

FORM 701



GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Transportation and Works
Highway Design Division

SECTION 701 INTRODUCTION

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701.01 SCOPE

The provisions for public protection established herein are for application by contractors employed under contract by the Department of Transportation & Works. Traffic safety in construction zones should be an integral and high priority element of every project. The goal should be to route traffic through such areas, with temporary condition signs and devices, as nearly as possible comparable to those for normal situations.

The responsibility for temporary condition signs and devices rests with the Contractor. Thus, while this specification provides standards for design and application of temporary condition signs and devices installation, it is not a substitute for good engineering judgment. The decision to use a particular device at a particular location should be made on the basis of an engineering study at the location.

The provisions for public protection established herein are for application by contractors performing any work for the Department of Transportation & Works. All costs associated with temporary condition signing to standards as outlined in Division 7 shall be the responsibility of the Contractor. Cost of signs, handling, installation, materials, and labour shall be paid by the Contractor and no payment shall be considered by the Department of Transportation & Works.

701.02 FUNDAMENTAL PRINCIPLES

1. All traffic signs used for temporary conditions are designed and erected for the safety and convenience of the travelling public and for the safety of the workmen on the construction projects. Additional information on temporary condition signage may be found in "Traffic Control Manual for Roadway Work Operations 2011 Field Edition.
2. The Project Engineer shall be contacted three weeks in advance for assistance in signing major construction detours.
3. Work sites should be carefully checked to make sure that traffic controls are changed to suit changing construction conditions due to work staging and progress, or if an immediate improvement to the traffic control is needed. Any problems shall be dealt with immediately.

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4. All signs shall conform to the required standards in shape, colour, size and position as outlined in this division for Temporary Condition Signing and the Department of Transportation & Works Traffic Control Manual and the Manual of Uniform Traffic Control Devices.
5. Throughout the normal construction season, including weekends and overnight, all temporary condition signage shall be securely installed on either portable sign supports or permanently installed sign supports. During periods of inactivity in a construction zone, if signs are not maintained, they may be required to be installed on permanent sign supports. When portable sign supports are used, they shall be vertically adjustable such that signs will be displayed at the minimum required height. If this cannot be achieved, flags shall be added to the top of the sign supports to meet the minimum required height as per drawing # 790-1. The base of the sign supports shall not be appreciably wider than the signs. Bases which require weighting for support shall be weighted using sandbags only. The use of rocks, boulders, concrete blocks, etc, as weights shall not be permitted.

When signs are removed from the construction zone, the sandbags must also be removed and not left along the shoulder of the highway. Where portable sign supports are poorly maintained or unable to provide constant uninterrupted support for temporary condition signage, the contractor shall be required to install permanent sign supports

6. Poorly maintained, defaced, damaged, or dirty temporary condition signs are ineffective and shall be replaced, repaired, or cleaned without delay. Signs which have been defaced or damaged and are not replaced within 24 hours of notification shall be expropriated by the Department. All signage expropriated in this manner will remain the property of the Department of Transportation and Works. Any work or costs associated with sign removal, sign replacement or traffic control will be the responsibility of the contractor.
7. No work will be permitted to commence until all traffic control devices are installed in position, as shown in this manual and approved by the user's representative.
8. After a work zone is completed all traffic signs used on that construction zone shall be removed immediately. Any erected signs not applicable during a phase of construction shall be removed or covered. The Department reserves the right to expropriate all highway signs that are left in place after the work zone is completed. In particular the Department especially focuses upon unwarranted and misused speed limit signage and flagperson signage. All signage expropriated in this manner will remain the property of the Department of Transportation & Works.
9. Objects within the roadway or immediately adjacent to the roadway, which constitute a hazard to traffic shall be marked with a delineator device.
10. Construction Speed Zones shall be implemented only as shown on the applicable drawing.
11. After dark all signs shall be checked for visibility and those that cannot be clearly seen shall be cleaned, replaced or adjusted.
12. Any signs not supplied by the Department of Transportation & Works shall meet all specifications in the Manual of Traffic Control Devices for Canada and the Traffic Control Manual of the Department of Transportation & Works.
13. Sound engineering judgment must be utilized in the application of the principles put forward in this Traffic Control Manual.

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701.03 CLASSIFICATION OF SIGNS

Unless modified by the following, the specifications outlined in the Manual of Uniform Traffic Control Devices for Canada will apply to temporary conditions signs in all details concerning symbols, lettering, illumination, reflectorization, position, installation, material, support, and maintenance.

One sign only shall be placed on each support, with the exception of tab signs installed to provide supplementary or complementary information associated with warning signs or detour signs, or with the exception of signs placed on the back (reverse) side of the same support, which is intended for motorists traveling in the opposite direction.

Temporary Condition Signs – shall have black symbols or lettering on an orange retro-reflectorized High Intensity Prismatic background. **The use of florescent paint on signage shall not be considered.**

Regulatory and Information Signs – which may be used for temporary traffic control or guidance shall have the same color and shape as described in the Manual of Uniform Traffic Control Devices for Canada.

701.04 SPECIFICATIONS

Unless modified by the following, the specifications outlined in the Traffic Control Manual or the Metric Edition of Uniform Traffic Control Devices of Canada will apply to temporary conditions signs in all details concerning symbols, lettering, illumination, reflectorization, position, erection, material, support, and maintenance.

One sign only shall be placed on each support with the exception of tab signs installed to provide supplementary or complementary information associated with warning signs or detour signs, or with the exception of signs placed on the back (reverse) side of the same support, which is intended for motorists traveling in the opposite direction.

701.05 COLOURS, SHAPES AND MATERIALS

Warning Signs - shall have black symbols or lettering on an orange retro-reflectorized background of 3M high intensity grade or equivalent. The use of fluorescent paint on signage shall not be considered.

Regulatory and Information Signs - which may be used for temporary traffic control or guidance shall have the same colour and shape as described in the Traffic Control Manual, Department of Transportation & Works.

All temporary construction signage shall be made with a rigid backing consisting of either plywood or aluminum. Flexible or roll up type signs will not be permitted.

701.06 DIMENSIONS OF ALL TEMPORARY CONDITION SIGNS

The size and dimensions of temporary condition signage shall be as described in the manual of Standard Signs, Department of Transportation & Works and shall be to approved methods as directed by the Engineer.

701.07 USE OF PORTABLE OR REMOVABLE SIGN SUPPORTS

As outlined in Section 701.02.5, the use of portable or removable sign supports shall be permitted for temporary conditions and shall be securely installed on either portable sign supports or permanently installed sign supports. During periods of inactivity in a construction zone, if signs are not maintained, they may be required to be installed on permanent sign supports. Signs shall be located on the right side of the roadway with the near edge not to exceed 4 m from the edge of the travelled portion of the roadway. Supplementary signs will be located on the left hand side of the roadway on divided highways.

If portable sign supports do not elevate temporary condition signs to the minimum required height, then two orange flags must be installed on the portable sign support, such that the required height is achieved. See drawing 790-1

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701.08 PERMANENTLY INSTALLED TEMPORARY CONDITION SIGN SUPPORTS

In construction zones, where the use of portable sign supports are not desired or properly maintained, temporary condition signs shall be installed on permanently installed rigid sign posts, as directed by the owner. Signs shall be located on the right side of the roadway not to exceed 4.0m from the edge of the traveled portion of the roadway. Supplementary signage shall be located on the left hand side of the roadway on divided highways.

Signs 900mm or less in width/length shall be installed on a single post to a height of 1.5m to 2.5m above the traveled portion of the roadway to the bottom edge of the sign. Most signs in this category can be securely installed on 100mm x 100mm wooden posts with a minimum of 1.0m of the post in the ground. Care must be exercised to ensure that the post is securely anchored in the ground so that it cannot be 'turned' or removed by vandals.

Signs exceeding 900mm in width/length shall be installed according to guidelines in the Department of Transportation and Works Specification Book, Section 580, Sign and Signpost Installations, for the corresponding size of the sign.

The use of flags to achieve minimum required heights on permanently installed sign posts shall not be permitted.

701.09 MOUNTING CHEVRON AND HAZARD MARKERS ON REBAR FOR INSTALLATION ON PAVED SURFACES

Where traffic has to be diverted or channelized to cross multi-lanes of paved surfaces, delineator devices, such as hazard markers and chevrons, shall be installed as outlined in this section.

Signs 300 mm or less in width shall be installed on a single piece of 25 mm rebar to a height of 1 m minimum above the traveled portion of the roadway to the bottom edge of the sign.

Signs greater than 300 mm in width shall be installed on two pieces of 25 mm rebar to a height of 1 m minimum above the traveled portion of the roadway to the bottom edge of the sign.

701.10 MOUNTING CHEVRON AND HAZARD MARKERS DURING WINTER SEASON

Chevrons and Hazard markers may be mounted on rebar or wooden posts in order to delineate traffic through a transition. Signs shall be installed as outlined in the Specification's Book, sections 701.08 and 701.09

701.11 BASIS OF PAYMENT

All costs associated with temporary condition signing to standards as outlined in this section shall be the responsibility of the Contractor. Costs of the signs, handling, installation, removal, asphalt reinstatement and / or repair, materials, and labour shall be paid by the Contractor and no payment shall be considered by the Department of Transportation & Works.