

WORK ZONE BULLETIN #6/2017

Gateway Assemblies

****Gateway Assemblies are currently a trial device. Project Sponsors may choose to use this device on projects that meet the criteria below. Details outlined in this bulletin may be modified in the future based on the results of the trials.****

Summary

This Bulletin is issued to inform consultants, contractors and department staff of the department's practice for the use of gateway assemblies in work zones. These signs are a new addition to the department's sign catalogue and are intended to enhance motorist awareness by providing a visual cue that indicates they are entering a work zone.

Key Changes

Type of Project

Gateway assemblies should be placed at rural work zone locations that require a speed reduction and have operating speeds of 110 or 100 km/h on the approach. Their use is limited to long duration projects of fourteen days or more on highways within the Level 1 and Level 2 service classifications. Examples of projects where they might be used include roadway grading, widening, or bridge repair.

If used on a carryover project that goes from one construction season to the next, gateway assemblies shall be removed during winter shutdown to allow for snow removal.

Sign Standard and Placement

Gateway assemblies are composed of three 240 mm x 3600 mm rectangular boards that are mounted to wood posts as shown in Drawing TCS-B-4.8A. One side of the boards has black and orange diagonal stripes and the other has black and white diagonal stripes. The size of the wood posts and any breakaway modifications, if needed, shall follow Chapter H-8 of Alberta Transportation's *Roadside Design Guide*.

Gateway assemblies are applied in pairs, with one assembly placed on each side of the roadway starting at the outer edge of the shoulder. For some highways, there may be a need to increase the distance between the edge of pavement and the assembly to accommodate wide loads. This distance should be determined using site-specific judgment but shall not exceed 2 m from the outer edge of the shoulder.

One pair of gateway assemblies is placed at each entrance to the work zone. The orange and black stripes face entering traffic while the black and white stripes face exiting traffic. The WD-101 sign is mounted to the entrance gateway assembly as shown in Drawing TCS-B-4.8B for undivided highways and Drawing TCS-B-4.8C for divided highways. For divided highways, exiting vehicles will not be faced with a gateway assembly. Gateway assemblies are placed only on the work zone thoroughfare and not on any ramps or intersecting roads.

Gateway assemblies are an enhancement to existing traffic control devices for work zones. Drawing TCS-B-4.8D shall be used as a reference when incorporating gateway assemblies into a project signage strategy.

Effective Date

May 9, 2017

Contact

Elena Yin at (780) 415-4827

Operations, Programming and Planning Branch, Alberta Transportation

References

[“Chapter H-8 Signs, Supports, and Poles”](#) in Alberta Transportation’s [Roadside Design Guide](#)

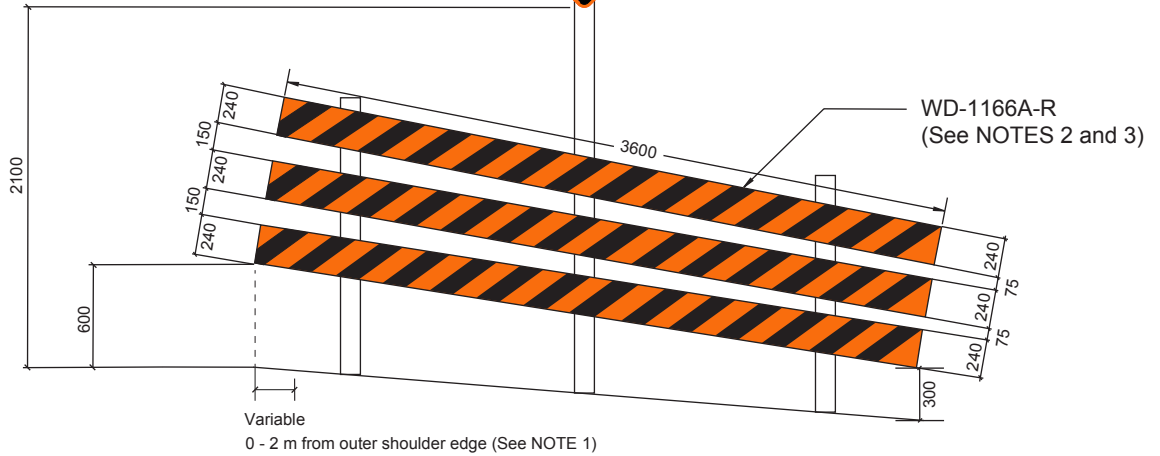
Approved

*Original signed
by Tom Loo*

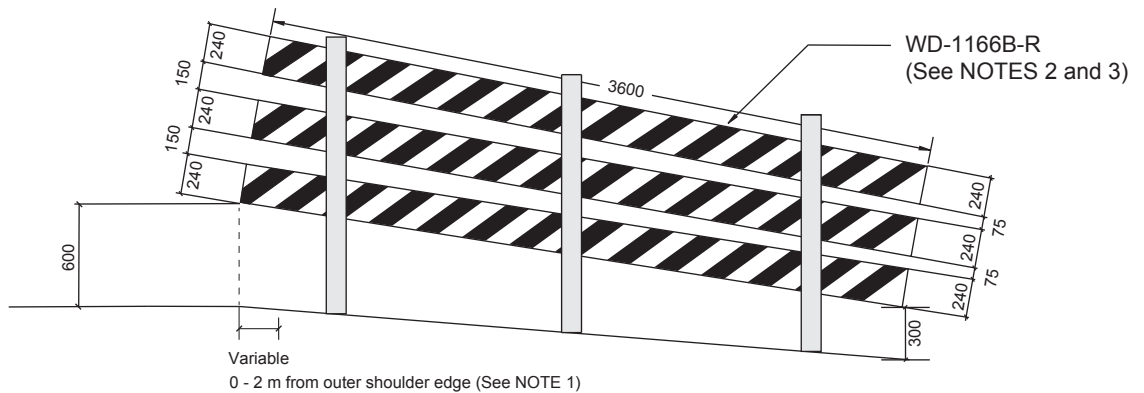
Tom Loo
Assistant Deputy Minister, Delivery Services Division



WD-101
1200 x 1200



ENTERING A WORK ZONE

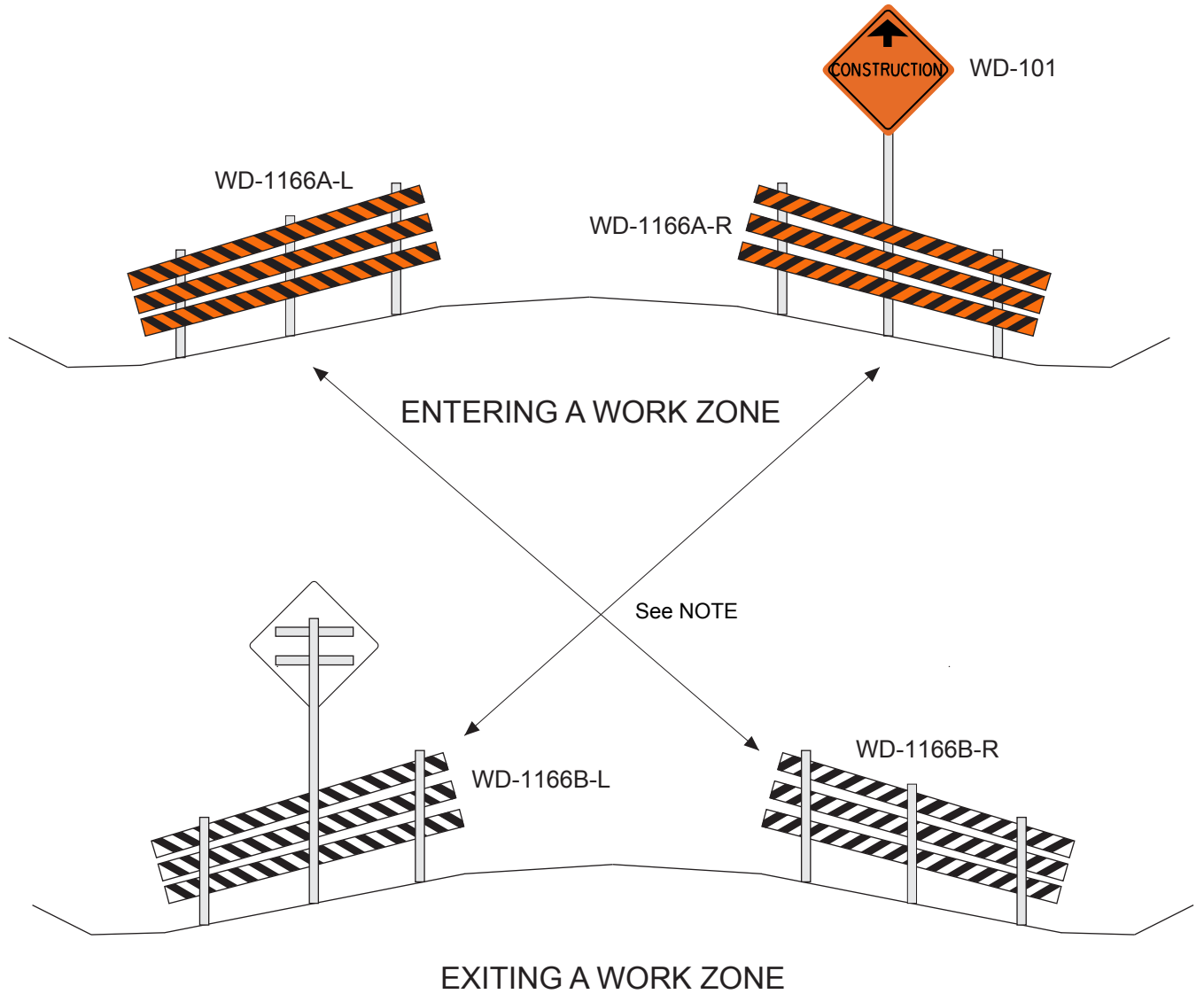


EXITING A WORK ZONE

NOTES:

1. No offset from the outer shoulder edge is preferred. However, based on site-specific judgment, gateway assemblies may be moved up to 2m from the outer shoulder edge to accommodate wide loads.
2. Sign sheeting should follow ASTM Type IV.
3. For undivided highways, gateway assembly patterns shall be printed back-to-back on the same board. WD-1166A-R and WD-1166B-L would be on opposite sides of one assembly and WD-1166A-L and WD-1166B-R would make up the other assembly.

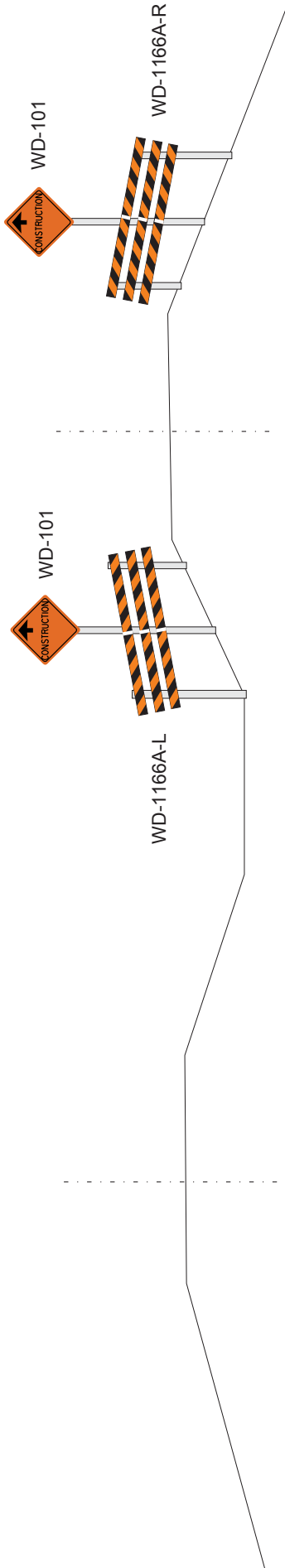
No.	REVISIONS	BY	DATE
Approved: <i>Original signed by Tom Loo</i>			
Assistant Deputy Minister, Delivery Services Division			
Date:	FEBRUARY 2017		
GATEWAY ASSEMBLIES			
Prepared By: S.L.	Checked By: N.C.	Scale: N.T.S.	Dwg No.: TCS-B-4.8A



NOTE:

For undivided highways, gateway assembly patterns shall be printed back-to-back on the same board. WD-1166A-R and WD-1166B-L would be on opposite sides of one assembly and WD-1166A-L and WD-1166B-R would make up the other assembly.

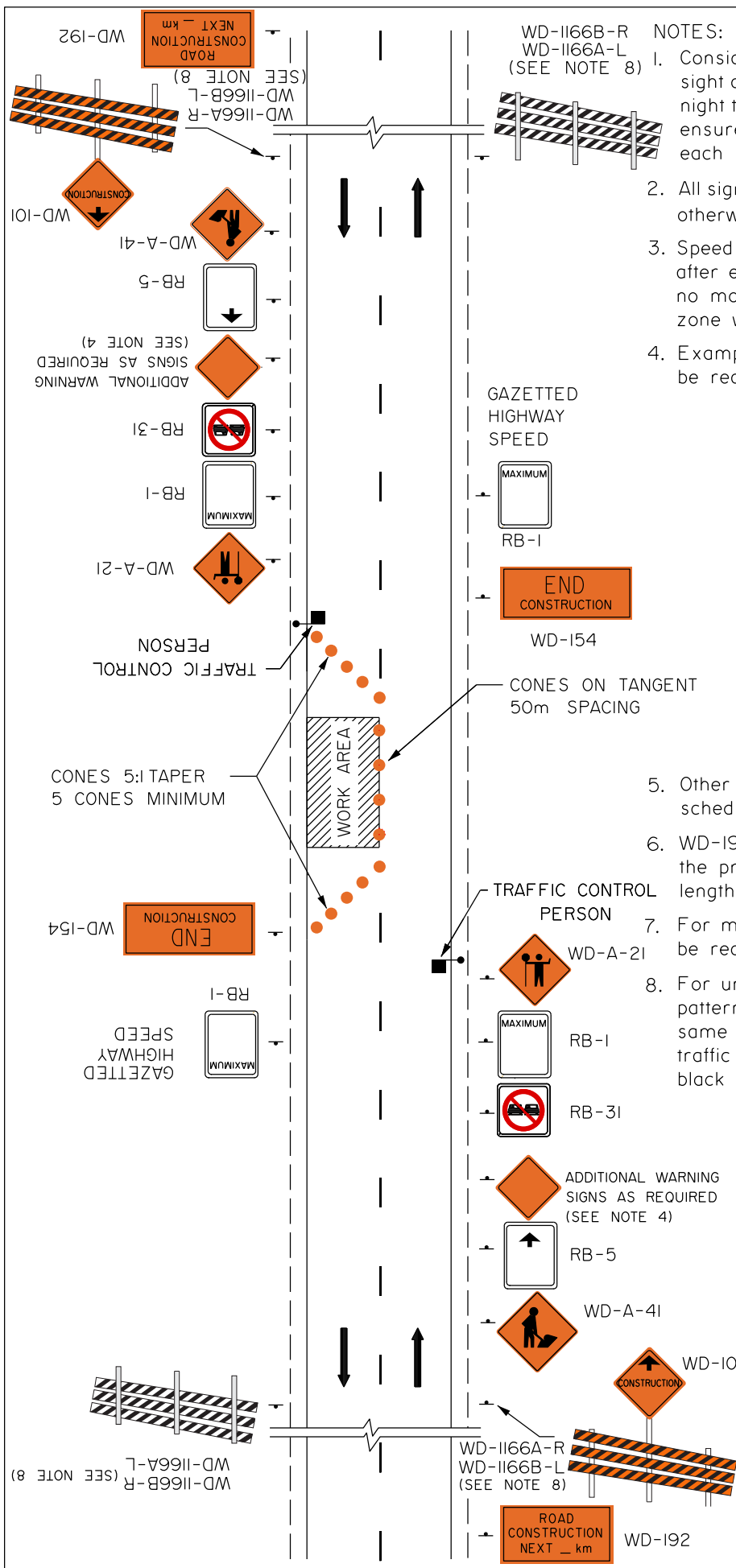
No.	REVISIONS	BY	DATE
Approved: <i>Original signed by Tom Loo</i>			
Assistant Deputy Minister, Delivery Services Division			
Date:	FEBRUARY 2017		
GATEWAY ASSEMBLIES RURAL UNDIVIDED HIGHWAY			
Prepared By: S.L.	Checked By: N.C.	Scale: N.T.S.	Dwg No.: TCS-B-4.8B



CONSTRUCTION GATE ASSEMBLIES
4-LANE DIVIDED HIGHWAY FORMAT

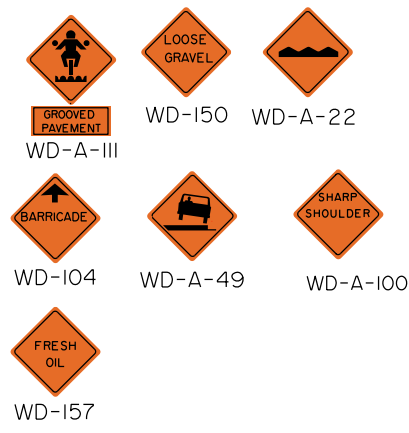
ENTERING CONSTRUCTION SITE
(FRONT VIEW)

No.	REVISIONS	BY	DATE
Approved:			
<i>Original signed by Tom Loo</i> Assistant Deputy Minister, Delivery Services Division			
Date:	FEBRUARY 2017		
GATEWAY ASSEMBLIES RURAL DIVIDED HIGHWAY WITH DEPRESSION MEDIAN			
Prepared By: S.L.	Checked By: N.C.	Scale: N.T.S.	Dwg No.: TCS-B-4.8C



WD-1166B-R
WD-1166A-L
(SEE NOTE 8)

- NOTES:
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
 2. All sign spacing shall be 100m-150m unless otherwise indicated.
 3. Speed limit and warning signs shall be placed after every intersecting roadway and shall be no more than 5km apart throughout the work zone where there is a restricted speed zone.
 4. Examples of additional warning signs that may be required in conjunction with this plan are:



5. Other hazard signs as shown in the schedule of signs may be used as required.
6. WD-192 shall be erected 2km in advance of the project. Distance tab to include project length plus setback from project limit.
7. For mobile operation, cones may not be required
8. For undivided highways, gateway assembly patterns shall be printed back-to-back on the same board. The orange and black side faces traffic entering the work zone while the black and white side faces exiting traffic.

No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tom Loo			
Assistant Deputy Minister, Delivery Services Division			
Date:	FEBRUARY 2017		
TYPICAL SIGNING ONE LANE CLOSURE WITH GATEWAY ASSEMBLIES TWO LANE UNDIVIDED HIGHWAY			
Prepared By: S.L.	Checked By: N.C.	Scale: N.T.S.	Dwg No.: TCS-B-4.8D