

	LOG HAUL INTERSECTION SIGNING (TYPE 6 – JUGHANDLE)		Issued: DEC 2005
			Revised: DEC 2006
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RECOMMENDED PRACTICES	PART	HIGHWAY SIGNS	
	SECTION	TYPICAL SIGNING PLANS	
	SUB-SECTION		

General

A log haul “jughandle” intersection is used to accommodate left turning log haul trucks where a log haul truck left turn maneuver would otherwise pose a serious safety risk to other highway users.

In addition to safety benefits, this movement also reduces delays to the through traffic that can be created by turning vehicles.

Typically, this intersection configuration includes an exit ramp which begins well in advance of the intersection and leads through a curve to a stop or signal controlled crossing.

The “jughandle” intersection is designated as a Type 6 log haul intersection in the provincial Highway Geometric Design Guide.

Guidelines for Use

Signing Layout

Traffic at a stop-controlled log haul jughandle intersection is controlled with the use of regulatory, warning and guide signs bringing awareness to the logging truck movements.

Regulatory Signs

A jughandle ramp normally operates as a one-way road with a stop condition and is controlled with the following signs: a standard 75 cm x 75 cm Stop (RA-1) sign and a No Entry signage package to prevent

illegal entries.

The standard sizes of the Do Not Enter (RB-23) sign and RB-23-T tab are 60 cm x 60 cm and 30 cm x 60 cm, respectively. The standard size of the Wrong Way (RB-22) sign is 60 cm x 60 cm.

Warning Signs

This special intersection condition requires that road users be warned about the potentially unsafe logging truck movements ahead.

A standard 75 cm x 75 cm warning Logging Trucks (WC-110) sign is installed on the intersection approach for both directions of travel. Each sign is usually installed 100 to 150 metres in advance of the guide directional sign.

When entering a jughandle ramp, logging trucks must usually adjust their speed to the safe travelling speed along the ramp (due to high speed differential).

The truck drivers are advised of the safe travelling speed along the ramp with the (WA-107) Ramp Ahead Advisory Speed and (WA-108) Ramp Speed Advisory signs. The standard size of the Ramp Advisory Speed signs is 90 cm x 120 cm.

The Ramp Speed Advisory sign is usually placed at the beginning of a curve (near the physical gore). The advance WA-107 sign is placed 50 to 100 metres in advance of the WA-108 Ramp Speed Advisory sign.

The advisory speed given on a sign should be based on the speed at which the jughandle can be safely negotiated.

A jughandle ramp itself requires a Stop Ahead (WB-1) sign due to the unexpected nature of the stop condition and often poor lighting. Chevron (WA-9) signs are provided along the sharp curvature of the ramp to aid drivers in better recognizing the roadway alignment.

The standard sizes of the WB-1 and WA-9 signs are 75 cm x 75 cm and 60 cm x 75 cm, respectively.

A minimum of three WA-9 chevron signs should be placed on the jughandle curve. The signs should be on the outside of the curve at right angles to the approaching vehicles to provide guidance at the sharp change in horizontal alignment.

Object Marker (WA-36) and Double Arrow (WA-17) signs are placed in the physical gore to indicate the separation between the two travel lanes. The standard sizes of WA-36 and WA-17 signs are 60 cm x 90 cm and 90 x cm x 90 cm, respectively.

Guide Signs

Logging trucks approaching the intersection are guided towards the jughandle ramp with specially designed guide signs having a Logging Trucks Exit Only panel.

An advance guide, IA-201 sign with a Logging Trucks Exit Only panel is installed 500 metres in advance of the jughandle painted gore.

A directional guide, IA-201 sign with a Logging Trucks Exit Only panel is installed

at the beginning of the ramp deceleration taper.

Where a logging truck destination plant is a large traffic generator, a single directional IA-201 sign indicating the plant name may be installed on the intersection approaches (for both directions of travel).

These signs should be installed 150 to 250 metres from the centre of the intersection (or at the beginning of the deceleration taper if one exists).

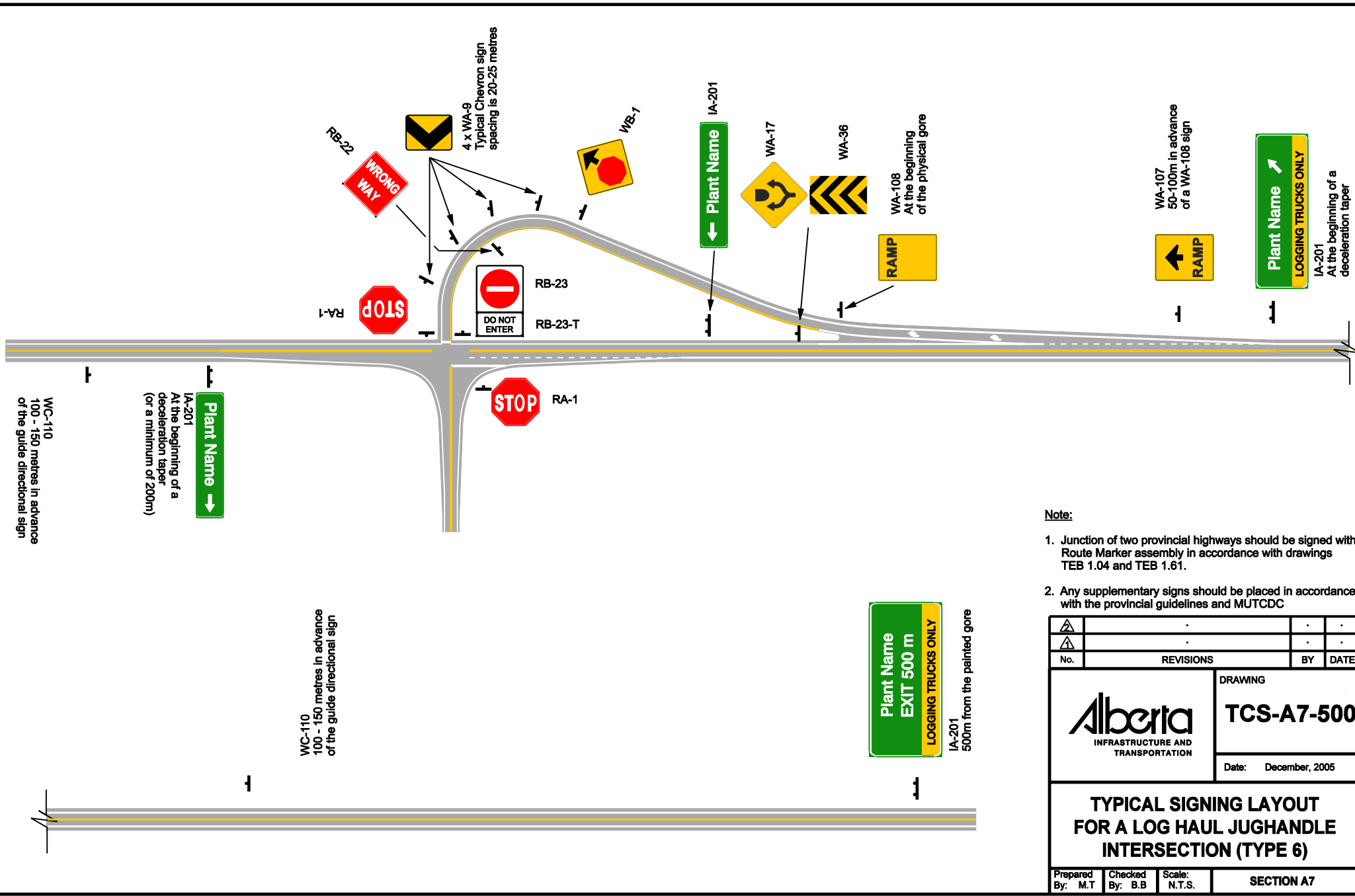
Highway route markers should only be installed if the jughandle is located at the junction of two primary highways. If highway route markers are warranted, they should be installed in accordance with typical drawings shown in the Alberta Highway Guide and Information Sign Manual.

The attached drawing TCS-A7-500 shows the approximate location of each sign. Site specific conditions may warrant the use of additional signs.

A WC-314 Logs May Swing Into Your Lane Do Not Pass sign may be required (in the direction opposite of the jughandle) in situations where the swing of logging vehicles making right turns poses a hazard to other motorists.

References to Standards

Recommended Practices Section: General	Highway Signs
Recommended Practices Section: Traffic Operations	Methods for Establishing Safe Speeds on Curves
Alberta Highway Pavement Marking Guide Section C5.3	Log Haul Intersections
Highway Geometric Design Guide Chapter D	At-grade Intersections



Note:

- Junction of two provincial highways should be signed with Route Marker assembly in accordance with drawings TEB 1.04 and TEB 1.61.
- Any supplementary signs should be placed in accordance with the provincial guidelines and MUTCDC

No.	REVISIONS	BY	DATE

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**TYPICAL SIGNING LAYOUT
FOR A LOG HAUL JUGHANDLE
INTERSECTION (TYPE 6)**

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