 and Rb-40A) are enforceable under HTA as well as in municipalities by municipal by-law.

Special Considerations

N/A

MAXIMUM TONNES Sign (Single Gross Weight) (Rb-63)

Rb-63	**600 mm x 750 mm** **750 mm x 937.5 mm**
Font	**FHWA Series C,** **Helvetica Medium**
Colour	**Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

Under some circumstances, such as structural weakness, it is necessary to limit the gross weight of vehicles on bridges on a temporary, seasonal or more permanent basis. In some cases, the separate components of the configuration of the heavy vehicle (that is, its division into tractor and trailer units) is not critical to the safety of the bridge. Rather it is the overall vehicle weight that impacts the bridge structure, and the same maximum weight restriction applies to both single and combination vehicles. If so, the MAXIMUM TONNES sign (single gross weight) (Rb-63) is used to limit loads on constrained bridges.

A structural assessment of the bridge is required prior to passing a by-law authorizing the weight restriction.

Typically, the sign is used on local streets and minor roads.

Where there is no by-law in place, but an advisory load limit notice is desired, the MAXIMUM TONNES ADVISORY (Single Gross Weight) warning sign (Wa-63) must be used in place of the regulatory MAXIMUM TONNES sign (Rb-63) . This warning sign is identical to the MAXIMUM TONNES (Single Gross Weight) regulatory sign, except that the advisory sign background is yellow instead of white (see OTM Book 6 (Warning Signs) for more information on Wa-63 sign).

Sign Types

The **standard size (600 mm x 750 mm) MAXIMUM TONNES (Single Gross Weight) sign (Rb-63)** should be used where posted speed limit is 60 km/h or less.

The **oversize (750 mm x 93.750 mm) MAXIMUM TONNES (Single Gross Weight) sign (Rb-63)** should be used where posted speed limit is 70 km/h or greater.

Guidelines for Use

The MAXIMUM TONNES (Single Gross Weight) sign must be used to identify bridges where the maximum gross weight shown applies to both single and combination vehicles.

Location Criteria

The sign must be located immediately upstream of the bridge to which it applies, or mounted on the bridge structure itself. A supplementary sign may be placed on the left side of the roadway approaching the bridge.

If the weight restriction applies to a bridge at an intermediate point along a road where there is no alternative route, truck route signing or advance warning signing should be provided to divert heavy vehicles to the nearest intersection where a suitable alternative route is available.

Legal Status

HTA, Section 123.

HTA Ontario Regulation 103/97 (STANDARDS TO DETERMINE ALLOWABLE GROSS WEIGHT FOR BRIDGES).

HTA Ontario Regulation 598 (GROSS WEIGHT ON BRIDGES).

HTA Ontario Regulation 615 (SIGNS).

Special Considerations

N/A

MAXIMUM TONNES Sign (Differentiated by Truck Type) (Rb-63A)

Rb-63A	**900 mm x 1200 mm**
Font	**FHWA Series C, Helvetica Medium**
Colour	**Legend & Border – Black Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

Like the MAXIMUM TONNES (Single Gross Weight) sign (Rb-63), the MAXIMUM TONNES (Differentiated by Truck Type) sign (Rb-63A) is used to limit weights of heavy vehicles on bridges. In some situations, the vehicle configuration and the weight distribution of the different vehicle components (i.e. tractor and trailer units) across the bridge structure is critical to the safety of the bridge.

The MAXIMUM TONNES (Differentiated by Truck Type) sign must be used where structural engineers have set individual load restrictions prescribing the maximum permitted gross vehicle weights for a single vehicle unit (e.g., a cube truck), a combination of two vehicle units (e.g., a tractor and trailer), and a combination of three vehicle units (e.g., a tractor and two trailers). The MAXIMUM TONNES (Differentiated by Truck Type) sign indicates the maximum weight for each vehicle combination.

Sign Types

There is one type of **MAXIMUM TONNES (Differentiated by Truck Type) sign (Rb-63A)**.

Guidelines for Use

The MAXIMUM TONNES (Differentiated by Truck Type) sign must be used to identify bridges where different maximum gross weights apply to different vehicle combinations.

A structural assessment of the bridge is required prior to passing a by-law authorizing the weight restriction.

Where there is no by-law in place, but an advisory load limit notice is desired, the MAXIMUM TONNES ADVISORY (Differentiated by Truck Type) (Wa-63A) warning sign must be used. This warning sign is identical to the MAXIMUM TONNES sign (Differentiated by Truck Type) regulatory sign, except that the advisory sign background is yellow instead of white (see OTM Book 6 (Warning Signs) for more information on Wa-63A).

Location Criteria

The sign must be located immediately upstream of the bridge to which it applies, or mounted on the bridge structure itself. A supplementary sign may be placed on the left side of the roadway approaching the bridge.

If the weight restriction applies to a bridge at an intermediate point along a road where there is no alternative route, truck route signing or advance warning signing should be provided to divert heavy vehicles to the nearest intersection where a suitable alternative route is available.

Legal Status

HTA, Section 123.

HTA Ontario Regulation 103/97 (STANDARDS TO DETERMINE ALLOWABLE GROSS WEIGHT FOR BRIDGES).

HTA Ontario Regulation 598 (GROSS WEIGHT ON BRIDGES).

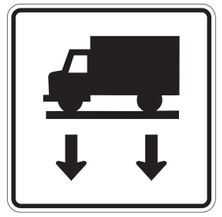
HTA Ontario Regulation 615 (SIGNS).

Enforceable under regulation or municipal by-law.

Special Considerations

N/A

LOAD RESTRICTION IN EFFECT Sign (Rb-76)



Rb-76	**600 mm x 600 mm**
Font	**N/A**
Colour	**Legend & Border – Black Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

LOAD RESTRICTION WEIGHT Tab Sign (Rb-76tA)

Rb-76tA	**300 mm x 600 mm**
Font	**Helvetica Bold Condensed**
Colour	**Legend & Border – Black/White Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

LOAD RESTRICTION DURATION Tab Sign (Rb-76tB)

Rb-76tB	**300 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black/ White** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The purpose of the LOAD RESTRICTION IN EFFECT sign is to protect designated sections of road from being damaged by heavy commercial motor vehicles and trailers. The sign is designed for temporary or seasonal application of the restriction, as appropriate. For example, weight bearing capacity under spring thaw conditions is lower for some roads.

The LOAD RESTRICTION IN EFFECT sign must be used on designated road sections to indicate that commercial motor vehicles and/or trailers that exceed the load limit are restricted from using the signed road without a permit.

The LOAD RESTRICTION IN EFFECT sign must be used with supplementary LOAD RESTRICTION WEIGHT tab sign and may be used with the LOAD RESTRICTION DURATION tab sign. These tab signs indicate information concerning the specifics of the seasonal load restriction.

The LOAD RESTRICTION WEIGHT tab sign applies to any commercial motor vehicle or trailer which transmits more than 5 tonnes of weight to the highway with at least one of its axles.

The LOAD RESTRICTION DURATION tab sign may be used in locations where the load restrictions are described in regulations or declared through media or where the Seasonal Load Restriction sign is left year-round. Its purpose is to inform truck traffic when the load restriction is in effect.

Sign Types

There is one type of **LOAD RESTRICTION IN EFFECT sign (Rb-76)** with associated **LOAD RESTRICTION WEIGHT tab sign (Rb-76tA)** and **LOAD RESTRICTION DURATION tab sign (Rb-76tB)**.

Guidelines for Use

The period of time (starting and ending dates), and the roadway limits upon which the reduced load restriction applies, may be designated by the road authority as supported by municipal by-law.

The LOAD RESTRICTION IN EFFECT Sign, if not appended with the LOAD RESTRICTION DURATION tab sign, must be installed on the starting date of the restriction. Once the restriction is lifted, the signs must be removed immediately.

The LOAD RESTRICTION IN EFFECT signs, if appended with the LOAD RESTRICTION DURATION tab signs, are left installed all year-round. Leaving the signs installed all year-round is more effective, because the sign informs truck drivers of the upcoming restriction in advance.

Location Criteria

The LOAD RESTRICTION IN EFFECT sign must be installed with the associated tab signs (the LOAD RESTRICTION WEIGHT tab sign and, if used, the LOAD RESTRICTION DURATION tab sign) at the beginning of the restricted zone and immediately downstream of each major intersection. The restriction should commence at an intersection, so prohibited vehicles have the opportunity to divert from the restricted road. Where a non-restricted roadway intersects with a restricted roadway, signs on the restricted roadway should be angled toward commercial motor vehicle drivers about to turn onto the restricted roadway, to notify them of the regulation as far in advance as possible prior to making the turn.

Legal Status

HTA, Subsections 122.

HTA Ontario Regulation 615 (SIGNS).

Time periods that the sign is in effect and roadway limits are specified in municipalities by municipal by-law.

Special Considerations

N/A

CLASS B ROAD Sign (Rb-77)

Rb-77	**600 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The CLASS B ROAD sign must only be used on hard-surfaced township or county roads to identify roads that have been designated as Class B roads by municipal by-law. Class B roads are associated with specific vehicle weight restrictions. Also, it is important that Class B roads be identified to drivers of trucks and other heavy vehicles, since weight regulations associated with spring thaw conditions sometimes apply only to Class B roads. These seasonal weight restrictions further limit the vehicle weights generally allowed on Class B roads.

Sign Types

There is one type of **CLASS B ROAD sign (Rb-77)**.

Guidelines for Use

The following vehicles are prohibited from using Class B roads:

- Vehicles with axle spacings of 2.4 m or more, for which the weight on any one axle exceeds 8.2 tonnes; and
- Vehicles with axle spacings of less than 2.4 m, for which the weight on any one axle exceeds 5.5 tonnes.

The CLASS B ROAD sign must not be used on Class A roads such as:

- Any road within a city, town or incorporated village, except where heavy trucks are prohibited by municipal by-law; or
- Any hard-surfaced county or township road, unless designated as a Class B road by county or township by-law.

CLASS B ROAD signs are not required for Class B roads having a gravel road surface, such as township or county roads.

Location Criteria

The CLASS B ROAD sign should be installed at the beginning of all Class B hard-surfaced roadways, at intervals along the roadway and immediately downstream of each intersection. Where a non-Class B roadway intersects with a Class B roadway, signs on the Class B roadway should be angled toward commercial motor vehicle drivers about to turn onto the Class B roadway, to notify the drivers as far in advance as possible of the regulation prior to making the turn.

Legal Status

HTA, Section 120.

No HTA regulations support this sign.

Class B roads are designated in municipalities by municipal by-law.

Special Considerations

N/A

TRUCKS ENTER INSPECTION STATION WHEN LIGHTS FLASHING Sign (Rb-96)

Rb-96	**1200 mm x 2400 mm** **2135 mm x 3660 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

TRUCK INSPECTION STATION ADVANCE Sign (G419)

G419	**1200 mm x 1200 mm** **2400 mm x 2400 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or IV**

TRUCK INSPECTION STATION TRUCKS ONLY TURN-OFF Sign (G420)

G420	**1200 mm x 2100 mm** **1830 mm x 3660 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background - White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the TRUCKS ENTER INSPECTION STATION WHEN LIGHTS FLASHING sign is to notify drivers of heavy trucks that they must report to the upcoming inspection station when the beacons on the sign are flashing.

The purpose of the TRUCK INSPECTION STATION ADVANCE sign is to indicate that an inspection station is ahead.

The purpose of the TRUCK INSPECTION STATION TRUCKS ONLY TURN-OFF sign is to indicate the start of the turn-off from the freeway or highway to the truck inspection station.

Sign Types

The **standard size (1200 mm x 1200 mm) TRUCKS ENTER INSPECTION STATION WHEN LIGHTS FLASHING sign (Rb-96)** is used for non-freeway applications. The **oversize (2135 mm x 3660 mm) TRUCKS ENTER INSPECTION STATION WHEN LIGHTS FLASHING sign (Rb-96)** is used for freeway applications.

The **standard size (1200 mm x 1200 mm) TRUCK INSPECTION STATION ADVANCE sign (G419)** is used for non-freeway applications and the **oversize (2400 mm x 2400 mm or 2440 mm x 2440 mm) TRUCK INSPECTION STATION ADVANCE sign (G419)** is used for freeway applications.

The **standard size (1200 mm x 1200 mm) TRUCK INSPECTION STATION TRUCKS ONLY TURN-OFF sign (G420)** is used for non-freeway applications and the

oversize (1830 mm x 1830 mm) TRUCK INSPECTION STATION TRUCKS ONLY TURN-OFF sign (G420) is used for freeway applications.

Guidelines for Use

The TRUCKS ENTER INSPECTION STATION WHEN LIGHTS FLASHING sign is used in advance of a truck inspection station. When the amber beacons are flashing (actuated by enforcement staff at the inspection station), drivers of large trucks are required to enter the station for inspection.

The TRUCK INSPECTION STATION ADVANCE sign is used in advance of truck inspection stations to give truck drivers advance notification that a truck inspection station is ahead, providing them with time to manoeuvre into the right lane to prepare for inspection, if required.

The TRUCK INSPECTION STATION TRUCKS ONLY TURN-OFF sign is used to indicate the exit to the truck inspection station.

For more information on the operation of the flashing beacons on the TRUCKS ENTER INSPECTION STATION WHEN LIGHTS FLASHING sign, see OTM Book 12 (Traffic Signals).

Location Criteria

The TRUCKS ENTER INSPECTION STATION WHEN LIGHTS FLASHING sign must be located 300 m or more upstream of the exit to the inspection station.

The TRUCK INSPECTION STATION ADVANCE sign should be located approximately 1km from the exit to the truck inspection station. The exact location of the sign should consider local conditions such as visibility, speed limit, and geometry. At some locations, consideration may be given to provide an addition advance sign (i.e. at 2 km) to address operational concerns.

The TRUCK INSPECTION STATION TRUCKS ONLY TURN-OFF sign should be installed beyond the right shoulder, at the beginning of the deceleration lane. The exact location of the sign should consider local conditions such as visibility, speed limit, and geometry.

Legal Status

HTA, Sections 82 and *82.1* for the authority related to inspections of commercial motor vehicles.

HTA, Section 124 for authority to have loads weighed.

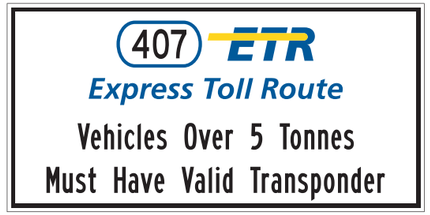
No HTA regulations support this sign.

The sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

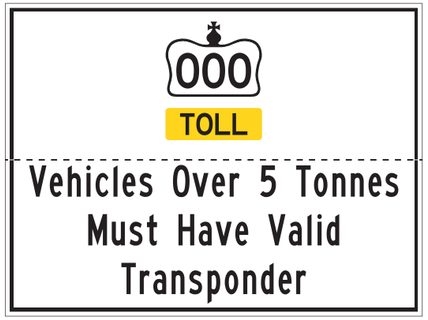
N/A

VEHICLES OVER 5 TONNES MUST HAVE VALID TRANSPONDER Sign - Non-Provincial Toll Facilities (Rb-97)



Rb-97	**1200 mm x 2400 mm** **2440 mm x 5490 mm**
Font	**FHWA Series C**
Colour	**Express Toll Route (ETR) Legend – Blue Reflective with Yellow Reflective Stripe** **Border Around 407 Legend – Blue Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

VEHICLES OVER 5 TONNES MUST HAVE VALID TRANSPONDER Sign - Provincial Toll Facilities (Rb-97A)



Rb-97A	**1800 mm x 2400 mm** **2745 mm x 5490 mm**
Font	**FHWA Series C, D, E or Em**
Colour	**Background of TOLL Legend- Yellow Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the VEHICLES OVER 5 TONNES MUST HAVE VALID TRANSPONDER sign is to indicate to heavy vehicles that they are required to have valid toll devices known as transponders when travelling on toll roads.

Sign Types

Non-Provincial Toll Facilities

The **standard size (1200 mm x 2400 mm) VEHICLES OVER 5 TONNES MUST HAVE VALID TRANSPONDER sign (Rb-97)** must be used on highways that do not have controlled access and are approach roads to toll highways. The sign should be used where posted speed is 80 km/h or less.

The **oversize (2400 mm x 5400 mm) VEHICLES OVER 5 TONNES MUST HAVE VALID TRANSPONDER sign (Rb-97)** must be used on controlled access highways approaching the toll facility. Supplemental signs may be placed on the toll facility itself to reinforce the message to motorists. The sign should be used where posted speed is 90 km/h or greater.

Provincial Toll Facilities

The **standard size (1800 mm x 2400 mm) VEHICLES OVER 5 TONNES MUST HAVE VALID TRANSPONDER sign (Rb-97A)** must be used on highways that do not have controlled access and are approach roads to toll highways. The sign should be used where posted speed is 80 km/h or less.

The **oversize (2745 mm x 5490 mm) VEHICLES OVER 5 TONNES MUST HAVE VALID TRANSPONDER sign (Rb-97A)** must be used on controlled access highways approaching the toll facility. Additional signs may be placed on the toll facility itself to reinforce the message to motorists. The sign should be used where posted speed is 90 km/h or greater.

Guidelines for Use

The VEHICLES OVER 5 TONNES MUST HAVE VALID TRANSPONDER sign applies to vehicles having a gross weight or registered gross weight of greater than five tonnes.

The criteria for mandating transponders may vary depending on the nature of each individual toll facility. The sign text must convey the requirements specific to the toll facility on which the signs are used.

On non-provincial toll facility signs, the highway number of the toll road and the logo of the toll system would normally appear at the top of the sign (replacing the “407 ETR Express Toll Route” text shown in the sign diagram above).

On provincial toll facility signs, the highway number will appear in the provincial crown.

Location Criteria

The signs should be located so that heavy vehicles without valid transponders have an opportunity to deviate prior to being committed to entering the toll facility.

The signs must be placed on all approaches to toll highways. The location of the sign should enable vehicles without transponders to safely choose an alternate route prior to being committed to entering the toll facility.

On highways that do not have controlled access and are approach roads to toll highways, the signs should be installed on the right side before the beginning of the auxiliary lane to the entrance ramp.

On controlled access highways approaching the toll facility, the signs should be ground mounted on the right side approximately 500 m downstream of the gore of the exit to the toll facility.

Where problems with compliance have been experienced, the sign may be installed on the toll highway itself, upstream of interchanges where vehicles may exit the toll facility.

Legal Status

HTA, Section 191.2.

HTA Ontario Regulation 147/97 (TOLL DEVICES).

HTA Ontario Regulation 615 (SIGNS).

Special Considerations

N/A

15.2 Dangerous Goods Carrier Control Signs

Dangerous goods carriers are vehicles carrying products, substances or organisms that are listed as dangerous goods in the federal Transportation of Dangerous Goods Act, due to the potential environmental and health hazards they pose. Collisions and fires involving dangerous goods carriers are especially hazardous. Therefore, dangerous goods carriers may be prohibited from travel on certain routes where there is a greater risk of collisions which could have serious impacts, e.g., high volume traffic areas, heavily populated residential areas.

The purpose of DANGEROUS GOODS ROUTE signs is to indicate regulations related solely to the road transport of dangerous goods by vehicles classified as dangerous goods carriers. The signs apply to vehicles which are required to display dangerous goods placards with the diamond symbol. The signs identify permitted or prohibited dangerous goods routes to the dangerous goods carriers.

Dangerous goods routes are typically identified by permissive signing (based on the permissive green annular band symbol), supplemented by prohibitive signing (based on the interdictory red annular band symbol). The permissive signs indicate a continuous route preferred or mandated for use by dangerous goods carriers. Supplementary prohibitive signs may be used where problems have been encountered with dangerous goods carriers using roads

from which they are prohibited. (See OTM Book 1B, Section 6.2, for a discussion of interdictory and permissive symbols.)

DANGEROUS GOODS ROUTE Sign (Rb-82)

Rb-82	**600 mm x 600 mm**
Font	**N/A**
Colour	**Permissive Symbol – Green Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

DANGEROUS GOODS ROUTE Tab Sign (Rb-82t)

Rb-82t	**300 mm x 600 mm**
Font	**Helvetica Bold Condensed**
Colour	**Legend & Border - Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the permissive DANGEROUS GOODS ROUTE sign is to indicate roads, especially continuous routes through or around an area, designated for vehicles prescribed by federal legislation as dangerous goods carriers.

The sign features a solid black diamond symbol to denote dangerous goods. This is the same symbol shape displayed on the placard of dangerous goods carriers.

Sign Types

There is one type of **DANGEROUS GOODS ROUTE sign (Rb-82)**.

The applicable **MOVEMENTS PERMITTED tab sign (Rb-61t)** must be appended to the DANGEROUS GOODS ROUTE sign to indicate permitted truck movements at intersections.

There is one type of **DANGEROUS GOODS ROUTE educational tab sign (Rb-82t)**. The tab may be used until familiarity of the symbol sign is established.

Guidelines for Use

The DANGEROUS GOODS ROUTE sign and the associated MOVEMENTS PERMITTED tab sign (Rb-61t) should only be used on continuous dangerous goods carrier routes.

The DANGEROUS GOODS ROUTE sign on its own may be used to indicate that truck travel along the signed road is permitted.

The DANGEROUS GOODS ROUTE sign and the attached MOVEMENTS PERMITTED tab sign must be used at intersections to indicate permitted left-turn, right-turn and/or straight-through movements to access designated dangerous goods routes. By implication, movements not indicated on the tab sign may be prohibited.

The NO DANGEROUS GOODS sign (Rb-83) may be used to supplement permissive dangerous goods route signing, where problems have been encountered with dangerous goods carriers using roads from which they are prohibited.

Location Criteria

The DANGEROUS GOODS ROUTE sign must be installed along a road on which dangerous goods carriers are permitted to travel, at a location between 50 m and 150 m in advance of a point at which two such routes intersect.

Where a dangerous goods route can be accessed by turning left and/or right at an intersection, the sign with tab combination must be installed immediately upstream of the intersection to which it applies.

Where a dangerous goods route proceeds straight through an intersection, the sign with tab combination showing the straight-through arrow may be installed immediately upstream of the intersection to which it applies. The DANGEROUS GOODS ROUTE sign and the straight-through MOVEMENTS PERMITTED tab sign combination at this location confirms that the intersecting road is not a dangerous goods route. This combination is for confirmation only and is not required at most intersections. It may be required at major intersections where there is a demonstrated problem with lack of compliance or if there have not been DANGEROUS GOODS ROUTE signs for a significant distance.

Legal Status

No HTA reference.

Permissive signing system is not enforceable.

Municipalities do not have the specific authority to designate dangerous goods routes.

Special Considerations

N/A

NO DANGEROUS GOODS Sign (Rb-83)

Rb-83	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

DANGEROUS GOODS CARRIERS PROHIBITED Tab Sign (Rb-83t)

Rb-83t	**450 mm x 600 mm**
Font	**Helvetica Bold Condensed**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the prohibitive NO DANGEROUS GOODS sign is to indicate roads on which dangerous goods carriers are prohibited.

Like the DANGEROUS GOODS ROUTE sign (Rb-82), the NO DANGEROUS GOODS sign features a solid black diamond symbol to denote dangerous goods. The symbol is also displayed on the dangerous goods carriers, in the form of a dangerous goods placard.

Sign Types

The **NO DANGEROUS GOODS sign (Rb-83)** is the standard prohibitive sign.

The **DANGEROUS GOODS CARRIERS PROHIBITED educational tab sign (Rb-83t)** may be used until familiarity of the symbol sign is established.

Guidelines for Use

The NO DANGEROUS GOODS sign may be used to supplement a permissive signing system for continuous routes designated for dangerous goods carriers.

The NO DANGEROUS GOODS sign may be installed along a street or highway on which dangerous goods carriers are prohibited at its intersection with a dangerous goods route, to prohibit illegal entry. The sign is used for special decision points, such as where the only choice is a turn, or where specific issues have been encountered with hazardous goods carriers deviating from the designated route.

Location Criteria

The NO DANGEROUS GOODS sign may be installed at the entrance to roads on which the dangerous goods carriers are prohibited, at the point where the road intersects a dangerous goods route. The sign should be used to supplement permissive dangerous goods route signing to prevent dangerous goods carriers using roads from which they are prohibited. This provides an opportunity to direct dangerous goods traffic to the appropriate route.

Legal Status

No HTA reference.

Municipalities do not have the specific authority to designate dangerous goods routes.

Special Considerations

N/A

15.3 SCHOOL BUS LOADING ZONE Sign

SCHOOL BUS LOADING ZONE Sign (Rb-89)

Rb-89	**300 mm x 450 mm** **450 mm x 675 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

A school bus loading zone is an area designated by municipal by-law, where school children are picked up or dropped off near their school. The SCHOOL BUS LOADING ZONE sign is used to indicate the designated school bus loading zone.

A school bus in a school bus loading zone does not have to display flashing red lights, and is not permitted to load or unload passengers from the opposite side of the road or highway from the school bus loading zone.

Sign Types

The **standard size (300 mm x 450 mm) SCHOOL BUS LOADING ZONE sign (Rb-89)** should be used where posted speed is 50 km/h or less.

The **oversize (450 mm x 600 mm) SCHOOL BUS LOADING ZONE sign (Rb-89)** should be used where posted speed is 60 km/h or greater.

Guidelines for Use

School bus loading zones are established by municipalities on roads within their jurisdiction.

School bus loading zones may be designated on only one side of the road on the same side as the school facility.

Location Criteria

One sign with a single-headed arrow pointing towards the loading zone must be installed at each end of the school bus loading zone. Where the length of the loading zone exceeds 60 m, additional signs with double-headed arrows must be placed at intervals of no more than 45 m.

The SCHOOL BUS LOADING ZONE sign should be set at an angle of 30 degrees to the direction of traffic flow, and should always be visible to approaching traffic.

Legal Status

HTA, Subsections 175.(10) and *(13)*.

HTA Ontario Regulation 615 (SIGNS).

Special Considerations

N/A

15.4 BUS BY-PASS SHOULDER Signs

With the demand for transportation services in urban areas continually rising, allowing authorized buses to by-pass general traffic on certain paved shoulder segments on designated stretches of roadways is gaining popularity among transportation and road authorities as a tool to improve service reliability while minimizing impact on existing operations.

This section covers bus by-pass shoulder signs on designated segments of King's Highways as outlined in *HTA Ontario Regulation 618/05 (DESIGNATION OF BUS BY-PASS SHOULDERS ON KING'S HIGHWAYS).*

These signs may be adopted by other road authorities that, through municipal by-law, have designated sections of roadways where paved should segments can be used by authorized buses.

AUTHORIZED BUSES USING SHOULDER BEGINS Sign (Rb-98)

Rb-98	**900 mm x 1200 mm**
Font	**FHWA Series C**
Colour	**Background – White Reflective** **Legend & Border – Black Background – White Reflective**
Minimum Sheeting	**Type III or IV**

AUTHORIZED BUSES USING SHOULDER ENDS Sign (Rb-99)

Rb-99	**900 mm x 1200 mm**
Font	**FHWA Series C**
Colour	**Background – White Reflective** **Legend & Border – Black Background – White Reflective**
Minimum Sheeting	**Type III or IV**

DO NOT DRIVE ON PAVED SHOULDER – AUTHORIZED BUSES EXCEPTED Sign (Rb-100)

Rb-100	**900 mm x 1800 mm**
Font	**FHWA Series C**
Colour	**Background – White Reflective** **Legend & Border – Black Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of bus by-pass shoulder signs is to identify parts of highways that are designated as having paved shoulders for use by authorized buses and to indicate to general traffic that use of the shoulder is prohibited. Permitting shoulders for bus use, where possible, is a cost-effective intervention to separate buses from general traffic. Bus by-pass shoulders are not the same as reserved lanes.

Sign Types

The **AUTHORIZED BUSES USING SHOULDER BEGINS sign (Rb-98)** must be used at the beginning of a paved shoulder segment that has been designated to permit authorized bus operation.

The **AUTHORIZED BUSES USING SHOULDER ENDS sign (Rb-99)** must be used at the end of a paved shoulder segment that has been designated to permit authorized bus operation.

The **DO NOT DRIVE ON PAVED SHOULDER – AUTHORIZED BUSES EXCEPTED sign (Rb-100)** must be used at intervals within the designated paved shoulder segment that permits authorized bus operation.

Guidelines for Use

Bus by-pass shoulder signs must be used where sections of highways are legally designated as having paved shoulders for use by authorized buses. For provincial highways, these sections are identified in *HTA Ontario Regulation 618/05 (DESIGNATION OF BUS BY-PASS SHOULDERS ON KING'S HIGHWAYS).* On non-provincial highways, sections would need to be designated through a municipal by-law.

Location Criteria

On King's Highway segments with bus by-pass shoulder designations, bus by-pass shoulder BEGINS and ENDS signs must be ground-mounted on the right side, as follows:

- At the beginning of the segment, the AUTHORIZED BUSES USING SHOULDER BEGINS sign must be installed;
- At the end of the segment, the AUTHORIZED BUSES USING SHOULDER ENDS sign must be installed; and
- At intermediate points between the Rb-98 sign and the Rb-99 sign, DO NOT DRIVE ON PAVED SHOULDER – AUTHORIZED BUSES EXCEPTED signs must be installed as follows:
  - Beyond each freeway interchange when the distance between interchanges is 2 km apart or less; and
  - At 2 km intervals when the distance between interchanges exceeds 2 km.

The CAUTION BUSES USING SHOULDER sign (Wc-35) should be installed before the start of the designated section and may be repeated at locations within the designated section where there are operational or safety concerns (see OTM Book 6 (Warning Signs) for information on CAUTION BUSES USING SHOULDER sign (Wc-35)).

Legal Status

HTA Ontario Regulation 618/05 (DESIGNATION OF BUS BY-PASS SHOULDERS ON KING'S HIGHWAYS).

Signs must be supported by municipal by-law to be enforceable on municipal roadways.

Special Considerations

N/A

15.5 NO TRACTORS Sign

NO TRACTORS Sign (Rb-60)

Rb-60	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The NO TRACTORS sign is used to indicate the prohibition of tractors and other farm vehicles from travelling on designated sections of freeways and roads with posted speed 90 km/h or more. The intent of the sign is to keep slow-moving vehicles off high speed freeways and roads, where they present a hazard to other road traffic, as well as to the farm vehicles themselves.

While the sign may refer to other farm vehicles than tractors, the tractor symbol must be used to represent all types of farm vehicles.

Using the same symbol eliminates the need for many different signs serving similar purposes and better promotes consistency and driver familiarity with sign appearance.

Sign Types

There is one type of **NO TRACTORS sign (Rb-60)**.

Guidelines for Use

The NO TRACTORS sign must be used on specifically designated sections of freeway, staged freeway or other roads as prescribed in *Regulation 609 (RESTRICTED USE OF THE KING'S HIGHWAY AND TOLL HIGHWAYS),* Schedule 1, where specific farm vehicles are prohibited.

The following types of vehicles are prohibited by the NO TRACTORS sign:

- Farm tractors;
- Self-propelled farm implements (implements of husbandry), e.g., combine harvester, threshing machine;
- Motor vehicles designed to draw ploughs;
- Mowing machines;
- Other farm implements used for hauling loads;
- Horses; and
- Horse-drawn vehicles.

The above vehicles are exempted from the prohibition when:

- Crossing a highway or roadway to access lands where no other means of access exists; or
- Performing highway maintenance activities.

Location Criteria

This sign may be used in the prescribed areas at locations where there are many farms. The sign is installed on the right side of the road where there is agricultural traffic travelling on the road or shoulder, and should be installed 50 m to 80 m in advance of a particular entrance with large volumes of crossing agricultural traffic.

Legal Status

HTA Ontario Regulation 609 (RESTRICTED USE OF THE KING'S HIGHWAY AND TOLL HIGHWAYS).

Special Considerations

N/A

16. Supplementary Traffic Signal Control Signs

Supplementary traffic signal control signs must be used to regulate the actions of motorists at traffic signal control intersections:

- Where the intended response to signals is not clear (for example, STOP HERE ON RED SIGNAL sign (Rb-78)); or
- Where the normal rules of the road do not apply (for example, NO RIGHT TURN ON RED sign (Rb-79R)).

For more information on traffic signal operations and signal control equipment, see OTM Book 12 (Traffic Signals).

NO RIGHT TURN ON RED Sign (Rb-79R)

Rb-79R	**600 mm x 900 mm**
Font	**N/A**
Colour	**Interdictory Symbol and Signal Indication – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

NO LEFT TURN ON RED Sign (Rb-79L)

Rb-79L	**600 mm x 900 mm**
Font	**N/A**
Colour	**Interdictory Symbol and Signal Indication – Red Reflective Legend & Border – Black Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The NO RIGHT TURN ON RED sign or the NO LEFT TURN ON RED sign must be used to indicate that right or left turns, respectively, that would otherwise be legal are prohibited during the red phase of the traffic signal.

Sign Types

The **NO RIGHT TURN ON RED Sign (Rb-79R)** prohibits a right turn, that without the sign would be legal, during the red phase of the traffic signal.

The **NO LEFT TURN ON RED Sign (Rb-79L)** prohibits a left turn, that without the sign would be legal, during the red phase of the traffic signal.

Guidelines for Use

The no right/left turn on red prohibition may be implemented and the corresponding signs may be used where:

- There is evidence, through observation and/or related collision experience, that many drivers are not stopping for a red signal prior to making a right or left turn, as required by the HTA;
- A multiple-phase traffic signal operation is used, where right turns and/or left turns are controlled separately;
- There is evidence of a relatively large number of of vehicle, vehicle-pedestrian, or cycling collisions which cannot be reduced by other methods; or
- There are a significant number of crossings by children, elderly or disabled people.

Location Criteria

The NO RIGHT TURN ON RED sign must be mounted adjacent to, or as close as possible to, the primary signal head on the right side of the intersection. The NO LEFT TURN ON RED sign must be mounted adjacent to, or as close as possible to, the secondary signal head on the left side of the intersection.

A supplemental NO RIGHT TURN ON RED sign or NO LEFT TURN ON RED sign can be installed on a pole within a driver's sight line if site conditions conclude that it will enhance compliance.

See OTM Book 12 (Traffic Signals) for more information on the primary and secondary signal heads.

Legal Status

HTA Ontario Regulation 615 (SIGNS).

Special Considerations

N/A

STOP HERE ON RED SIGNAL Sign (Rb-78)

Rb-78	**600 mm x 900 mm**
Font	**FHWA Series C, D**
Colour	**Legend & Border – Black Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The point at which vehicles must stop at a signalized intersection during the red phase is typically indicated by a stop line pavement marking upstream of the signal head. However, the appearance of the traffic signals and the geometry of the intersection provide additional context as to the stop location of the first vehicle in the stop queue. In some cases, these context clues are not present, and the STOP HERE ON RED SIGNAL sign is used to provide supplementary guidance on where drivers must stop.

Sign Types

There is one type of **STOP HERE ON RED SIGNAL sign (Rb-78)**.

Guidelines for Use

The STOP HERE ON RED SIGNAL sign must be used if:

- The stop location associated with a traffic signal is different than usual, for example, where auxiliary traffic signal heads stop traffic in advance of an intersection; or
- The physical conditions fail to indicate clearly the intended stopping position, for example, at mid-block traffic control signals related to pedestrian crossings, and at portable lane control signals within construction zones.

The STOP HERE ON RED SIGNAL sign may be beneficial where the stop line is farther away from the crosswalk than the standard 1 m at a traffic signal, due to geometry, signal operation or bicycle facilities.

More information on stop lines is provided in OTM Book 11 (Pavement, Hazard and Delineation Markings), on pedestrian crossings in OTM Book 15 (Pedestrian Crossing Treatments) and on portable lane control signals for construction in OTM Book 7 (Temporary Conditions).

Location Criteria

The sign must be placed on the right side of the roadway, directly in line with the point at which motorists are intended to stop, usually indicated by a stop line pavement marking.

An additional sign must be provided on the left side of a one-way roadway, or on the median of a divided highway. The sign should be directly in line with the stop line pavement marking. In this case, the same sign text is used, but the arrow points down to the right, rather than down to the left, and the positions of the arrow and the “on red” text are reversed.

Legal Status

HTA, Subsection 144.(5)(c).

HTA Ontario Regulation 606 (PORTABLE LANE CONTROL SIGNAL SYSTEMS).

Special Considerations

N/A

LEFT-TURN SIGNAL Sign (Rb-81)

Rb-81	**450 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the LEFT-TURN SIGNAL sign is to make motorists aware that there are separate traffic signal heads exclusively for left turns, in addition to the signal heads for other movements.

Sign Types

There is one type of **LEFT-TURN SIGNAL sign (Rb-81)**.

Guidelines for Use

The LEFT-TURN SIGNAL sign must be used to supplement a traffic signal head which is exclusively controlling left turns.

Location Criteria

The LEFT-TURN SIGNAL sign must be mounted directly beside the primary left-turn signal head. An additional sign may be placed beside the secondary left-turn signal head.

Legal Status

No HTA reference.

The sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

17. Regulatory Construction Traffic Control Signs

Regulatory construction traffic control signs are regulatory signs primarily used in the context of temporary conditions works, and as such are also included in OTM Book 7 (Temporary Conditions). However, some of these regulatory signs are also used for applications that extend beyond the scope of temporary conditions work.

CONSTRUCTION ZONE BEGINS Sign (Rb-90A)

Rb-90A	**600 mm x 900 mm**
Font	**Helvetica Bold Condensed, FHWA Series D**
Colour	**Top Section of Sign:** **Legend & Border – Black** **Background – White** **Reflective** **Bottom Section of Sign:** **Legend & Border – White** **Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

CONSTRUCTION ZONE ENDS Sign (Rb-90B)

Rb-90B	**600 mm x 900 mm**
Font	**Helvetica Bold Condensed, FHWA Series D**
Colour	**Top Section of Sign:** **Legend & Border – Black** **Background – White** **Reflective** **Bottom Section of Sign:** **Legend & Border – White** **Reflective** **Background – Black**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of CONSTRUCTION ZONE BEGINS/ENDS signs are to indicate to motorists the start and end limits, respectively, of a construction zone. Construction zones are defined by HTA regulation and municipal by-law. They may include lower speed limits, the use of unlicensed vehicles on-site by construction personnel and higher fines for drivers who violate speed restrictions.The CONSTRUCTION ZONE BEGINS sign alerts drivers to proceed with caution and respond to modified driving conditions that may include rough terrain, unusual alignments, narrow lanes, machinery and other objects that pose hazards, and congestion. Conversely, the CONSTRUCTION ZONE ENDS sign indicates the end of these driving conditions.

Sign Types

The **CONSTRUCTION ZONE BEGINS sign (Rb-90A)** indicates the start of a construction zone.

The **CONSTRUCTION ZONE ENDS sign (Rb-90B)** indicates the end of a construction zone.

Guidelines for Use

The CONSTRUCTION ZONE BEGINS/ ENDS signs must be used to indicate a construction zone on a King's Highway. They may also be required for construction zones established according to municipal by-law.

See OTM Book 7 (Temporary Conditions) for how the signs are used within the context of temporary conditions.

Location Criteria

For placement of the signs in the context of other Temporary Conditions signs, see OTM Book 7 (Temporary Conditions).

Legal Status

HTA, Subsection 128 (8).

HTA Ontario Regulation 615 (SIGNS).

Special Considerations

N/A

YIELD TO ONCOMING TRAFFIC Sign (Rb-91)

Rb-91	**900 mm x 1200 mm**
Font	**FHWA Series C**
Colour	**Yield Symbol – Red** **Reflective** **Legend & Border – Black** **Background – White**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The YIELD TO ONCOMING TRAFFIC sign is primarily used during temporary works conditions when only one lane is available for traffic. It is only applicable when there are low volumes of traffic. Vehicles travelling in the direction of the closed lane

must share the open lane with oncoming traffic, and the purpose of the sign is to warn these vehicles that traffic in the oncoming direction has the right- of-way.

Sign Types

There is one type of **YIELD TO ONCOMING TRAFFIC sign (Rb-91)**.

Guidelines for Use

The YIELD TO ONCOMING TRAFFIC sign must be used for temporary works conditions where only one lane is available for traffic and the traffic volume is too low to warrant the installation of portable lane control signals or the use of Traffic Control Persons (TCPs) on duty 24 hours per day. For more detailed information on the use of the YIELD TO ONCOMING TRAFFIC sign, refer to OTM Book 7 (Temporary Conditions).

The sign may be used for applications that are not associated with temporary conditions works, e.g., at narrow bridges that can accommodate only one traffic lane.

Table 3 shows the maximum traffic volumes for which the use of the one lane configuration is acceptable.

Table 3 – Maximum One-way Volumes for Rb-91 Use

Length of Single Lane [m]	Maximum One-Way Volume [vehicles/h]
15	625
30	560
45	500
60	460
75	430
90	400
105	380
120	360
135	340
150	330
165	315
180	300
195	290
210	280
225	270
240	260
255	250
270	245
285	235
300	230
315	220
330	215
345	210
360	200

Location Criteria

The sign must face traffic detouring from the closed lane, and must be located upstream of the lane closure. For further information on sign placement, including distances from the closed lane, and use in the context of temporary conditions, refer to OTM Book 7 (Temporary Conditions).

For applications other than temporary conditions, e.g., at narrow bridges that can accommodate only one traffic lane, the sign should be installed in advance of the beginning of the single lane. The sign must be continuously visible to the approaching vehicles for a minimum of 60 m.

Legal Status

No HTA reference.

The sign must be supported by municipal by-law to be enforceable in municipalities.

The use of YIELD TO ONCOMING TRAFFIC sign for regulating traffic during temporary conditions when vehicles travelling in the direction of the closed lane must share the open lane with oncoming traffic would typically require a permit from the municipality.

HTA Ontario Regulation 615 (SIGNS) provides the meaning of the yield symbol.

Special Considerations

N/A

ROAD CLOSED Sign (Rb-92)

Rb-92	**900 mm x 1200 mm**
Font	**FHWA Series E**
Colour	**Top Section of Sign:** **Legend – Red Reflective** **Border – Black** **Background – White Reflective** **Bottom Section of Sign:** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The ROAD CLOSED sign is used to indicate to motorists that a road is closed, and therefore inaccessible to all traffic.

Sign Types

There is one type of **ROAD CLOSED sign (Rb-92)**.

Guidelines for Use

The ROAD CLOSED sign must be used when a road is temporarily closed due to construction activities.

The sign may also be used for other types of temporary road closures (e.g., due to weather-related damages) and for permanent road closures (e.g., abandoned road due to construction of new alignment).

Location Criteria

For placement of the sign in the context of construction-related temporary conditions signs, see OTM Book 7 (Temporary Conditions).

For other types of road closures, the sign should be installed in the middle of the road facing the closure in front of the physical barrier, such as a barricade, gate, fencing, etc.

Legal Status

Public Transportation and Highway Improvement Act, Subsections 28.(3).

Special Considerations

N/A

18. Community Safety Zone Signs

Community Safety Zones are sections of roadway where public safety is of special concern.

These zones may include roadways near schools, day care centres, playgrounds, parks, hospitals, senior citizen residences or may be collision-prone areas within a community. Traffic-related offences committed within the zone are subject to increased fines. Many set fines are doubled for offences such as speeding and traffic signal violations.

Zones on municipal roads are established through municipal by-law, and zones on provincial highways are established through regulation.

COMMUNITY SAFETY ZONE Sign (Rc-9)

Rc-9	**600 mm x 900 mm**
Font	**Helvetica Bold Condensed**
Colour	**Legend & Border – Black** **Background - White**
Reflective Minimum Sheeting	**Type III or IV**

Purpose and Background

The COMMUNITY SAFETY ZONE sign informs drivers that they are entering a zone that the community has designated as an area where the safety of its children/citizens is paramount and where fines have been increased.

The rules of the road do not change within the zone, but the penalties for violations of the traffic laws are substantially increased.

Sign Types

There is one type of **COMMUNITY SAFETY ZONE sign (Rc-9)**.

The **BEGINS tab sign (Rb-84t)** and the **ENDS tab sign (Rb- 85t)** must be appended to the sign at the corresponding start and finish points of the zone.

Guidelines for Use

COMMUNITY SAFETY ZONE signs are installed to define the legal limits of the zone as prescribed in municipal by-law or regulation. The designation does not take effect until the required signs are installed.

Signs are installed at the beginning and end of the zone, as well as within the zone depending on the length of the designated zone.

All zones have designated times and days defining the time period when increased fines are in effect; however, these times/days/months do not to appear on the signs.

Location Criteria

A COMMUNITY SAFETY ZONE sign with a BEGINS tab sign mounted below the primary sign must be installed at the beginning of the Community Safety Zone.

A COMMUNITY SAFETY ZONE sign with an ENDS tab sign mounted below the primary sign must be installed at the end of the Community Safety Zone.

For zones greater than 1 km in length, additional COMMUNITY SAFETY ZONE signs must be installed as follows:

- Spaced not more than 300 m apart where the speed limit is 60 km/h or less; and
- Spaced not more than 2 kms apart where the speed limit is greater than 60 km/h.

For zones equal to or less than 1 km in length, additional COMMUNITY SAFETY ZONE signs may be installed within the zone to remind drivers of the increased fines.

Legal Status

HTA, Sections 214.1.

HTA Ontario Regulation 615 (SIGNS).

Municipal by-law is required to designate a Community Safety Zone in municipalities.

Special Considerations

N/A

19. Off-roadway Facility Control Signs

Signs for off-roadway facilities are oriented to off-roadway users, such as off-road vehicles, snowmobiles, pedestrians, and cyclists. In general, the same design principles regarding standardization, lettering, colour, application, location, orientation and number of signs apply to off-roadway signs as to on-roadway signs.

OFF-ROAD VEHICLES PERMITTED SIGN (Rb-114)

Rb-114	**600 mm x 600 mm**
Font	**N/A**
Colour	**Permissive Symbol – Green Reflective** **Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The HTA and the Off-Road Vehicles Act and associated regulations define vehicles that meet the definition of an off-road vehicle.

The purpose of the OFF-ROAD VEHICLES PERMITTED sign is to indicate roads upon which off-road vehicles are permitted to travel.

Municipal by-laws may prevent off-road vehicles from making any movements on roads indicated by OFF-ROAD VEHICLES PERMITTED signs.

On provincial highways, Schedules A and B of *HTA Ontario Regulation 316/03 (OPERATION OF OFF-ROAD VEHICLES ON HIGHWAYS)* include a complete list of where off-road vehicles are permitted and prohibited.

Sign Types

There is one type of **OFF-ROAD VEHICLES PERMITTED sign (Rb-114)**.

It should be used with the **MOVEMENT PERMITTED tab sign (Rb-61t)**, with the appropriate choice of arrows, to indicate permitted movements.

Guidelines for Use

The OFF-ROAD VEHICLES PERMITTED sign on its own may be used to indicate that off-road vehicle travel along the signed road is permitted.

The OFF-ROAD VEHICLES PERMITTED sign with the associated MOVEMENT PERMITTED tab sign must be used at intersections to indicate permitted movements for off-road vehicles. By implication, movements not indicated on the tab sign may be prohibited.

The OFF-ROAD VEHICLES PROHIBITED sign (Rb-115) may be used to supplement OFF-ROAD VEHICLES PERMITTED signing, where problems have been encountered with off-road vehicles using roads from which they are prohibited.

Location Criteria

The OFF-ROAD VEHICLES PERMITTED sign must be installed along a road on which the off-road vehicle travel is permitted, at a location between 50 m and 150 m in advance of a point at which two such roadways intersect.

Where a road permitted for off-road vehicles travel can be accessed by turning left and/or right at an intersection, the sign with tab combination must be installed immediately upstream of the intersection to which it applies.

Where a road permitted for off-road vehicles travel only continues straight ahead, the sign with the straight-through arrow tab sign may be installed immediately upstream of the intersection to which it applies, to provide additional information.

Legal Status

ONTARIO OFF-ROAD VEHICLES ACT.

HTA Ontario Regulation 316/03 (OPERATION OF OFF-ROAD VEHICLES ON HIGHWAYS).

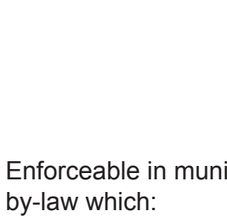
Enforceable in municipalities by municipal by-law which:

- Specifies a schedule of roads on which off-road vehicles are permitted, corresponding to the roads included in permissive off-road vehicles signing system; or
- Specifies a schedule of roads on which off-road vehicles are prohibited, corresponding to the roads excluded from the permissive off-road vehicles signing system.

Special Considerations

N/A

OFF-ROAD VEHICLES PROHIBITED SIGN (Rb-115)



Rb-115	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol - Red Reflective** **Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The purpose of the OFF-ROAD VEHICLES PROHIBITED sign is to specifically indicate that off-road vehicles are prohibited in a specific area.

Sign Types

There is one type of **OFF-ROAD VEHICLES PROHIBITED sign (Rb-115)**.

Guidelines for Use

The OFF-ROAD VEHICLES PROHIBITED sign may be used to supplement a permissive off-road vehicle signing on highways where off-road vehicles are permitted by the HTA or municipal by-law. The OFF-ROAD VEHICLES PROHIBITED sign, when used, must be installed at the entrance to streets or at specified locations, where off-road vehicles are not permitted.

Location Criteria

The OFF-ROAD VEHICLES PROHIBITED sign may be installed at the entrance of a road on which travel by off-road vehicles is prohibited, at the point where the road intersects a roadway on which travel by off-road vehicles is permitted. The sign should be used to supplement permissive off-road vehicle travel signing, at locations of known lack of compliance, to prevent off-road vehicles using roads from which they are prohibited.

Legal Status

HTA Regulation 316/03 (OPERATION OF OFF-ROAD VEHICLES ON HIGHWAYS).

ONTARIO OFF-ROAD VEHICLES ACT

Supporting legislation defining the area and extent of the permission and prohibition should be enacted by municipal by-law or should be secured under statutes of the Operations of Off-Road Vehicles on Highways in the HTA.

Special Considerations

N/A

SNOWMOBILE ROUTE Sign (Rb-64)

Rb-64	**600 mm x 600 mm**
Font	**N/A**
Colour	**Permissive Symbol – Green Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

Snowmobiles are permitted only on sections of road where their presence does not create a hazard to other traffic and the snowmobiles themselves. The purpose of the SNOWMOBILE ROUTE sign is to indicate roads, especially continuous routes through or around an area, upon which motorized snow vehicles known as snowmobiles are permitted to travel. In some cases, municipal by-laws expressly prohibit snowmobiles from making any movements other than those indicated on permissive SNOWMOBILE ROUTE signs.

Sign Types

There is one type of **SNOWMOBILE ROUTE sign (Rb-64)**.

The applicable **MOVEMENTS PERMITTED tab sign (Rb-61t)** must be appended to the SNOWMOBILE ROUTE sign to indicate permitted snowmobile movements at intersections.

Guidelines for Use

The SNOWMOBILE ROUTE sign and the associated MOVEMENTS PERMITTED tab sign (Rb-61t) should only be used on continuous snowmobile routes.

The SNOWMOBILE ROUTE sign on its own may be used to indicate that snowmobile travel along the signed road is permitted.

The SNOWMOBILE ROUTE sign with the applicable MOVEMENTS PERMITTED tab sign (Rb-61t) attached must be used at intersections to indicate permitted movements to access designated snowmobile routes. By implication, movements not indicated on the tab sign may be prohibited.

The NO SNOWMOBILES sign (Rb-65) may be used to supplement permissive snowmobile route signing, where problems have been encountered with snowmobiles using roads from which they are prohibited.

Location Criteria

The SNOWMOBILE ROUTE sign must be installed along a road on which snowmobiles are permitted, at a location between 50 m and 150 m in advance of a point at which two such routes intersect.

Where a snowmobile route can be accessed by turning left and/or right at an intersection, the sign with tab combination must be installed immediately upstream of the intersection to which it applies.

Where a snowmobile route only continues straight ahead the sign with the straight-through arrow tab sign may be installed immediately upstream of the intersection to which it applies, to provide additional information. The SNOWMOBILE ROUTE sign and the MOVEMENTS PERMITTED tab sign combination at this location confirms that the intersecting road is not a snowmobile route.

Legal Status

No HTA reference.

Motorized Snow Vehicles Act.

Enforceable in municipalities by municipal by-law which:

- Specifies that snowmobiles are prohibited from all roads other than snowmobile routes indicated by the permissive snowmobile route signing system;
- Specifies a schedule of roads on which snowmobiles are permitted, corresponding to the roads included in the permissive snowmobile route signing system; or
- Specifies a schedule of roads on which snowmobiles are prohibited, corresponding to the roads excluded from the permissive snowmobile route signing system.

Special Considerations

N/A

NO SNOWMOBILES Sign (Rb-65)

Rb-65	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the NO SNOWMOBILES sign is to indicate streets and highways on which snowmobile travel is prohibited.

Sign Types

There is one type of **NO SNOWMOBILES sign (Rb-65)**.

Guidelines for Use

The NO SNOWMOBILES sign may be used to supplement a permissive signing system for continuous snowmobile routes.

The NO SNOWMOBILES sign when used, must be installed at the entrance to streets, primarily in residential areas, or at specified locations on highways.

Location Criteria

The NO SNOWMOBILES sign should be installed at the entrance of a road on which snowmobiles are prohibited, at the point where the road intersects a snowmobiles route. The sign should be used to supplement permissive snowmobile signing to prevent snowmobiles using roads from which they are prohibited.

Legal Status

No HTA reference.

Supporting legislation defining the area and extent of the prohibition should be enacted by municipal by-law, or should be secured under statutes of the Motorized Snow Vehicles Act.

Special Considerations

N/A

SHARED PATHWAY SIGN (Rb-71)

Rb-71	**300 mm x 450 mm**
Font	**FHWA Series C**
Colour	**Permissive Symbol – Green Reflective** **Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The purpose of the SHARED PATHWAY sign is to indicate that both cyclists and pedestrians are expected to share the space on the path.

Sign Types

There is one type of **SHARED PATHWAY sign (Rb-71)**.

Guidelines for Use

The SHARED PATHWAY sign should be installed along in-boulevard shared-used active transportation facilities to indicate that users are expected to share the space on the path. For further information, refer to OTM Book 18 (Cycling Facilities).

Location Criteria

The sign should be installed at key entry and exit points and must be placed so that it is visible to both cyclists and pedestrians. The sign should be kept clear of the path of cyclists and pedestrians. The sign should be ground-mounted, with horizontal offset of 300 mm to 2 m from the edge of the facility. The vertical mounting height should be 2 m to 3 m from ground elevation at the base of the sign post to the bottom of the sign.

Legal Status

No HTA reference.

Special Considerations

N/A

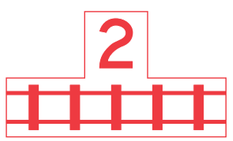
20. Miscellaneous Control Signs

Miscellaneous control signs include regulatory signs that do not fall under one of the categories previously discussed in Sections 2 to 19.

RAILWAY CROSSING SIGN (RA-6 TAC)

RA-6 (TAC)	**1200 mm x 200 mm**
Font	**N/A**
Colour	**Legend & Border – Red** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

NUMBER OF TRACKS Tab Sign (RA-6S TAC)



RA-6S (TAC)	**700 mm x 400 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Red** **Background - White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The RAILWAY CROSSING Sign with appended NUMBER OF TRACKS tab sign indicates to drivers that they must yield the right-of-way to trains in immediate vicinity and obey any flashing lights, bells, and gates, stopping if necessary, before entering the railway crossing area and must not proceed until it is safe to do so.

Sign Types

There is one type of **RAILWAY CROSSING sign (RA-6 TAC)** and one type of **NUMBER OF TRACKS tab sign (RA-6S TAC**).

The RAILWAY CROSSING sign is in the form of an “X”. Both crosspieces of the “X” are 1200 mm by 200 mm and they intersect at a right angle.

The supplementary NUMBER OF TRACKS tab sign displays a numeral corresponding to the number of tracks at the railway crossing location.

Guidelines for Use

The provision of these signs for at-grade crossings is the responsibility of the respective railway authority.

As per *Transport Canada Grade Crossings Standards*, the RAILWAY CROSSING sign must be installed at all at-grade crossings. It must be appended with the NUMBER OF TRACKS tab sign, when there are two or more tracks at the crossing.

For more information on guidelines for use for RAILWAY CROSSING sign and the supplementary NUMBER OF TRACKS tab sign, refer to *Transport Canada Grade Crossings Regulations* and *Transport Canada Grade Crossings Standards.*

Location Criteria

For location criteria, refer to the Grade Crossings Regulations and the Grade Crossings Standards from Transport Canada.

Legal Status

HTA, Subsection 163(1), (2).

Grade Crossings Regulations (Transport Canada)

Grade Crossings Standards under the Rail Safety Act published by Transport Canada for RAILWAY CROSSING sign and NUMBER OF TRACKS sign information.

Special Considerations

Installation and maintenance of all signs within the railway right-of-way is the responsibility of the respective railway authority.

DO NOT STOP ON TRACKS (Rb-113)

Rb-113	**600 mm x 750 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background - White Reflective**
Minimum Sheeting	**Type III or Type IV**

Purpose and Background

The DO NOT STOP ON TRACKS sign indicates that stopping is prohibited at all times on all days, on the railway tracks.

Sign Types

There is one type of **DO NOT STOP ON TRACKS sign (Rb-113)**.

Guidelines for Use

The DO NOT STOP ON TRACKS sign should be used whenever engineering judgment determines that the potential for vehicles stopping on the tracks is high.

Location Criteria

The DO NOT STOP ON TRACKS signs may be installed at level crossings where there is a recognized problem of vehicles stopping on the tracks, such as during rush hour and when the level crossing is located near an intersection

The DO NOT STOP ON TRACKS sign must be installed in advance of the at-grade railway crossing and as close to it as possible without detracting from existing control devices.

The sign should be installed at an angle of 30 to 45 degrees to the flow of traffic and should always be visible to approaching traffic.

The sign, if used, should be located on the right side of the roadway on either the near or far side of the roadway-rail grade crossing, depending upon which side provides better visibility to approaching drivers.

On divided roadways and one-way streets, a second DO NOT STOP ON TRACKS sign may be placed on the near or far left side of the roadway-rail grade crossing to further improve visibility of the sign.

Legal Status

No HTA reference.

The sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

WALK ON LEFT FACING TRAFFIC Sign (Rc-1)

Rc-1	**450 mm x 600 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

On roads where no sidewalks are provided, pedestrians are safer when they walk on the left edge of the road facing oncoming traffic.
The purpose of the WALK ON LEFT FACING TRAFFIC sign is to encourage pedestrians to adopt this practice.

Sign Types

There is one type of **WALK ON LEFT FACING TRAFFIC sign (Rc-1)**.

Guidelines for Use

The WALK ON LEFT FACING TRAFFIC sign should be used only on roads with no sidewalks where:

- there are narrow or no highway shoulders; or
- collision experience involving pedestrians demonstrates the need for the sign.

Location Criteria

The WALK ON LEFT FACING TRAFFIC sign should be placed on the right side of the road, to address pedestrians not already walking on the left side.

The sign should be mounted at the outside edge of the usable shoulder of the road.

The sign may be placed at specific locations where large numbers of pedestrians are present, such as near parks or other rural attractions or placed at regular intervals along roadways based on specific site requirements.

Legal Status

HTA, Section 179.

Special Considerations

N/A

NO FISHING FROM BRIDGE Sign (Rc-2)

Rc-2	**450 mm x 600 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the NO FISHING FROM BRIDGE sign is to prohibit persons from fishing where their presence may create a hazard to other road users or to themselves.

Sign Types

There is one type of **NO FISHING FROM BRIDGE Sign (Rc-2)**.

Guidelines for Use

The NO FISHING FROM BRIDGE sign should be used on bridges where, in the opinion of the road authority, the presence of people fishing constitutes a hazard to road users and themselves.

Location Criteria

The NO FISHING FROM BRIDGE sign, where used, must be placed at both ends of the bridge facing approaching pedestrians.

Legal Status

No HTA reference.

The sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

VEHICLES WITH LUGS PROHIBITED Sign (Rc-3)

Rc-3	**450 mm x 600 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

Lugs are metal or hard rubber studs or ridges on tires or tracks used to improve traction on dirt surfaces. Driving vehicles with lugs on their tires on paved roads can cause serious damage to the pavement.

The purpose of the VEHICLES WITH LUGS PROHIBITED sign is to prohibit vehicles with lugs from driving on designated sections of road.

Sign Types

There in one type of **VEHICLES WITH LUGS PROHIBITED sign (Rc-3)**.

Guidelines for Use

The VEHICLES WITH LUGS PROHIBITED sign must be used where, in the opinion of the road authority, there is evidence of vehicles with lugs damaging:

- Pavement;
- Open-mesh decks of lift bridges; or
- Other structures with temporary decking.

Location Criteria

The VEHICLES WITH LUGS PROHIBITED sign must be installed at the entrance to roadways which prohibit vehicles with lugs, immediately downstream of the intersection with a road on which lugs are allowed, with the signs placed to be visible to turning vehicles.

The signs, where required, must also be installed:

- On both ends of lift bridges;
- At the approaches to temporary structures; and
- Appropriately spaced along the highway sections where it is evident that vehicles with lugs have been travelling.

Legal Status

HTA, Subsection 69.(2).

Special Considerations

N/A

NO LITTERING Sign (Rc-4)

Rc-4	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

MAXIMUM FINE FOR LITTERING Tab Sign (Rc-4t)

Rc-4t	**300 mm x 600 mm**
Font	**FHWA Series D**
Colour	**Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

NO LITTERING AND MAXIMUM FINE FOR LITTERING Sign (Rc-4A)

Rc-4A	**600 mm x 900 mm**
Font	**FHWA Series D**
Colour	**Interdictory Symbol – Red Reflective** **Legend & Border – Black** **Background – White Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

Litter on the road and in the air interferes with the driving task, and also detracts from the appearance of roads.

The purpose of the NO LITTERING sign is to remind road users not to litter and to inform them of the consequences of doing so.

Sign Types

There is one type of **NO LITTERING sign (Rc-4t)**.

The supplementary **MAXIMUM FINE FOR LITTERING tab sign (Rc-4t)** may be attached to the NO LITTERING sign to indicate the maximum fine for contravention.

The **NO LITTERING AND MAXIMUM FINE FOR LITTERING sign (Rc-4A)** incorporates the Rc-4 and Rc-4t signs on a single blank.

Guidelines for Use

The NO LITTERING sign may be used here there is evidence of non-compliance in the form of excessive litter would be a reason for using the sign.

Location Criteria

The NO LITTERING sign may be installed adjacent to roadways where it is found necessary to inform road users of regulations that prohibit littering.

Legal Status

HTA, Section 180.

No HTA regulation to support this sign.

Special Considerations

N/A

KEEP OFF MEDIAN Sign (Rc-11)

Rc-11	**450 mm x 750 mm**
Font	**FHWA Series C**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The KEEP OFF MEDIAN sign is used to prevent motorists from illegally crossing over the median strip between interchanges and at-grade intersections.

Sign Types

There is one type of **KEEP OFF MEDIAN sign (Rc-11)**.

Guidelines for Use

The KEEP OFF MEDIAN sign must be placed on the median strip of divided highways only at locations where there is evidence that motorists are illegally crossing over the median strip.

Location Criteria

The KEEP OFF MEDIAN sign, if used, must be installed on the median strip.

Two signs, back to back on the same post, must be installed so as to be visible by both directions of traffic flow.

Legal Status

HTA, Section 156.

No HTA regulation to support this sign.

Sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

N/A

NO PEDESTRIANS Sign (Rc-12)

Rc-12	**600 mm x 600 mm**
Font	**N/A**
Colour	**Interdictory Symbol – Red** **Reflective** **Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

This NO PEDESTRIANS sign prohibits the access of pedestrians to freeways, bridges or other designated highway sections where their presence may create a hazard to motorized traffic or to themselves.

Sign Types

There is one type of **NO PEDESTRIANS sign (Rc-12)**.

Guidelines for Use

The NO PEDESTRIAN sign must be used on approach ramps to freeways, highways or bridges where the use of the facility by pedestrians is prohibited by HTA or municipal by-law.

Location Criteria

The signs must be placed so that they are visible primarily to pedestrians entering the prohibited area, rather than to motorists.

Legal Status

HTA, Subsection 185.(1).

HTA Ontario Regulation 615 (SIGNS).

HTA Ontario Regulation 627 (USE OF CONTROLLED-ACCESS HIGHWAYS BY PEDESTRIANS).

Sign must be supported by municipal by-law to be enforceable in municipalities.

Special Considerations

Where a pedestrian prohibition is combined with a bicycle prohibition, the NO PEDESTRIANS OR BICYCLES sign (Rb-68) is used. This sign is discussed under Section 11 (Specific Vehicle Class Control Signs), since it includes a prohibition for bicycles (a specific vehicle class).

FASTEN SEAT BELT Sign (Rc-13)

Rc-13	**600 mm x 600 mm**
Font	**N/A**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

COMPULSORY Tab Sign (Rc-13t)

COMPULSORY

Rc-13t	**200 mm x 600 mm**
Font	**Helvetica Bold Condensed**
Colour	**Legend & Border – Black** **Background – White** **Reflective**
Minimum Sheeting	**Type III or IV**

Purpose and Background

The purpose of the FASTEN SEAT BELT sign is to remind passengers in vehicles to ensure that their seat belts are fastened while the vehicle is travelling. Due to proven safety benefits, the use of seat belts is mandatory. For maximum effectiveness, the sign is placed where vehicles are about to enter the roadway, where passengers are most likely to require reminding about seat belts.

Sign Types

There is one type of **FASTEN SEAT BELT sign (Rc-13)**.

The **COMPULSORY tab sign (Rc-13t)** is a supplementary tab sign indicating that use of seat belts is mandatory by law.

Guidelines for Use

The FASTEN SEAT BELT sign is typically used at exits from various facilities which lead to the road and highway system. Signs are not normally visible to motorists travelling on the roads and highways.

The FASTEN SEAT BELT sign should be considered at exits from locations which generate a large percentage of foreign or tourist traffic, where drivers may be unfamiliar with Ontario seat belt laws. The COMPULSORY tab sign may also be used at these locations.

Location Criteria

The FASTEN SEAT BELT sign may be installed at exits from the following:

- Provincial and municipal buildings (particularly those generating high public traffic volumes, such as court buildings, licensing offices, hospitals, police stations, travel information centres);
- Freeway service centres;
- Border crossings;
- Ferry crossings;
- Airports;
- Roadside parks; and
- Provincial parks.

Where major traffic generators have exits leading to a highway, the installation of FASTEN SEAT BELT signs should be considered, including locations such as the following:

- Shopping plazas;
- Industrial parking lots;
- Racetrack exits; and
- Hospitals and high schools.

Legal Status

HTA, Section 106.

HTA Ontario Regulation 613 (SEAT BELT ASSEMBLIES).

Special Considerations

N/A

21. Subject Index

O

P

R

S

T

U

W

Y

22. Sign Number Index

Ra Signs

Rb Signs

Rc Signs

Other Signs

23. Appendix A Definitions

A

Acceleration
A rate of change of speed (km / h/sec or m/sec^2) resulting in an increase in travel speed.

Acceleration Lane
A speed change lane for the purpose of:

enabling a vehicle entering a roadway to increase its speed to a rate at which it can more safely merge with through traffic:

providing the necessary merging distance; and

giving the main road traffic the necessary time to make appropriate adjustments.

Access
A way of entering or travelling towards a location. It is used when describing which vehicle movements may be permitted at an intersection (such as with an access-only barrier). It is also used when describing the location of driveways and walkways which provide an entrance to a property. See Egress and Ingress.

Accident
See Collision.

Advisory Speed
The speed, determined to the nearest 5 km/h, at which traffic may safely negotiate a potential hazard under favourable driving conditions.

All-red Interval (Traffic Signal)
The time in seconds of a red indication for all intersection traffic. It is used following an Amber Clearance Interval to permit vehicles or pedestrians to clear the intersection before conflicting traffic receives a green indication.

Amber Clearance Interval (Traffic Signal)
The clearance interval in which the signal indication for that Phase is amber. A clearance interval to warn approaching traffic to clear the intersection before conflicting traffic receives a green indication.

Approach Nose
The end of a traffic island first encountered by a road user approaching from a given direction; also called the Upstream End. Depending on the situation, traffic may pass only to the right of the island, or on both sides. Each traffic island has two approach ends, one for each direction of travel.

Approach Speed
The maximum safe speed that can be maintained over a short section of highway immediately in advance of a potentially hazardous location, taking into account pavement and shoulder width, horizontal and vertical alignment, sight distance, and other controlling factors. The approach speed does not necessarily coincide with the design speed.

Arterial Road
A Major Road, used primarily for through traffic rather than for access to

adjacent land, that is characterized by high vehicular capacity and continuity of movement. Intersections are spaced relatively far apart and are frequently signalized. See also Collector Road and Local Road.

ASTM
American Society for Testing and Materials.

At-grade Intersection
An intersection of two roadways where there is no vertical separation between the two roadways at their point of intersection.

B

Bicycle
A vehicle having only two tandem wheels, propelled solely by human power, upon which typically one or two persons may travel. The HTA definition of bicycle includes tricycles and unicycles and excludes motor- assisted bicycles.

Bicycle Facility
A general term denoting a facility with improvements and provisions made or administered by public agencies to accommodate or encourage bicycling, including bikeways and bikeway parking facilities.

Bicycle Lane
A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists.

Bicycle Path
A bikeway physically separated from the motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way.

Bicycle Route
A segment of a system of bikeways designated by the jurisdiction having authority, with appropriate directional and information markers, with or without a specific bicycle route number.

Bicycle Trail
An unimproved bikeway.

Blank Number
See Sign Blank Number.

Broken Line
A Pavement Marking consisting of a cycle of marking segments and gaps. Broken lines are permissive and inform drivers that they are permitted to cross a broken line, (two-lane, two-way highways) or that there is a change in use of a particular lane (continuity lines).

Built-up Area
An area along a highway where frontage consisting of dwellings, businesses, schools or churches, occupies:

- *50% or more of the road property frontage for at least 200 m on one side, or for at least 100 m if on both sides, or*
- *where no more than 200m of the highway separates the areas described above.*

The term 'built-up area' does not apply to a controlled access highway.

(Reference HTA 1(1)).

Bus
Any motor vehicle designed, constructed and/or used in the transportation of ten or more seated passengers.

Bus Lane
A street or highway lane intended exclusively or primarily for buses, either all day, or during specified periods. See also Managed Lane, Reserved Lane and Transit Lane.

Business District
The territory contiguous to and including a highway when within 180 m along such highway there are buildings in use for business or industrial purposes, including but not limited to, hotels, banks or office buildings which occupy at least 90 m of frontage on one side or 90 collectively on both sides of the highway.

C

Centreline
See Directional Dividing Line.

CGSB
Canadian General Standards Board.

Changeable Message Sign
An electrical, electro-optical, electro-mechanical, or mechanical sign which permits the sign message to be changed dynamically, either locally or remotely.

Channelization
The separation or regulation of traffic movements into definite paths of travel by use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movement of traffic, both vehicular and pedestrian.

Collector Road
A road for which vehicle movement and access are of equal importance. Direct access to adjacent properties may be permitted in some cases, typically in lower-density residential areas. Intersections are spaced at varying intervals and are typically only signalized where the collector road intersects an arterial road or in some cases another collector road. See Arterial Road and Local Road.

Collision
An incident resulting in property damage, personal injury or death and involving the loss of control and/or the striking of one or more vehicles with another vehicle, a person, an animal or an inanimate object.

Commercial Motor Vehicle
Unless otherwise defined by regulation, a motor vehicle having attached to it a truck or delivery body and includes an ambulance, a hearse, a casket wagon, a fire apparatus, a bus and a tractor used for hauling purposes on a highway.

Comprehension
The ability of drivers to understand the meaning of a sign message, including any symbols or abbreviations.

Conflict
A Collision or near-collision which requires evasive action on the part of one or more persons. Conflicts can occur between two motorists, between a motorist and cyclist, between a motorist and pedestrian, and between a cyclist and pedestrian.

Conspicuity
The ability of a traffic control device to attract or command attention, given the visual setting in which it is placed.

Construction Zone
One or more highway work zones located on or near a roadway. A construction zone must be designated and signed in order to have enforceable maximum speed limits.

Continuous Wide Median
On a divided highway, a median that has a continuous width of 10 m or more. See also Divided Highway.

Controlled Intersection
An intersection where traffic approaching from any or all directions is regulated by some form of traffic control device.

Crossover
See Pedestrian Crossover.

Crosswalk
See Pedestrian Crosswalk.

Curb
A vertical or sloping construction element along the edge of a pavement or shoulder forming part of a gutter, strengthening or protecting the edge, and clearly defining the edge to vehicle operators. The surface of the curb facing the general direction of the pavement is called the “face”.

Curve
A horizontal or vertical deviation in the roadway. A horizontal curve appears as a bend in the roadway, requiring drivers to turn the steering wheel. A vertical curve appears either as a “crest” or a “sag” to provide for a change in gradient on the profile of the roadway.

Cyclist
A person riding a bicycle.

D

Dangerous Goods Carrier
A commercial goods carrier which transports goods deemed dangerous by the relevant provincial and federal legislation.

Deceleration Lane
A speed change lane for the purpose of enabling a vehicle that is to make an exit from a roadway to slow to the safe speed on the exit after it has left the main stream of traffic.

Delineation
One, or a combination of several types of devices that regulate, warn, or provide tracking information and guidance to drivers.

Designated Area for Speed Limit
Designated area within which a maximum speed limit for all streets within that area has been reduced from the statutory speed limit by municipal by-law.

Device (Traffic Calming)
A physical feature of the roadway, constructed for the purpose of affecting the movement of motor vehicles, bicycles and/or pedestrians.

Directional Dividing Line
A yellow Pavement Marking indicating the division of the roadway between traffic travelling in opposite directions.

Divided Highway
A multi-lane highway consisting of roadways for opposing traffic which are separated by an unpaved area or other physical barrier, including a curbed island. See also Continuous Wide Median.

Double Line
A pavement marking used on two-way, undivided roadways to inform the driver of a “no-passing” zone in both directions of travel.

Driver
A person who operates a vehicle on a highway.

Driver Response
The driver action taken as a result of reading a traffic sign or encountering another traffic control device.

Driveway
A private road giving access from a public way to a building or property on abutting grounds.

E

Edge Line
A painted line marking the edge of the roadway.

Egress
A way of exiting or travelling away from a location. Is used when describing which vehicle movements may be permitted at an intersection (such as with an egress-only barrier). Is used when describing the location of driveways and walkways which provide an exit from a property.

Electronic Changeable Message Sign
See Changeable Message Sign.

Engineering Grade Material
A reflective sign sheeting material meeting ASTM Specification for Type I material or CGSB Specification 62-GP-11M for Reflectivity Level II material.

Expectancy
Used in traffic engineering to describe a driver’s anticipation of upcoming road design and traffic control conditions. Driver expectancy is usually affected by previous experience and the consistency and continuity of traffic control devices encountered. Violation of driver expectancy should be avoided whenever possible. For example, a sharp curve after a long stretch of a roadway segment or a sudden drop of speed constitutes violation of driver expectancy. The violation of driver expectancy reduces the driver’s readiness to respond to situations in predictable and successful manners and

should therefore be avoided whenever possible.

Expressway
A divided arterial highway for through traffic with full or partial control of access and generally with grade separations at major intersections.

F

Farm Tractor
A self-propelled vehicle designed and used primarily as an implement for drawing ploughs, mowing machines and other implements of husbandry and not designed or used for carrying a load.

Field Advertising
Commercial advertising signs located off the highway right-of-way, or, in bush country, located on, and at the edge of, the highway right-of-way.

Flashing Beacon
A red or yellow flashing beacon is generally installed at an intersection or in conjunction with a warning sign in advance of an area requiring greater than normal care by the average driver. A red flashing beacon is used only in conjunction with a STOP sign.

Flow
Movement of traffic:

Interrupted – Non-continuous movement of traffic;

Uninterrupted – Continuous movement of traffic.

Freeway
An expressway with full control of access and interchanges in place of At-grade Intersections. This term includes Toll Highways built to a freeway configuration.

G

Geometry
When referring to roadway design, geometry refers to the physical characteristics and dimensions of parts of the roadway.

Grade Separation
The vertical separation of two or more intersecting roadways or a roadway and another transportation mode, e.g., railroad, thus permitting traffic on all roads to cross traffic on all other roads without interference.

Gross Axle Weight
That part of the gross vehicle weight in kilograms transmitted to the highway by an axle unit.

Gross Vehicle Weight
The total weight in kilograms transmitted to the highway by a vehicle or combination of vehicle and load.

Guide Sign
A Traffic Sign used to direct traffic along a route towards a destination.

Guideline
A recommended (but usually not required) practice, method or value for a specific design feature or operating practice.

H

Hazard Marker
See Object Marker.

High Intensity Material
A reflective sign sheeting material meeting ASTM Specification for Type III or higher or CGSB Specification 62-GP-11M for Reflectivity Level I material.

High Occupancy Vehicle (HOV)
A vehicle that carries a defined minimum number of persons (typically two or three).

High Occupancy Vehicle (HOV) Lane
Exclusive roadway or lane limited to high-occupancy vehicles, such as buses, vanpools, carpools and emergency vehicles. Some road authorities also permit motorcycles.

Highway
A general term denoting a public way for purposes of vehicular and pedestrian travel, including the entire area within the right-of-way. This includes King's Highways, regional and county roads, rural roads, municipal roads and streets.

Highway Traffic Act (HTA)
The Ontario Highway Traffic Act.

Human Factors
The consideration of human physical, perceptual and mental limitations in engineering design, so as to optimize the relationship between people and things. The objective is to reduce error and increase user comfort.

I

Ingress
A way of entering or travelling into a location. Is used when describing which vehicle movements may be permitted at an intersection (such as ingress-only barriers). Is also used when describing the location of driveways and walkways which provide access into a property.

In-line Skater
A person using a manufactured or assembled device consisting of a shoe, boot, or other foot covering, with a frame or chassis holding two or more ball bearing wheels aligned in a single straight line, and used to skate, or glide, by means of muscle power.

Installation
The process or act of placing, erecting, and/or connecting a traffic control device or system into its functional position and state of operational readiness.

Interchange
A system of interconnecting roadways in conjunction with one or more grade separations, providing for the interchange of traffic between two or more roadways on different levels.

Interdictory Symbol
An annular (circular) red band with a diagonal red stroke at 45 degrees, or as close to 45 degrees as practical, signifying that whatever is depicted within the symbol is prohibited.

Intermittent
Not continuous. As used for traffic control devices, usually means regularly spaced either in time (flashing beacon) or space (broken pavement lines). Otherwise, may mean regularly or irregularly spaced (such as intermittent hazard).

Intersection
The area embraced by the prolongation of lateral curb lines or, if none, of the rights-of-way of two or more highways that join one another at an angle, whether or not one highway crosses the other.

Intersection Approach
That part of an intersection leg used by traffic approaching the intersection.

Intersection Channelization
Raised or painted islands at an intersection that prevent specific movement(s) from being made or provide better definition of large uncontrolled areas of pavement.

Intersection Leg
That part of any one of the roadways radiating from the intersection which is close to the intersection but outside the area of the intersection proper.

J

Junction
See Intersection.

Jurisdiction
A legal or other authority with responsibility and control for specific actions within a defined area.

K

Kilometre
A measure of distance equal to 1000 m (.622 miles).

King's Highway
A highway, including secondary and tertiary roads designated under the Public Transportation and Highway Improvement Act.

km
Abbreviation for kilometre.

L

Lane
A defined width of road intended to accommodate a single line of moving vehicles.

Lane Designation Sign
An overhead or ground-mounted sign, erected at or in advance of an intersection, or over a lane or lanes, to regulate traffic on an approach by assigning certain traffic movements to specific lanes or a reserved lane. These signs should not be confused with Turn Control Signs.

Lane Line
A pavement marking, other than a directional dividing line, which separates two traffic lanes assigned to traffic moving in the same direction.

Left-turn Lane
A lane reserved for left-turning vehicles and so designated by pavement markings and/or lane-use signs.

Left-turn Slip-around
An additional lane or width of pavement provided for through traffic to separate this traffic from left- turning traffic at an intersection.

Legal Authority
The authority provided, by legislation and regulation, to a jurisdiction or enforcement body for the actions it takes.

Legibility Distance
The distance at which a sign can be read by a given driver under prevailing conditions.

Legibility Distance, Required
The distance at which a sign must be legible, based on the travel speed and the sum of Reading Time, Perception-reaction Time, and Manoeuvre Time.

Local Road
A street or road primarily for access to residence, business or other abutting property.

Local Traffic
Traffic which originates from or is destined to a location within a Neighbourhood.

Low Volume/ High Volume Roadway
The volume of a roadway is normally expressed as a daily volume and includes the combined traffic in both directions. Low volume roadways are typically defined as having volumes less than 3,000 vehicles per day. The appropriate value can be obtained from the local road authority.

Lugs
Metal or hard rubber studs or ridges on tires used to improve traction on dirt surfaces.

Luminance
The luminous flux in a light ray, emanating from a surface or falling on a surface, in a given direction, per unit of projected area of the surface as viewed from that direction, per unit of solid angle. (Reflective light.)

M

m
Abbreviation for metre.

Maintenance
The upkeep of highways, traffic control devices, other transportation facilities, property and/or equipment.

Major Road
The principal route of two roads at an intersection. Also called Main Road.

Manoeuvre Time
The time to complete any required manoeuvre before reaching a sign, other traffic control device, or decision point.

Managed Lane
Managed lane is a broad term that refers to any lane or corridor that controls usage by vehicle, eligibility, price, or access management. The types of managed lanes commonly seen are: High Occupancy Vehicle (HOV) Lane, High Occupancy Toll (HOT) Lane, Toll Lanes, and Reserved Lanes.

Marking (Pavement)
See Pavement Marking.

Maximum Speed
The maximum speed drivers are permitted to travel. The maximum speed is imposed by the HTA, or municipal by-laws.

May
Indicates a permissive condition. No requirement for design or application is intended. However, mandatory requirements apply to some specific options if and when they are selected.

Median
That portion of a divided highway separating the travelled ways for traffic in opposite directions.

Median Barrier
A raised island, wall or structure located on the Centreline of a roadway through an intersection or along a road that prevents left turns or straight through movements from being made to and from a side street or private/ commercial driveway.

Median Island
A zone or physical island constructed in the centre of a roadway to separate opposing directions of traffic. In the context of traffic calming, it may be used to reduce the overall width of the travel lanes.

Median Strip
An expanse of hard surface material separating opposing lanes on a highway. The hard surface is flush or nearly flush with the adjacent lanes.

Merging
The convergence of separate streams of traffic into a single stream.

Ministry
The Ministry of Transportation, Ontario.

Minor Road
The lesser of two roads at an intersection.

Motor Vehicle
Includes an automobile, motorcycle, motor-assisted bicycle (moped), and any other vehicle propelled or driven other than with muscular power, but does not include a streetcar, or other vehicles designed to operate on rails, or a motorized snow vehicle, traction engine, farm tractor and implements of husbandry or road-building machine.

Motorist
Motorist is a person who is operating a ‘motor vehicle’.

Movement (Traffic Signal)
A movement is the direction of traffic flow and may be straight ahead (a “through movement”), a green left arrow (a “left-turn movement”), etc. Several movements may be allowed within a phase (such as with an advanced green arrow and a circular green display). In some cases, a movement is called a Faze since it is normally part of a Phase. For more information on ‘Faze’, see OTM Book 12.

MTO
The Ministry of Transportation Ontario.

Multi-lane Highway
A roadway with two or more travelled lanes carrying traffic in each direction.

Multi-use Path
Any off-road dedicated facility for non-motorized traffic such as bicycles, pedestrians and in-line skaters.

Must
Indicates a mandatory condition. Where certain requirements in the design or application of the device are described with the “must” stipulation, it is mandatory that these requirements be met when an installation is made.

MUTCD
The Manual of Uniform Traffic Control Devices for Ontario, 1995.

N

Neighbourhood
A cohesive urban area defined by geographic features, the road network or socio-economic characteristics. With respect to traffic calming, neighbourhood boundaries are often defined by the arterial roadway network, which typically presents a significant barrier to travel and interaction.

No Parking
See Parking and Parking Restriction.

No Standing
The prohibition of the halting of a vehicle whether occupied or not, except for the purpose of and while actually engaged in the receiving or discharging of passengers.

No Stopping
The prohibition of the halting of a vehicle, even temporarily, whether occupied

or not, except where necessary to avoid conflict with other vehicles, or in compliance with the directions of a police officer or Traffic Control Signal.

O

Object Marker
A traffic sign mounted temporarily or permanently on an obstruction, within or adjacent to the roadway, to make the obstruction as highly visible as possible.

Off-Ramp
That part of an interchange connecting a Deceleration Lane to a crossroad.

Off-road Bikeway
A bicycle path which is not immediately adjacent to a roadway.

Official Sign
Any sign approved by MTO.

Older Driver
A driver aged 55 years or older.

On Ramp
That part of an interchange connecting a crossroad to an Acceleration Lane leading onto a Major Road.

On-street Parking
The use of vehicle parking on the roadway surface or on the adjacent shoulder.

Opposing Traffic (Traffic Signal)
Traffic progressing in the opposite direction to the traffic being considered on a roadway.

Overhead Sign
A Traffic Sign mounted above the roadway, usually with 4.5 m to 5.3 m of vertical clearance and preferably located over the lane or lanes to which the sign applies.

Oversize Sign
A Traffic Sign with greater proportional dimensions than the minimum dimensions specified in this Book. Such signs are generally required on higher speed highways, or on other highways in special cases.

P

Parking
The stationary storage or leaving of a vehicle unoccupied or unattended.

Parking Control Sign
A sign which identifies the times of day and days of week parking, stopping or standing restrictions are in place on the section of road adjacent to the sign.

Parking and Stopping Signs
A Traffic Sign of the regulatory type which informs drivers of the parking and stopping regulations in effect on facilities where such signs are erected.

Parking Restriction

A limitation which prevents vehicles from being parked in specific locations, at specific times, or for specific types of vehicle. Most often used to control on-street parking.

Parking Space Marking
Markings intended to inform drivers where they are permitted to park.

Passing Sight Distance
The length of highway required for a vehicle to execute a normal passing manoeuvre as related to design conditions and design speed.

Pavement Marking
A coloured marking applied to the pavement to provide drivers with roadway alignment information.

Pedestrian
Any person who is not in or upon a vehicle, motorized or otherwise propelled.

Pedestrian Crossover
Any portion of a Roadway, designated by by-law of a municipality, at an intersection or elsewhere, distinctly indicated for pedestrian crossing by signs on the highway and lines or other markings on the surface of the roadway as prescribed by the regulation and the HTA, with associated signs Ra-4, Ra-4t, Ra-10 and Ra-11.

Pedestrian Crosswalk
Any portion of the roadway, at an intersection or elsewhere, distinctly indicated for pedestrian crossing by appropriate pavement markings and/or signs, or by the projections of the lateral lines of the sidewalk on opposite sides of the road.

Pedestrian Facility
A facility where pedestrians are controlled and protected from other road users.

Pedestrian Signal (Traffic Signal)
A Traffic Signal head or indication showing either a white walking pedestrian on a black background (when pedestrians are permitted to cross) or an orange hand on a black background (when pedestrians are not permitted to cross, if continuous, or are not permitted to start crossing, if flashing).

Perception-reaction Time
The time required to make a decision, after reading or encountering a traffic control device, and initiate a manoeuvre if required.

Permissive
Refers to areas where a driver is permitted to travel.

Permissive Symbol
An annular (circular) green band used on a sign to signify that whatever is depicted within the symbol is permitted.

Phase (Traffic Signal)
A part of a cycle where one or more traffic movements receive a green indication at the same time. Phase time is the time required from the start to the finish of the phase including Amber and

All-red Interval times.

Portable Lane Control Signal
A portable lane control signal may be

used as an alternative to Traffic Control Persons and is used only to stop vehicles intermittently when traffic must use a single lane in situations where the road is normally a two-way operation. Portable lane control signals must comply in all respects with Section 146 or Regulation 606 under the HTA.

Posted Speed Zone
A section of highway upon which the maximum speed is indicated by appropriate Regulatory Signs.

Prescribed Sign
The *Highway Traffic Act (HTA)*, Section 182, provides for the regulation of various signs, their type and location on the roadway. The criteria and specifications for application, dimensions, location and orientation are prescribed and illustrated under Regulations 402/15, 615, 620/05, 608, 581, 599 (R.R.O 1990) and are indicated as such in this Book. Signs erected in accordance with the regulations, and pursuant to the HTA, are enforceable under various provisions of the Act. Enforcement is permitted under the particular section under the authority of which a prescribed sign may be erected to indicate a traffic regulation, or HTA Section 182, which requires obedience to prescribed signs.

Progression (Traffic Signal)
The time relationship between adjacent signals on a roadway which permits a platoon of vehicles to proceed through the signals at a planned rate of speed.

Provincial Highway
Any public highway under the jurisdiction of the Ministry of Transportation of Ontario (MTO). See King's Highway.

Public Roadway
Any roadway under the jurisdiction of and maintained by a public authority and open to public travel.

R

Raised Crosswalk
A marked Pedestrian Crosswalk at an intersection or mid-block, constructed to the same elevation as adjacent curbs and sidewalks.

Ramp
An interconnecting roadway of a traffic interchange, or any connection between highways at different levels or between parallel highways, on which the vehicles may enter or leave a designated roadway.

Reading Time
The time required to read a sign with a given message.

Rectangular Rapid-Flashing Beacons
Rectangular rapid-flashing beacons (RRFBs) are pedestrian-actuated conspicuity enhancement devices located at pedestrian crossover (see OTM Book 15 for more information). RRFBs can enhance safety by reducing collisions between vehicles and pedestrians at unsignalized intersections and mid-block

pedestrian crossings by increasing driver awareness of potential pedestrian conflicts.

Reflectance
See Reflectivity.

Reflective Material
A type of material applied in either strips or sheets which reflects illumination back to its source. Also referred to as retroreflective material.

Reflectivity
A measure of the degree to which a surface reflects incident light. A related term, reflectance, is the amount of light reflected back from a sign, relative to the amount of light shining on the sign. Also referred to as retroreflectivity.

Reflectorization
A method of incorporating light-reflective material on the approach face of a Traffic Sign so that the face will reflect light during the hours of darkness while retaining the same colours as by day.

Refuge Island
An island provided in a street for the safety of pedestrians, either as a Median Island on a wide street, where the width may not permit pedestrians to cross the street on a single Pedestrian Signal indication, or as a loading island for transit, such as Streetcars.

Regulation
A prescribed rule, supported by legislation, such as any regulation made under the HTA or municipal by- law.

Regulations provide the legal basis for enforcement.

Regulatory Sign
A Traffic Sign advising drivers of action they should or must do (or not do), under a given set of circumstances. Disregard of a regulatory sign would usually constitute an offence.

Reserved Lane
A street or highway lane reserved for use by specific classes of vehicles, either all day, or during specified periods. These classes may include any or all of buses, carpools, taxis or bicycles. Reserved lanes comes under the broad terminology of Managed lanes, which also include High Occupancy Lane, High Occupancy Toll Lane, and Toll Lanes.

Reserved Lane Controls
All controls, including Traffic Control Devices and physical devices, intended to ensure that a Reserved Lane functions in accordance with its intended purpose.

Residential District
That portion of a municipality, or an area within the influence of a municipality, in which the dominant land use is residential development, but where small business areas may be included.

Restrictive
Refers to areas where, or times when, a driver is not permitted to travel.

Right-of-way
Allocation of right of movement to a road user, in preference over other road users;

The width of the road allowance from the

property line on one side to the property line on the opposite side of the roadway.

Right-of-way Rule
Although these may vary in specific localities, generally a vehicle approaching an uncontrolled intersection must yield to a vehicle approaching on the leg to its right.

Right Turn on Red
A right-turning movement permitted on a red signal indication after coming to a stop and ensuring that a right turn can be made safely. Allowed by the HTA, but subject to site-specific local by-laws.

Road
See Highway.

Road Authority
The body (Municipal, Provincial or private) that has legal jurisdiction over a roadway.

Road Closure
The closing of a highway to road users. Road closures are covered by Regulation 599 of the HTA.

Road User
Anyone who uses the road such as pedestrian, cyclist, motorist, etc.

Roadway
The part of the highway that is improved, designed or ordinarily used for vehicular traffic, but does not include the shoulder, and, where a highway includes two or more separate roadways, the term "roadway" refers to any one roadway separately and not to all of the roadways collectively.

Rollerblader
See In-line Skater.

Roundabout
A raised circular island located in the centre of an intersection, which requires vehicles to travel through the intersection in a counter-clockwise direction around the island. Roundabouts are typically used on arterial and collector roads, and are distinguished by YIELD signs and raised Median Islands on all approaches, and in some cases, gradual widening of the entry approach to two or more lanes.

Rumble Strip
Raised buttons, bars or depressions closely spaced at regular intervals on the roadway or shoulder that create both noise and vibration in a moving vehicle to alert the driver or cyclist of an upcoming situation, or of a potentially hazardous deviation from the normal travel way. Also called Singing Strip.

Rural Area
An area outside of the limits of any incorporated or unincorporated city, town, village, or any other designated residential or commercial area.

S

Safe Speed
See Advisory Speed.

Safe Stopping Distance
The distance required to bring a vehicle completely and safely to rest with normal braking and road conditions.

School Bus
Any bus which is used for the express purpose of transporting students to and from school. Ontario registered vehicles must be Chrome Yellow in colour.

School and Pedestrian Signs
A group of signs, both Regulatory and Warning, used to control vehicles and protect pedestrians wherever students and pedestrians are likely to be present and conflict with vehicles may occur.

School Zone
A roadway section with a mandatory 40 km/h maximum speed zone in effect every school day at designated times, in the vicinity of a school. The HTA also makes provision for 60 km/h speed zones on King's Highways.

Shall
Means the same as "must".

Shared Roadway
Any roadway upon which a Reserved Lane is not designated and which may be legally used by a variety of vehicle types regardless of whether such facility is specifically designated. This includes bicycles, buses, taxis, and carpools.

Short Duration Work
Any daytime maintenance activity, construction project or utility work which requires a separate work area for less than one day in duration.

Should
Indicates an advisory condition. Where the word "should" is used, the action is advised; recommended but not mandatory. This term is meant to suggest good practice in most situations but also to recognize that in some situations, for good reasons, the recommended action cannot or need not be followed.

Shoulder
The portion of a highway between the outer edge of the roadway and the curb, or point of intersection of the slope lines at the outer edge of the roadway and the fill, ditch, or median slope, for the accommodation of stopped vehicles, for emergency use, and for lateral support.

Side Road (Traffic Signal)
The roadway approach or approaches at an intersection normally carrying the least volume of vehicular traffic. (Also called Minor Road.)

Sidewalk
That portion of a road, adjacent to the travelled roadway, which has been improved for the use of pedestrians.

Sight Distance
The distance visible to the driver of a passenger vehicle, measured along the normal travel path of a roadway, to the roadway surface or to a specified height above the roadway, when the view is unobstructed by traffic.

Sign
A Traffic Control Device mounted on a fixed or portable support which conveys

a specific message by means of symbols or words, and is officially erected for the purpose of regulating, warning, or guiding traffic.

Sign Blank Number
The number given to a given size of standard sign blank (substrate), for purposes of identification, inventory and fabrication.

Sign Pattern
The full-size drawings of individual signs, showing sufficient detail and dimensional accuracy for sign fabrication.

Sign Sheeting
The reflective material used on the surface of a Sign to provide good daytime and nighttime visibility.

Sign Support
The physical means of holding a sign in its intended position.

Sign Symbol
A pictogram, depiction, arrow, silhouette or figure, and/or Interdictory or Permissive Symbol, used to simplify or represent a word message on a sign.

Signal Indication (Traffic Signal)
The illumination of one or more lenses in a signal head which conveys a message to traffic approaching the signal from one direction.

Signalized Control
The use of a traffic signal control device to control traffic on a road section or intersection.

Singing Strip
See Rumble Strip.

Single Axle Weight
The total weight transmitted to the roadway by all wheels whose centres may be included between two parallel transverse vertical planes 1 m apart, extending across the full width of the vehicle.

Snow Route
A highway where parking is prohibited for purposes of snow removal as decreed by municipal by-law.

Snowmobile
A motorized vehicle solely designed to operate on snow or ice.

Solid Line
A continuous Pavement Marking. Solid lines are restrictive; drivers are being informed that they are not to cross a solid line.

Speed Controls
Speed zoning, enforcement, and non-enforcement measures to control speeds.

Speed Limit
The maximum vehicular speed allowed within any given posted or unposted Speed Zone.

Speed Zone
A specific section of roadway upon which a maximum speed limit has been imposed. Such zones may be posted or unposted.

Speeding
Operating at a speed, possibly below the posted limit, above that at which a reasonable and prudent person would operate under the circumstances, or operating at a speed above the legal limit.

Staged Freeway
A highway designated as a possible future freeway, being constructed by stages with either two or four lanes and with both at-grade intersections and interchanges.

Standard
A rule, principle, pattern or measure, which practice or theory has shown to be appropriate for a given set of conditions, and applicable, as the case may be, to planning, design, traffic control devices, operations or maintenance.

Standing
The halting of a vehicle whether occupied or not, except for the purpose of and while actually engaged in the receiving or discharging of passengers.

Statutory Speed Limit
A maximum speed limit automatically in effect on all roads, unless otherwise signed. The statutory speed limit applies even where no maximum speed limits are signed.

Stop Bar
A Pavement Marking placed laterally across the approach half of a travelled roadway at the site of a STOP sign, Traffic Signal, or Pedestrian Crosswalk. The line indicates the point beyond which the foremost part of a vehicle must not protrude, should the vehicle be required to stop. Also called Stop Line.

Stop Line
See Stop Bar.

Stopping
The halting of a vehicle, even temporarily, whether occupied or not, except where necessary to avoid conflict with other vehicles, or in compliance with the directions of a police officer or Traffic Control Signal.

Stopping Sight Distance
The distance required by a driver of a vehicle, travelling at a given speed, to bring the vehicle to a stop after an object on the roadway becomes visible. It includes the distance travelled during the Perception-reaction Time and the vehicle braking distance.

Street
An Urban Highway.

Streetcar/Tram
An electrically powered rail car that is operated singly or in short trains in mixed traffic on track in city streets.

Substrate
The surface to which the Sign Sheeting is applied.

Suburban Area
An area, primarily residential, generally located between an urban centre of a community and the surrounding rural area.

Surface
The top of the pavement material, Substrate, or Sign Sheeting.

T

Tab Sign
A sign smaller than the primary sign with which it is associated, and mounted below it. There are two types of tab signs:

(1) Supplementary Tab Sign – contains additional, related information;

(2) Educational Tab Sign – conveys the meaning of symbols during their introductory period.

Taxi
A "for-hire" vehicle for the transport of passengers between points not along a fixed route or schedule.

TC
Abbreviation for Temporary Conditions.

Temporary Conditions
Roadway and traffic control conditions related to non-permanent construction, maintenance and utility work on any highway open to the public.

Temporary Sign
A Regulatory, Warning, or Guide Sign, intended to be used for Temporary Conditions.

Through Roadway

(1) The portion of the roadway used by through traffic as opposed to the parts used by traffic which is stopping or turning; or

(2) A road at which vehicular traffic from intersecting roads is required to stop before crossing or entering.

Through Traffic

(1) Traffic using a through roadway; or

(2) Traffic proceeding through an area and not having an origin and destination therein.

Timing
When referring to traffic signals, timing describes the amount of time allotted to each Phase within each signal cycle.

Toll Highway
A highway, often built to freeway configuration, where a fee (toll) is charged for use of the highway.

Traffic Accident
See Collision.

Traffic Circle
A confluence of three or more intersection legs at which traffic merges into and emerges from a one- way roadway in a counter clockwise direction around a central area. Traffic circles are typically used on local streets, and may have either no right-of-way control devices, or YIELD signs. See also Roundabout.

Traffic Control Device
Any sign, signal, marking, or device placed upon, over or adjacent to a roadway by a public authority or official having jurisdiction, for the purpose of regulating, warning, guiding or informing road users.

Traffic Control Person
A person, duly trained and authorized, to direct traffic at a work zone, through the use of a "Stop" and "Slow" paddle.

Traffic Control Signal (Traffic Signal)
Any power-operated Traffic Control Device, whether manually, electrically or mechanically operated, by which traffic is alternately directed to stop and permitted to proceed. Traffic Signal:

(1) When used in general discussion, a traffic signal is a complete installation including signal heads, wiring, controller, poles and other appurtenances.

(2) When used specifically, the terms refers to the signal head which conveys a message to the observer.

(3) That part of a traffic control signal system that consists of one set of no less than three coloured lenses, red, amber and green, mounted on a frame and commonly referred to as a signal head.

Traffic Island
A raised or painted island designed to separate streams of vehicular traffic.

Traffic Sign
A device (other than Delineators and Traffic Control Signals) which may be erected beside or above a roadway for the purpose of regulating, warning or guiding traffic.

Trailer
A vehicle that is drawn upon a highway by a motor vehicle, except an implement of husbandry, a mobile home, or motorcycle side car.

Transit Lane
A street or highway lane intended exclusively or primarily for transit vehicles, including buses, streetcars and trolleys, either all day, or during specified periods.

Transponder
A small electronic device which, when mounted in or on a vehicle and interrogated electronically by a roadside reader, responds with its transponder identification and possibly additional information, enabling the reader to identify the passage of a specific vehicle. (Used in electronic toll collection systems and other applications.)

Truck
A commercial vehicle exceeding a specified weight or length as defined by the Highway Traffic Act, municipal by-law, or toll agency.

Turn Control Sign
A Traffic Sign, generally erected at an intersection, indicating by arrows and an Interdictory Symbol the movement or movements traffic on that approach must not take. These signs should not be confused with Lane Designation Signs.

Turn Lane
A lane designed to facilitate vehicular turn movements from the through roadway.

Turn Prohibition
A regulation prohibiting a straight-through movement or a left or right turn at an intersection. Turn prohibitions are sometimes used in association with barriers that physically prevent a turn from being made.

Two-lane Highway
An undivided two-way facility having one lane for traffic moving in each direction.

Two-way Left-turn Lane
The centre lane on some three, five or seven lane sections of undivided highway which is designed to facilitate left turns from each direction.

U

Uncontrolled Intersection
An intersection which does not have right-of-way control devices on any of the approaches.

Undivided Highway
A multi-lane highway with no continuous median, or with a paved flush dividing strip (including a Rumble Strip), or with a two-way left-turn lane.

Uniformity
Consistency in the design and application of traffic control devices and operations.

Upstream End (of an Island)
See Approach Nose.

Urban Area
An indefinite area of land used primarily for residential, commercial, and/or industrial purposes, usually associated with a given area size, population, and density.

Urban Highway
Any highway, road, or street within the boundaries of an urban area.

V

Variable Speed Limit
A variable speed is a restriction on the rate at which motorists can drive on a highway segment. The speed limit changes when the maximum speed is not safe according to the changed environmental and road conditions. The speed limit is displayed on a variable message sign. The restriction displayed is not permanent.

Vehicle
Includes a motor vehicle, trailer, traction engine, farm tractor, road-building machine, bicycle, and any vehicle drawn, propelled or driven by any kind of power, including muscular power, but does not include a motorized snow vehicle or motorcycle sidecar.

Vehicle Occupancy
The number of persons, including the driver and passenger(s), in a vehicle at a given time.

Vehicles with Lugs
See Lugs.

Volume
The number of vehicles or pedestrians that pass over a given section of a lane or a roadway or make a particular movement during a specific time period (such as one hour or 24 hours).

W

Warning Sign
A sign which indicates conditions on or adjacent to a highway or street that are actually or potentially hazardous to traffic operations.

Warrant
A criterion or set of criteria by which justification for a given type of Traffic Control Device or other application is determined.

Work Zone
A section of a highway or roadway where highway-related construction, maintenance, or utility work is taking place.

Y

Yield
To cede the right-of-way.

24. Appendix B References

24.1 Referenced Documents

Highway Traffic Act (HTA) (R.S.O. 1990): Office Consolidation, Revised Statues of Ontario, 1990, Chapter H.8 and the regulations thereunder (as amended), 2019

HTA Ontario Regulation 8/03 (R.R.O. 1990): LOCAL MUNICIPALITIES WHERE 80 KILOMETERS PER OUR SPEED LIMIT APPLIES

HTA Ontario Regulation 103/97 (R.R.O. 1990): STANDARDS TO DETERMINE ALLOWABLE GROSS WEIGHT FOR BRIDGES

HTA Ontario Regulation 147/97 (R.R.O. 1990): TOLL DEVICES

HTA Ontario Regulation 277/99 (R.R.O. 1990): RED LIGHT CAMERA SYSTEM EVIDENCE

HTA Ontario Regulation 316/03 (R.R.O. 1990): OPERATION OF OFF-ROAD VEHICLES ON HIGHWAYS

HTA Ontario Regulation 402/15 (R.R.O. 1990): PEDESTRIAN CROSSOVER SIGNS

HTA Ontario Regulation 598 (R.R.O. 1990): GROSS WEIGHT ON BRIDGES

HTA Ontario Regulation 599 (R.R.O. 1990): HIGHWAY CLOSINGS

HTA Ontario Regulation 604 (R.R.O. 1990): PARKING

HTA Ontario Regulation 605 (R.R.O. 1990): PARKING OF VEHICLES IN TERRITORY WITHOUT MUNICIPAL ORGANIZATION

HTA Ontario Regulation 606 (R.R.O. 1990): PORTABLE LANE CONTROL SIGNAL SYSTEMS

HTA Ontario Regulation 608 (R.R.O. 1990): RESTRICTED USE OF LEFT LANES BY COMMERCIAL VEHICLES

HTA Ontario Regulation 609 (R.R.O. 1990): RESTRICTED USE OF THE KING'S HIGHWAY AND TOLL HIGHWAYS

HTA Ontario Regulation 615 (R.R.O. 1990): SIGNS

HTA Ontario Regulation 618/05 (R.R.O. 1990): DESIGNATION OF BUS BY-PASS SHOULDERS ON KING'S HIGHWAYS

HTA Ontario Regulation 619 (R.R.O. 1990): SPEED LIMITS

HTA Ontario Regulation 620 (R.R.O. 1990): SPEED LIMITS IN PROVINCIAL PARKS

HTA Ontario Regulation 620/05 (R.R.O. 1990): ACCESSIBLE PARKING FOR PERSONS WITH DISABILITIES

HTA Ontario Regulation 621 (R.R.O. 1990): SPEED LIMITS IN TERRITORY WITHOUT MUNICIPAL ORGANIZATION

HTA Ontario Regulation 622 (R.R.O. 1990): STOPPING OF VEHICLES ON PARTS OF THE KING'S HIGHWAY

HTA Ontario Regulation 623 (R.R.O. 1990): STOP SIGNS AT INTERSECTIONS

HIGHWAY TRAFFIC ACT REGULATION 624 (R.R.O. 1990): STOP SIGNS IN TERRITORY WITHOUT MUNICIPAL ORGANIZATION

HTA Ontario Regulation 630 (R.R.O. 1990): VEHICLES ON CONTROLLED-ACCESS HIGHWAYS

HTA Ontario Regulation 631 (R.R.O. 1990): YIELD RIGHT-OF-WAY SIGNS IN TERRITORY WITHOUT MUNICIPAL ORGANIZATION

French Language Services Act, R.S.O. 1990, c.F.32

Ontario Off-Road Vehicles Act, R.S.O. 1990, c.O.4

King's Highway Guide Signing Policy Manual; Ministry of Transportation Ontario, 1990

Manual of Uniform Traffic Control Devices; Ministry of Transportation Ontario, 1985

Motorized Snow Vehicles Act; Ministry of Transportation Ontario, 2019

Ontario Traffic Manual; Books 1, 2, 6, 7, 8, 10, 11, 12, 12A, 15,18 and 19

Public Transportation and Highway Improvement Act; Revised Statutes of Ontario 1990, Revised Regulations of Ontario, 2019

Specification D 4956-19; American Society for Testing and Materials, 2019

Transportation of Dangerous Goods Act (Canada); 1992

24.2 Additional References

Highway Capacity Manual; Transportation Research Board, 2017

Manual of Uniform Traffic Control Devices; U.S. Department of Transportation, 2009

Manual of Uniform Traffic Control Devices; Transportation Association of Canada, 2014

Municipal Act; Revised Statues of Ontario, 2001

British Columbia Manual of Standard Traffic Signs and Pavement Markings, 2000

Ministry of Transportation Quebec Guide for Regulatory Signs, 2015

Traffic Engineering Handbook; Institute of Transportation Engineers, 1992

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Transport Canada, Grade Crossings Regulations

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