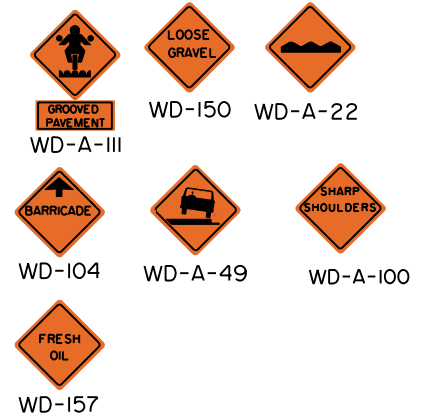


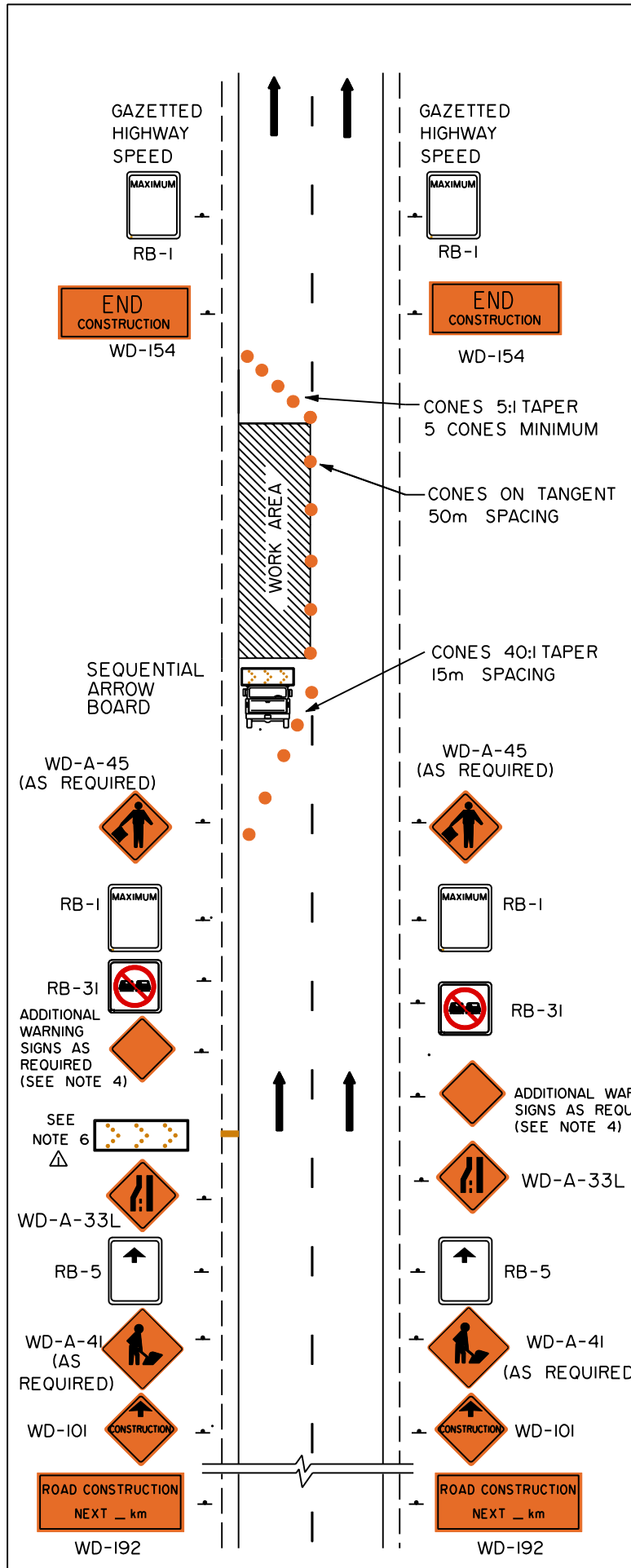
NOTES:

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

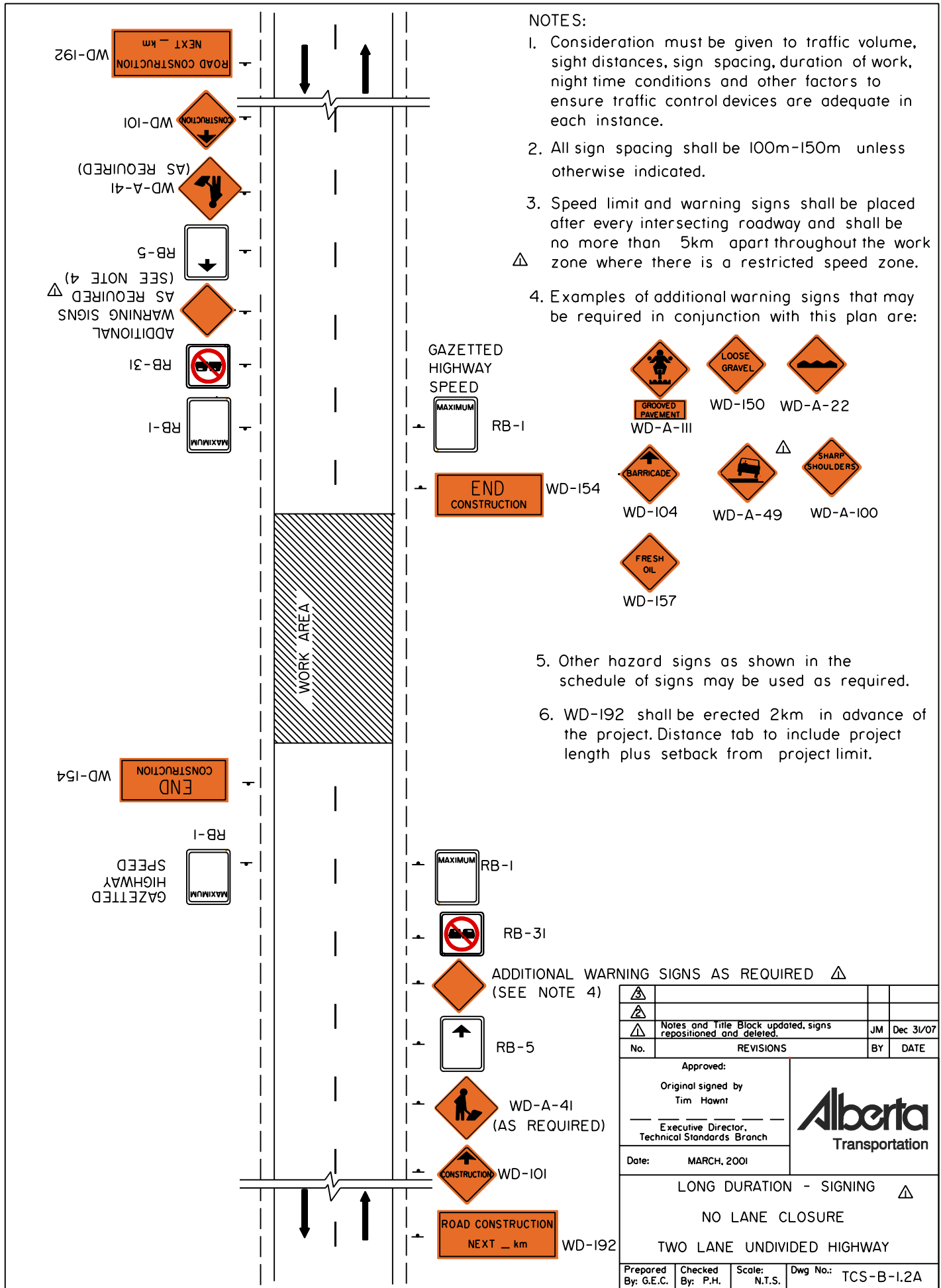
	Title Block and note updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - SIGNING ONE LANE CLOSURE (ONE LANE ALTERNATING TRAFFIC) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.1A



NOTES:

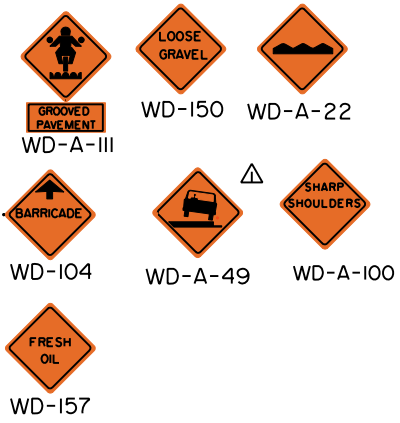
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.
3. Speed limit and warning signs 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. The Sequential Arrow Board shall be located in the centre of the closed lane. An additional Sequential Arrow Board is required when traffic volume exceeds 10000 vehicles per day (ASDT) or when sight distance is restricted.
7. WD-192 shall be erected 2km in advance of the project. Distance tab to include project length plus setback from project limit.
8. For mobile operation, cones may not be required.

	Notes and Title Block updated and sign added	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date: MARCH, 2001			
LONG DURATION - SIGNING			
ONE LANE CLOSURE			
FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.1B



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:

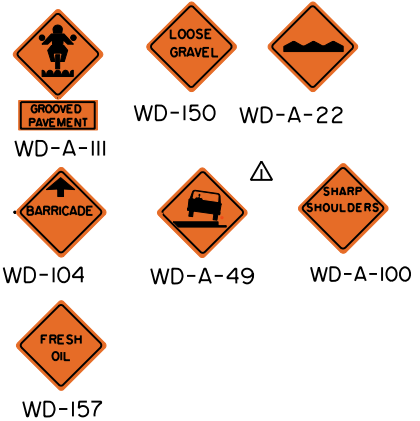


5. Other hazard signs as shown in the schedule of signs may be used as required.
6. WD-192 shall be erected 2km in advance of the project. Distance tab to include project length plus setback from project limit.

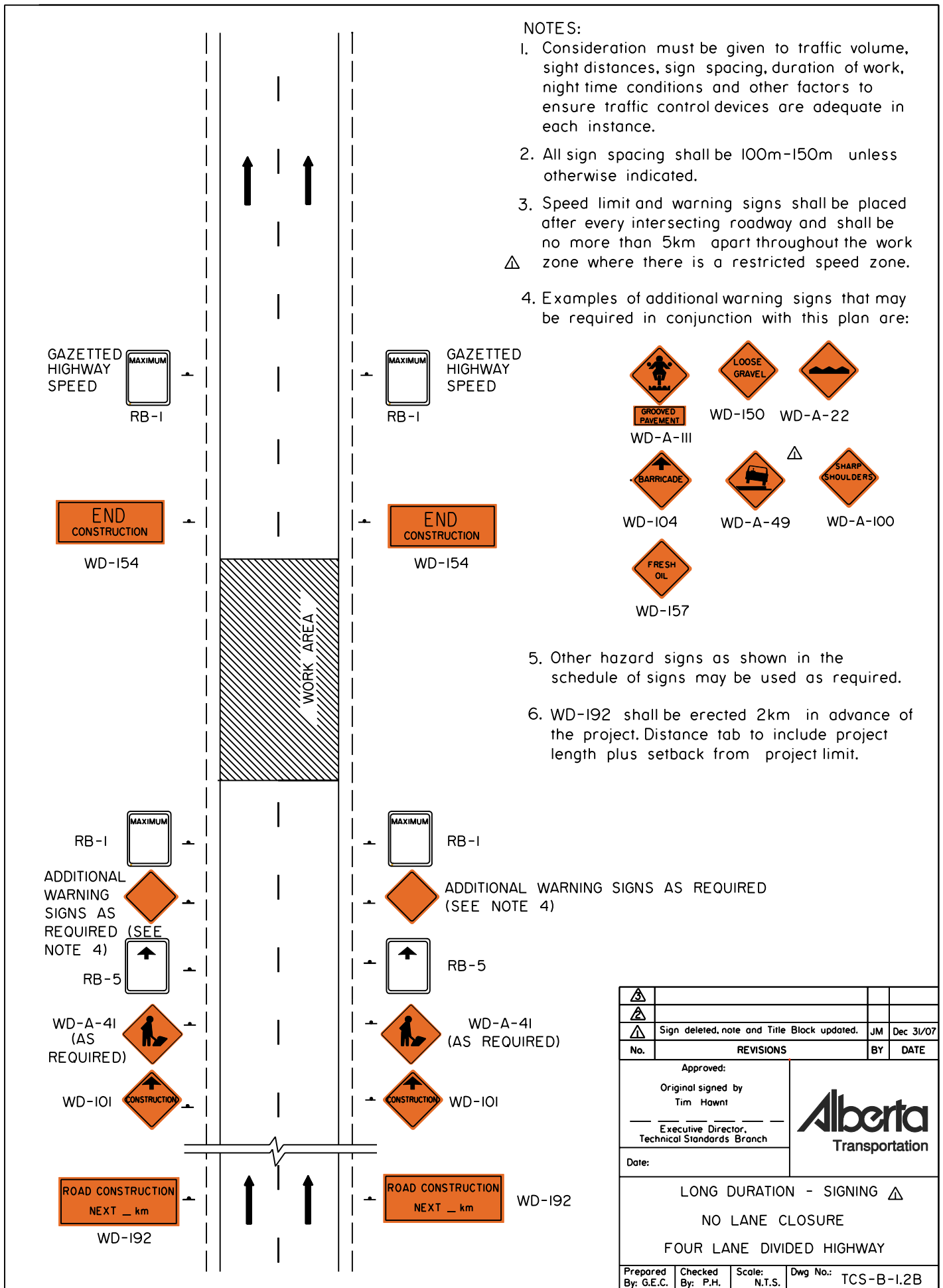
△			
△			
△	Notes and Title Block updated, signs repositioned and deleted.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date: MARCH, 2001			
LONG DURATION - SIGNING △ NO LANE CLOSURE TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.2A

NOTES:

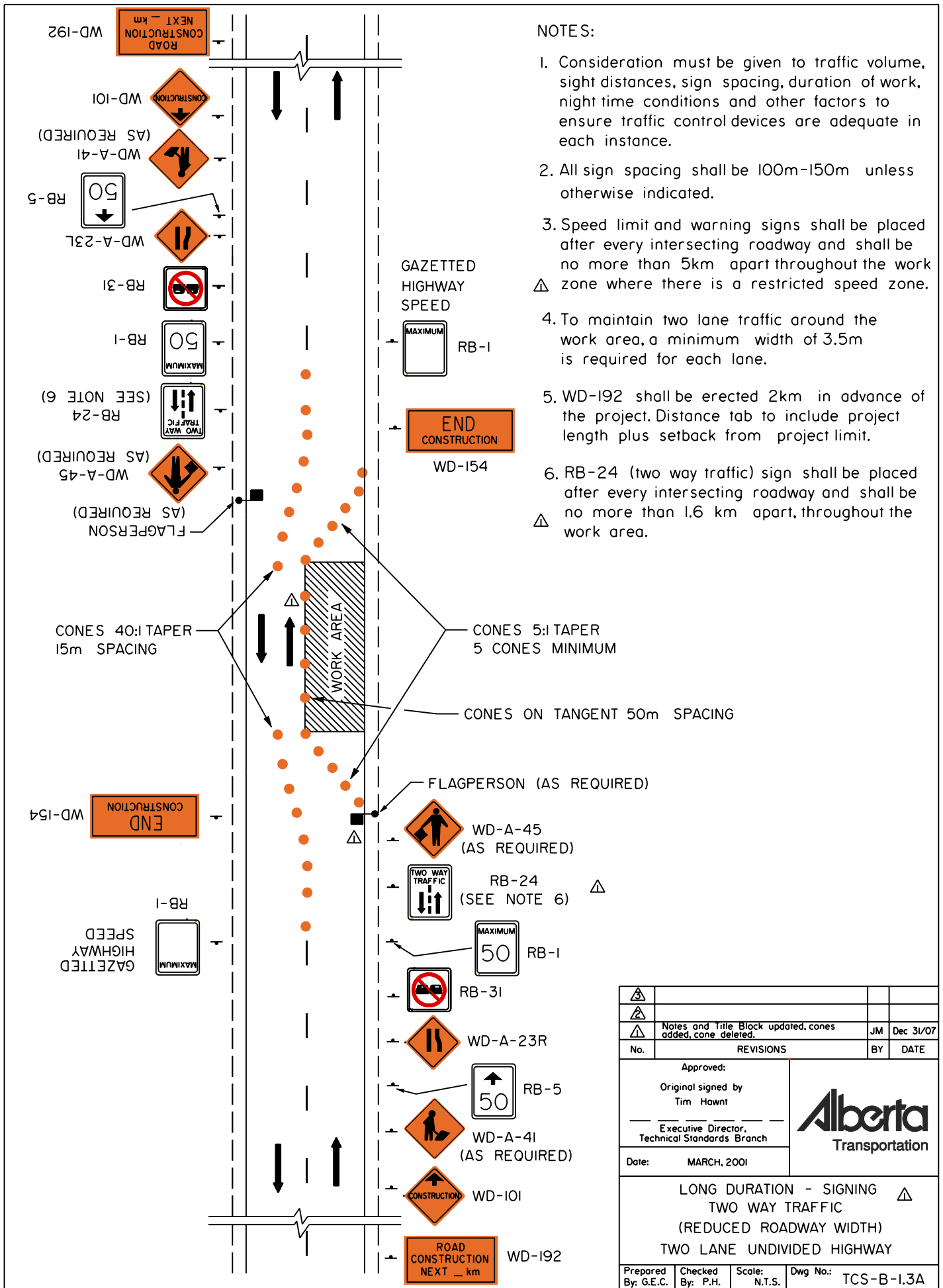
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.
3. Speed limit and warning signs 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.



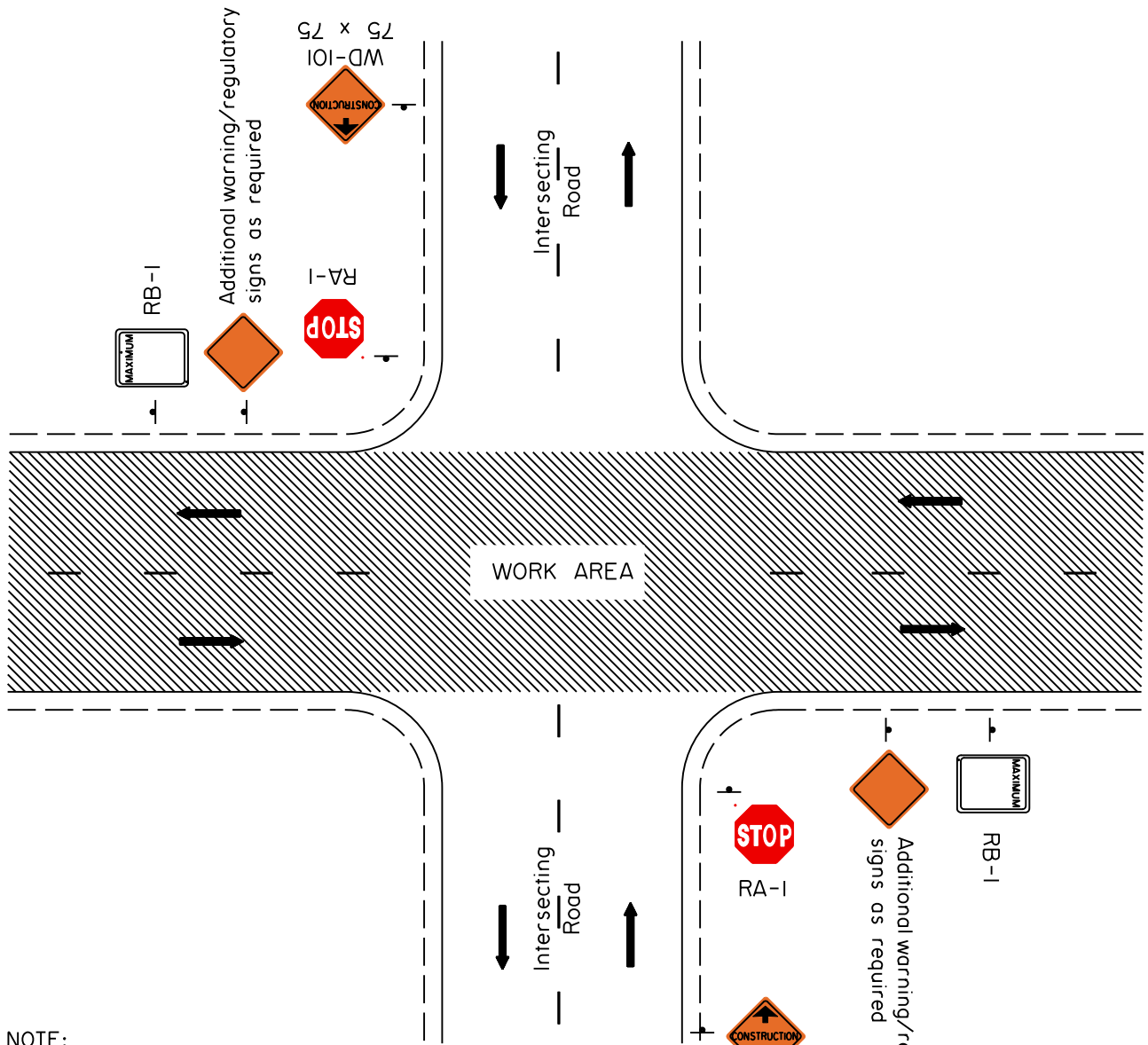
△			
△			
△	Sign deleted, note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date:			
LONG DURATION - SIGNING △ NO LANE CLOSURE FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.2B



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. To maintain two lane traffic around the work area, a minimum width of 3.5m is required for each lane.
5. WD-192 shall be erected 2km in advance of the project. Distance tab to include project length plus setback from project limit.
6. RB-24 (two way traffic) sign shall be placed after every intersecting roadway and shall be no more than 1.6 km apart, throughout the work area.

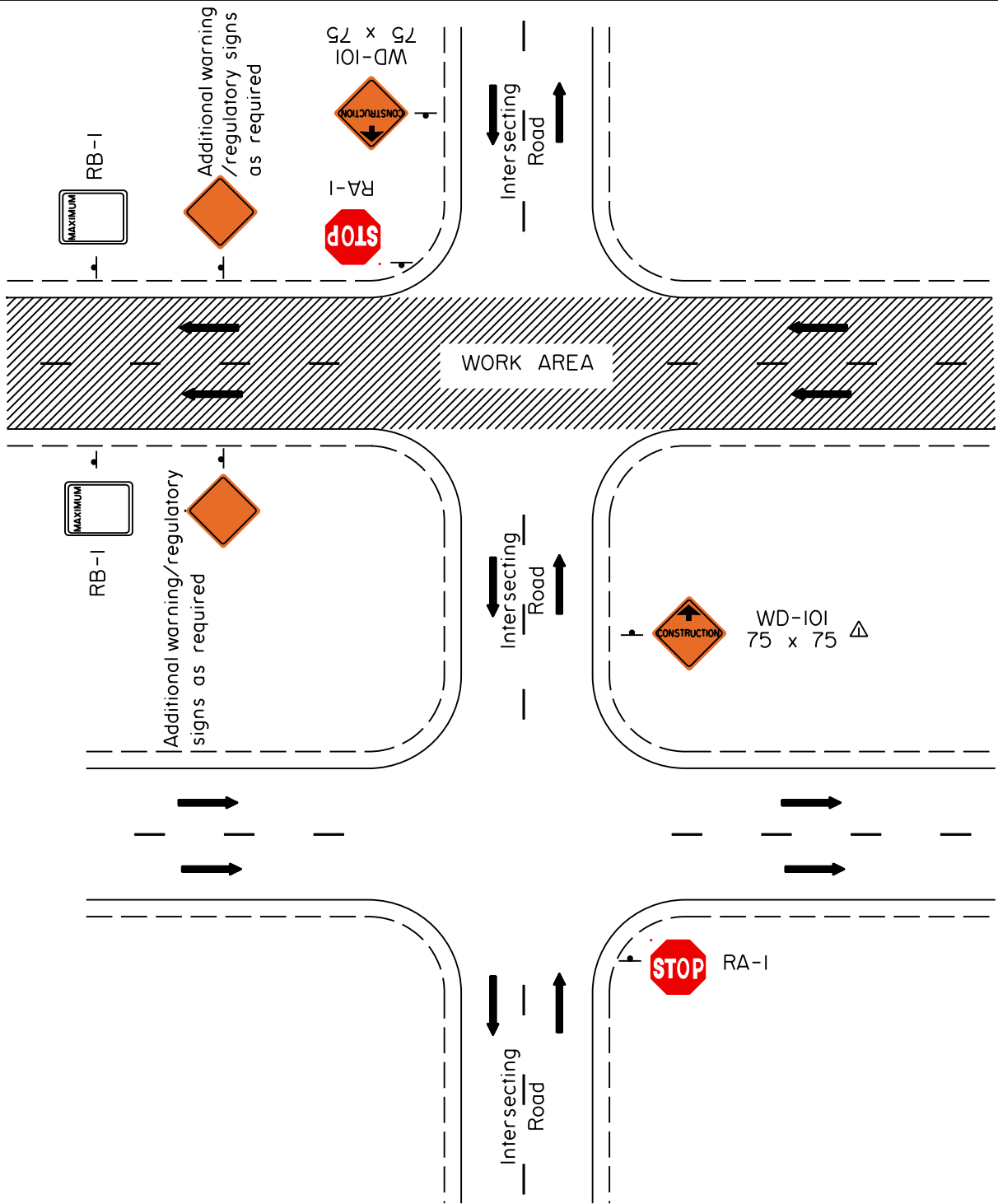
△			
△			
△	Notes and Title Block updated, cones added, cone deleted.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawn			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - SIGNING △ TWO WAY TRAFFIC (REDUCED ROADWAY WIDTH) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.3A



NOTE:

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.

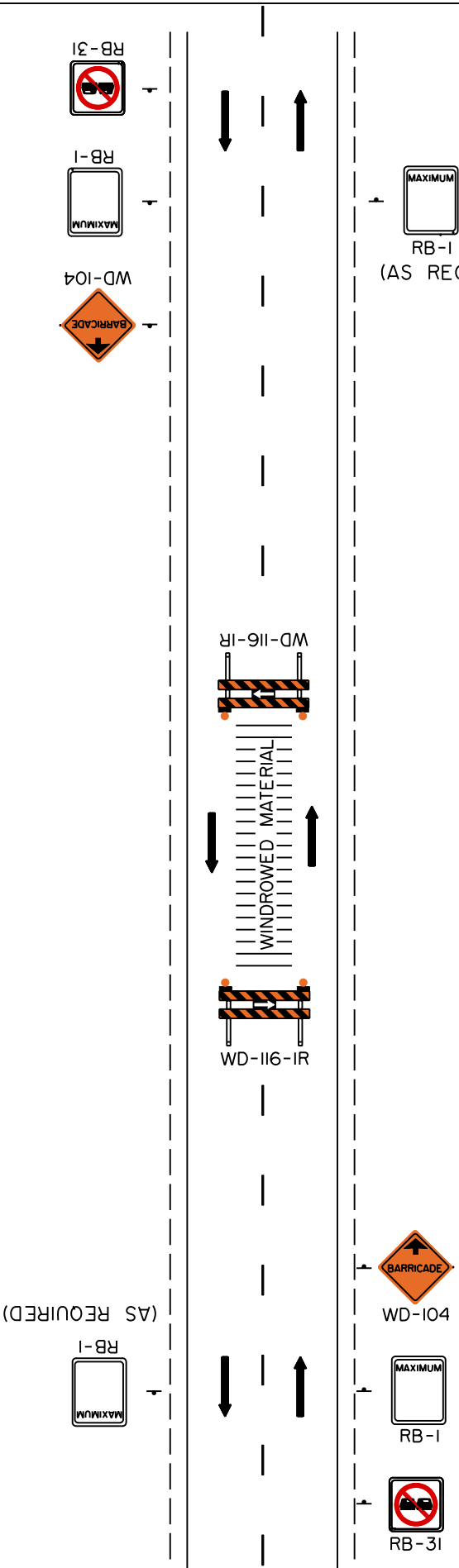
	Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date: MARCH, 2001			
LONG DURATION - SIGNING INTERSECTING ROADS TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.4A



NOTE:

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.

▲			
▲			
▲	Title Block updated and signs repositioned.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - SIGNING ▲ INTERSECTING ROADS FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.4B



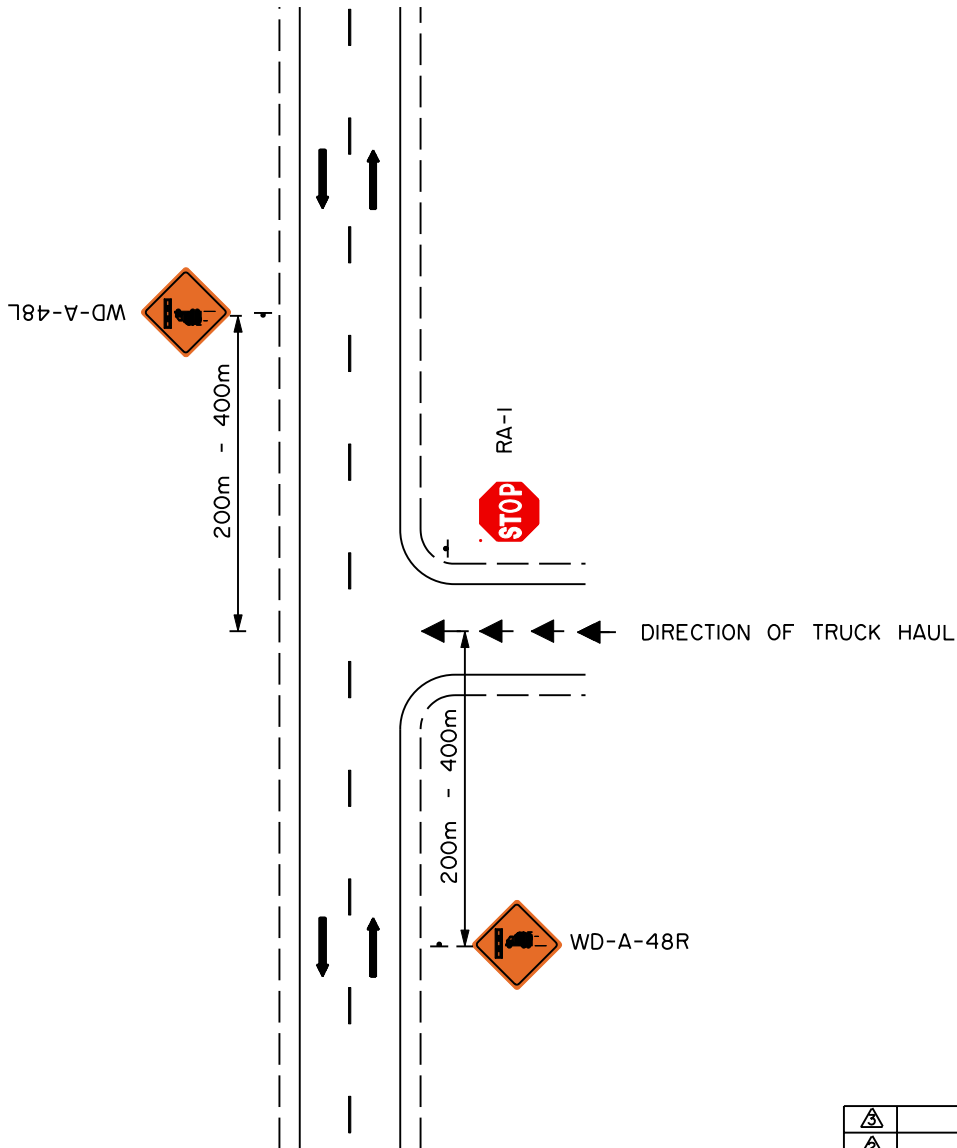
NOTES:

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. During darkness two type "A" flashing lights shall be placed on top of each barricade.
5. A minimum lane width of 3.5m must be maintained.

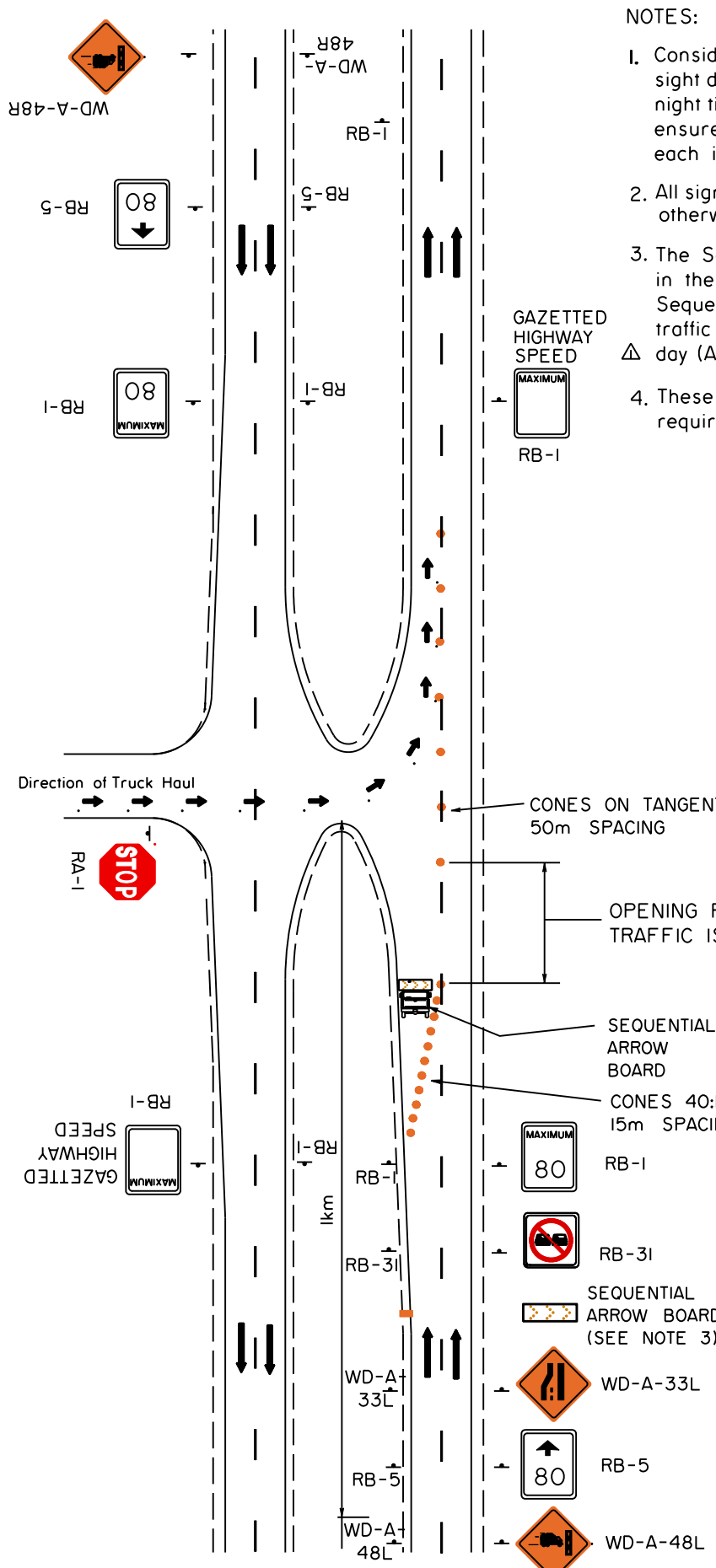
△			
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△	Note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hownt Executive Director, Technical Standards Branch			
Date: MARCH, 2001			
LONG DURATION - SIGNING △ OBSTRUCTION WITHIN WORK AREA TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.5A

NOTES:

- I. 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.



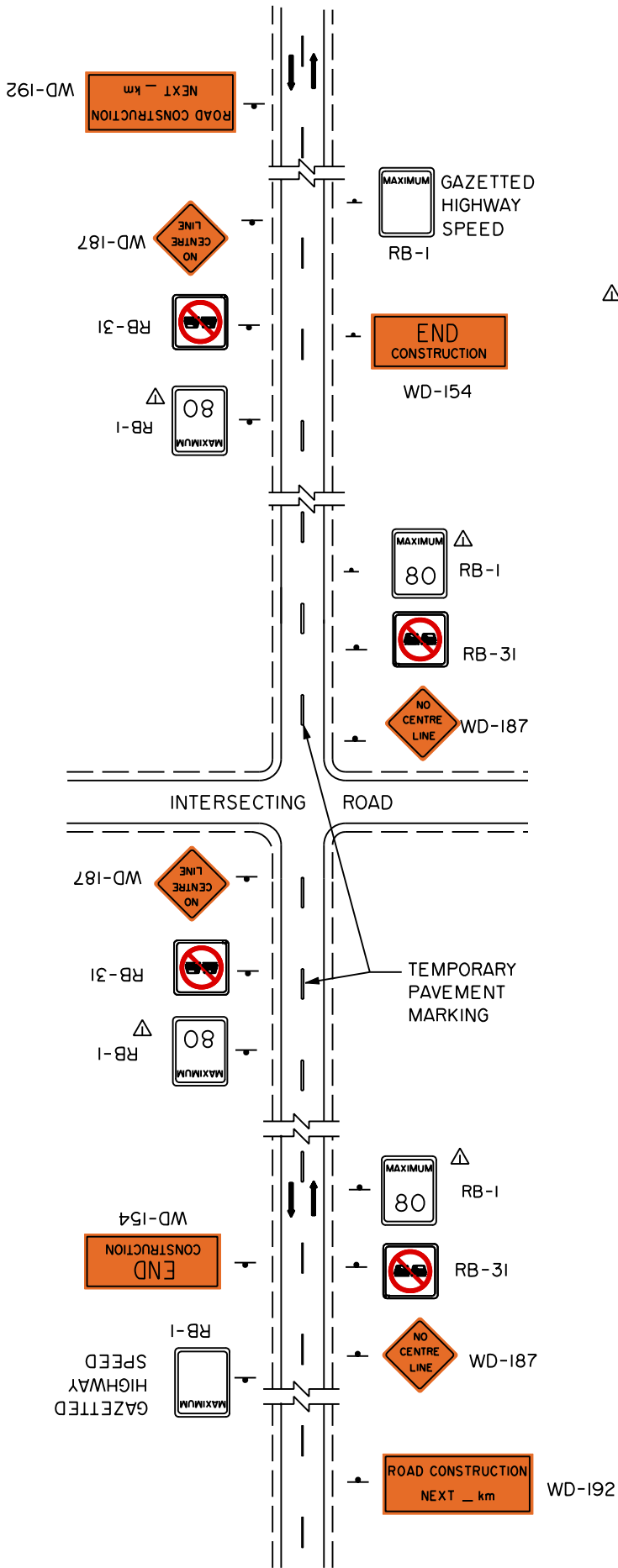
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△	Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date: MARCH, 2001			
LONG DURATION - SIGNING △ TRUCK ENTRANCE (HAUL ROUTE) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.6A



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. The Sequential Arrow Board shall be located in the centre of the closed lane. An additional Sequential Arrow Board is required when traffic volume exceeds 10000 vehicles per day (ASDT) or when sight distance is restricted.
4. These signing details may not necessarily be required at all temporary truck entrances.

△			
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△	Note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - SIGNING △ TRUCK ENTRANCE (HAUL ROUTE) FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TSC-B-1.6B



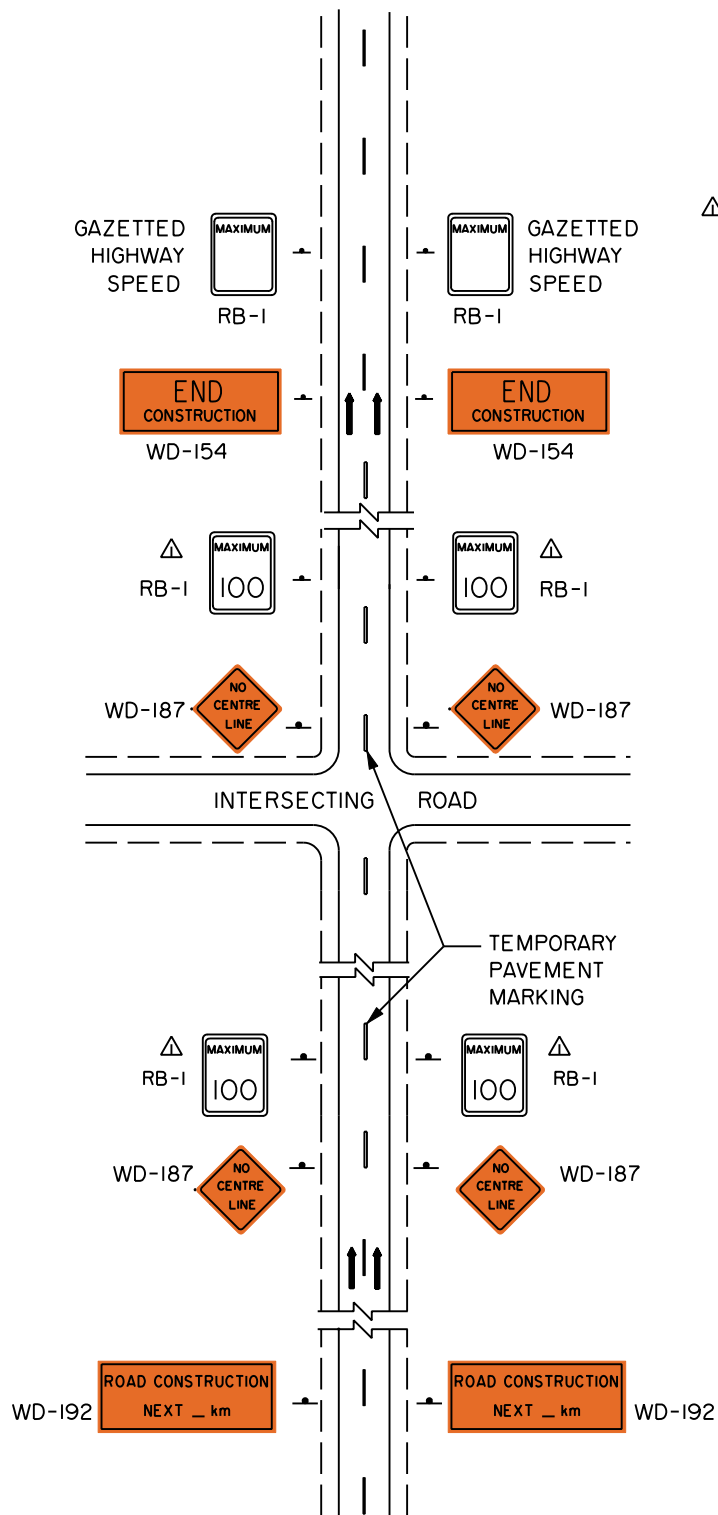
NOTES:

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/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. Temporary pavement marking requirement shall be as per specification.
5. WD-192 shall be erected 2km in advance of the project. Distance tab to include project length plus setback from project limit.

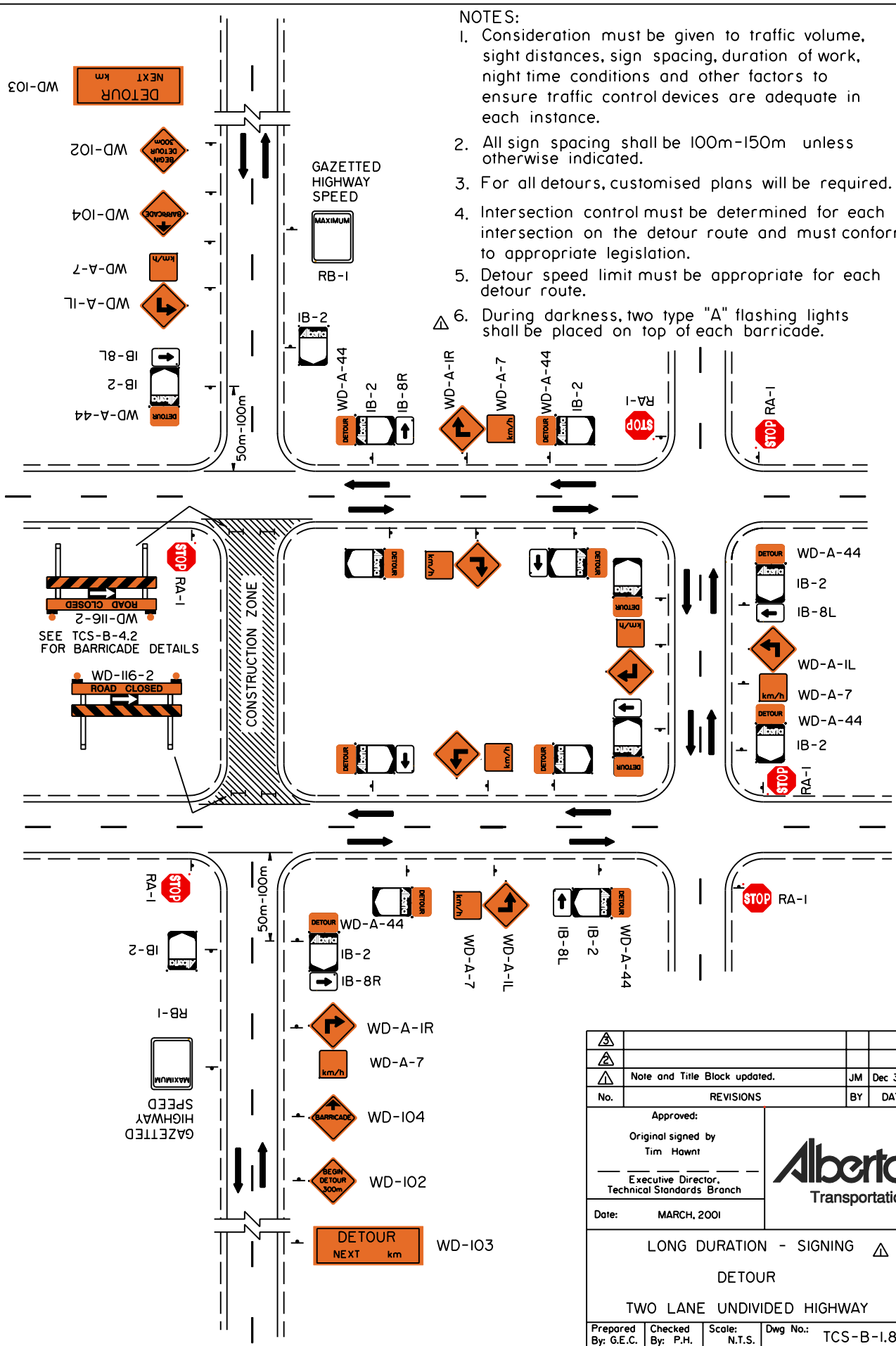
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△	80km/h added, Title Block and note updated, JM	Dec 31/07	
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawn Executive Director, Technical Standards Branch			
Date: MARCH, 2001			
LONG DURATION - SIGNING △ NO CENTRE LINE PAVEMENT MARKING TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.7A

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/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. Temporary pavement marking requirement shall be as per specification.
 5. WD-192 shall be erected 2km in advance of the project. Distance tab to include project length plus setback from project limit.



△			
△			
△	00 km/h added, Title Block and note updated	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawn Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - SIGNING △ NO CENTRE LINE PAVEMENT MARKING FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.7B



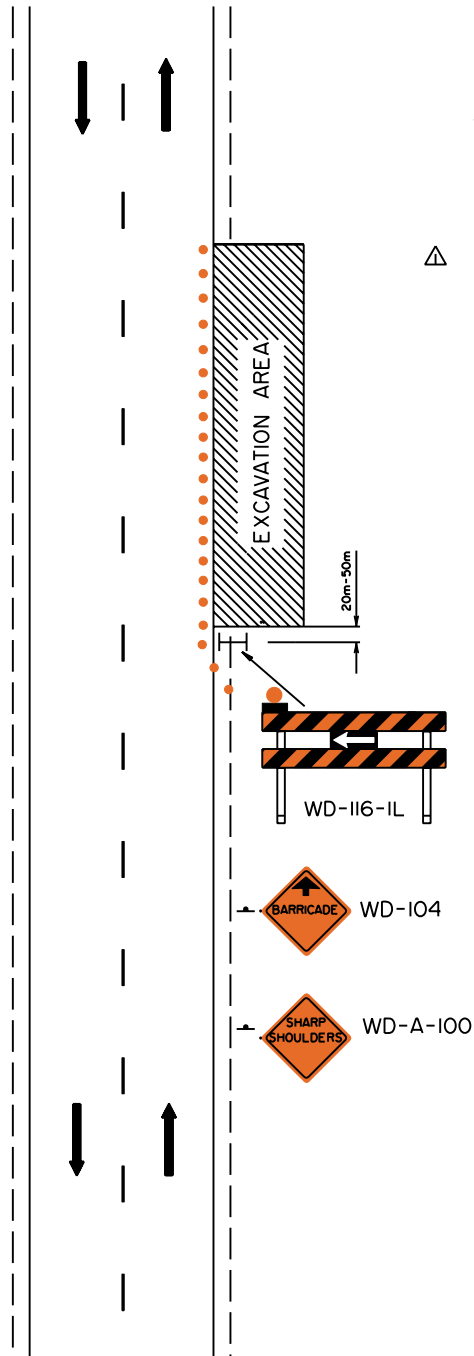
NOTES:

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. For all detours, customised plans will be required.
4. Intersection control must be determined for each intersection on the detour route and must conform to appropriate legislation.
5. Detour speed limit must be appropriate for each detour route.
6. During darkness, two type "A" flashing lights shall be placed on top of each barricade.

▲			
▲	Note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - SIGNING ▲ DETOUR TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.8A

NOTES:

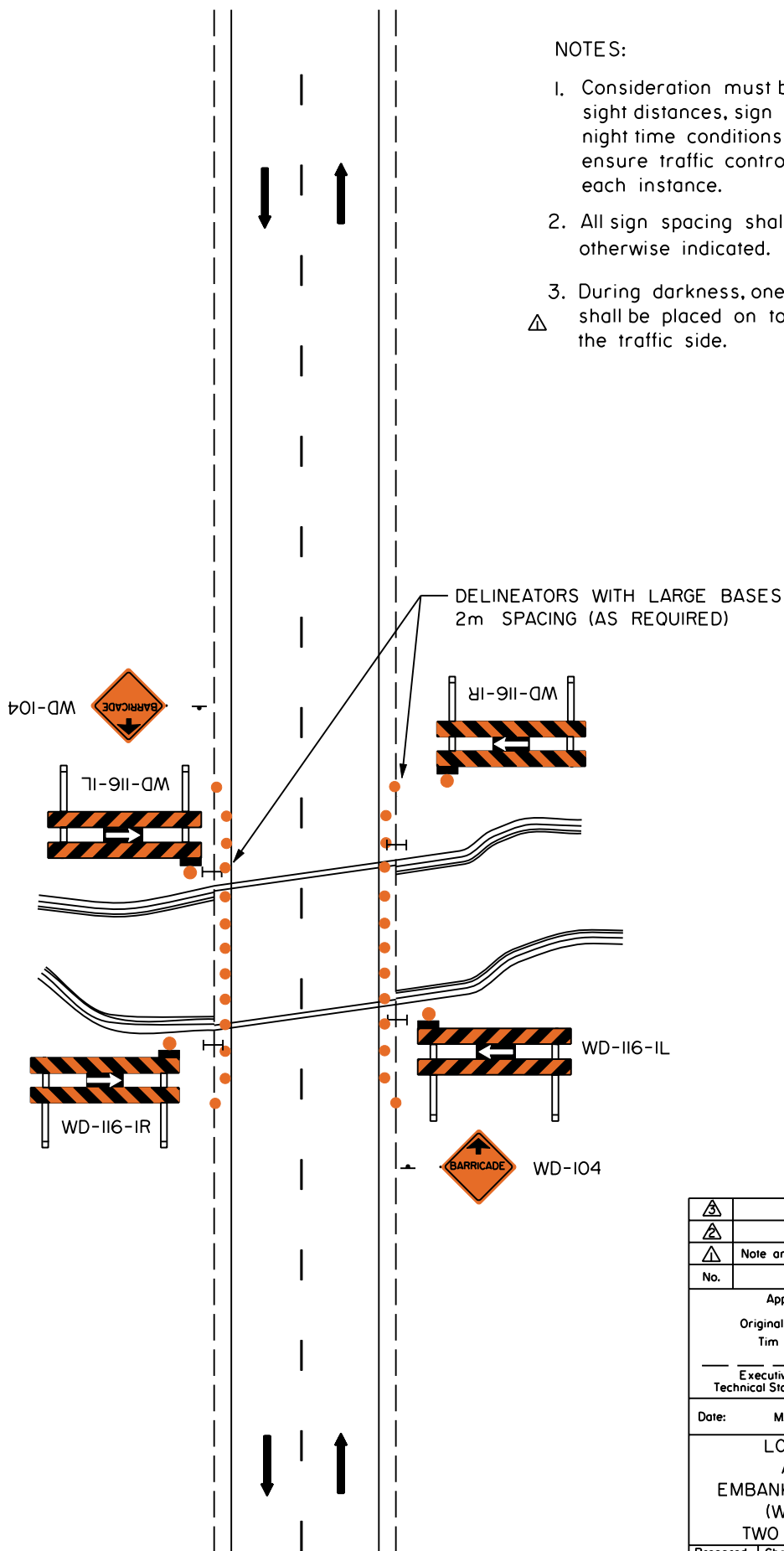
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.
3. Delineators with large bases at intervals of 20m. If the drop-off has a slope flatter than 3:1, delineator posts are not required.
4. During darkness, one type 'A' flashing light shall be placed on top of the barricade on the traffic side.



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△	Note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - SIGNING △ SHOULDER DROP-OFF (WITHIN WORK ZONE) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.9A


NOTES:

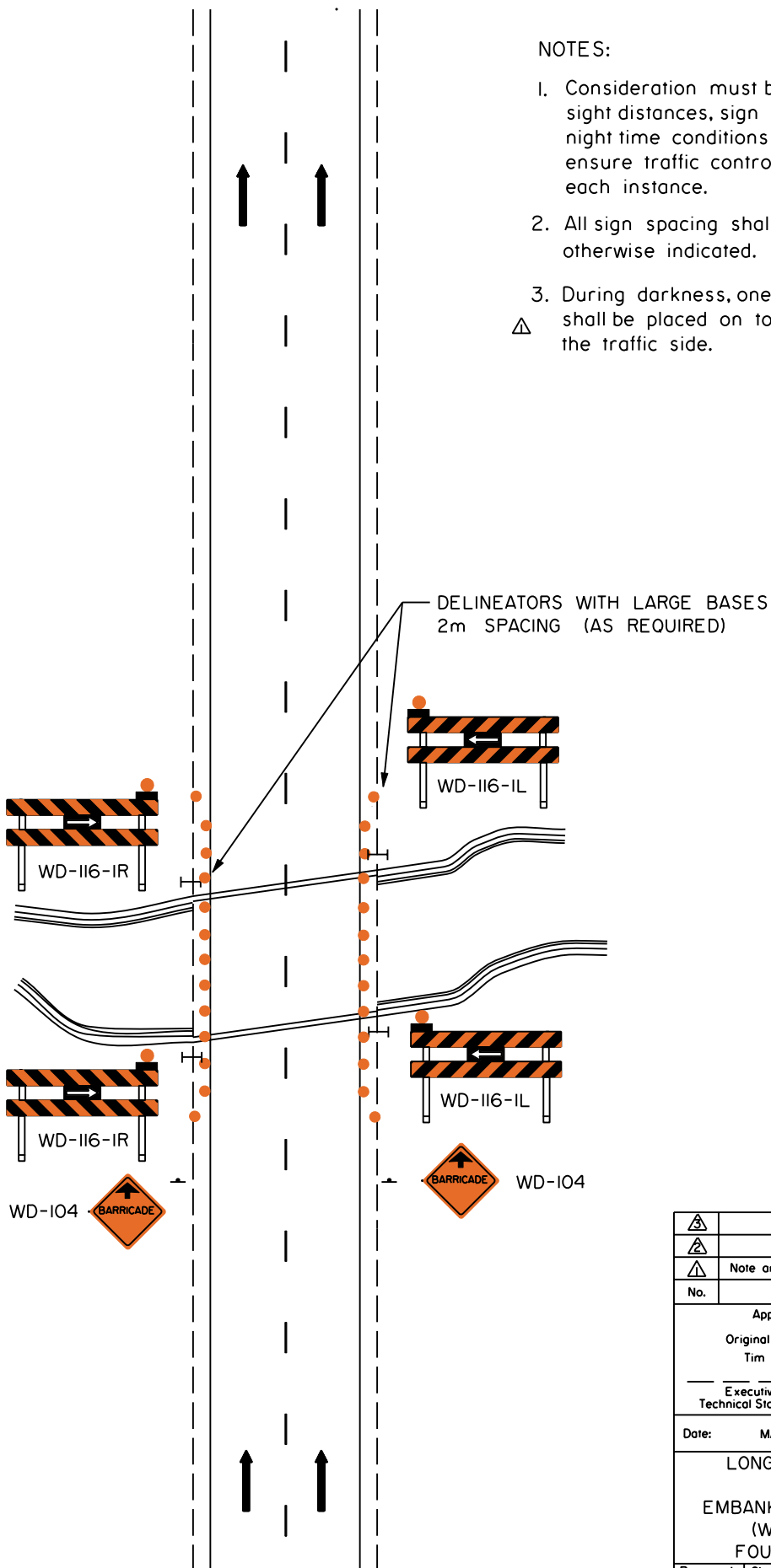
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.
3. During darkness, one type 'A' flashing light shall be placed on top of each barricade on the traffic side.








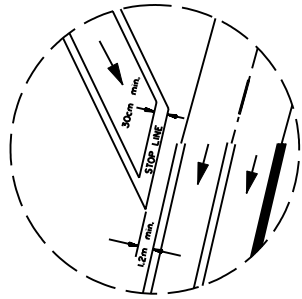
⚠			
⚠			
⚠	Note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - SIGNING AND DELINEATION FOR EMBANKMENTS AND FIXED OBJECTS (WITHIN THE WORK ZONE) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.IIA

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. During darkness, one type 'A' flashing light  shall be placed on top of each barricade on the traffic side.



			
			
	Note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date: MARCH, 2001			
LONG DURATION - SIGNING AND  DELINEATION FOR EMBANKMENTS AND FIXED OBJECTS (WITHIN THE WORK ZONE) FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.IIB



DETAIL 'A'

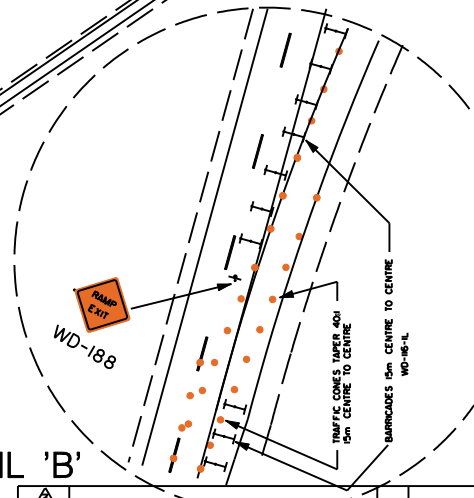
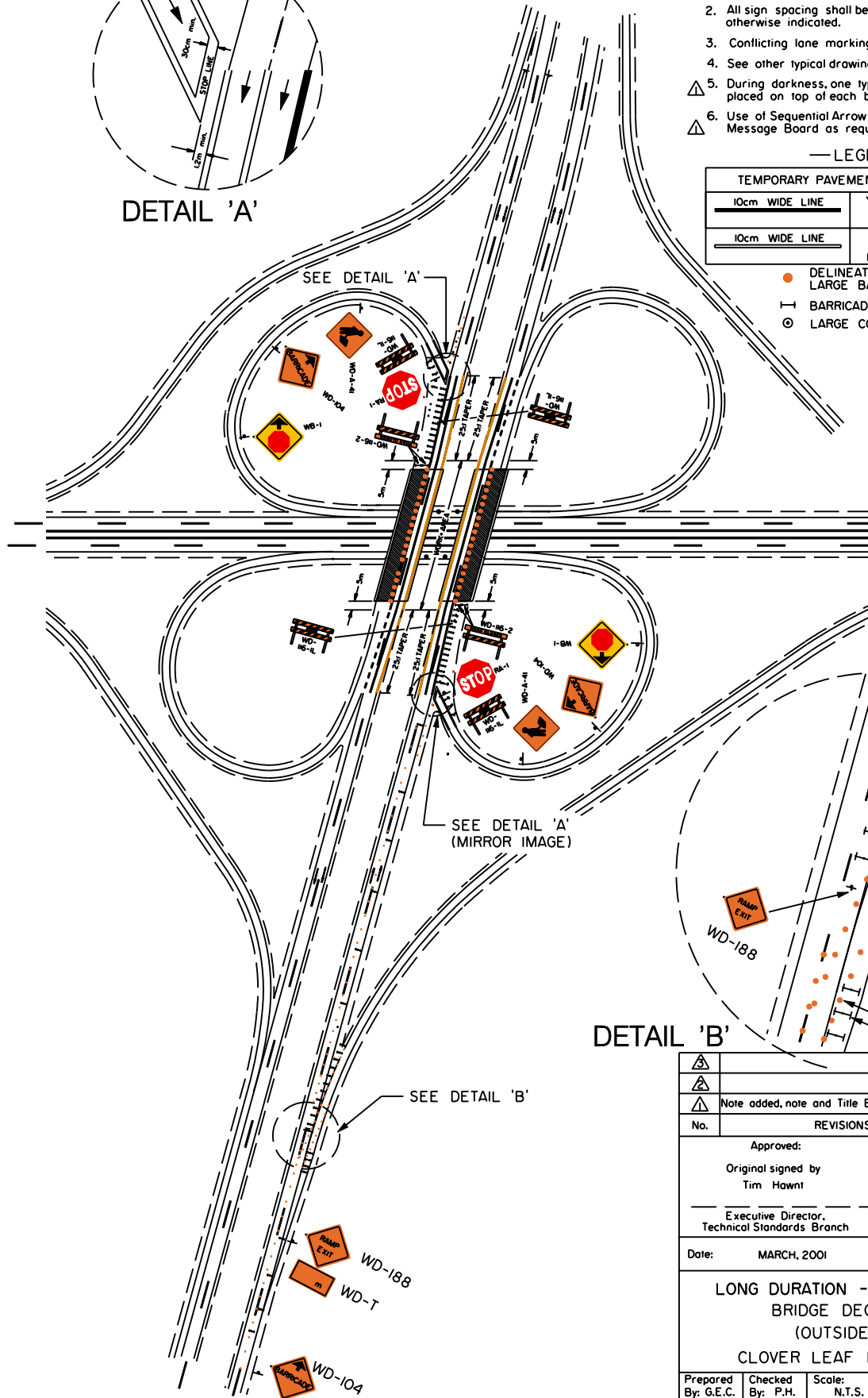
NOTES:

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. Conflicting lane markings must be removed.
4. See other typical drawings for advance signing.
5. During darkness, one type 'A' flashing lights shall be placed on top of each barricade on the traffic side.
6. Use of Sequential Arrow Board and Electronic Message Board as required.

— LEGEND —

TEMPORARY PAVEMENT MARKING DETAILS	
10cm WIDE LINE	YELLOW EDGE LINES FOR CRITICAL AREAS WHERE CROSSING IS PROHIBITED
10cm WIDE LINE	WHITE EDGE LINES AND LANE DIVIDING LINES PROHIBITING LANE CHANGE

- DELINEATOR POSTS WITH LARGE BASES
- BARRICADES
- ⊙ LARGE CONES



DETAIL 'B'

⚠			
⚠	Note added, note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved:
 Original signed by
 Tim Hawnt
 Executive Director,
 Technical Standards Branch

Date: MARCH, 2001



LONG DURATION - BRIDGE SIGNING
 BRIDGE DECK REPAIR
 (OUTSIDE LANE)
 CLOVER LEAF INTERCHANGES

Prepared By: G.E.C. Checked By: P.H. Scale: N.T.S. Dwg No.: TCS-B-1.15B

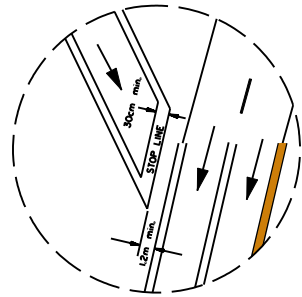
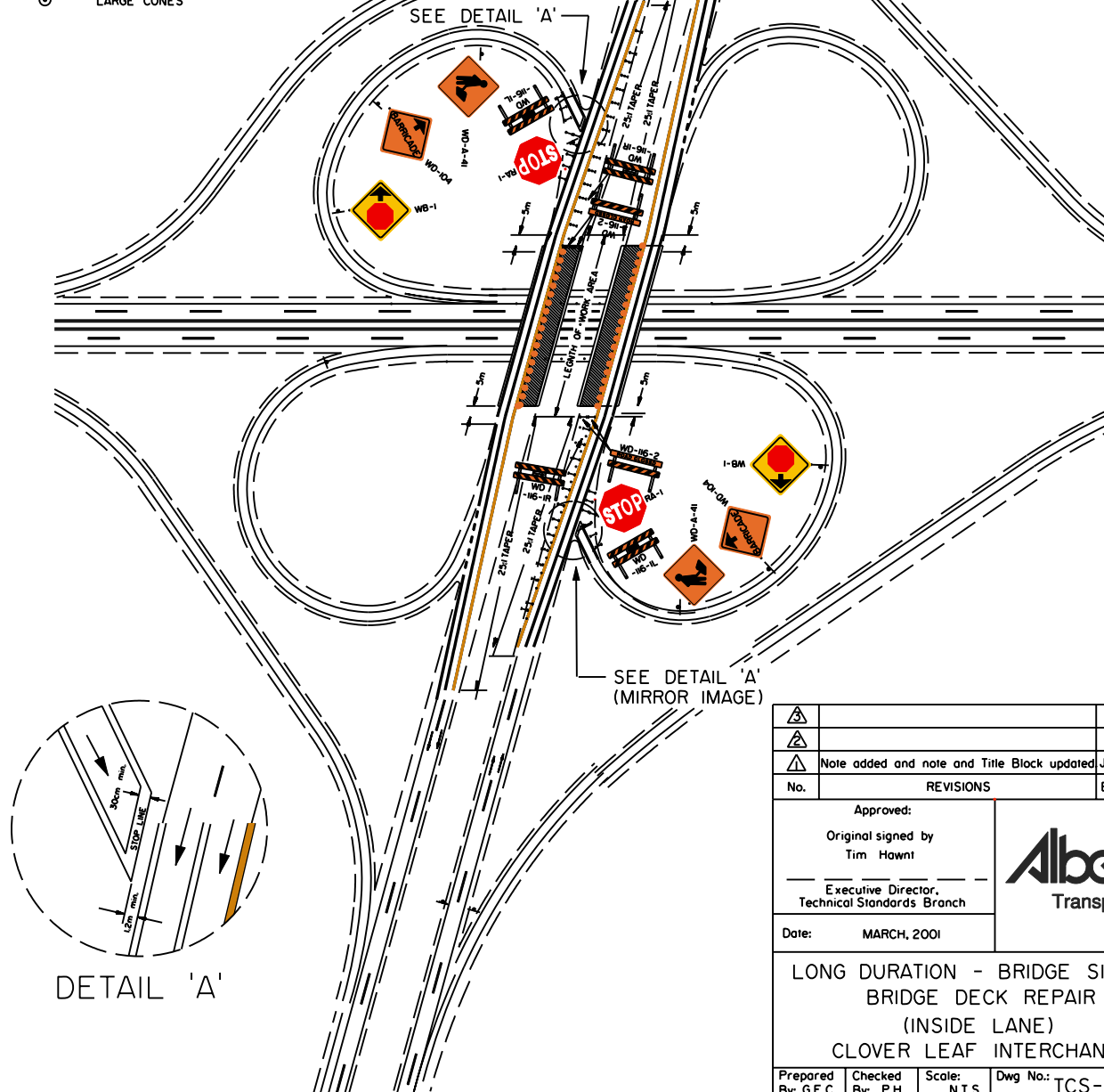
NOTES:

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. Conflicting lane markings must be removed.
4. See other typical drawings for advance signing.
5. During darkness, one type 'A' flashing lights shall be placed on top of each barricade on the traffic side.
6. Use of Sequential Arrow Board and Electronic Message Board as required.

— LEGEND —

TEMPORARY PAVEMENT MARKING DETAILS	
	YELLOW EDGE LINES FOR CRITICAL AREAS WHERE CROSSING IS PROHIBITED
	WHITE EDGE LINES AND LANE DIVIDING LINES PROHIBITING LANE CHANGE

- DELINEATOR POSTS WITH LARGE BASES
- BARRICADES
- LARGE CONES

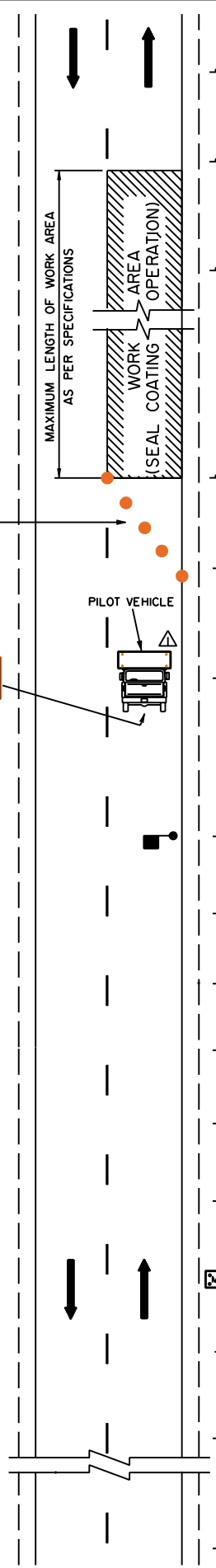


	Note added and note and Title Block updated	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - BRIDGE SIGNING BRIDGE DECK REPAIR (INSIDE LANE) CLOVER LEAF INTERCHANGES			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-I.16B

NOTE:
 DETAILS OF
 WARNING/REGULATORY
 SIGNS SAME AS
 THOSE ON OTHER
 SIDE OF HIGHWAY.

CONES 5:1 TAPER
 5 CONES MINIMUM

WD-173
 PILOT VEHICLE
 DO NOT PASS
 INSTALL ON REAR OF
 PILOT VEHICLE



RB-1
 MAXIMUM
 GAZETTED
 HIGHWAY
 SPEED

END
 CONSTRUCTION
 WD-154

MAXIMUM
 LOOSE
 CHIPS
 WD-174

SEE NOTE 8

MAXIMUM
 LOOSE
 CHIPS
 WD-174

INSTALL EVERY 4.8km
 LOOSE CHIPS
 PLEASE SLOW DOWN
 WD-169

FOLLOW
 PILOT
 VEHICLE
 WD-172

DO NOT
 PASS
 FOLLOW IN
 CONVOY
 WD-171

FLAGPERSON

WD-A-45

MAXIMUM
 50
 RB-1

RB-31

ONE LANE
 TRAFFIC
 WD-106

50
 RB-5

VARIABLE MESSAGE
 (SEE NOTE 4)

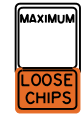
WD-A-41

CONSTRUCTION
 WD-101

ROAD CONSTRUCTION
 NEXT __ km
 WD-192

NOTES:

1. Consideration must be given to traffic volume, direction of travel of seal coating operations, sight distances, sign spacing, duration of work 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. Typical signing is required in both directions.
4. Variable Message Board should read either "LOOSE CHIPS MAX 50 km/h" or "LOOSE CHIPS PLEASE SLOW DOWN".
5. WD-192 shall be erected 2km in advance of the project. Distance tab to include project length plus setback from project limit.
6. Drawing TCS-B-1.7A applies when construction on the roadway has been completed but barrier lines have not yet been painted.
7. Conditions under which 'MAXIMUM 80km/hr' sign may be used are detailed in the chip seal coat specifications.
8. Speed limit signs shall be placed after every intersecting roadway and shall be no more than 5 km apart.

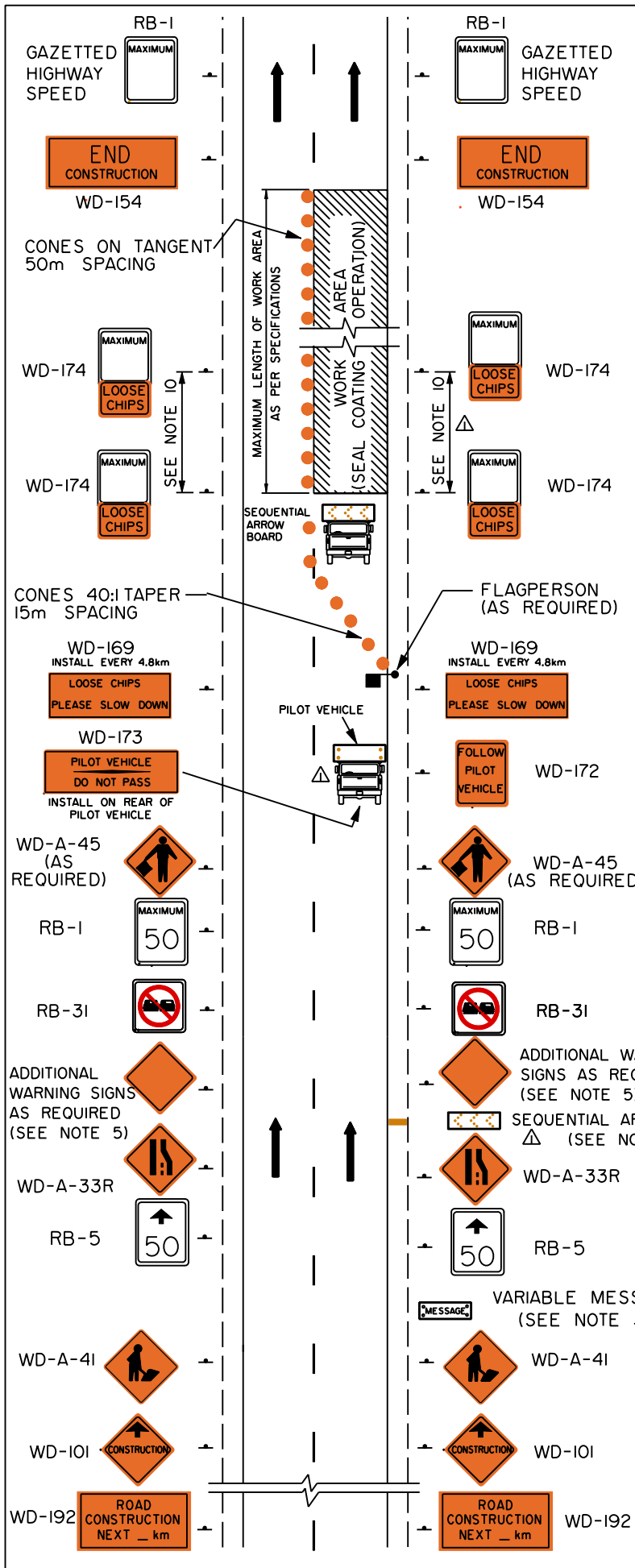


BLACK ON WHITE

BLACK ON ORANGE

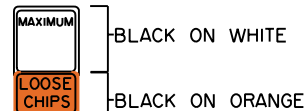
WD-174 (speed limit shown on WD-174 should be compatible with other speed limit signs used)

△			
△			
△	Title Block updated, changed Taper to 5:1, pilot vehicle updated and note added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date: MARCH, 2001			
LONG DURATION - SIGNING △ CHIP SEAL COATING OPERATIONS TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.17A



NOTES:

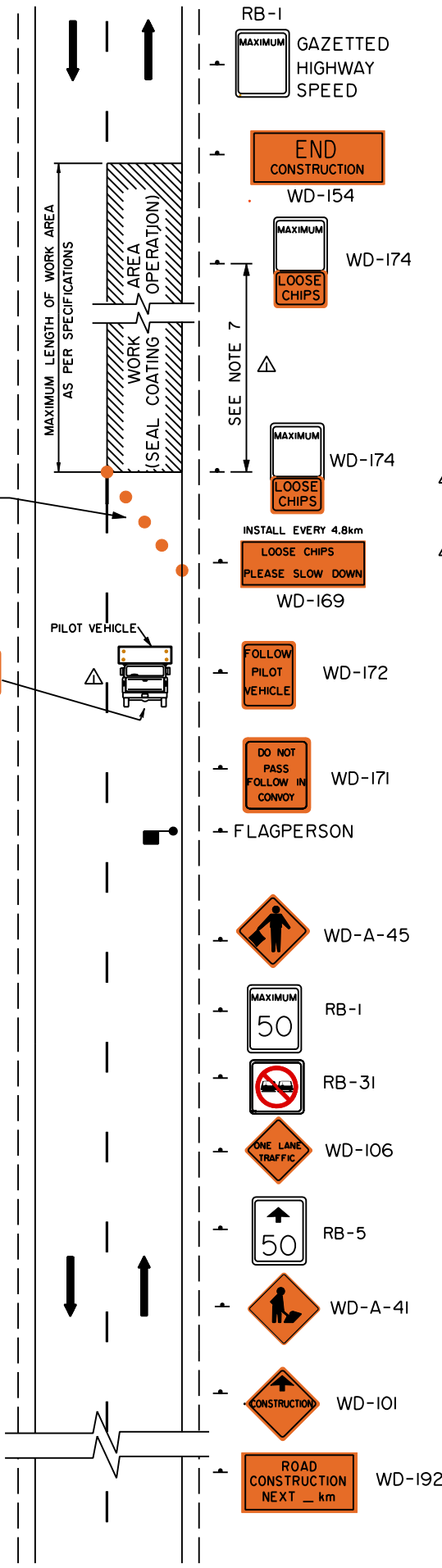
1. Consideration must be given to traffic volume, direction of travel of seal coating operations, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.
3. Variable Message Board message should read either "LOOSE CHIPS MAX 50 km/h" or "LOOSE CHIPS PLEASE SLOW DOWN".
4. An additional Sequential Arrow Board is required when traffic volumes exceed 10000 vehicles per day (ASDT) or when sight distance is restricted.
5. Examples of additional warning signs that may be required in conjunction with this plan are:
 - WD-104 (BARRICADE)
 - WD-150 (LOOSE GRAVEL)
 - WD-157 (SLOW FRESH OIL)
6. WD-192 shall be erected 2km in advance of the project. Distance tab to include project length plus setback from project limit.
7. Drawing TCS-B-1.7B applies when construction on the roadway has been completed but barrier lines have not yet been painted.
8. Conditions under which 'MAXIMUM 80km/hr' sign may be used are detailed in the chip seal coat specifications.
9. Cones on tangent may not be required if alternative lane closure methods are utilized.
10. Speed limit signs shall be placed after every intersecting roadway and shall be no more than 5 km apart.



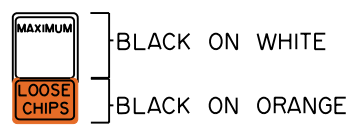
WD-174 (speed limit shown on WD-174 should be compatible with other speed limit signs used)

△			
△			
△	Note and Title Block updated, pilot vehicle revision and note added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
LONG DURATION - SIGNING △			
CHIP SEAL COATING OPERATIONS			
FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.7B

NOTE:
 DETAILS OF
 WARNING/REGULATORY
 SIGNS SAME AS
 THOSE ON OTHER
 SIDE OF HIGHWAY.



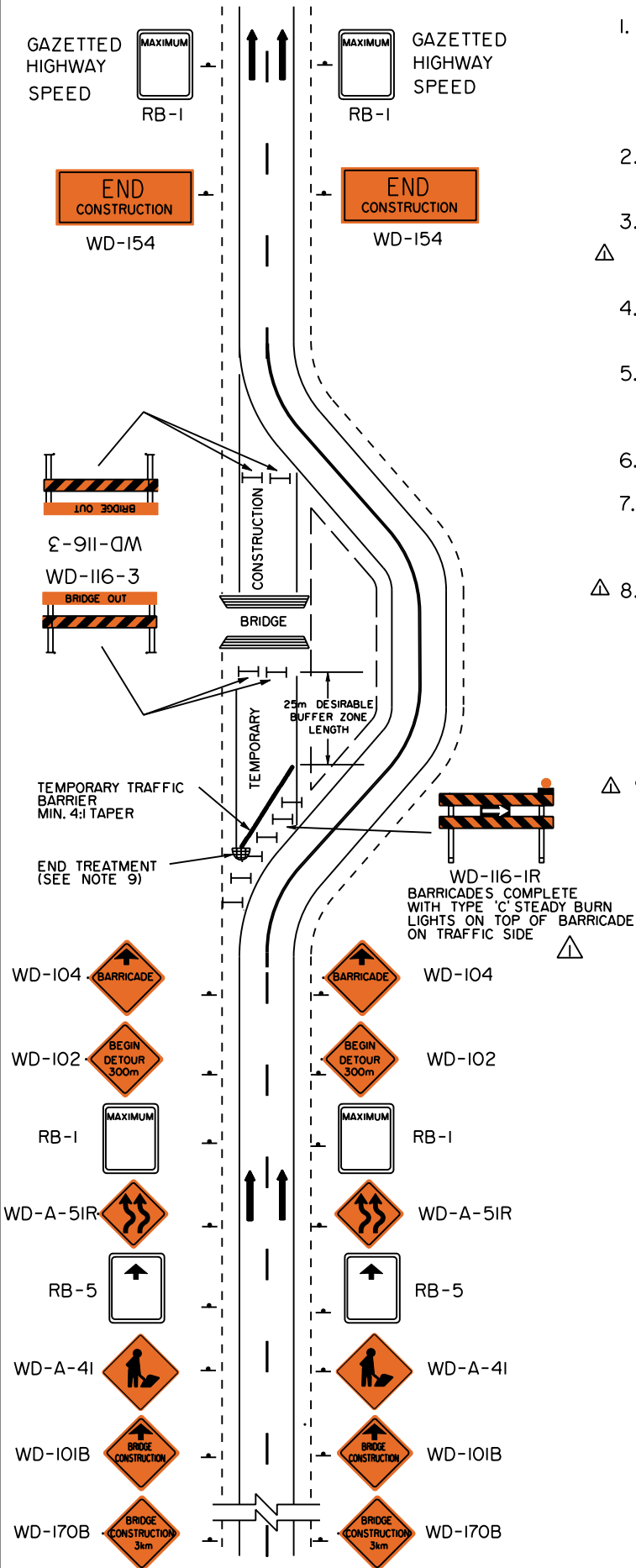
- NOTES:
1. Consideration must be given to traffic volume, direction of travel of seal coating operations, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
 2. All sign spacing shall be 100m-150m unless otherwise indicated.
 3. Typical signing is required in both directions.
 4. WD-192 shall be erected 2km in advance of the project. Distance tab to include project length plus setback from project limit.
 5. Drawing TCS-B-1.7A applies when construction on the roadway has been completed but barrier lines have not yet been painted.
 6. Conditions under which 'MAXIMUM 80km/hr' sign may be used are detailed in the double seal coating operations specifications.
 7. Speed limit signs shall be placed after every intersecting roadway and shall be no more than 5 km apart.



WD-174 (speed limit shown on WD-174 should be compatible with other speed limit signs used)

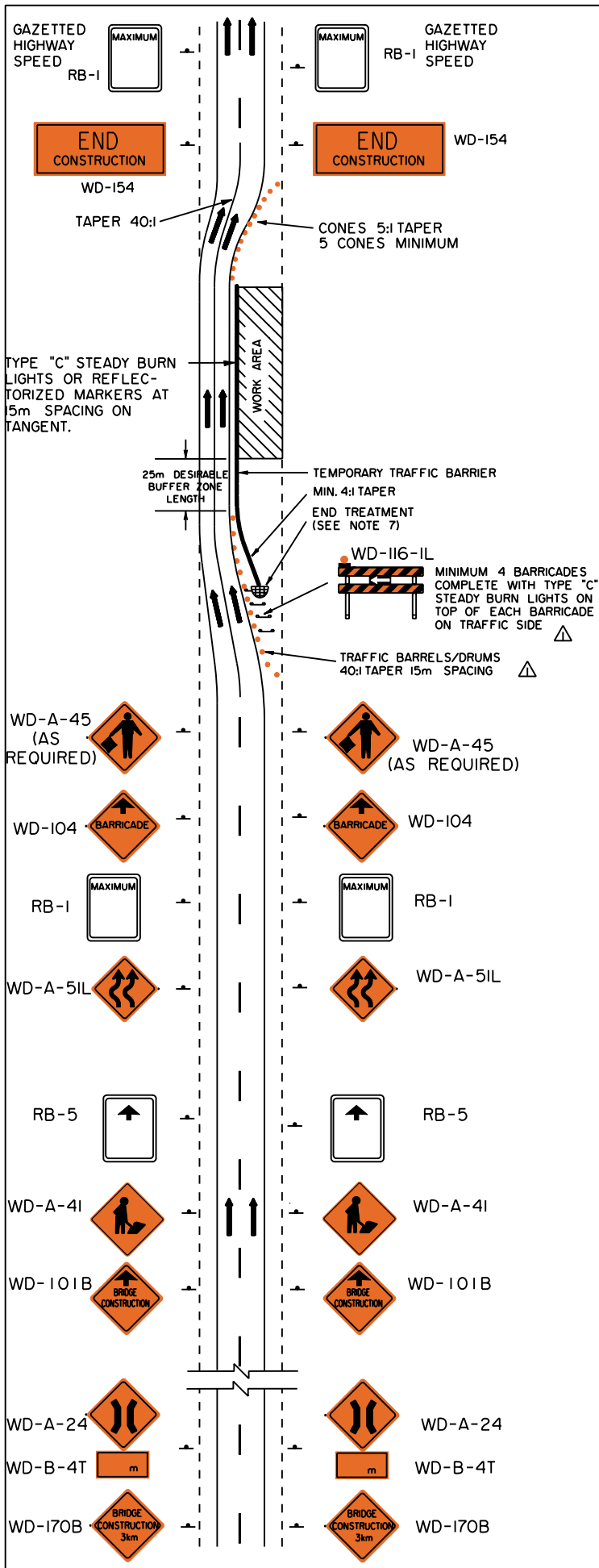
△			
△	Note and Title Block updated, taper changed to 5:1, pilot vehicle revision and note added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
Alberta Transportation			
LONG DURATION - SIGNING △ DOUBLE SEAL AND GRADED AGGREGATE SEAL COATING OPERATIONS TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.18A

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. Shoulder delineation is required on 8m spacing along the length of the detour (both sides).
4. For paved detours, line painting or temporary lane markings are required.
5. For gravel detours, temporary lane markings are required to transition painted line markings from the paved surface.
6. Conflicting lane markings shall be removed.
7. Detour shall be designed and illuminated according to Highway Geometric Design Guide, Section B.7 Temporary Highway Detours.
8. Temporary traffic barriers shall be Approved Continuous Precast Concrete F-shaped Barriers (refer to drawing CB6-4.2 M16) (see Appendix A or approved equivalent) meeting the requirements of NCHRP 350 Test Level 3, with proper consideration for deflection allowance behind barriers. The barriers shall be placed on pavement or properly prepared granular base.
9. The exposed ends of the barriers shall be protected by crashworthy end treatments, such as sand barrels, crash tested for the appropriate speed (Drawing TEB 3.19 see Appendix A), or approved equivalent. Alternatively, the barriers may be terminated outside the clear zone. (Drawing TCS-B-1.29, see Appendix A).

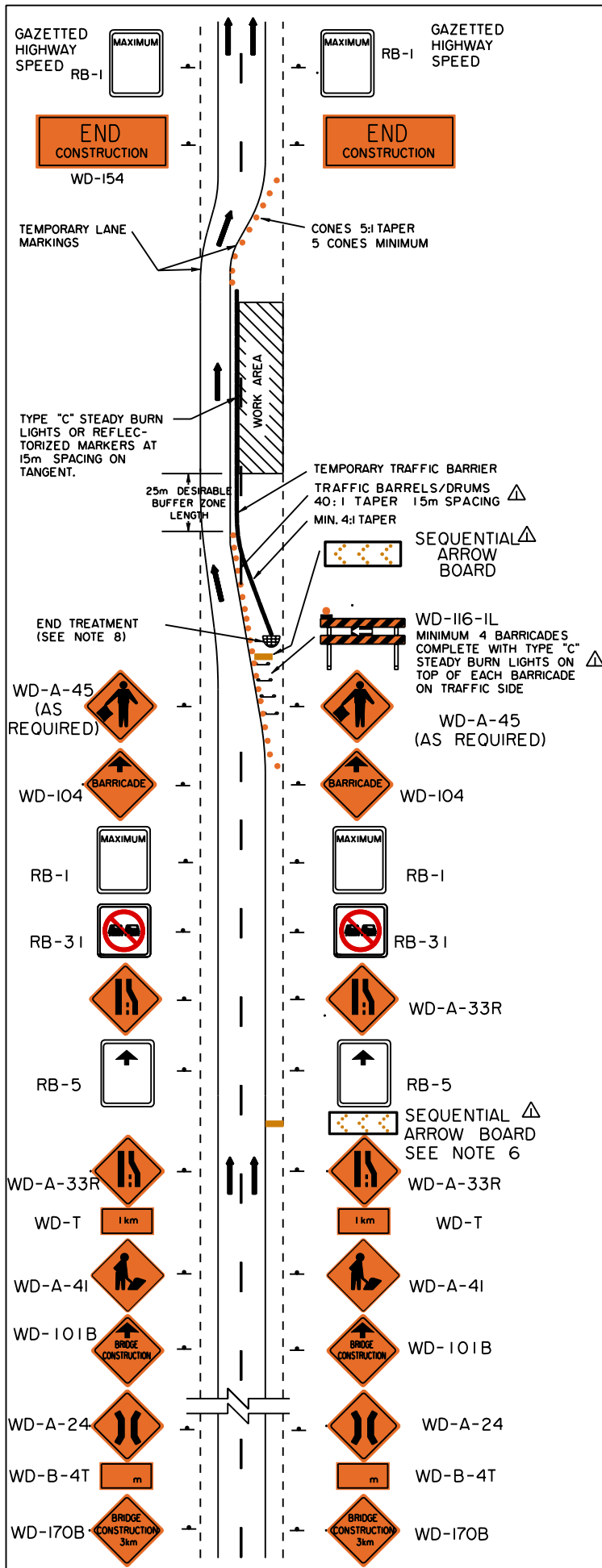
	Notes and Title Block updated.	JM	Sep 23/08
No.	REVISIONS	BY	DATE
Approved:			
Original Signed by Allan Kwan			
Executive Director, Technical Standards Branch			
Date:	JANUARY 2005		
LONG DURATION - BRIDGE DETOUR SIGNING (WORK ZONE SPEED > 60 km/h)			
Prepared By: S.L.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-1.19B



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. When switching traffic during staged construction, a specialized traffic accommodation plan is required.
3. All sign spacing shall be 100m-150m unless otherwise indicated
4. A minimum lane width of 3.5m is required.
5. Temporary lane markings are required and conflicting lane markings shall be removed.
6. Temporary traffic barriers shall be Approved Continuous Precast Concrete F-shaped Barriers (refer to drawing CB6-4.2 MI6) (see Appendix A or approved equivalent) meeting the requirements of NCHRP 350 Test Level 3, with proper consideration for deflection allowance behind barriers. The barriers shall be placed on pavement or properly prepared granular base.
7. The exposed ends of the barriers shall be protected by crashworthy end treatments, such as sand barrels, crash tested for the appropriate speed (Drawing TEB 3.19 see Appendix A), or approved equivalent. Alternatively, the barriers may be terminated outside the clear zone. (Drawing TCS-B-1.29, see Appendix A)

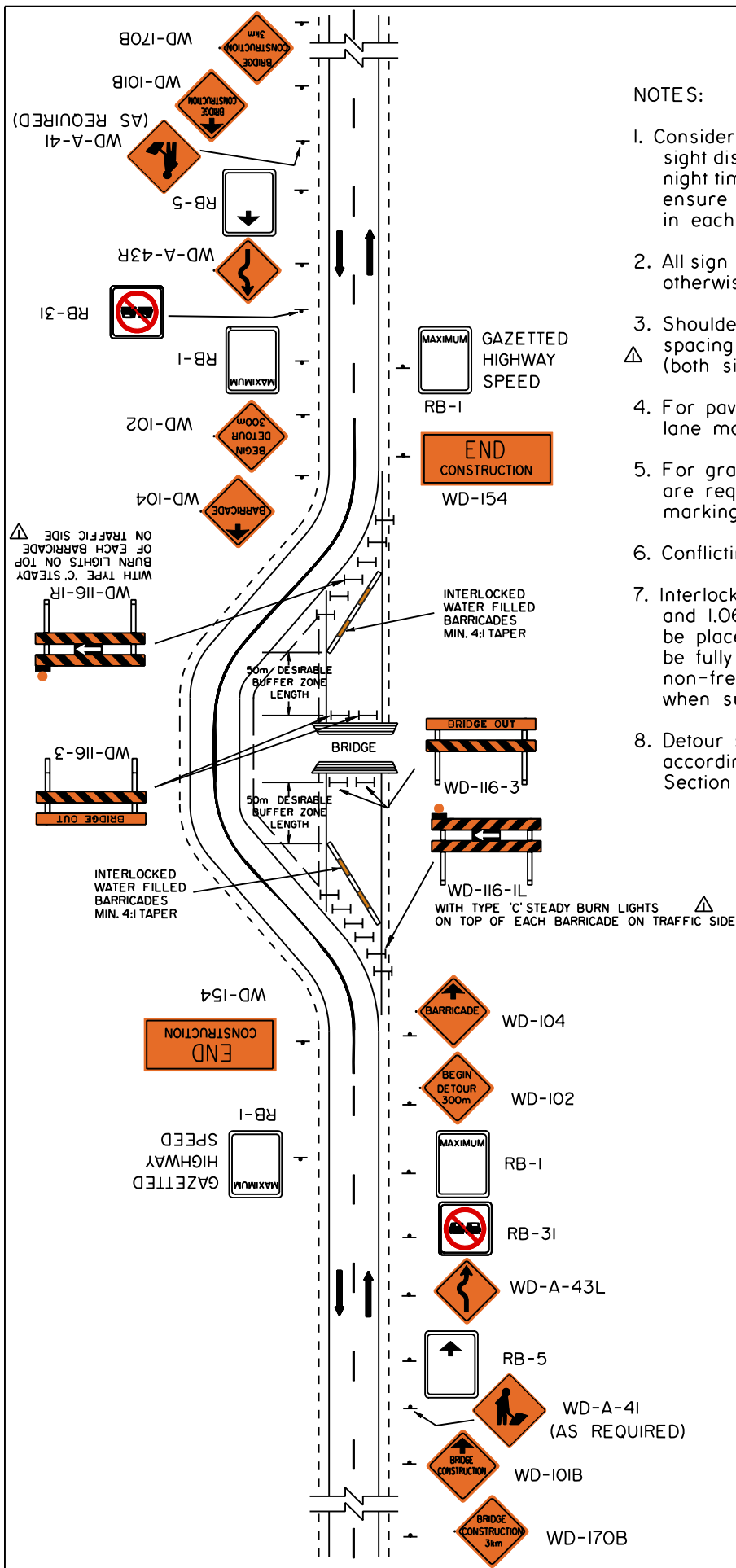
△			
△			
△	Notes and Title Block updated.	JM	Sep 23/08
No.	REVISIONS	BY	DATE
Approved: Original Signed by Allan Kwan Executive Director, Technical Standards Branch			
Date: JANUARY 2005			
LONG DURATION - BRIDGE SIGNING (WORK ZONE SPEED > 60 km/h OR WORK AREA > 300mm DROP) TWO LANES TRAFFIC (REDUCED BRIDGE WIDTH) FOUR LANE DIVIDED HIGHWAY			
Prepared By: S.L.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-1.20B



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. When switching traffic during staged construction, a specialized traffic accommodation plan is required.
3. All sign spacing shall be 100m-150m unless otherwise indicated.
4. A minimum lane width of 3.5m is required.
5. Temporary lane markings are required and conflicting lane markings shall be removed.
6. The Sequential Arrow Board shall be located in the centre of the closed lane. An additional Sequential Arrow Board is required when traffic volumes exceed 10000 vehicles per day (ASDT) or when sight distance is restricted.
7. Temporary traffic barriers shall be Approved Continuous Precast Concrete F-shaped Barriers (refer to drawing CB6-4.2 M16) (see Appendix A or approved equivalent) meeting the requirements of NCHRP 350 Test Level 3, with proper consideration for deflection allowance behind barriers. The barriers shall be placed on pavement or properly prepared granular base.
8. The exposed ends of the barriers shall be protected by crashworthy end treatments, such as sand barrels, crash tested for the appropriate speed (Drawing TEB 3.19 see Appendix A), or approved equivalent. Alternatively, the barriers may be terminated outside the clear zone. (Drawings TCS-B-1.29, see Appendix A)

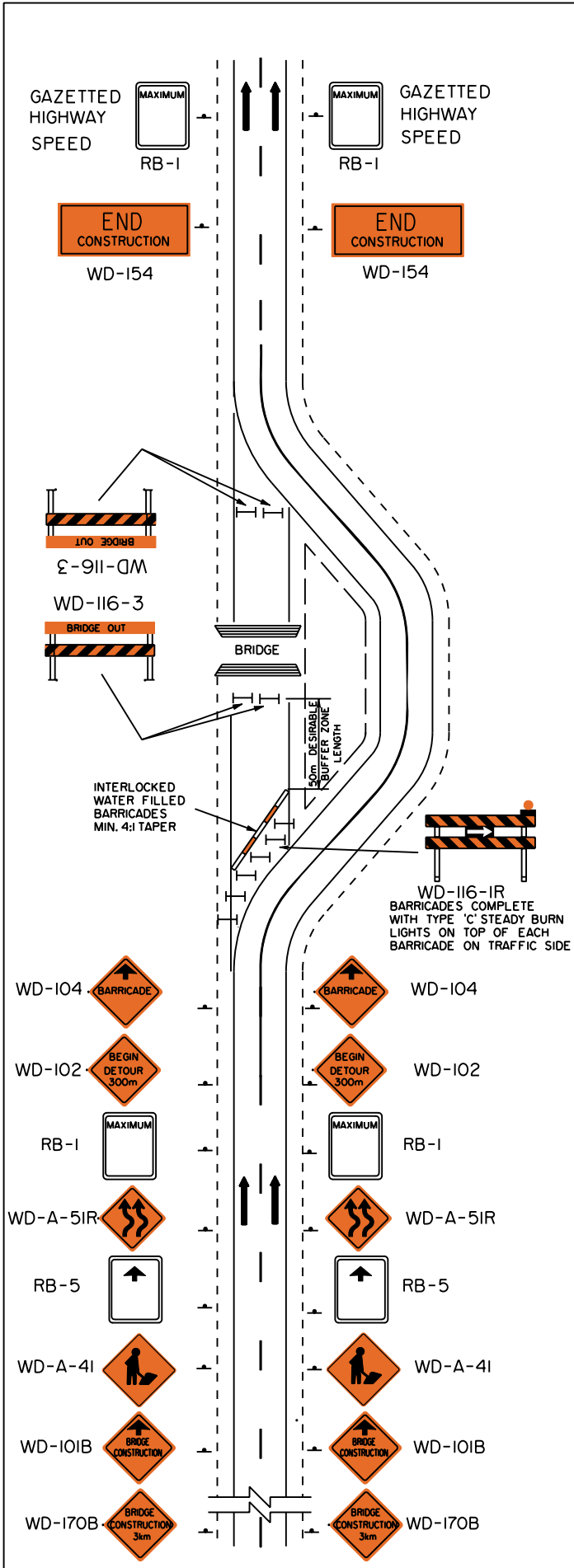
	Notes and Title Block updated, sign deleted and sign added.	JM	Sep 23/08
No.	REVISIONS	BY	DATE
Approved:			
Original Signed by Allan Kwan			
Executive Director, Technical Standards Branch			
Date:	JANUARY 2005		
LONG DURATION - BRIDGE SIGNING (WORK ZONE SPEED > 60 km/h OR WORK AREA > 300mm DROP)			
ONE LANE CLOSURE FOUR LANE DIVIDED HIGHWAY			
Prepared By: S.L.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-1.21B



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. Shoulder delineation is required on 8m spacing along the length of the detour (both sides).
4. For paved detours, line painting or temporary lane markings are required.
5. For gravel detours, temporary lane markings are required to transition painted line markings from the paved surface.
6. Conflicting lane markings shall be removed.
7. Interlocked water-filled barricades (1.83m long and 1.06m high) with minimum 4:1 taper shall be placed across the roadway. Barricades shall be fully filled at all times with water or non-freezing ballast of equivalent specific gravity when sub-zero temperature is conceivable.
8. Detour shall be designed and illuminated according to Highway Geometric Design Guide Section B.7 Temporary Highway Detours.

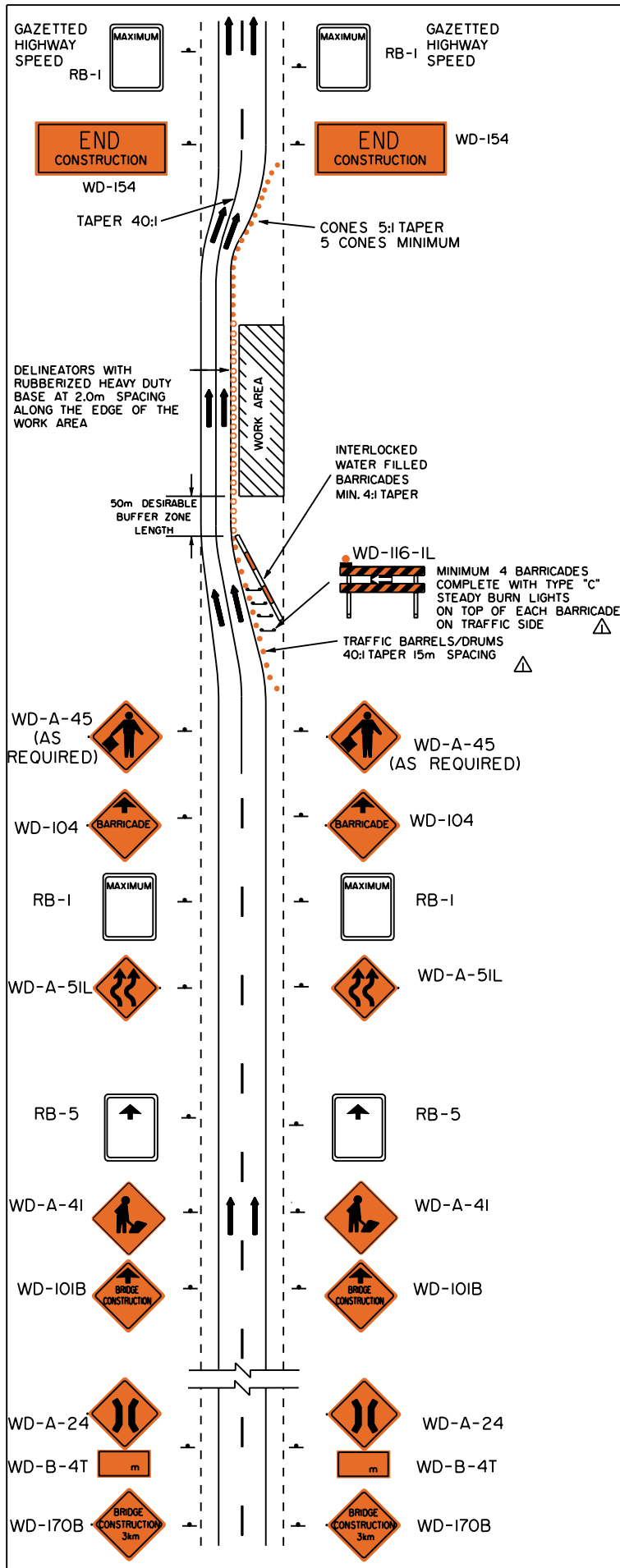
▲			
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▲	Note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original Signed by Allan Kwan			
Executive Director, Technical Standards Branch			
Date:	JANUARY 2005		
LONG DURATION - BRIDGE DETOUR SIGNING (WORK ZONE SPEED ≤ 60 km/h) ▲ TWO WAY TRAFFIC TWO LANE UNDIVIDED HIGHWAY			
Prepared By: S.L.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-1.22A



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. Shoulder delineation is required on 8m spacing along the length of the detour (both sides).
4. For paved detours, line painting or temporary line markings are required.
5. For gravel detours, temporary lane markings are required to transition painted line markings from the paved surface.
6. Conflicting lane markings shall be removed.
7. Interlocked water-filled barricades (1.83m long and 1.06m high) with minimum 4:1 taper shall be placed across the roadway. Barricades shall be fully filled at all times with water or non-freezing ballast of equivalent specific gravity when sub-zero temperature is conceivable.
8. Detour shall be designed and illuminated according to Highway Geometric Design Guide Section B.7 Temporary Highway Detours.

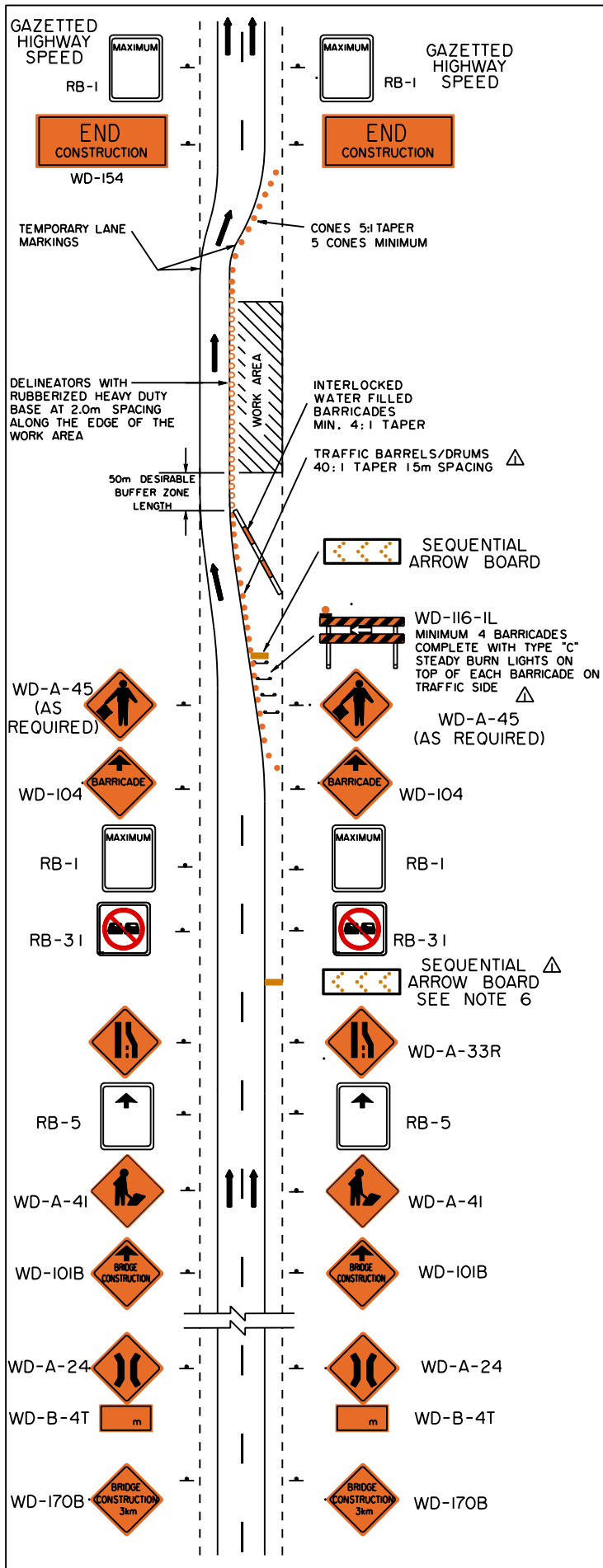
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△	Note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original Signed by Allan Kwan Executive Director, Technical Standards Branch			
Date:	JANUARY 2005		
LONG DURATION - BRIDGE DETOUR SIGNING (WORK ZONE SPEED ≤ 60 km/h) △ FOUR LANE DIVIDED HIGHWAY			
Prepared By: S.L.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-1.23B



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. When switching traffic during staged construction, a specialized traffic accommodation plan is required.
3. Interlocked water filled barricades (1.83m long and 1.03m high) with minimum 4:1 taper shall be placed across the roadway. Barricades shall be fully filled at all times with water or non-freezing ballast of equivalent specific gravity when sub-zero temperature is conceivable.
4. All sign spacing shall be 100m-150m unless otherwise indicated.
5. A minimum lane width of 3.5m is required.
6. Temporary lane markings are required and conflicting lane markings shall be removed.

	Notes and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original Signed by Allan Kwan Executive Director, Technical Standards Branch			
Date:	JANUARY 2005		
LONG DURATION - BRIDGE SIGNING (WORK ZONE SPEED ≤ 60 km/h AND WORK AREA < 300mm DROP) FOUR LANE DIVIDED HIGHWAY			
Prepared By: S.L.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-1.24B



- 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. Interlocked water-filled barricades (1.83m long and 1.06m high) with minimum 4:1 taper shall be placed across the roadway. Barricades shall be fully filled at all times with water or non-freezing ballast of equivalent specific gravity when sub-zero temperature is conceivable.
 3. All sign spacing shall be 100m-150m unless otherwise indicated
 4. A minimum lane width of 3.5m is required.
 5. Temporary lane markings are required and conflicting lane markings shall be removed.
 6. The Sequential Arrow Board shall be located in the centre of the closed lane. An additional Sequential Arrow Board is required when traffic volumes exceed 10000 vehicles per day (ASDT) or when sight distance is restricted.

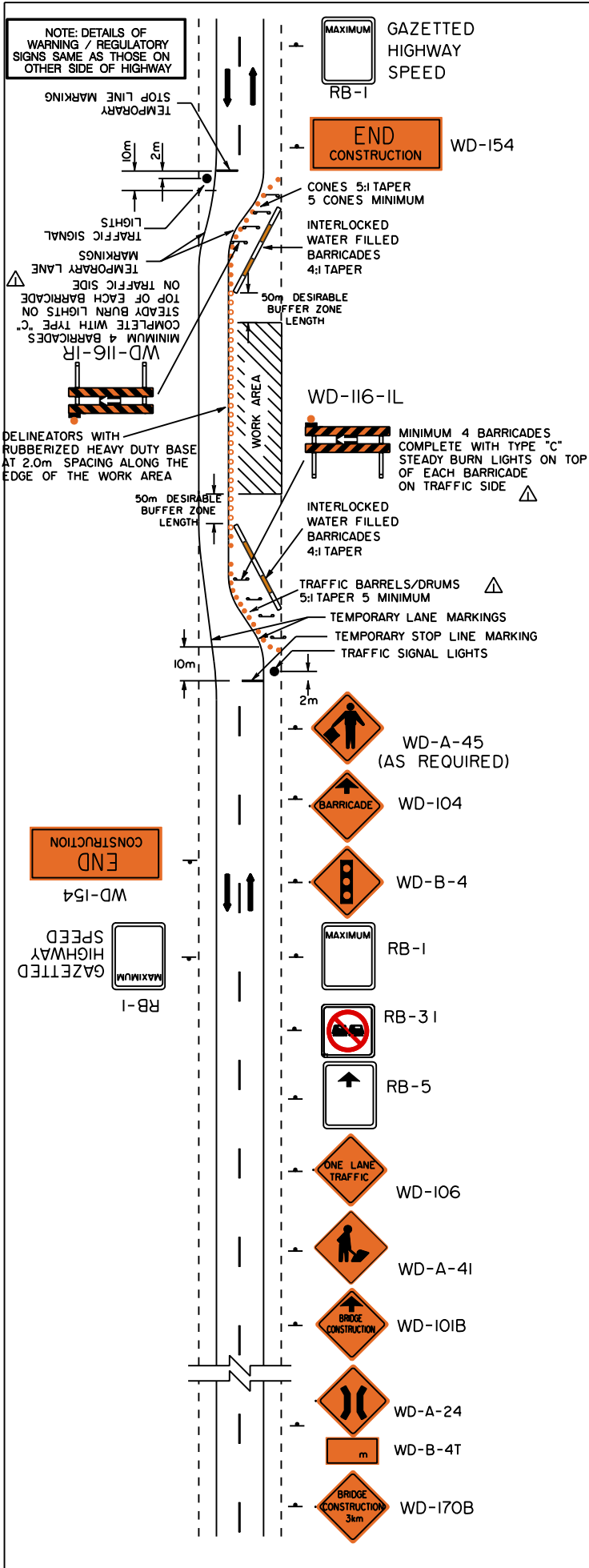
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△	Note and Title Block updated and sign added	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved:
Original Signed by
Allan Kwan
Executive Director,
Technical Standards Branch

Date: JANUARY 2005

LONG DURATION - BRIDGE SIGNING
(WORK ZONE SPEED ≤ 60 km/h △
AND WORK AREA < 300mm DROP)
ONE LANE CLOSURE
FOUR LANE DIVIDED HIGHWAY

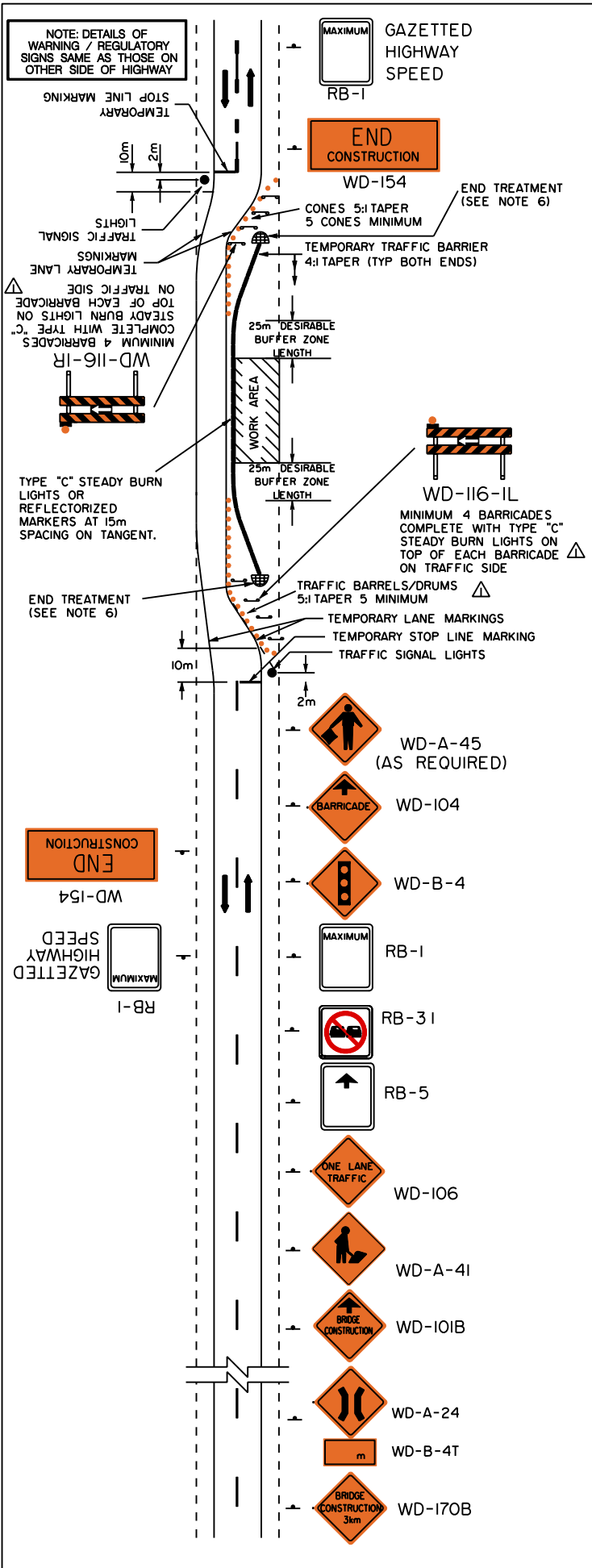
Prepared By: S.L.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-1.25B
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NOTES:

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. Interlocked water filled barricades (1.83m long and 1.03m high) with minimum 4:1 taper shall be placed across the roadway. Barricades shall be fully filled at all times with water or non-freezing ballast of equivalent specific gravity when sub-zero temperature is conceivable.
3. All sign spacing shall be 100m-150m unless otherwise indicated
4. Traffic signal lights shall be 300mm diameter.
5. A minimum lane width of 3.5m is required.

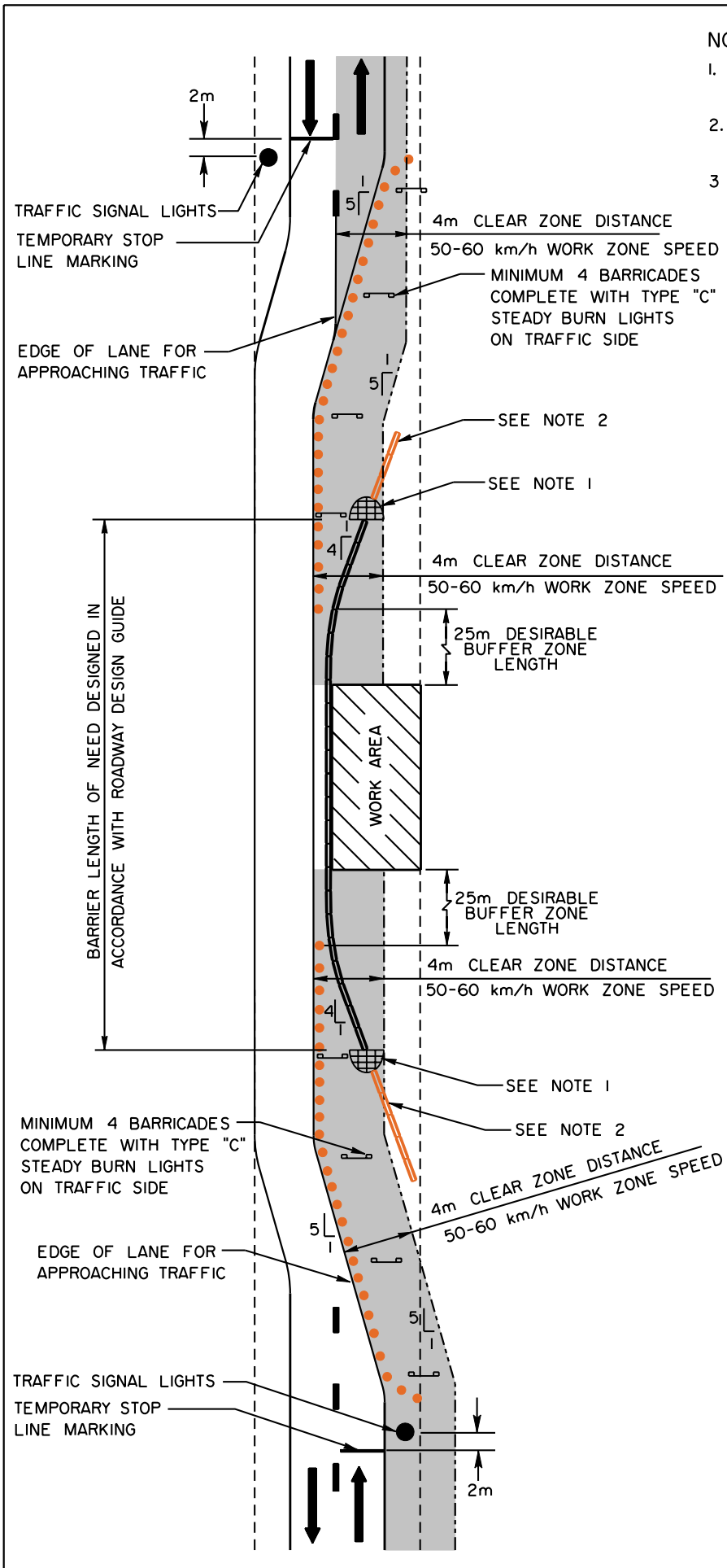
△			
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△	Notes and Title Block Updated, cones replaced by Barrels/drums	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original Signed by Allan Kwan			
Executive Director, Technical Standards Branch			
Date:	JANUARY 2005		
LONG DURATION - BRIDGE SIGNING △ (WORK ZONE SPEED ≤ 60 km/h AND WORK AREA < 300mm DROP) (ONE LANE ALTERNATING TRAFFIC) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: S.L.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-1.26A



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. Traffic signal lights shall be 300mm diameter.
4. A minimum lane width of 3.5m is required.
5. Temporary traffic barriers shall be Approved Continuous Precast Concrete F-shaped Barriers (refer to drawing CB6-4.2 MI6) (see Appendix A or approved equivalent) meeting the requirements of NCHRP 350 Test Level 3, with proper consideration for deflection allowance behind barriers. The barriers shall be placed on pavement or properly prepared granular base.
6. The exposed ends of the barriers shall be protected by crashworthy end treatments, such as sand barrels, crash tested for the appropriate speed (Drawing TEB 3.19 see Appendix A), or approved equivalent. Alternatively, the barriers may be terminated outside the clear zone. (Drawing TCS-B-1.28 see Appendix A)

△			
△			
△	Notes and Title Block Updated, cones replaced by Barrels/drums	JM	Sep 23/08
No.	REVISIONS	BY	DATE
Approved:			
Original Signed by Allan Kwan			
Executive Director, Technical Standards Branch			
Date:	JANUARY 2005		
LONG DURATION - BRIDGE SIGNING △ (WORK ZONE SPEED ≤ 60 km/h AND WORK AREA > 300mm DROP) (ONE LANE ALTERNATING TRAFFIC) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: S.L.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-1.27A



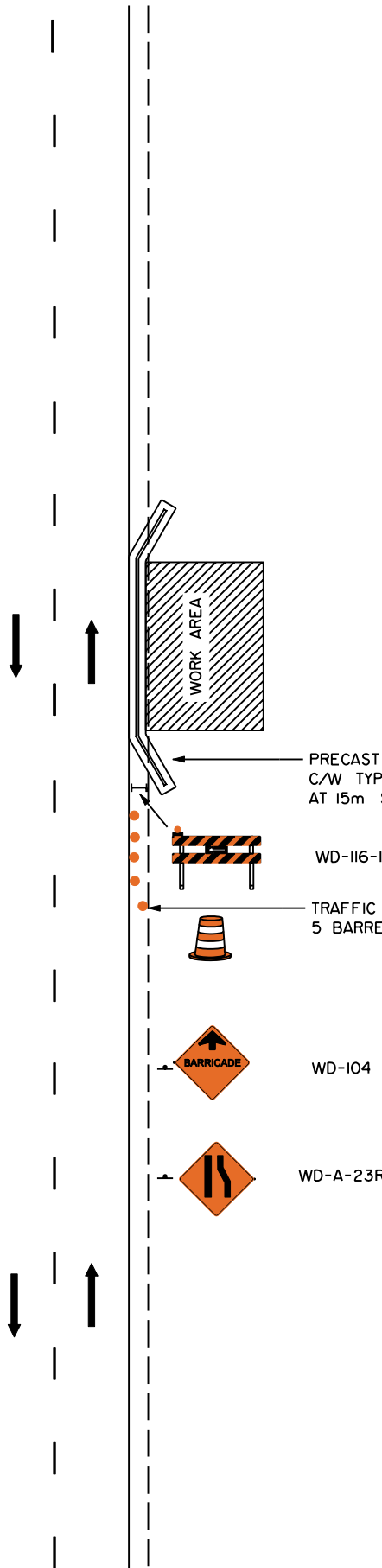
NOTES

1. PROVIDE CRASH CUSHION IF BARRIER TERMINATES WITHIN CLEAR ZONE.
2. NO CRASH CUSHION REQUIRED IF BARRIER EXTENDED OUTSIDE CLEAR ZONE.
3. SEE SECTION 12.1.1 "APPLICATION OF THE CLEAR ZONE CONCEPT IN WOK ZONES" OF SECTION 1 FOR ADDITIONAL INFORMATION.

No.	REVISIONS	BY	DATE
Approved: Original signed by Allan Kwan Executive Director, Technical Standards Branch			
Date: OCTOBER, 2008			
EXAMPLE OF CLEAR ZONE APPLICATION FOR WORK AREA TWO LANE UNDIVIDED HIGHWAY (ONE LANE ALTERNATING TRAFFIC)			
Prepared By: G.E.C.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-128 LONG DURATION

NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. During darkness, one Type "A" flashing light shall be placed on the traffic side of the barricade.
4. Temporary traffic barriers shall be Approved
 △ Continuous Precast Concrete F-shaped Barriers (refer to drawing CB6-4.2 MI6) (see Appendix A or approved equivalent) meeting the requirements of NCHRP 350 Test Level 3, with proper consideration for deflection allowance behind barriers. The barriers shall be placed on pavement or properly prepared granular base.
5. The exposed ends of the barriers shall be protected by crashworthy end treatments, such as sand barrels, crash tested for the appropriate speed (Drawing TEB 3.19 see Appendix A), or approved equivalent. Alternatively, the barriers may be terminated outside the clear zone. (Drawing TCS-B-1.28 see Appendix A)



PRECAST CONCRETE F-SHAPED BARRIERS
 C/W TYPE "C" STEADY BURN LIGHTS OR REFLECTORIZED MARKERS
 AT 15m SPACING ON TANGENT

WD-II6-IL

TRAFFIC BARRELS/DRUMS
 5 BARRELS MINIMUM

WD-104

WD-A-23R

△			
△			
△	Notes revised.	JM	Sep 23/08
No.	REVISIONS	BY	DATE

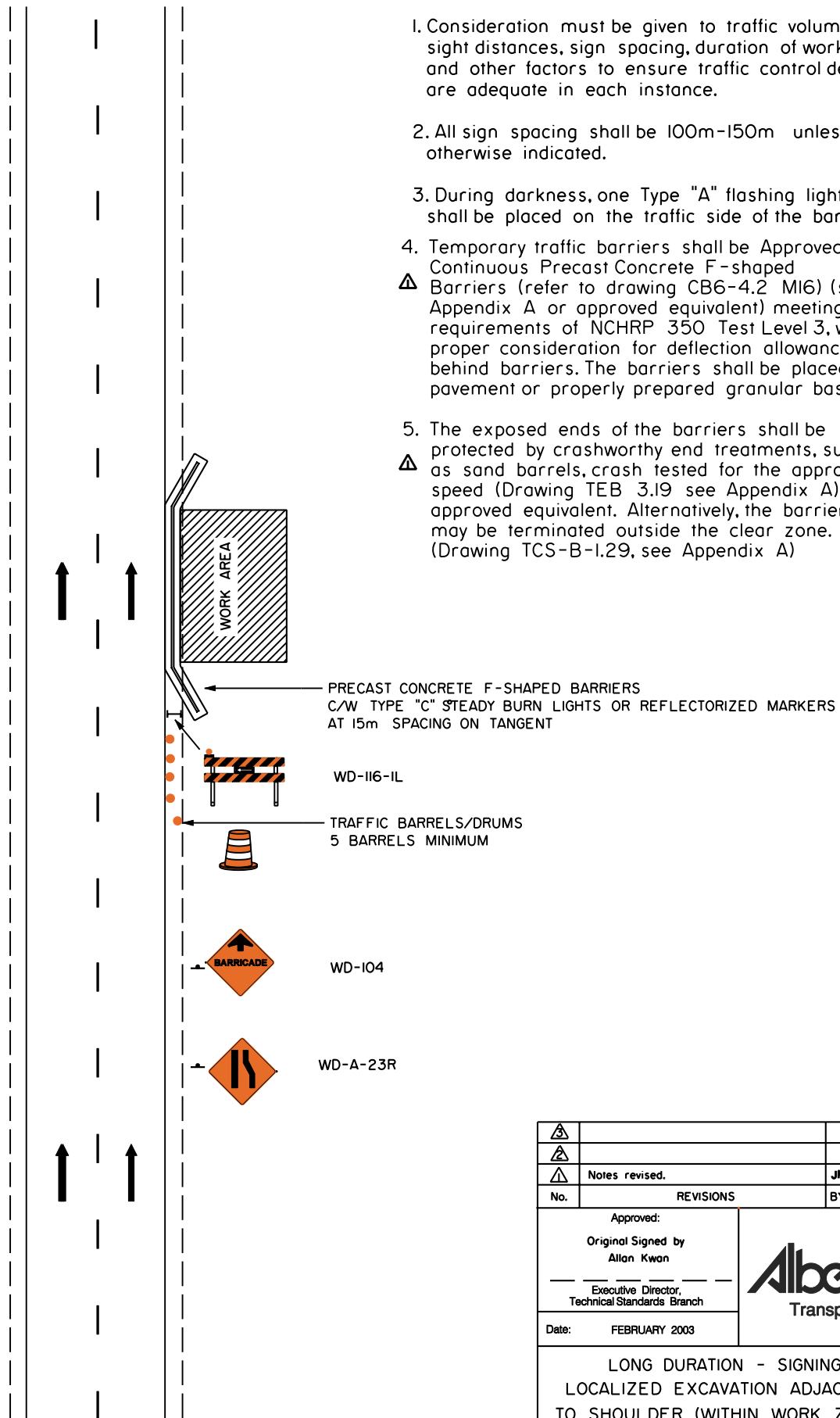
Approved: Original Signed by Allan Kwan Executive Director, Technical Standards Branch	
Date: FEBRUARY 2003	

LONG DURATION - SIGNING
 LOCALIZED EXCAVATION ADJACENT
 TO SHOULDER (WITHIN WORK ZONE)
 TWO LANE UNDIVIDED HIGHWAY

Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-1.28A
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NOTES:

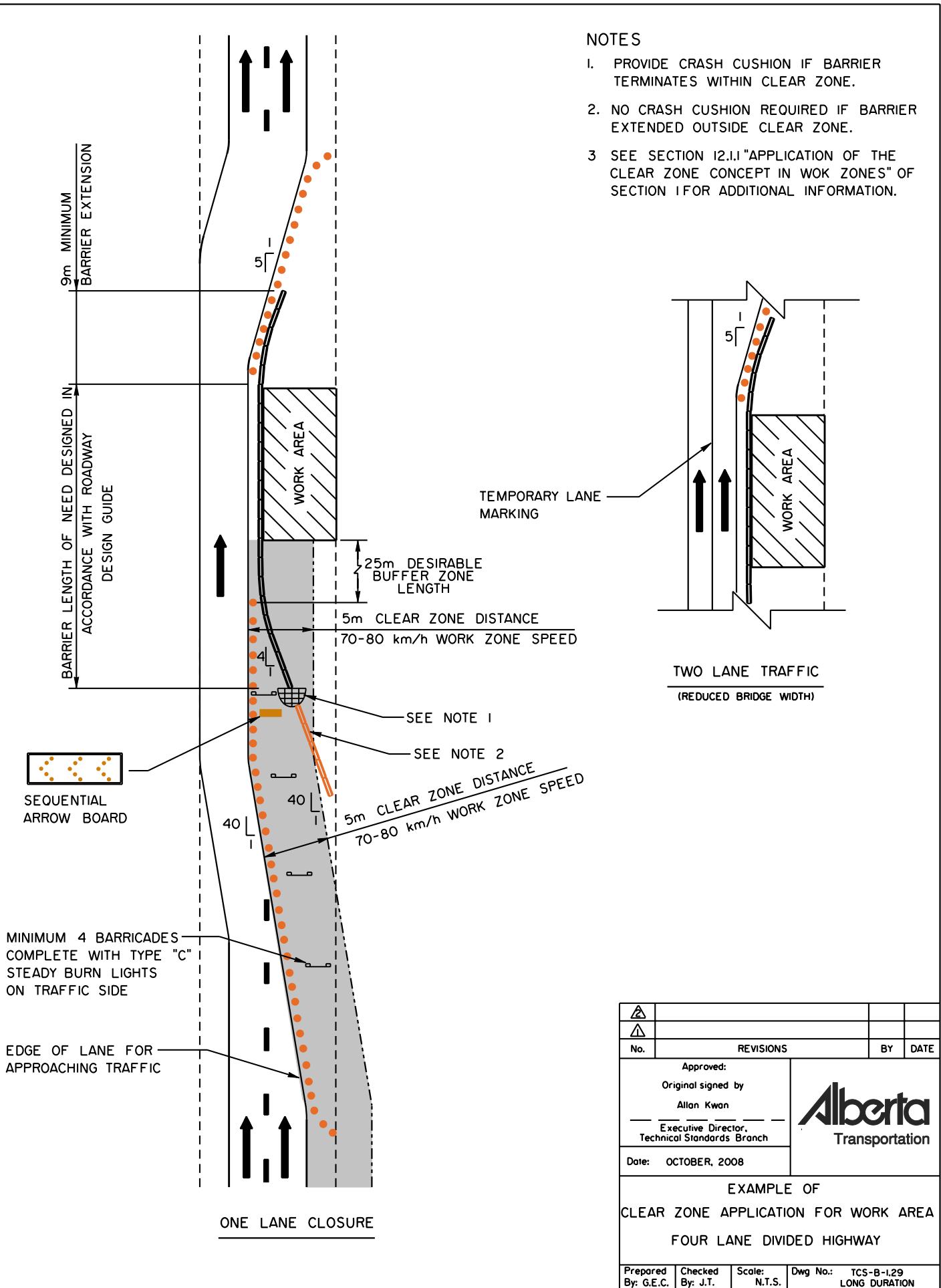
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.
3. During darkness, one Type "A" flashing light shall be placed on the traffic side of the barricade.
4. Temporary traffic barriers shall be Approved Continuous Precast Concrete F-shaped Barriers (refer to drawing CB6-4.2 MI6) (see Appendix A or approved equivalent) meeting the requirements of NCHRP 350 Test Level 3, with proper consideration for deflection allowance behind barriers. The barriers shall be placed on pavement or properly prepared granular base.
 - △ Barriers (refer to drawing CB6-4.2 MI6) (see Appendix A or approved equivalent) meeting the requirements of NCHRP 350 Test Level 3, with proper consideration for deflection allowance behind barriers. The barriers shall be placed on pavement or properly prepared granular base.
5. The exposed ends of the barriers shall be protected by crashworthy end treatments, such as sand barrels, crash tested for the appropriate speed (Drawing TEB 3.19 see Appendix A), or approved equivalent. Alternatively, the barriers may be terminated outside the clear zone. (Drawing TCS-B-1.29, see Appendix A)
 - △ The exposed ends of the barriers shall be protected by crashworthy end treatments, such as sand barrels, crash tested for the appropriate speed (Drawing TEB 3.19 see Appendix A), or approved equivalent. Alternatively, the barriers may be terminated outside the clear zone. (Drawing TCS-B-1.29, see Appendix A)



△			
△			
△	Notes revised.	JM	Sep 23/08
No.	REVISIONS	BY	DATE
Approved:			
Original Signed by Allan Kwon			
Executive Director, Technical Standards Branch			
Date:	FEBRUARY 2003		
LONG DURATION - SIGNING LOCALIZED EXCAVATION ADJACENT TO SHOULDER (WITHIN WORK ZONE) FOUR LANE DIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-1.28B

NOTES

1. PROVIDE CRASH CUSHION IF BARRIER TERMINATES WITHIN CLEAR ZONE.
2. NO CRASH CUSHION REQUIRED IF BARRIER EXTENDED OUTSIDE CLEAR ZONE.
3. SEE SECTION 12.1.1 "APPLICATION OF THE CLEAR ZONE CONCEPT IN WORK ZONES" OF SECTION 1 FOR ADDITIONAL INFORMATION.



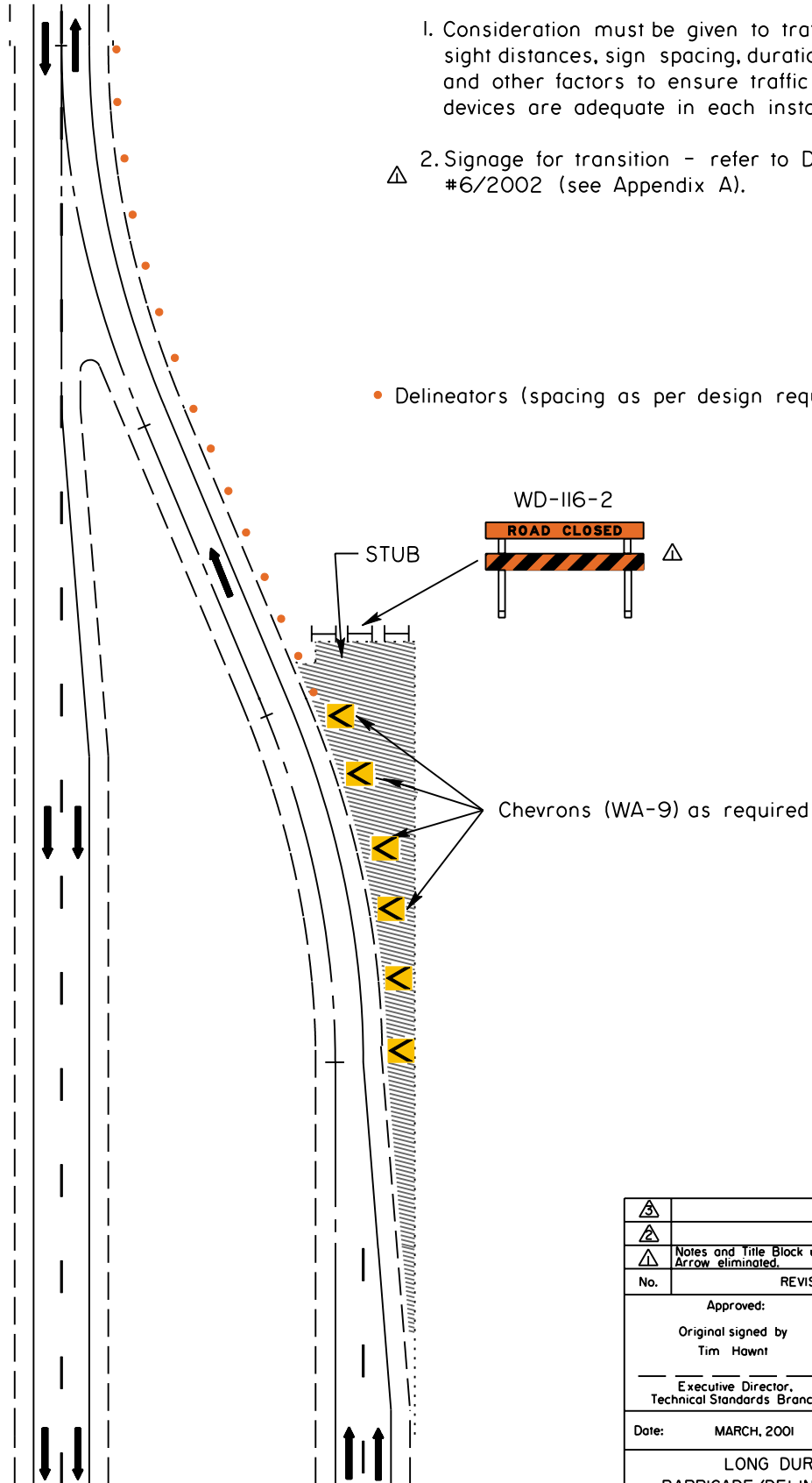
No.	REVISIONS	BY	DATE
Approved: Original signed by Allan Kwan Executive Director, Technical Standards Branch			
Date: OCTOBER, 2008			
EXAMPLE OF CLEAR ZONE APPLICATION FOR WORK AREA FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: J.T.	Scale: N.T.S.	Dwg No.: TCS-B-129 LONG DURATION

NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.

△ 2. Signage for transition - refer to Design Bulletin #6/2002 (see Appendix A).

• Delineators (spacing as per design requirement)



△			
△			
△	Notes and Title Block updated and Arrow eliminated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

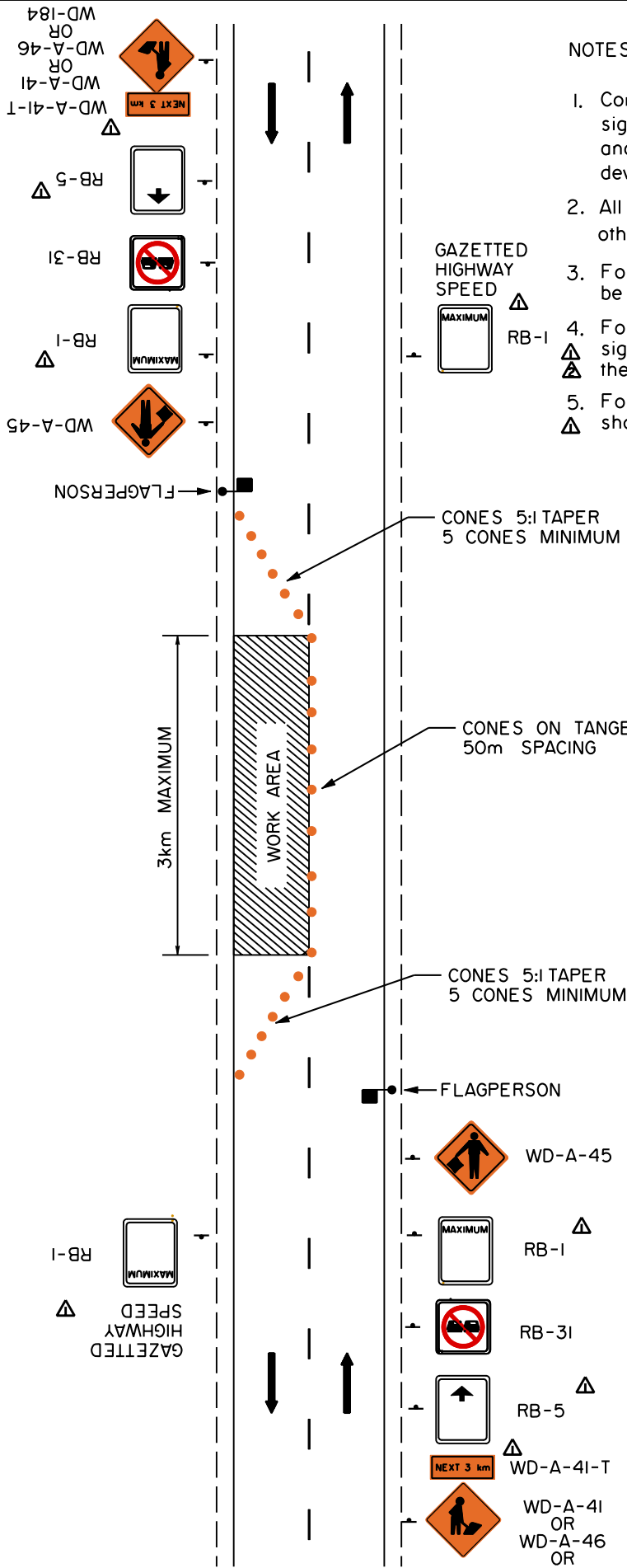
Approved:
Original signed by
Tim Hawn
Executive Director,
Technical Standards Branch

Date: MARCH, 2001

Alberta
Transportation

LONG DURATION- SIGNING △
BARRICADE/DELINEATOR CONFIGURATION
HIGHWAY TRANSITION FROM FOUR LANE
DIVIDED TO TWO LANE UNDIVIDED
(WITH TEMPORARY STUB)

Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-1.29B
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NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. For mobile operation, cones may not be required.
4. For mobile operation, WD-A-45 (flagperson sign) shall be located less than 1.5 km from the flag person.
5. For mobile operation, the NEXT 3km tab shall be installed on the first warning sign.

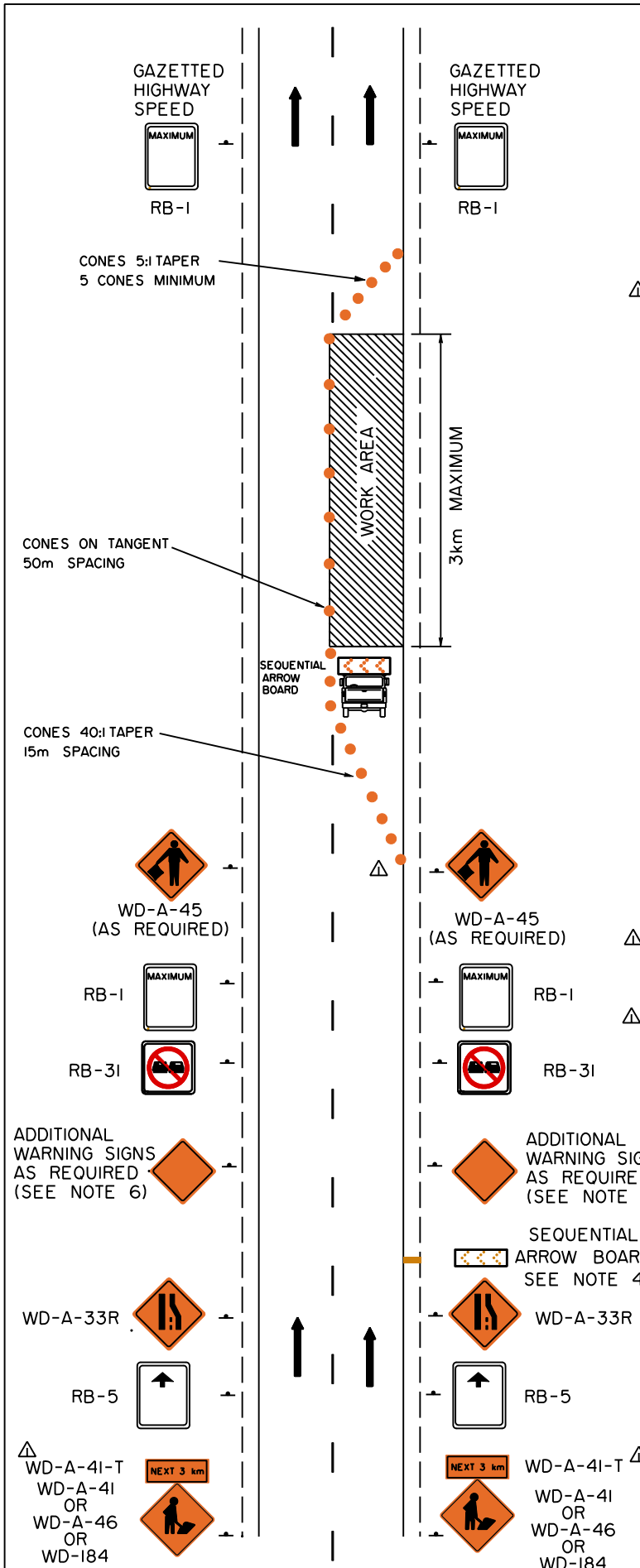


WD-A-46



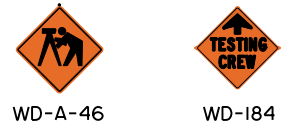
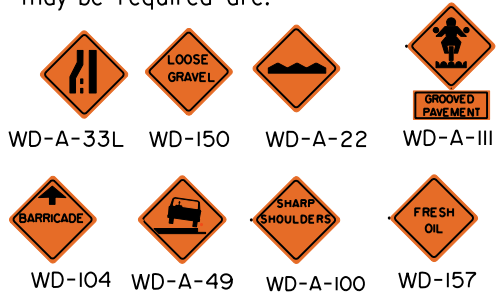
WD-184

△			
△	Notes revised.	JM	Sep 15/08
△	Notes and Title Block updated and signs added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawn			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING △ ONE LANE CLOSURE (ONE LANE ALTERNATING TRAFFIC) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.1A



NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. For mobile operation, cones may not be required.
4. The Sequential Arrow Board shall be located in the centre of the closed lane. An additional Sequential Arrow Board is required when traffic volume exceeds 10000 vehicles per day (ASDT) or when sight distance is restricted. The additional Sequential Arrow Board shall be located after the lane closure sign.
5. If construction operation is occurring on the opposite travel lane, then applicable construction signing will also be required on those lanes.
6. Examples of additional warning signs that may be required are:
 - WD-A-33L
 - WD-150
 - WD-A-22
 - WD-A-III
 - WD-104
 - WD-A-49
 - WD-A-100
 - WD-157
7. Other hazard signs as shown in the schedule of signs may be used as required.
8. For mobile operation, WD-A-45 (Flagperson sign) shall be located less than 1.5 km from the Flagperson.
9. For mobile operation, the NEXT 3KM tab shall be installed on the first warning sign.



	Notes and Title Block updated and signs added	JM	Sep 23/08
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING ONE LANE CLOSURE FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.1B

WD-184
or
WD-A-46
or
WD-A-41
WD-A-41-T
△



NEXT 3 km



RB-5
△



RB-1
△

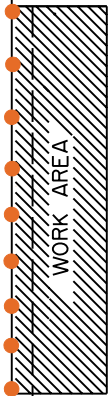


GAZETTED
HIGHWAY
SPEED



RB-1
△

CONES ON TANGENT
50m SPACING



WORK AREA

3km MAXIMUM



RB-1
△

GAZETTED
HIGHWAY
SPEED



RB-1
△



RB-5
△

NEXT 3 km



WD-A-41-T
WD-A-41
or
WD-A-46
or
WD-184

NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. For mobile operation, cones may not be required.



WD-A-46



WD-184

4. For mobile operation, the NEXT 3KM tab shall be installed on the first warning sign.

△			
△	Title Block updated, note added and signs added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved: Original signed by Tim Hawn Executive Director, Technical Standards Branch	
Date: MARCH, 2001	

SHORT DURATION - SIGNING △
 WORK ON SHOULDER
 TWO LANE UNDIVIDED HIGHWAY

Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.2A
---------------------	------------------	---------------	---------------------

NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. For mobile operation, cones may not be required.

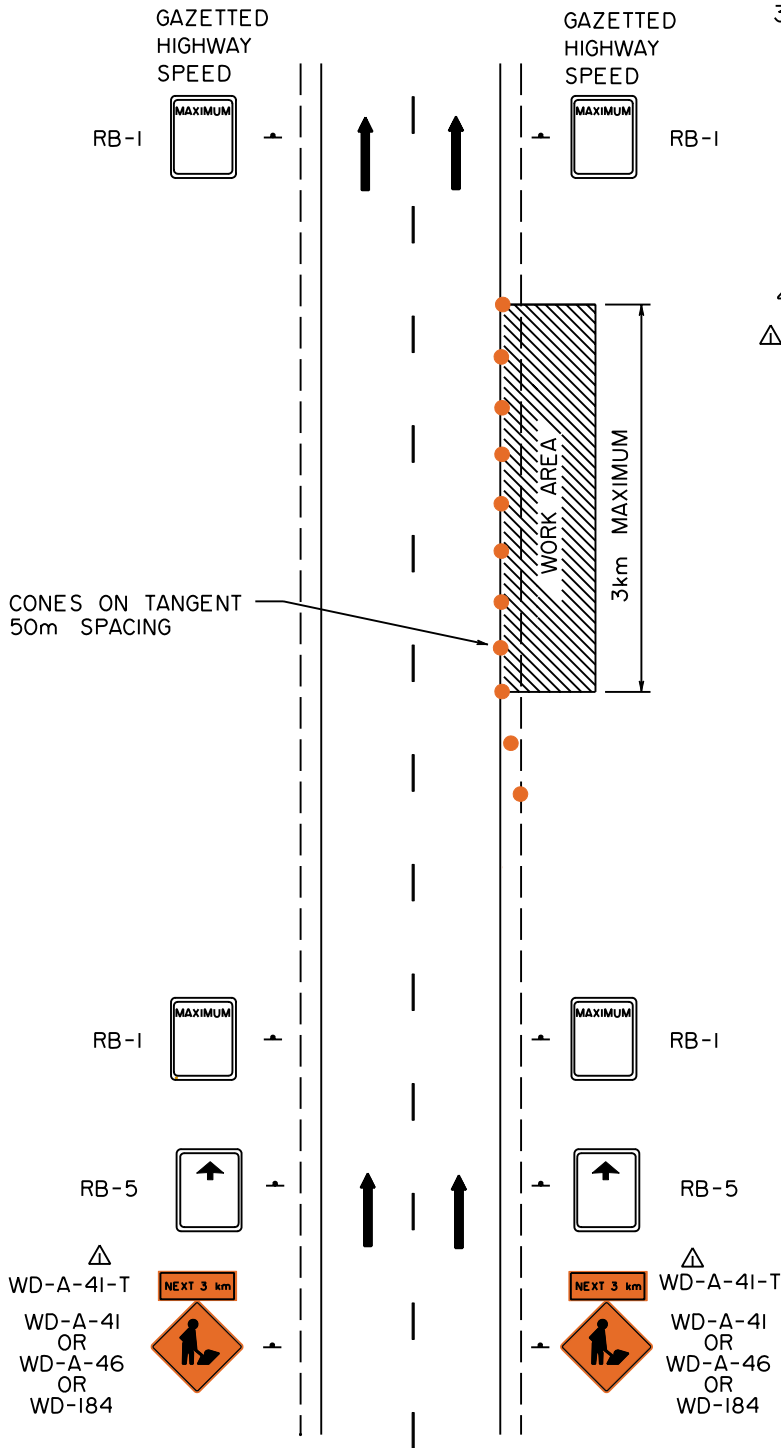


WD-A-46



WD-184

4. For mobile operation, the NEXT 3KM tab Δ shall be installed on the first warning sign.



Δ			
Δ			
Δ	Title Block updated, note added and signs added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved:
Original signed by
Tim Hawnt
Executive Director,
Technical Standards Branch

Date: MARCH, 2001



SHORT DURATION - SIGNING Δ
WORK ON SHOULDER
FOUR LANE DIVIDED HIGHWAY

Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.2B
---------------------	------------------	---------------	---------------------

WD-A-41
OR
WD-A-46
OR
WD-184



HIGHWAY R/W



WD-A-41
OR
WD-A-46
OR
WD-184

NOTES:

1. No vehicle shall be parked on the road surface.
2. If the work is entirely off the road surface, signs may not be required.

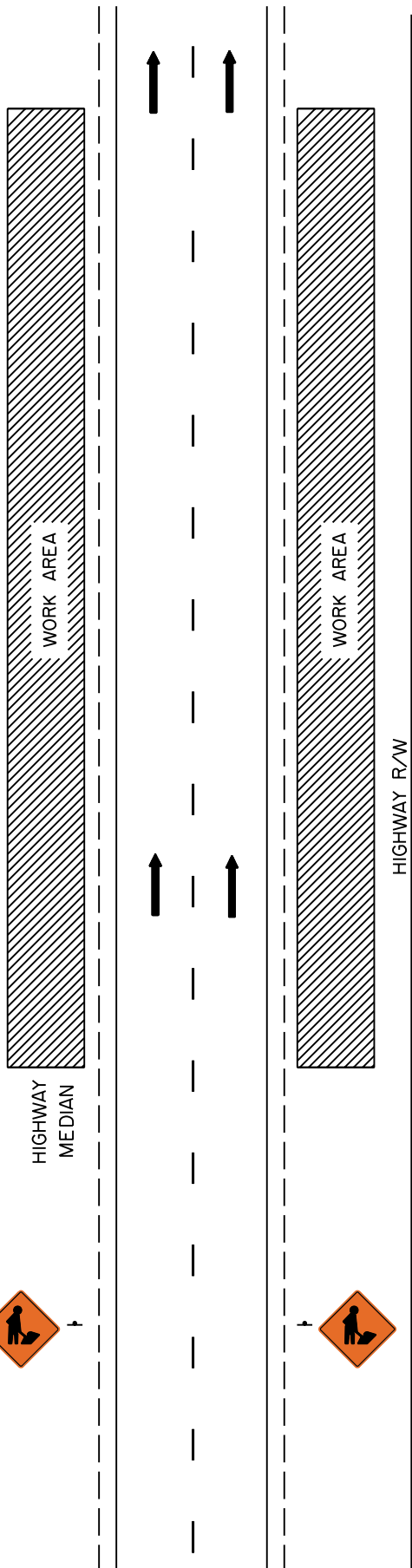


WD-A-46



WD-184

	Note added, and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawn			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING WORK OFF ROAD SURFACE TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.3A



NOTE:

1. No vehicle shall be parked on the road surface.
2. If the work is entirely off the road surface, signs may not be required.



WD-A-46



WD-184

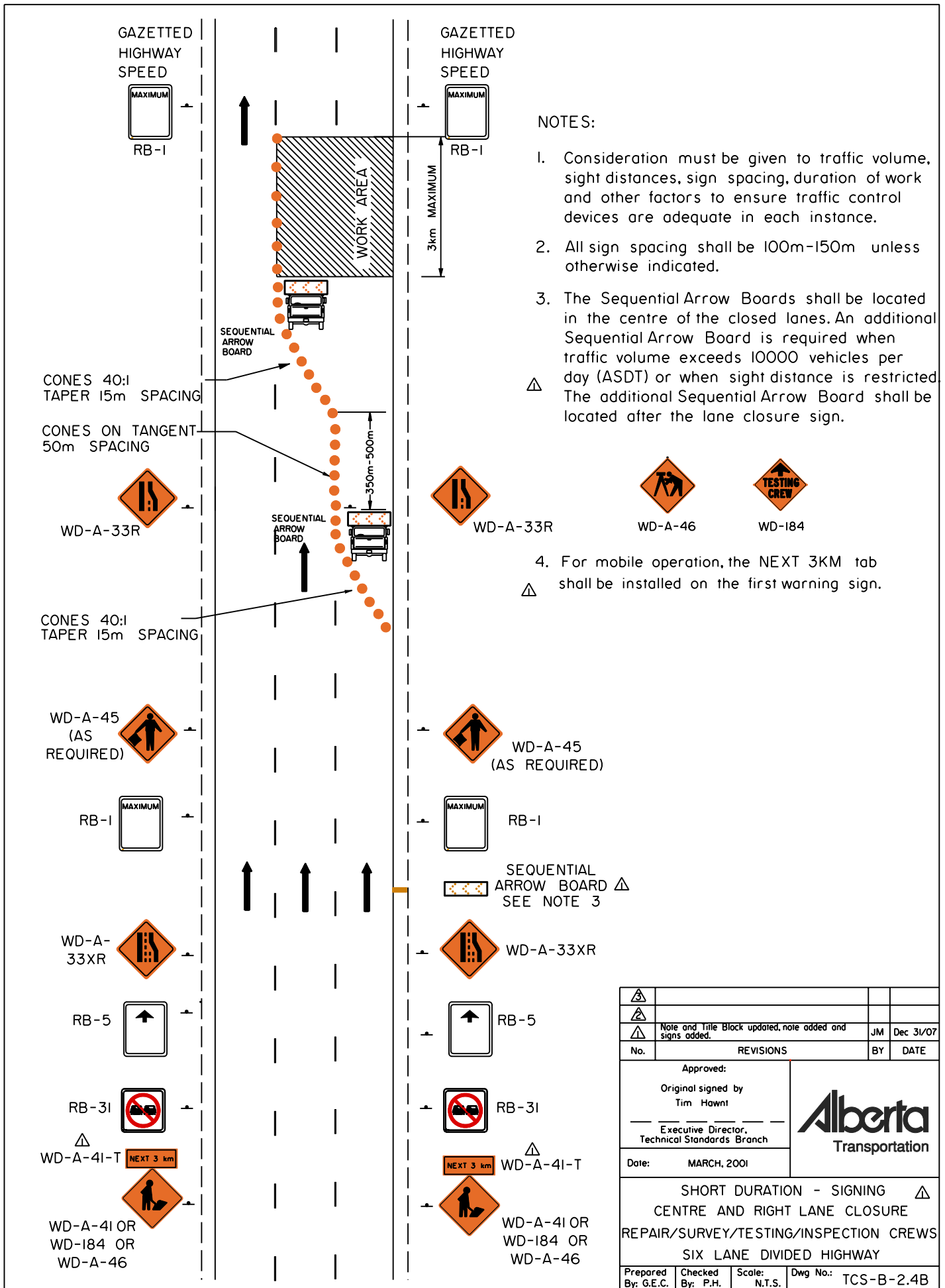
WD-A-41
OR
WD-A-46
OR
WD-184



WD-A-41
OR
WD-A-46
OR
WD-184



	Note added and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawn _____ Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING WORK OFF ROAD SURFACE FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.3B



NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. The Sequential Arrow Boards shall be located in the centre of the closed lanes. An additional Sequential Arrow Board is required when traffic volume exceeds 10000 vehicles per day (ASDT) or when sight distance is restricted.
 △ The additional Sequential Arrow Board shall be located after the lane closure sign.

4. For mobile operation, the NEXT 3KM tab shall be installed on the first warning sign.
 △



WD-A-33R



WD-A-46



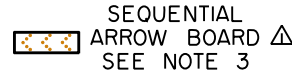
WD-184



WD-A-45 (AS REQUIRED)



RB-1



SEQUENTIAL ARROW BOARD △ SEE NOTE 3



WD-A-33XR



RB-5



RB-31

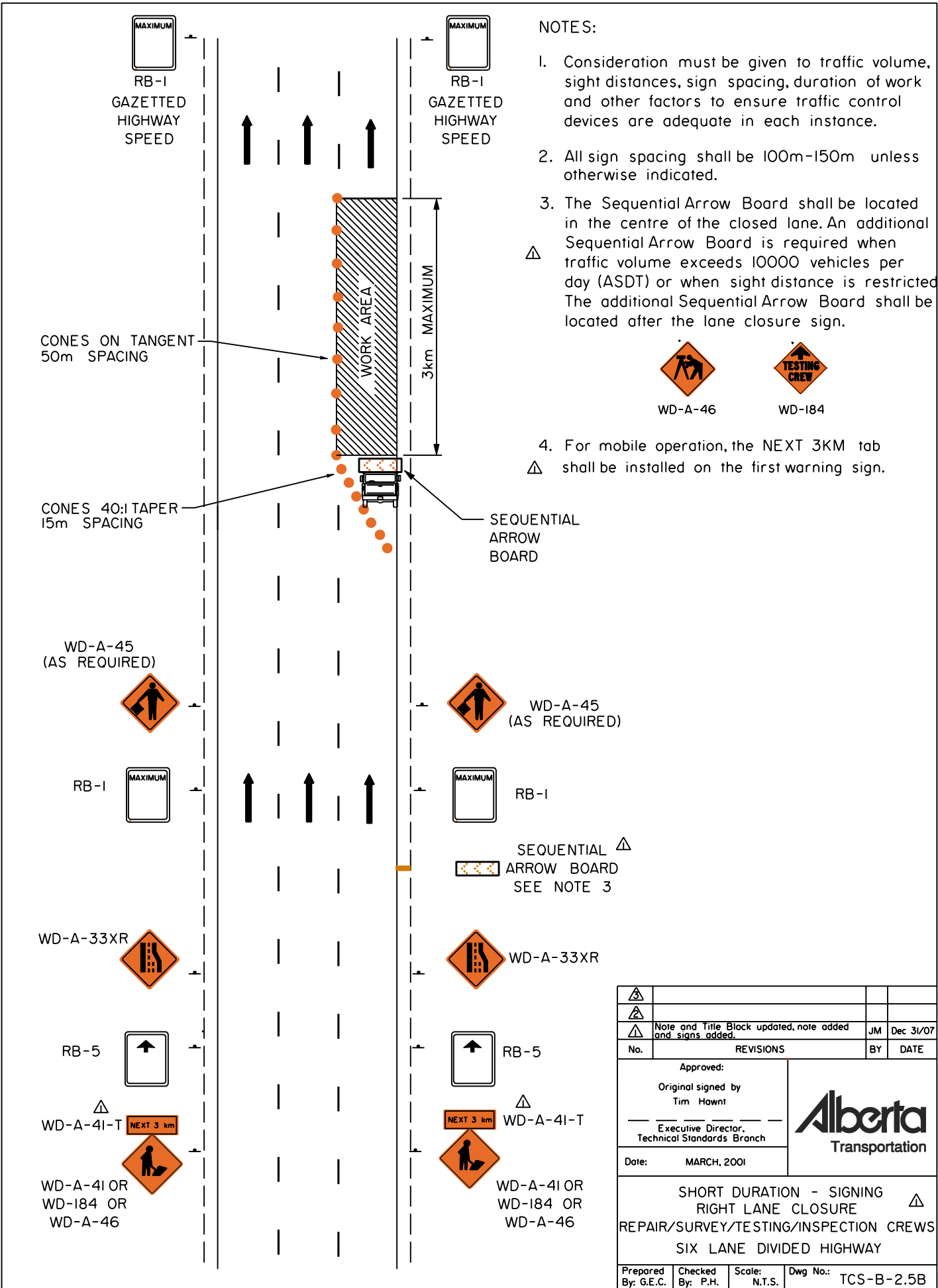


NEXT 3 km WD-A-41-T



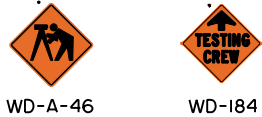
WD-A-41 OR WD-184 OR WD-A-46

△			
△			
△	Note and Title Block updated, note added and signs added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING △ CENTRE AND RIGHT LANE CLOSURE REPAIR/SURVEY/TESTING/INSPECTION CREWS SIX LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.4B



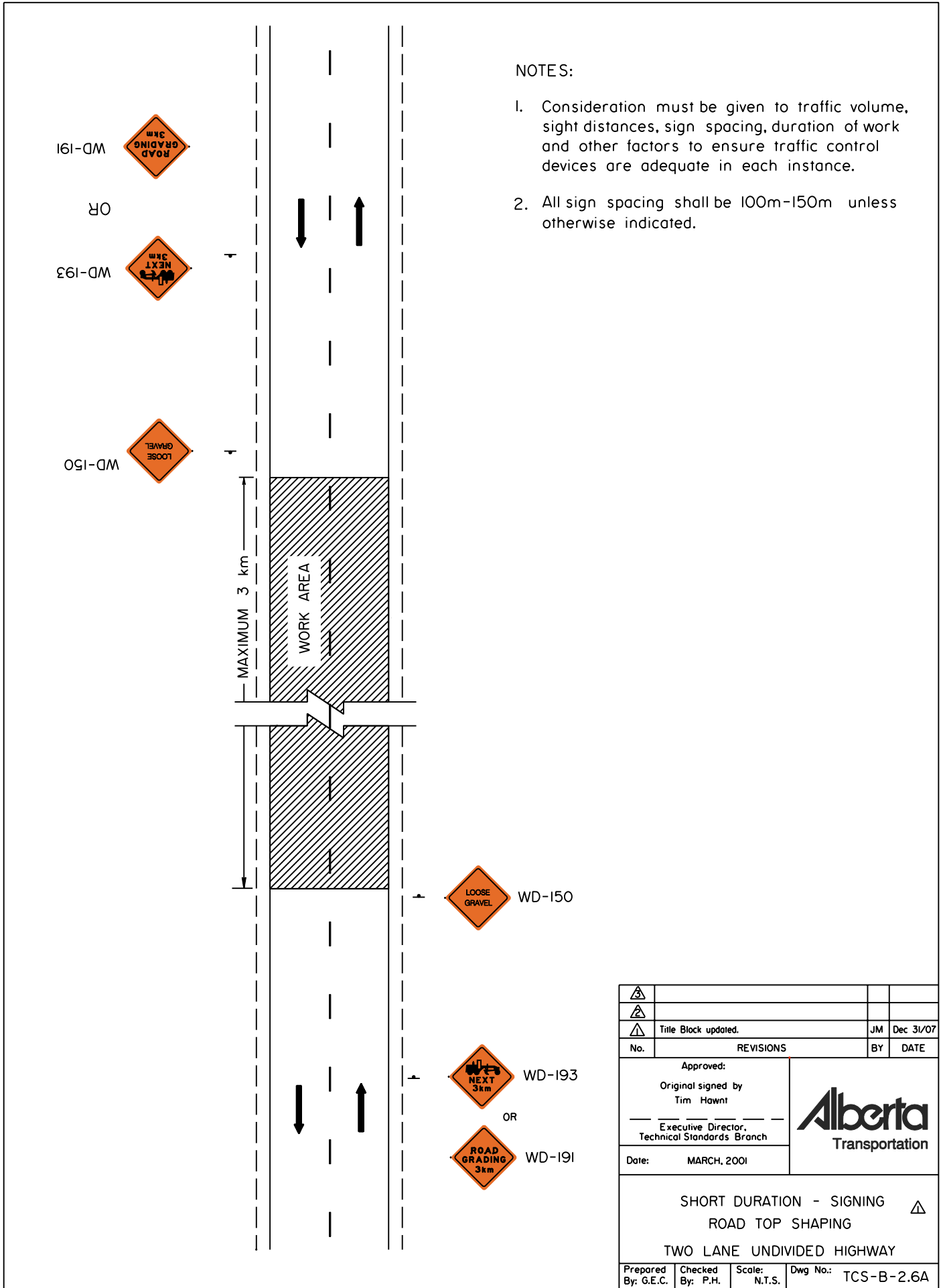
NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. The Sequential Arrow Board shall be located in the centre of the closed lane. An additional Sequential Arrow Board is required when traffic volume exceeds 10000 vehicles per day (ASDT) or when sight distance is restricted. The additional Sequential Arrow Board shall be located after the lane closure sign.



4. For mobile operation, the NEXT 3KM tab shall be installed on the first warning sign.

△			
△			
△	Note and Title Block updated, note added and signs added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING RIGHT LANE CLOSURE △ REPAIR/SURVEY/TESTING/INSPECTION CREWS SIX LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.5B



NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.

△			
△			
△	Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

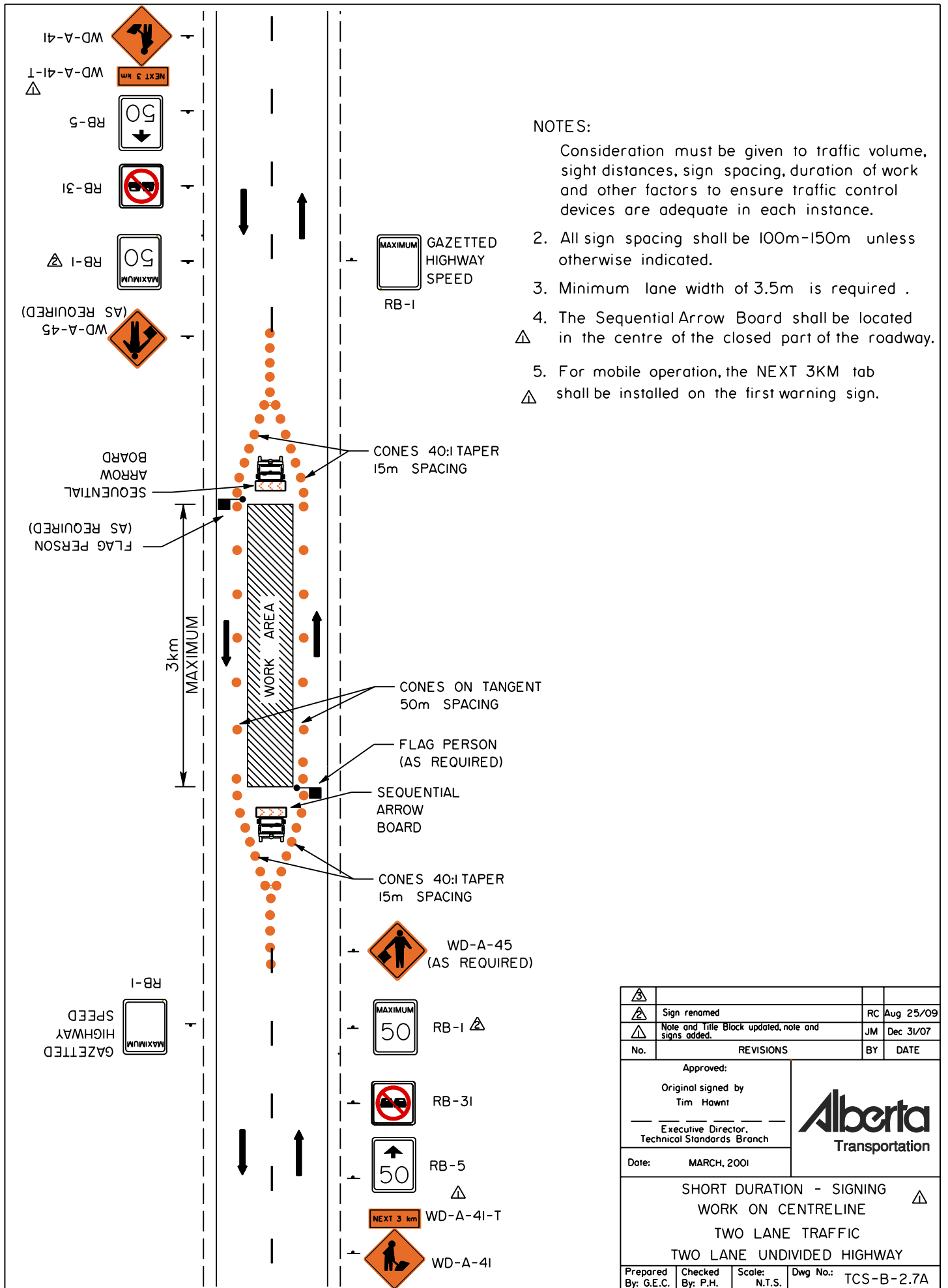
Approved:
 Original signed by
 Tim Hawnt

 Executive Director,
 Technical Standards Branch
 Date: MARCH, 2001



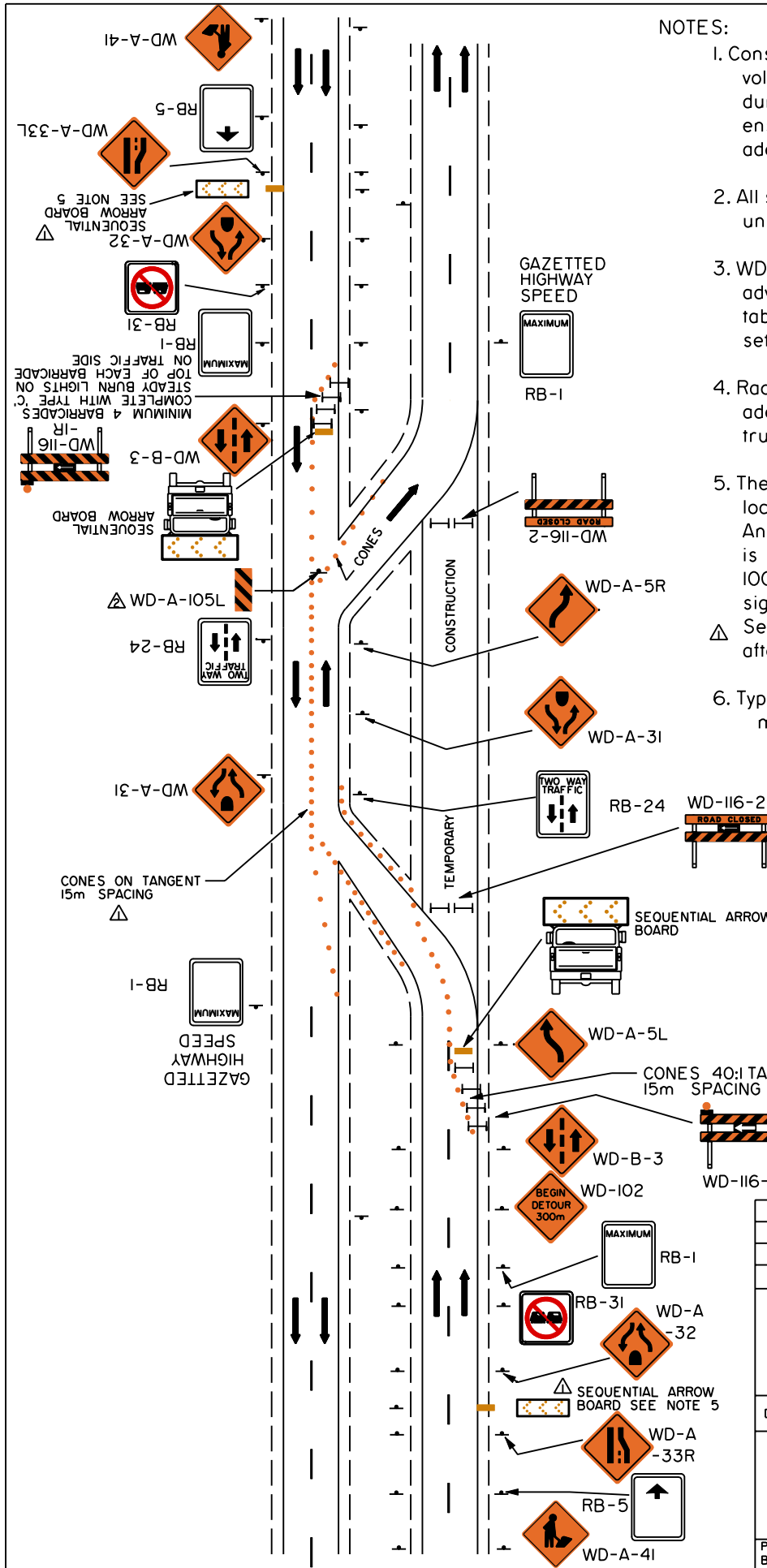
SHORT DURATION - SIGNING △
 ROAD TOP SHAPING
 TWO LANE UNDIVIDED HIGHWAY

Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.6A
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- NOTES:
- 1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. Minimum lane width of 3.5m is required .
 - 4. The Sequential Arrow Board shall be located in the centre of the closed part of the roadway.
 - 5. For mobile operation, the NEXT 3KM tab shall be installed on the first warning sign.

△			
△	Sign renamed	RC	Aug 25/09
△	Note and Title Block updated, note and signs added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING △ WORK ON CENTRELINE TWO LANE TRAFFIC TWO LANE UNDIVIDED HIGHWAY			
Prepared By:	G.E.C.	Checked By:	P.H.
Scale:	N.T.S.	Dwg No.:	TCS-B-2.7A



NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. WD-192 shall be erected 2km in advance of the work area. Distance tab to include work area length plus setback from work area.
4. Radius of crossover detour shall be adequate to accommodate multi-trailer trucks.
5. The Sequential Arrow Board shall be located in the centre of the closed lane. An additional Sequential Arrow Board is required when traffic volume exceeds 10000 vehicles per day (ASDT) or when sight distance is restricted. The additional Sequential Arrow Board shall be located after the lane closure sign.
6. Typical signing is required in the median in both directions.

△			
△	Sign renamed.	RC	25 AUG/09
△	Note and Title Block updated and signs added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved:

Original signed by
Tim Hawnt

Executive Director,
Technical Standards Branch

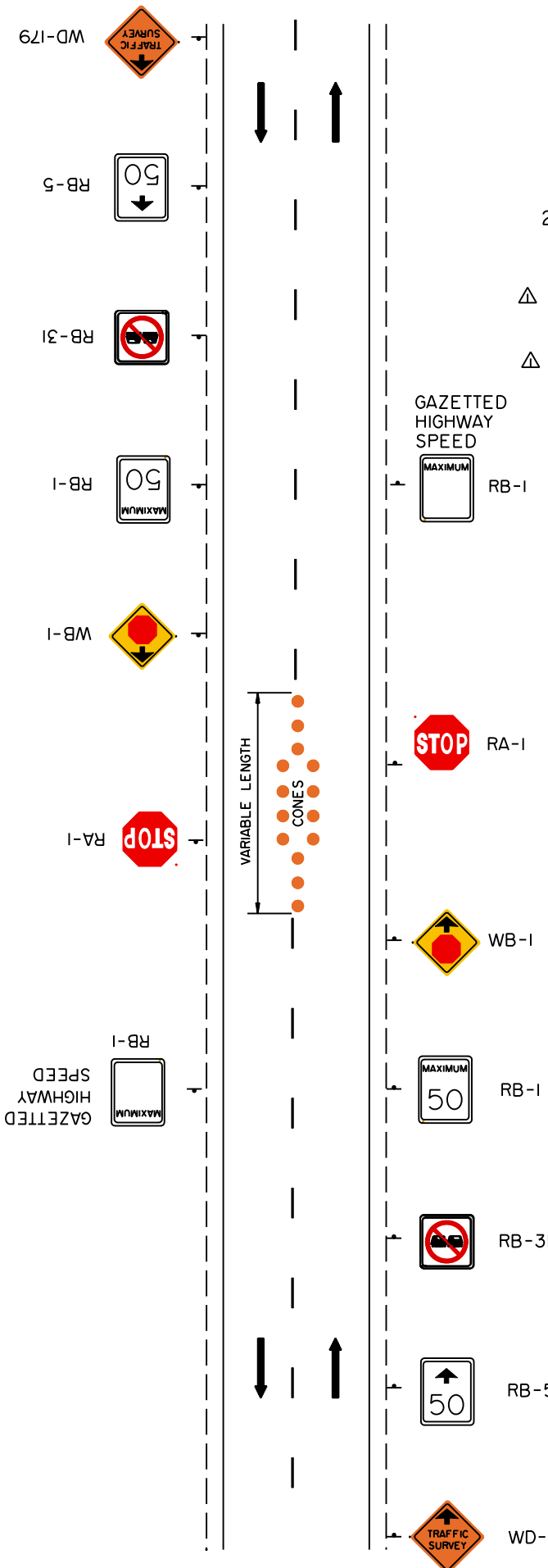
Date: MARCH, 2001

SHORT DURATION - SIGNING △

TEMPORARY DETOUR TRANSITION

FOUR LANE DIVIDED HIGHWAY

Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-2.8B
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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. Flagpersons may be required to slow traffic before it stops.
- △ 4. Electronic Variable Message Board is required.

GAZETTED HIGHWAY SPEED

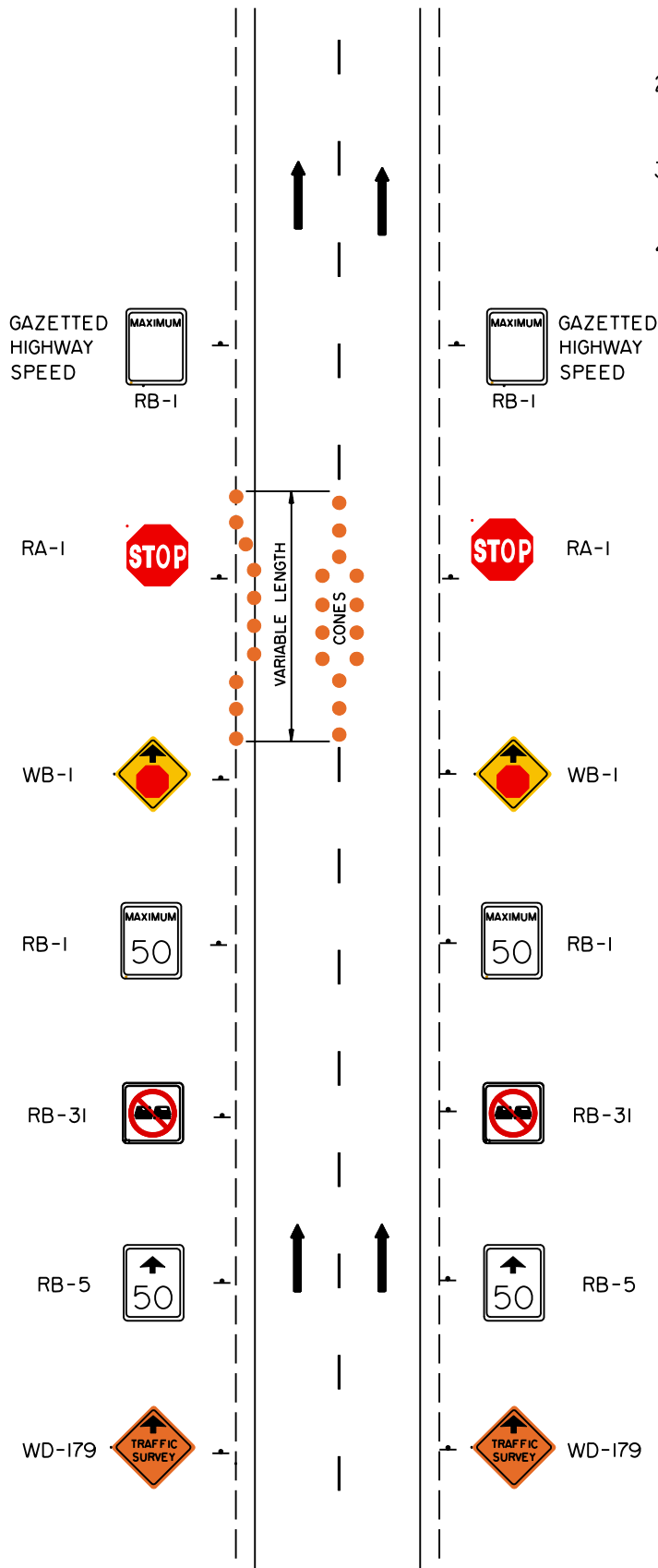
RB-1

Due to the specialized nature of this type of operation, a special detailed traffic accommodation strategy must be developed for each location.

△			
△			
△	Notes and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING			△
TRAFFIC SURVEY			
TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-3,IA

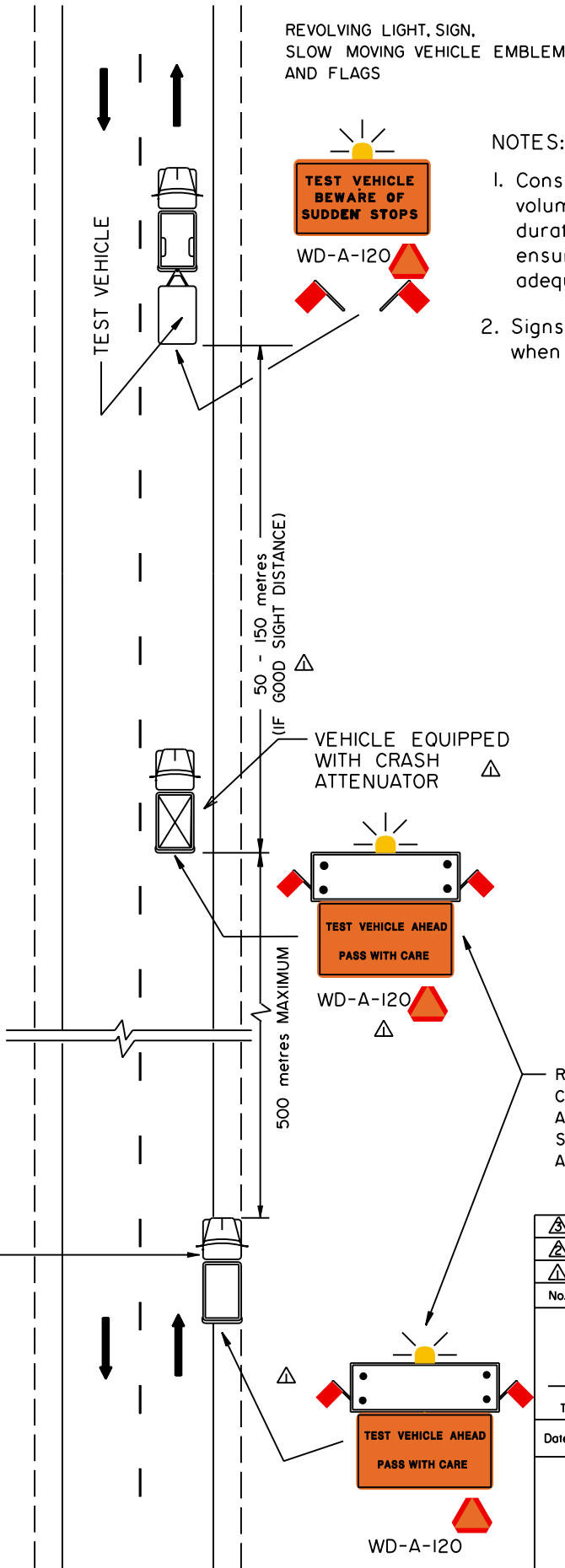
NOTES:

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. Flagpersons may be required to slow traffic Δ before it stops.
4. Electronic Variable Message Board is required. Δ



Due to the specialized nature of this type of operation, a special detailed traffic accommodation strategy must be developed for each location.

Δ			
Δ			
Δ	Notes and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING Δ TRAFFIC SURVEY FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-3.IB



NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. Signs on trucks must be visible only when testing is in progress.

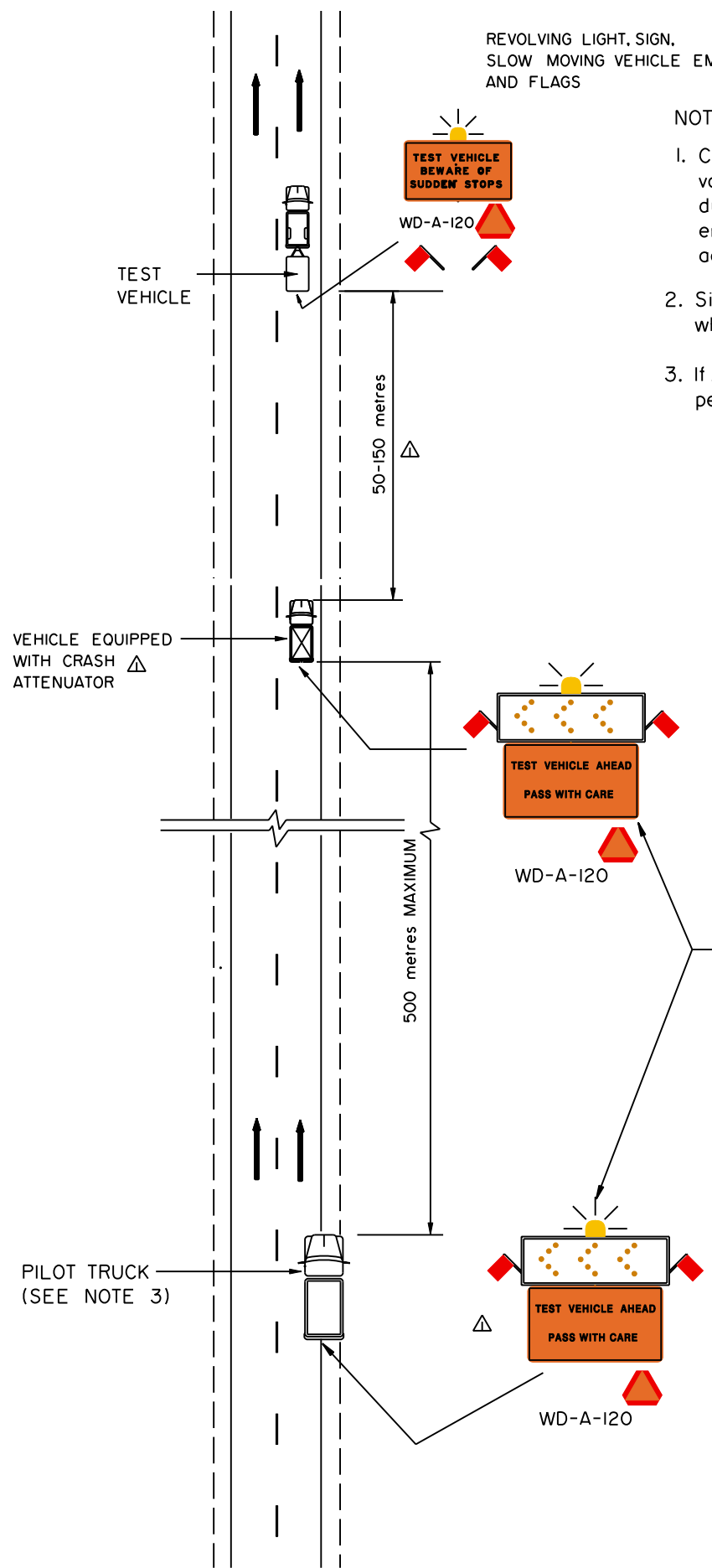
REVOLVING LIGHT,
CORNER FLASHERS ON
ARROW BOARD, SIGN,
SLOW MOVING VEHICLE EMBLEM
AND FLAGS

△			
△			
△	Notes and sign deleted, crash attenuator and pilot vehicle added and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING △ MOBILE TESTING TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-3.2A

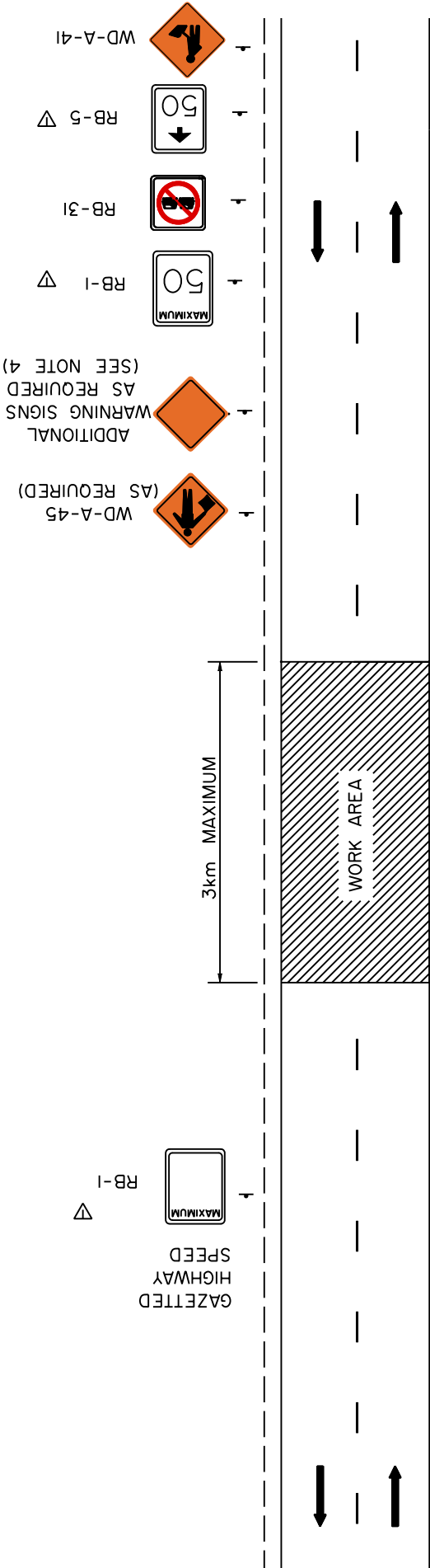
REVOLVING LIGHT, SIGN,
SLOW MOVING VEHICLE EMBLEM
AND FLAGS

NOTES: Δ

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. Signs on trucks must be visible only when testing is in progress.
3. If ASDT is greater than 10,000 vehicles per day, a pilot truck is required.



Δ				
Δ				
Δ	Notes and sign revised, crash attenuator and pilot vehicle added and Title Block updated.	JM	Sep 23/08	
No.	REVISIONS	BY	DATE	
Approved:				
Original signed by Tim Hawnt				
Executive Director, Technical Standards Branch				
Date:	MARCH, 2001			
SHORT DURATION - SIGNING Δ MOBILE TESTING FOUR LANE DIVIDED HIGHWAY				
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-3.2B	



GAZETTED
HIGHWAY
SPEED



RB-1

NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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.
4. Examples of additional warning signs that may be required are:
 - WD-150
 - WD-157
 - WD-A-22
 - WD-A-100
 - WD-A-49
5. RB-1 sign shall be placed after every intersecting roadway.



WD-A-45
(AS REQUIRED)



ADDITIONAL WARNING SIGNS AS REQUIRED
(SEE NOTE 4)



RB-1



RB-31

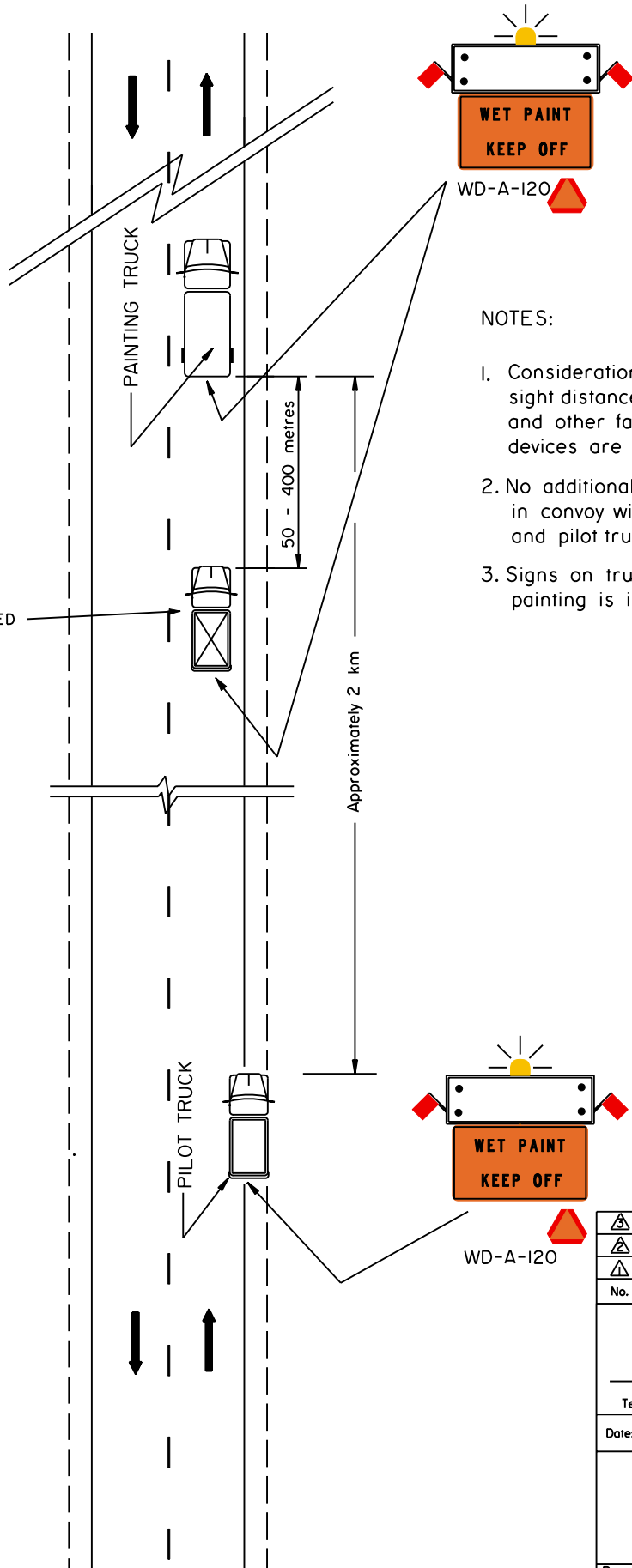


RB-5



WD-A-41

	Notes and Title Block updated, sign deleted, signs added.	JM	Dec 31/07	
No.	REVISIONS	BY	DATE	
Approved: Original signed by Tim Hawnt				
Executive Director, Technical Standards Branch				
Date: MARCH, 2001				
SHORT DURATION - SIGNING GRAVEL/OIL/ROAD MAINTENANCE TWO LANE UNDIVIDED HIGHWAY				
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-3.3A	



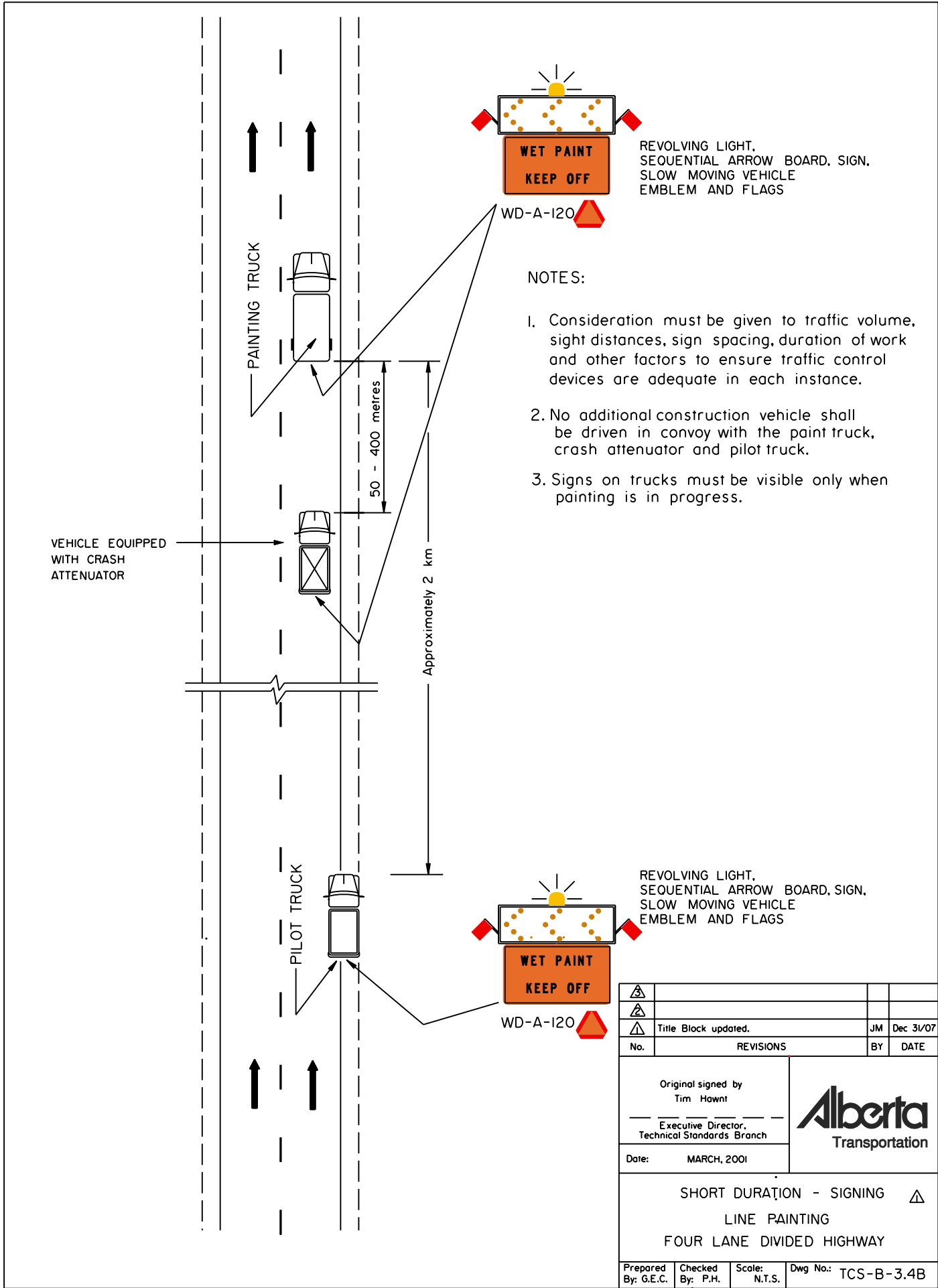
REVOLVING LIGHT,
CORNER FLASHERS ON
ARROW BOARD, SIGN,
SLOW MOVING VEHICLE EMBLEM
AND FLAGS

NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. No additional construction vehicle shall be driven in convoy with the paint truck, crash attenuator and pilot truck.
3. Signs on trucks must be visible only when painting is in progress.

REVOLVING LIGHT,
CORNER FLASHERS ON
ARROW BOARD, SIGN,
SLOW MOVING VEHICLE EMBLEM
AND FLAGS

△			
△	Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
SHORT DURATION - SIGNING △ LINE PAINTING TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-3.4A



REVOLVING LIGHT,
 SEQUENTIAL ARROW BOARD, SIGN,
 SLOW MOVING VEHICLE
 EMBLEM AND FLAGS

WD-A-120

NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. No additional construction vehicle shall be driven in convoy with the paint truck, crash attenuator and pilot truck.
3. Signs on trucks must be visible only when painting is in progress.

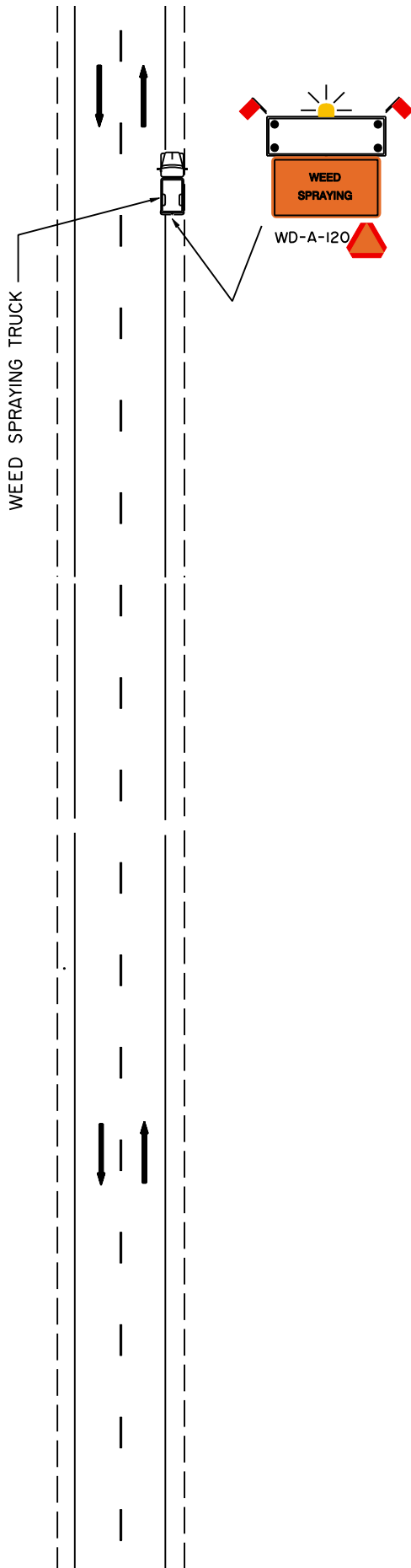
REVOLVING LIGHT,
 SEQUENTIAL ARROW BOARD, SIGN,
 SLOW MOVING VEHICLE
 EMBLEM AND FLAGS

WD-A-120

	Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Original signed by Tim Hawnt Executive Director, Technical Standards Branch	
Date: MARCH, 2001	

SHORT DURATION - SIGNING			
LINE PAINTING			
FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-3.4B

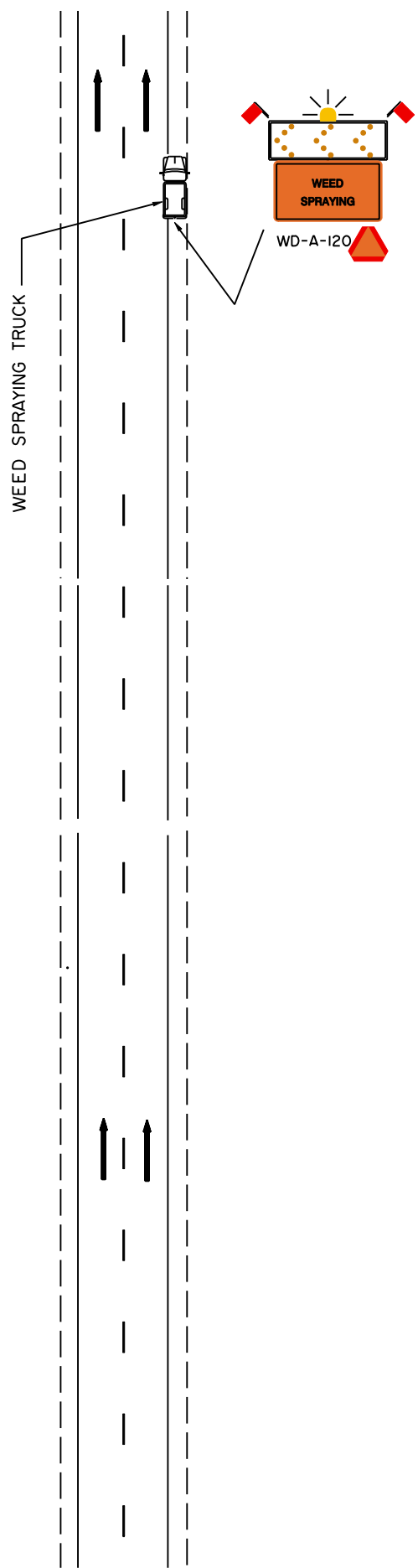


REVOLVING LIGHT,
CORNER FLASHERS ON
ARROW BOARD, SIGN,
SLOW MOVING VEHICLE
EMBLEM AND FLAGS

NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. Signs on trucks must be visible only when weed spraying is in progress.
3. A "Slow Moving Vehicle" sign shall be mounted at the rear of the vehicle and be visible to the public only when weed spraying is in progress.
4. A warning sign, mounted at the rear of the truck stating "Weed Spraying" shall have standard warning colours with letters a minimum height of 150mm and shall be visible to the public only when weed spraying is in progress.

No.	REVISIONS	BY	DATE
Approved: Original signed by Allan Kwan _____ Executive Director, Technical Standards Branch			
Date: OCTOBER, 2008			
SHORT DURATION - SIGNING CHEMICAL VEGETATION CONTROL TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-3.5A

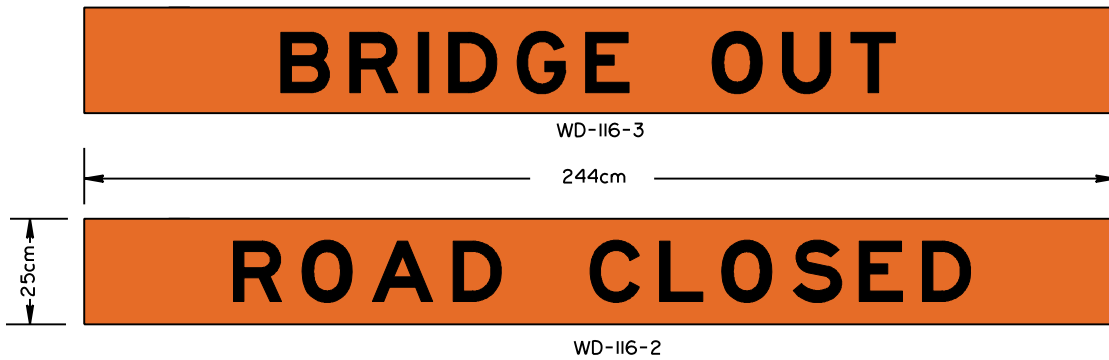
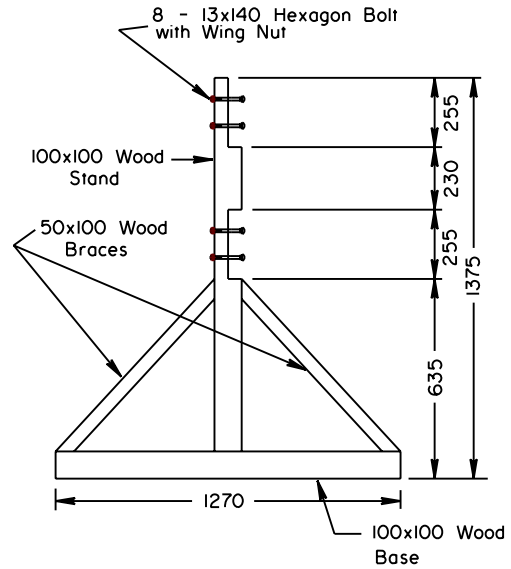
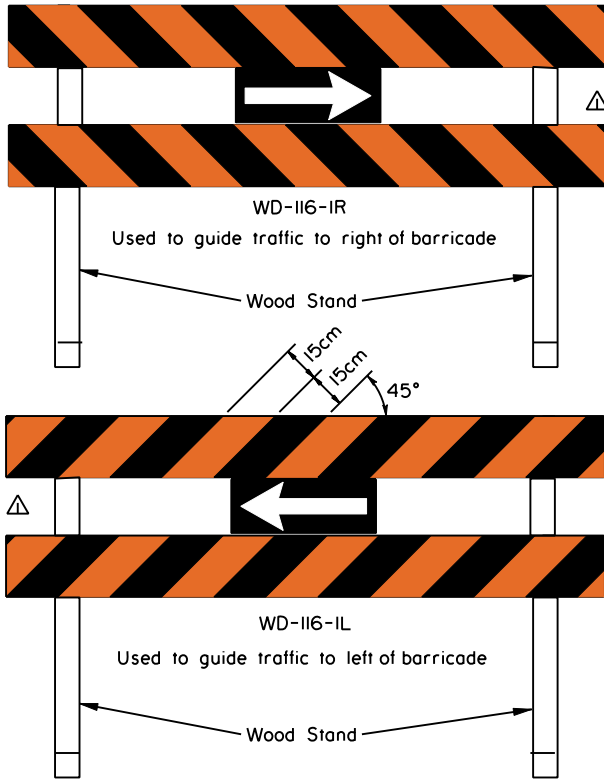


REVOLVING LIGHT,
 SEQUENTIAL ARROW BOARD, SIGN,
 SLOW MOVING VEHICLE
 EMBLEM AND FLAGS

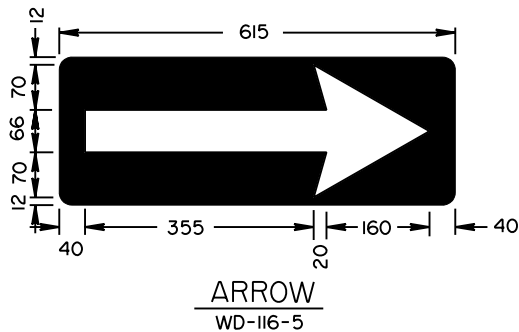
NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. Signs on trucks must be visible only when weed spraying is in progress.
3. A "Slow Moving Vehicle" sign shall be mounted at the rear of the vehicle and be visible to the public only when weed spraying is in progress.
4. A warning sign, mounted at the rear of the truck stating "Weed Spraying" shall have standard warning colours with letters a minimum height of 150mm and shall be visible to the public only when weed spraying is in progress.

No.	REVISIONS	BY	DATE
Approved: Original signed by Allan Kwan _____ Executive Director, Technical Standards Branch			
Date: OCTOBER, 2008			
SHORT DURATION - SIGNING CHEMICAL VEGETATION CONTROL FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-3.5B

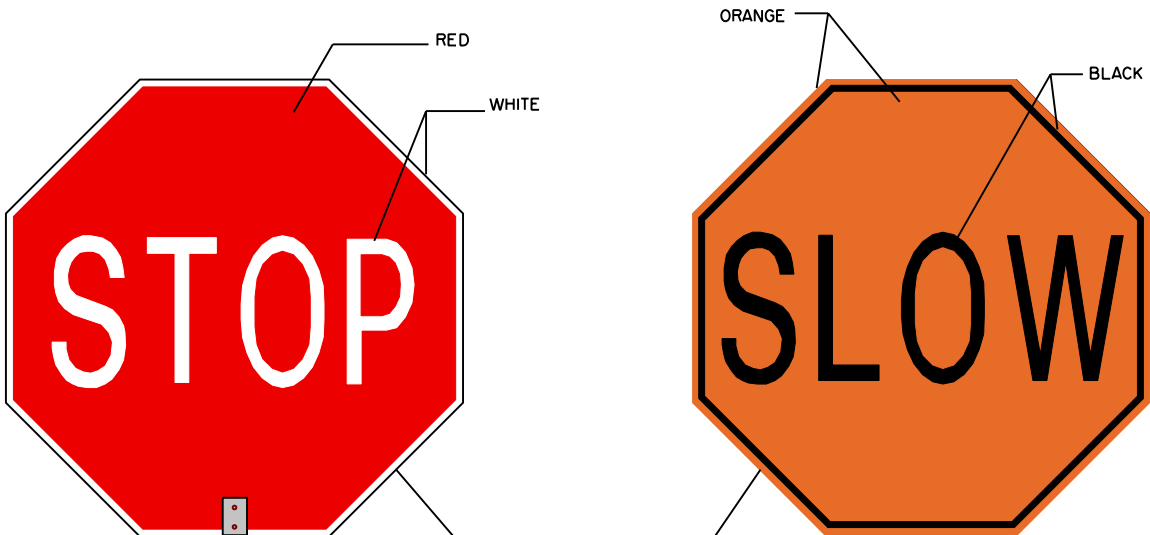


Bridge Out and Road Closed boards may be used to replace one diagonal stripe board where appropriate. All dimensions are in millimetres unless otherwise indicated.



Note: Arrow Sign may be installed on the wood stand on the traffic side.

△			
△			
△	Note and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
MISCELLANEOUS ITEMS - STANDARD BARRICADE USED FOR CONSTRUCTION PROJECTS			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-4.1



△ SHEETING MATERIAL SHALL MEET SIGN SHEETING REQUIREMENTS AS SHOWN IN "SIGN SCHEDULE" OF THIS MANUAL

SIGN 45cm x 45cm
LETTER SIZE 150mm SERIES "C"

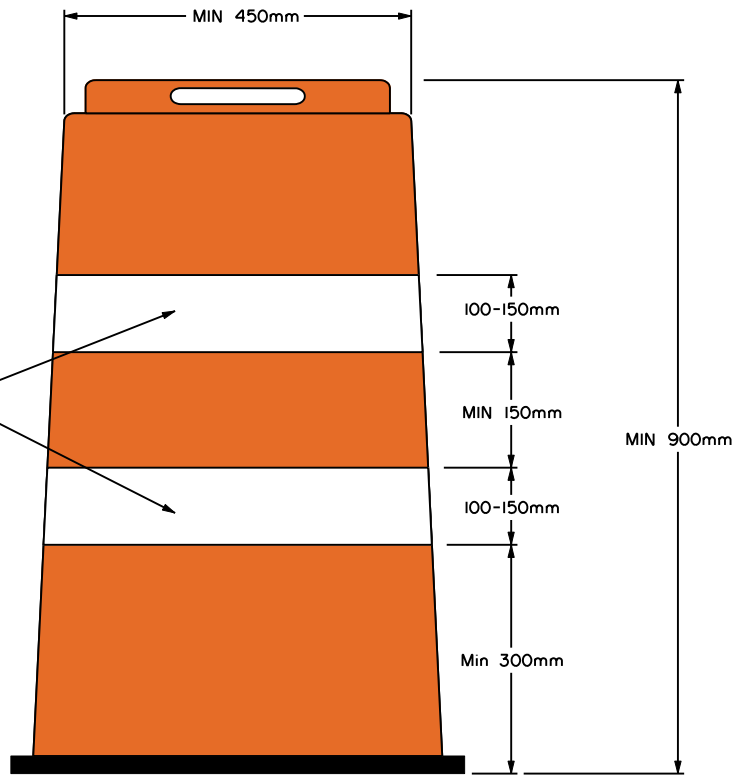
HANDLE 30mm x 280mm PIPE
WITH AN INSULATED HAND GRIP
31.75mm INSIDE DIAMETER

RUBBER CAP FITTED OVER HANDLE OF POLE

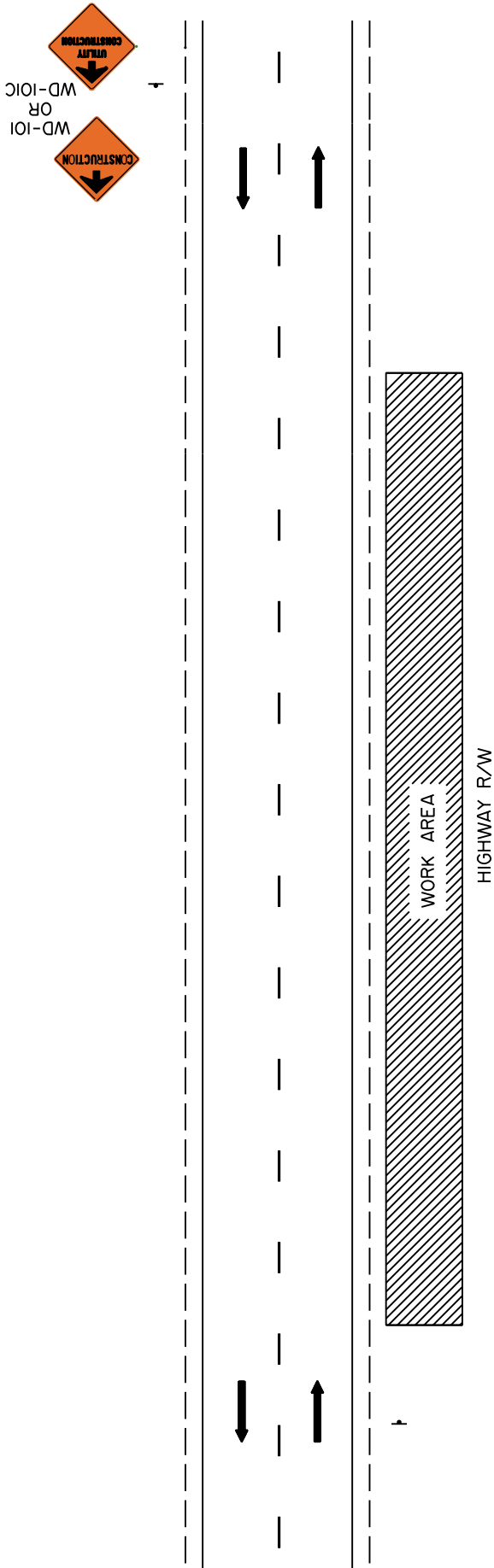
OPTIONAL POLE 30mm x 1300mm PIPE
WITH A QUICK RELEASE UNION TO FIT
INTO HANDLE 28.57mm OUTSIDE DIAMETER

△			
△			
△	Title Block Updated Sheeting material note added to Slow sign	JM	Sep 23/08
No.	REVISIONS	BY	DATE
Approved: Original signed by Tim Hawnt _____ Executive Director, Technical Standards Branch			
Date: MARCH, 2001			
MISCELLANEOUS ITEMS △ TRAFFIC CONTROL PADDLE			
Prepared By: M.T.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-4.2

WHITE REFLECTIVE BAND MATERIAL SHALL MEET SIGN SHEETING REQUIREMENTS AS PER SECTION 7.1.4.1 "MATERIALS" OF THE LATEST VERSION OF ALBERTA TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY/BRIDGE CONSTRUCTION.



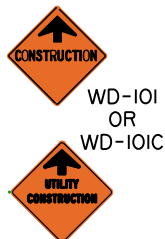
⚠			
⚠			
⚠			
No.	REVISIONS	BY	DATE
Approved: Original signed by Allan Kwan _____ Executive Director, Technical Standards Branch			
Date: OCTOBER, 2008			
MISCELLANEOUS ITEMS - TRAFFIC BARREL/DRUM			
Prepared By: M.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-4.3

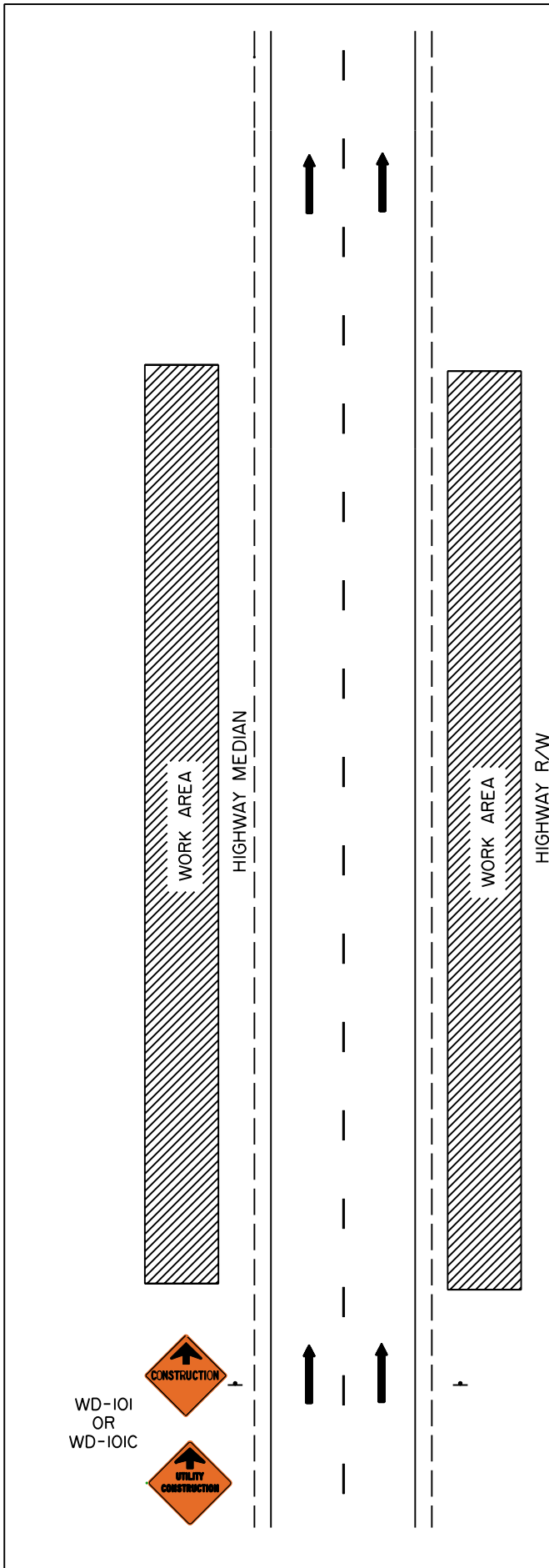


NOTES:

1. Each situation will require individual assessment, and consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. No vehicles shall be parked on the road surface.
4. Materials or equipment may only be placed or stored on the outside backslope in a position to reduce damages to vehicles that may run off the roadway.
- △ 5. If working outside of the clear zone, signage may not be required.
6. All signs shall be kept clean and in good condition. The bottom of the sign shall not be less than 0.3m above the road surface.
7. During periods when no work is being actively performed, all non-applicable signs are to be removed or suitably covered

△			
△	Note added and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
UTILITIES CONSTRUCTION - SIGNING △ WORK OFF ROAD SURFACE TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-5.1A





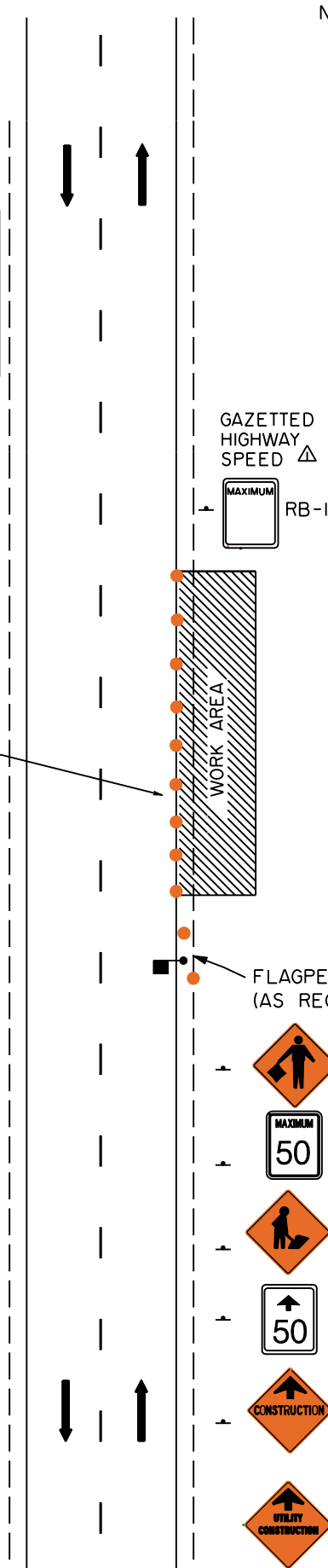
NOTES:

1. Each situation will require individual assessment, and consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. No vehicles shall be parked on the road surface.
4. Materials or equipment may only be placed or stored on the outside backslope in a position to reduce damages to vehicles that may run off the roadway.
5. Materials or equipment shall not be stored in the median.
6. If working outside of the clear zone, signage may not be required.
7. All signs shall be kept clean and in good condition. The bottom of the sign shall not be less than 0.3m above the road surface.
8. During periods when no work is being actively performed, all non-applicable signs are to be removed or suitably covered

	Note added and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
UTILITIES CONSTRUCTION - SIGNING WORK OFF ROAD SURFACE FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-5.1B

NOTE:
 DETAILS OF
 WARNING/REGULATORY
 SIGNS SAME AS
 THOSE ON OTHER
 SIDE OF THE HIGHWAY

CONES ON TANGENT
 50m SPACING



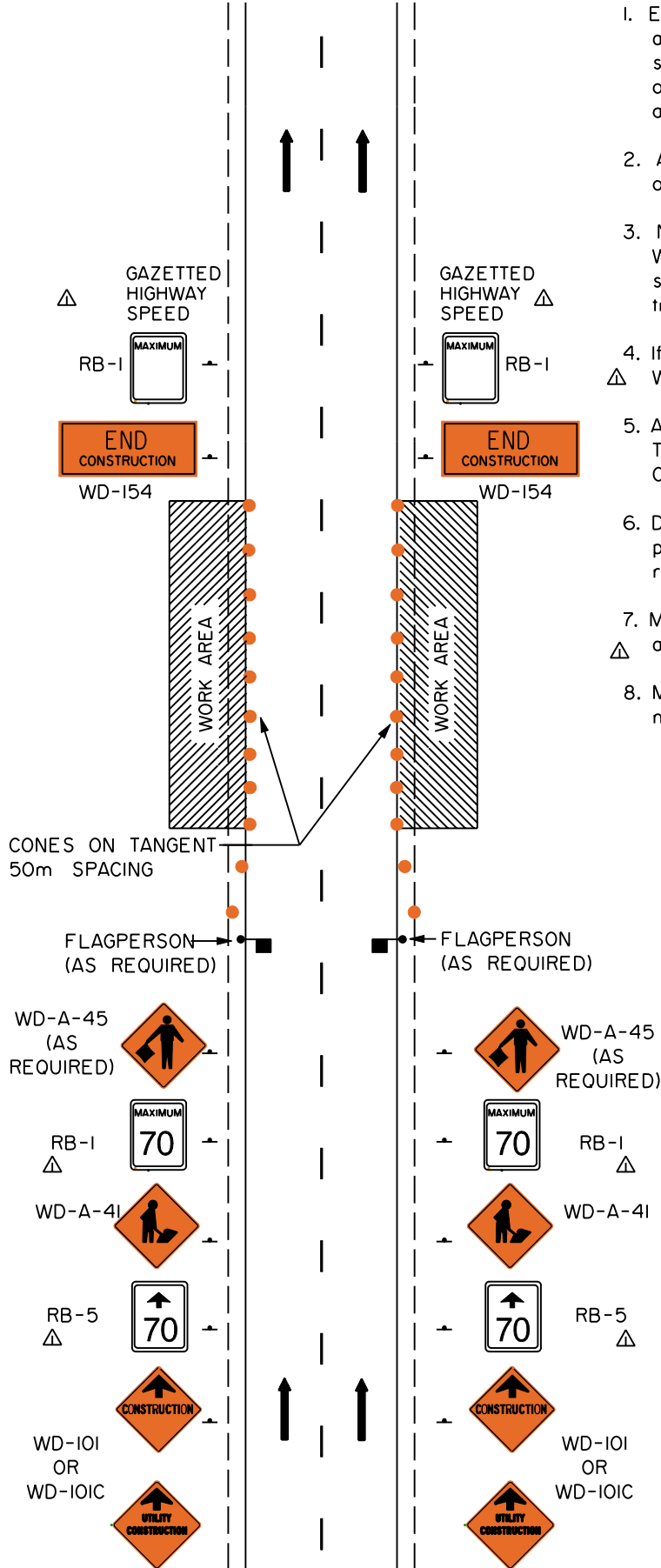
NOTES:

1. Each situation will require individual assessment, and consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. No vehicles shall be parked on the driving lanes. When it is necessary to park vehicles on the shoulder of the road, they shall be marked by traffic cones.
4. If equipment is being moved across the roadway, Δ WD-A-45 and a flagperson shall be used.
5. All signs shall be kept clean and in good condition. Δ The bottom of the sign shall not be less than 0.3m above the road surface.
6. During periods when no work is being actively performed, all non-applicable signs are to be removed or suitably covered.
7. Materials or equipment may be placed or stored adjacent to the highway property line if required. Δ

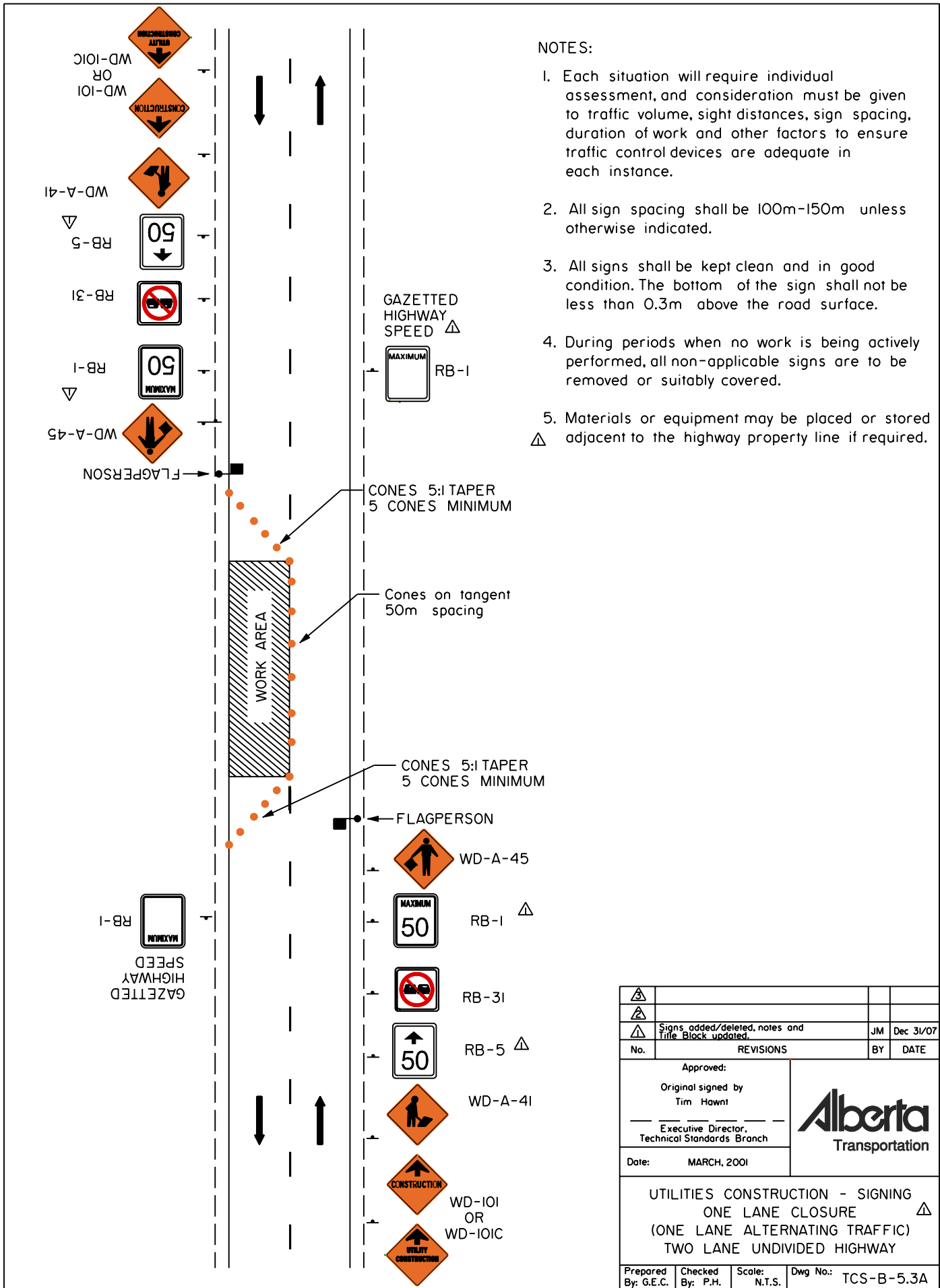
Δ			
Δ			
Δ	Signs added/deleted and notes and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
UTILITIES CONSTRUCTION - SIGNING Δ WORK ON SHOULDER TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-5.2A

NOTES:

1. Each situation will require individual assessment, and consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. No vehicles shall be parked on the driving lanes. When it is necessary to park vehicles on the shoulder of the road, they shall be marked by traffic cones.
4. If equipment is being moved across the roadway, Δ WD-A-45 and a flagperson shall be used.
5. All signs shall be kept clean and in good condition. The bottom of the sign shall not be less than 0.3m above the road surface.
6. During periods when no work is being actively performed, all non-applicable signs are to be removed or suitably covered.
7. Materials or equipment may be placed or stored adjacent to the highway property line if required.
8. Materials or equipment shall not be stored in the median.



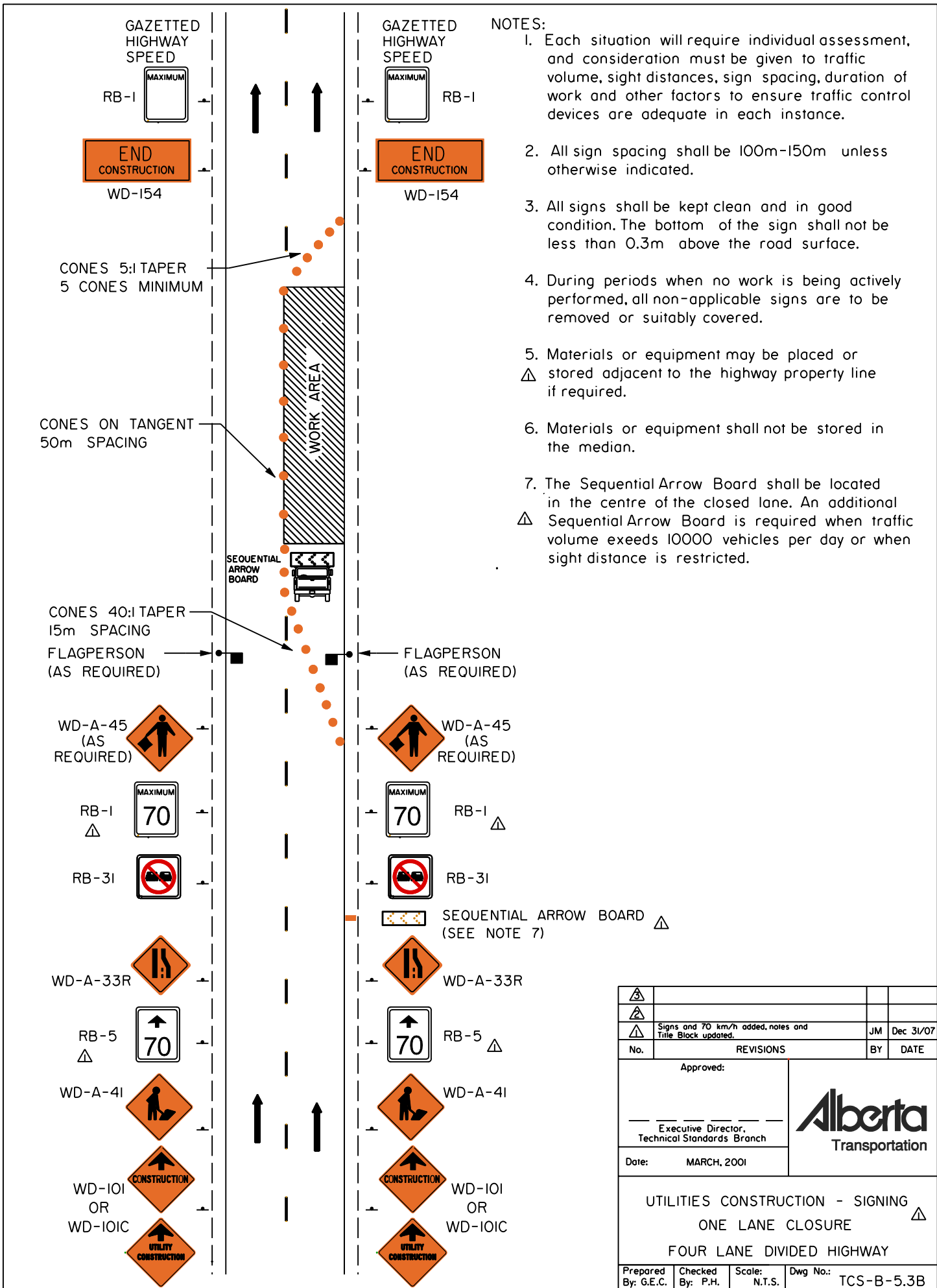
Δ			
Δ			
Δ	70 km/h added, note deleted and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Original signed by Tim Hawnt			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
UTILITIES CONSTRUCTION - SIGNING Δ WORK ON SHOULDER FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-5.2B



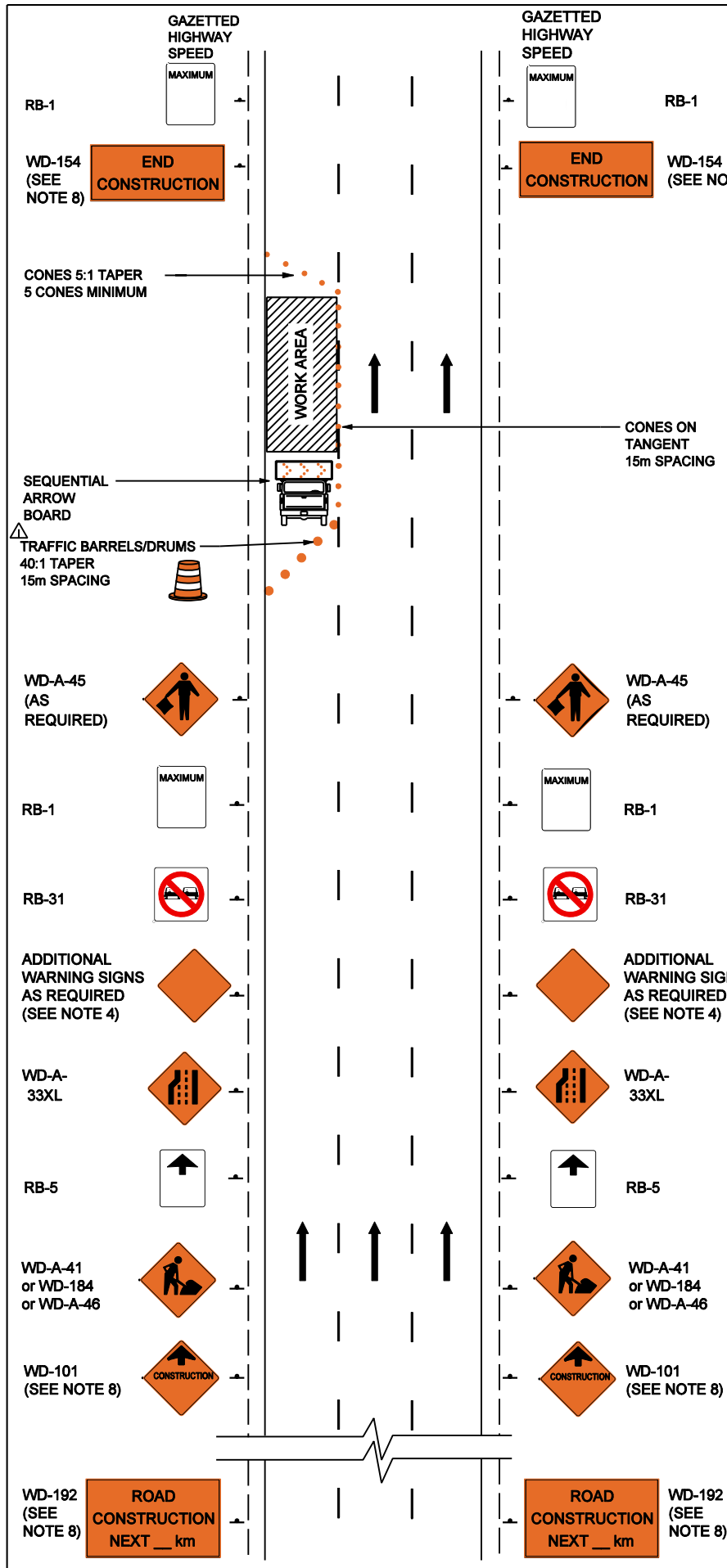
NOTES:

1. Each situation will require individual assessment, and consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. All signs shall be kept clean and in good condition. The bottom of the sign shall not be less than 0.3m above the road surface.
4. During periods when no work is being actively performed, all non-applicable signs are to be removed or suitably covered.
5. Materials or equipment may be placed or stored adjacent to the highway property line if required.

	Signs added/deleted, notes and Title Block updated.	JM	Dec 31/07	
No.	REVISIONS	BY	DATE	
Approved:				
Original signed by Tim Hawnt				
Executive Director, Technical Standards Branch				
Date:	MARCH, 2001			
UTILITIES CONSTRUCTION - SIGNING ONE LANE CLOSURE (ONE LANE ALTERNATING TRAFFIC) TWO LANE UNDIVIDED HIGHWAY				
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.:	TCS-B-5.3A



	Signs and 70 km/h added, notes and Title Block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2001		
UTILITIES CONSTRUCTION - SIGNING ONE LANE CLOSURE FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: P.H.	Scale: N.T.S.	Dwg No.: TCS-B-5.3B



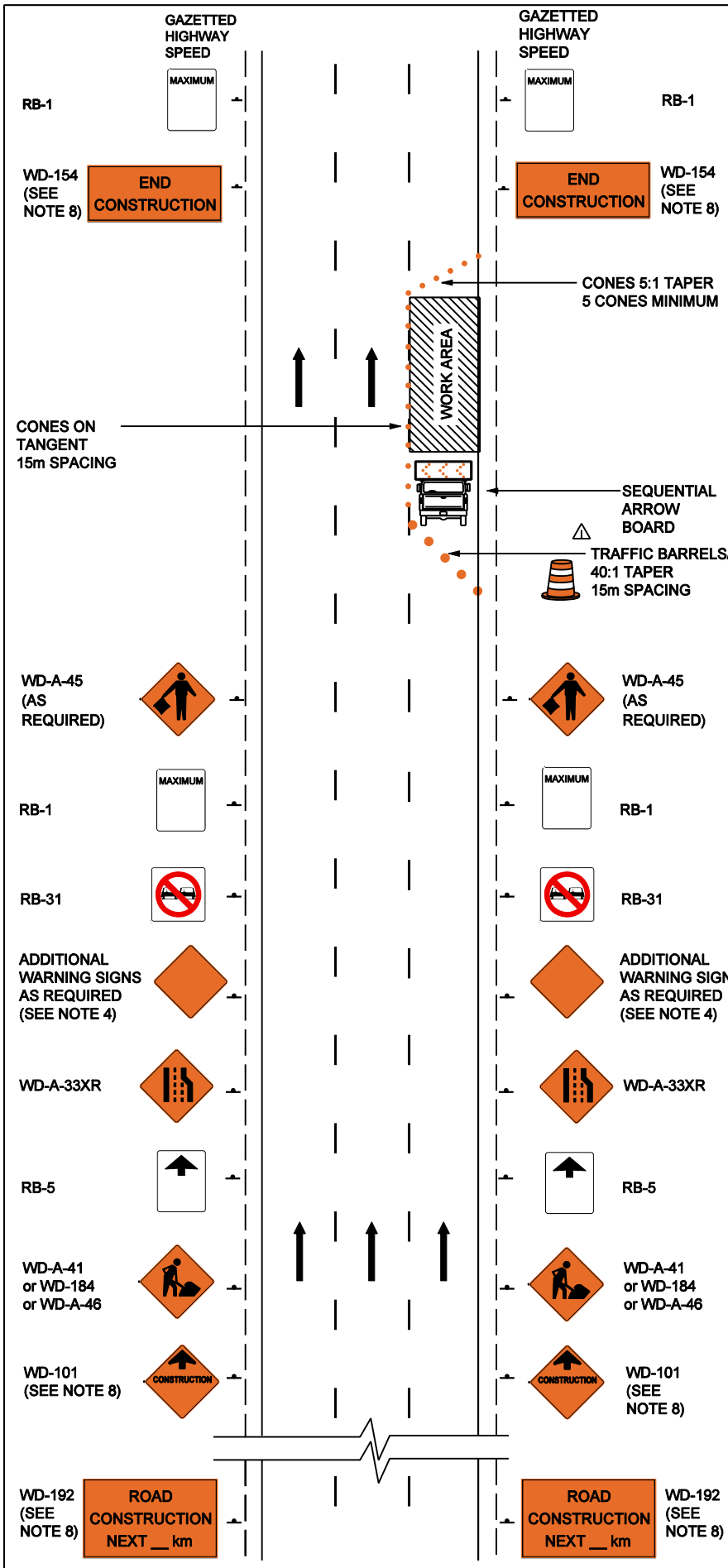
NOTES:

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 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:
 - WD-104
 - WD-150
 - WD-157
 - WD-A-22
 - WD-A-49
 - WD-A-100
 - WD-A-111
5. Other hazard signs as shown in the schedule of signs may be used as required.
6. Electronic variable message board is required when average summer daily traffic (ASDT) volume exceeds 10,000 vehicles per day or when sight distance is restricted.
7. WD-192 shall be erected 2km in advance or the distance may be adjusted due to site specific requirements of the project. Distance tab to include project length plus setback from project limit.
8. WD-192, WD-101, WD-154 signs are not required for short duration work.
- 9.

WD-184

WD-A-46

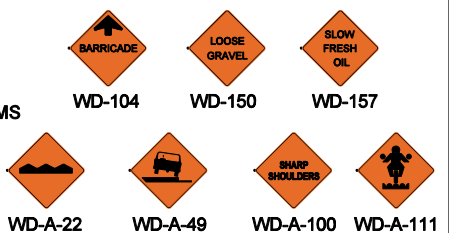
	Title block and notes updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN Executive Director, Technical Standards Branch			
Date:		MARCH, 2003	
HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS LEFT LANE CLOSURE			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.IB



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 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:

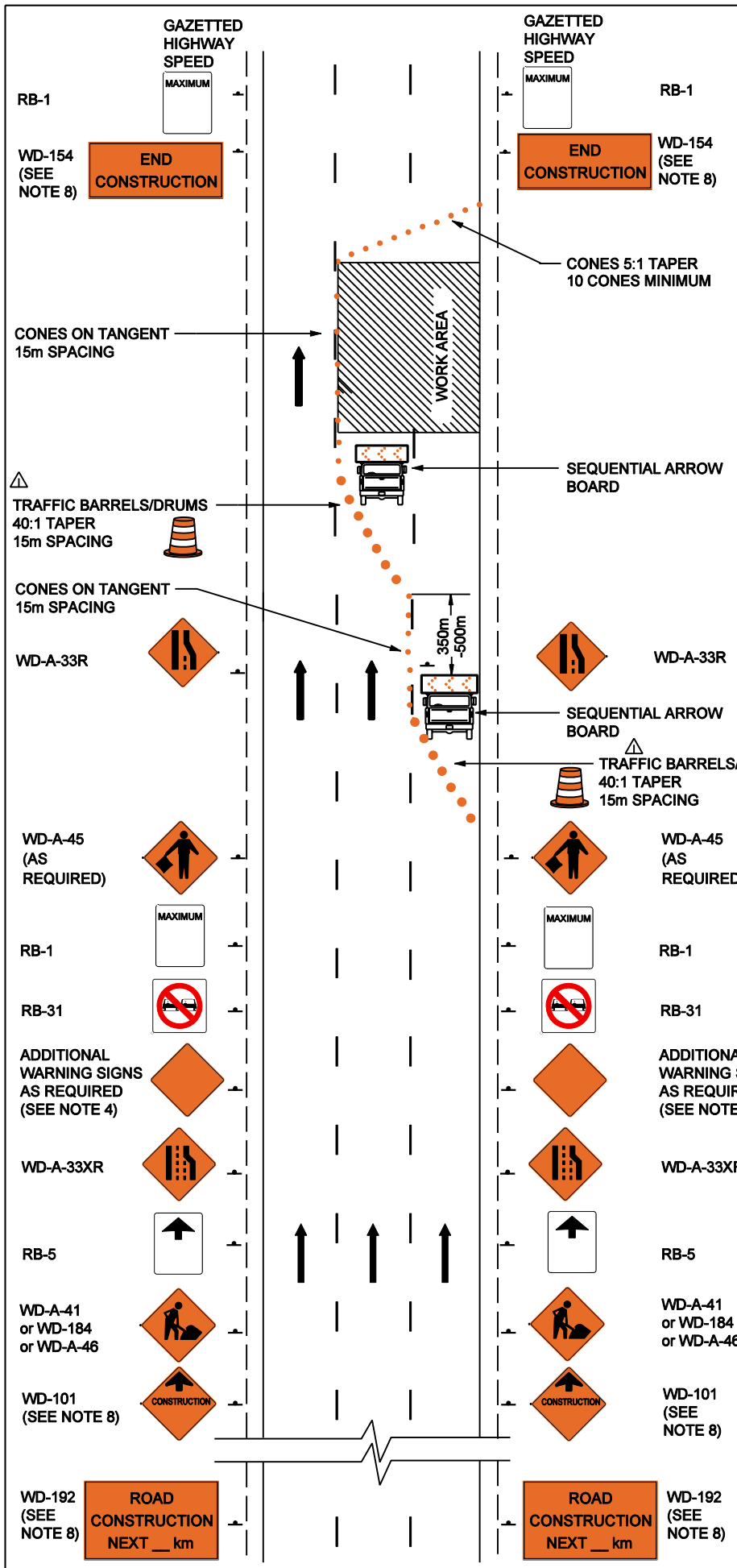


5. Other hazard signs as shown in the schedule of signs may be used as required.
6. Electronic variable message board is required when average summer daily traffic (ASDT) volume exceeds 10,000 vehicles per day or when sight distance is restricted.
7. WD-192 shall be erected 2km in advance or the distance may be adjusted due to site specific requirements of the project. Distance tab to include project length plus setback from project limit.

8. WD-192, WD-101, WD-154 signs are not required for short duration work.



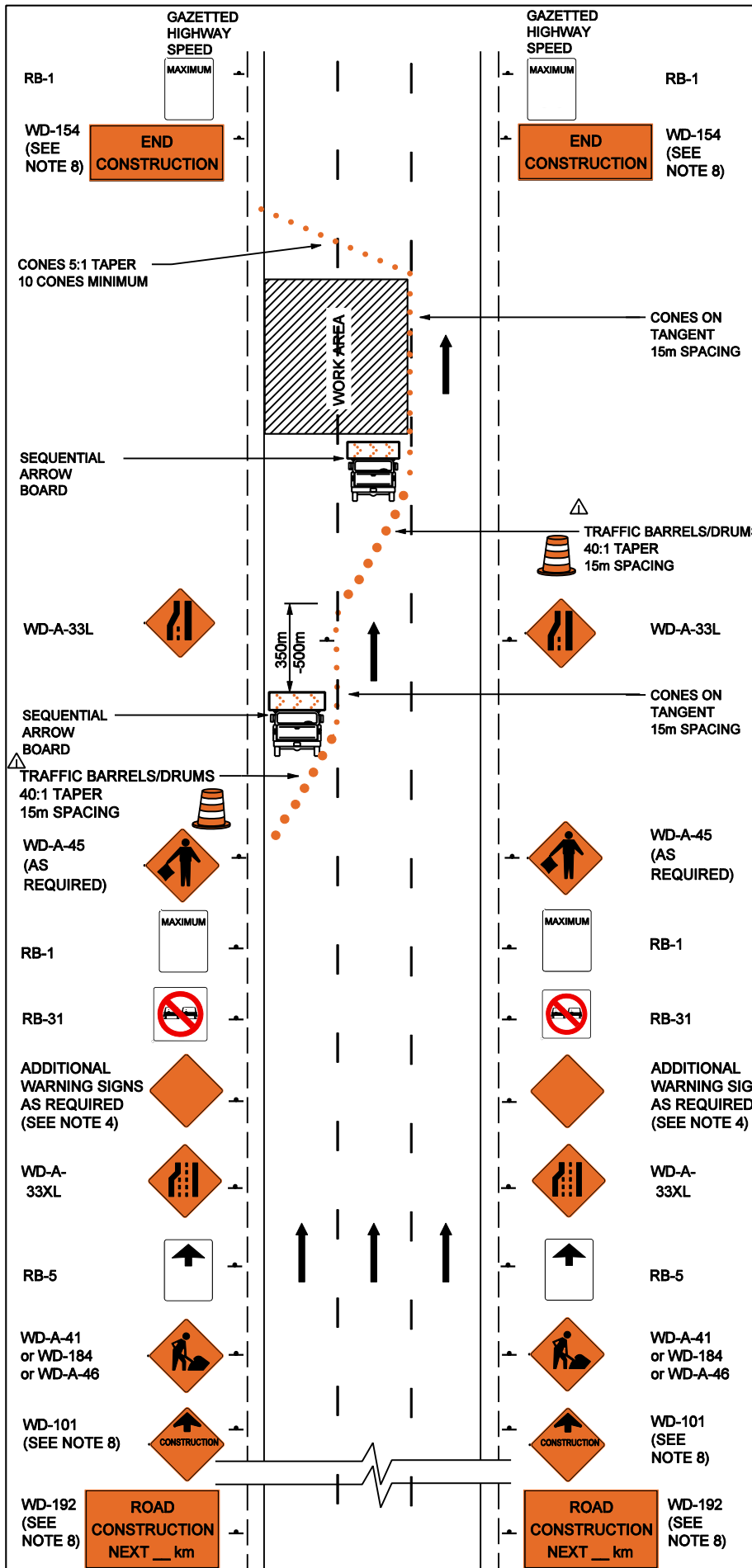
△			
△	Title block and notes updated.	JM	Dec 31/07
△	No.	REVISIONS	BY DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS RIGHT LANE CLOSURE			
Prepared By:	M.E.T.	Checked By:	J.M.
Scale:	N.T.S.	Dwg No.:	TCS-B-6.2B



NOTES:

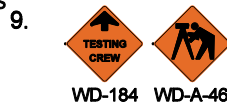
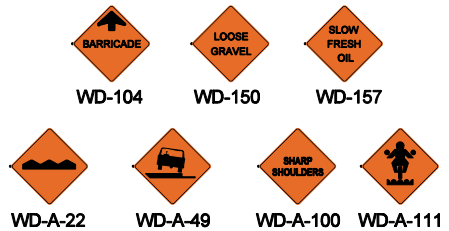
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.
3. Speed limit and warning signs shall be placed after every intersecting roadway 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:
 - BARRICADE (WD-104)
 - LOOSE GRAVEL (WD-150)
 - SLOW FRESH OIL (WD-157)
 - ROAD WORK (WD-A-22)
 - TRUCK (WD-A-49)
 - SHARP SHOULDERS (WD-A-100)
 - PEDESTRIAN (WD-A-111)
5. Other hazard signs as shown in the schedule of signs may be used as required.
6. Electronic variable message board is required when average summer daily traffic (ASDT) volume exceeds 10,000 vehicles per day or when sight distance is restricted.
7. WD-192 shall be erected 2km in advance or the distance may be adjusted due to site specific requirements of the project. Distance tab to include project length plus setback from project limit.
8. WD-192, WD-101, WD-154 signs are not required for short duration work.
9. TESTING CREW (WD-184) ROAD WORK (WD-A-46)

	Title block and notes updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS CENTRE AND RIGHT LANE CLOSURE			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.3B

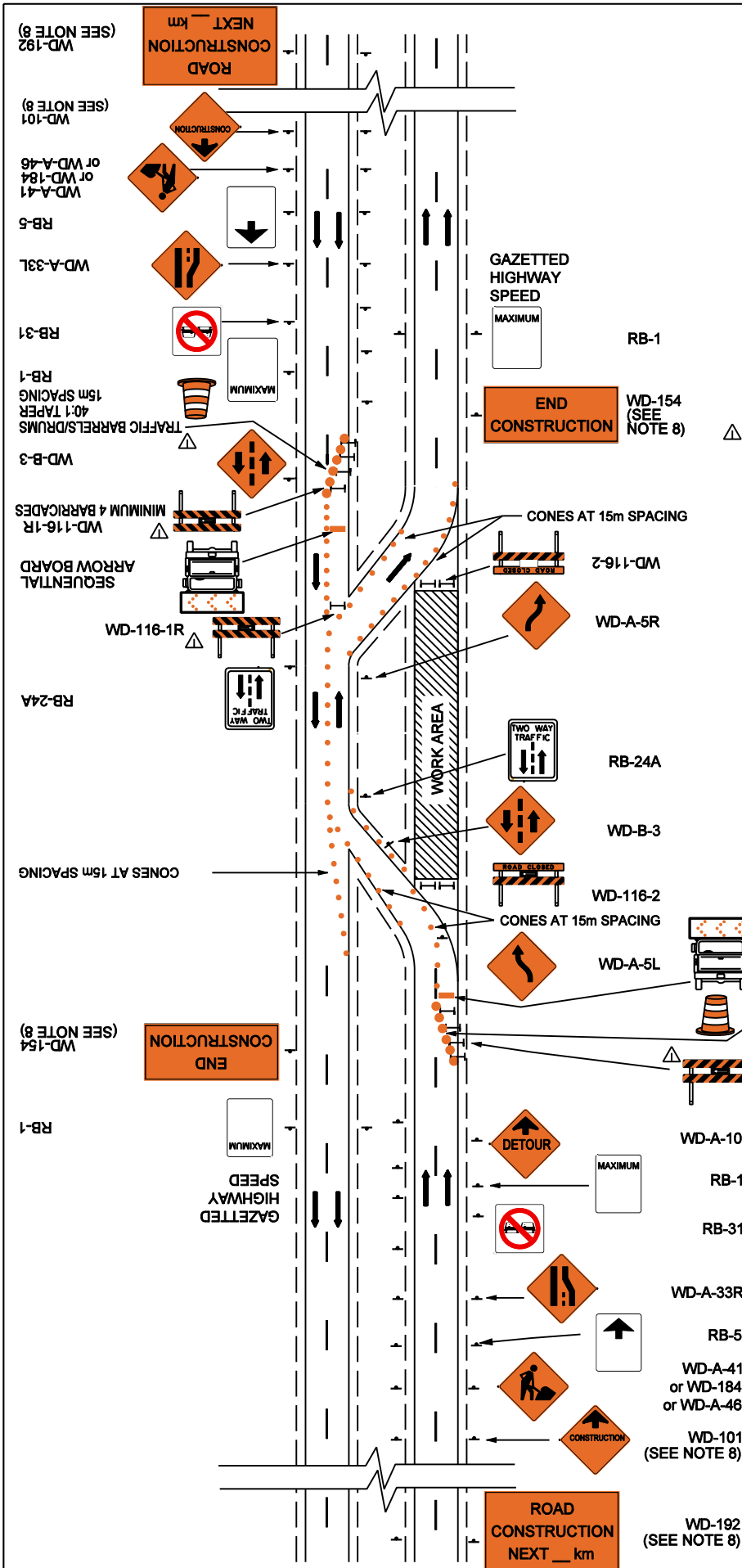


NOTES:

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 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. Electronic variable message board is required when average summer daily traffic (ASDT) volume exceeds 10,000 vehicles per day or when sight distance is restricted.
7. WD-192 shall be erected 2km in advance or the distance may be adjusted due to site specific requirements of the project. Distance tab to include project length plus setback from project limit.
8. WD-192, WD-101, WD-154 signs are not required for short duration work.



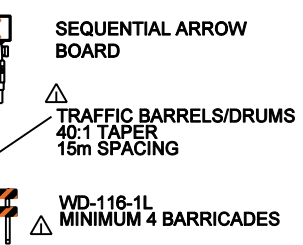
△			
△	Title block and notes updated.	JM	Dec 31/07
△	No.	REVISIONS	BY DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date: MARCH, 2003			
HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS △ CENTRE AND LEFT LANE CLOSURE			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.4B






NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. Radius of crossover detour shall be adequate to accommodate multi-trailer trucks.
4. Typical signing is required in the median in both directions.
5. During darkness, Type "C" steady burn lights shall be on all Traffic barrels/drums.
6. Electronic variable message board is required when average summer daily traffic (ASDT) volume exceeds 10,000 vehicles per day or when sight distance is restricted.
7. WD-192 shall be erected 2km in advance or the distance may be adjusted due to site specific requirements of the project. Distance tab to include project length plus setback from project limit.
8. WD-192, WD-101, WD-154 signs are not required for short duration work.

9.  
 WD-184 WD-A-46




			
			
	Title block, notes updated and flashers eliminated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved:

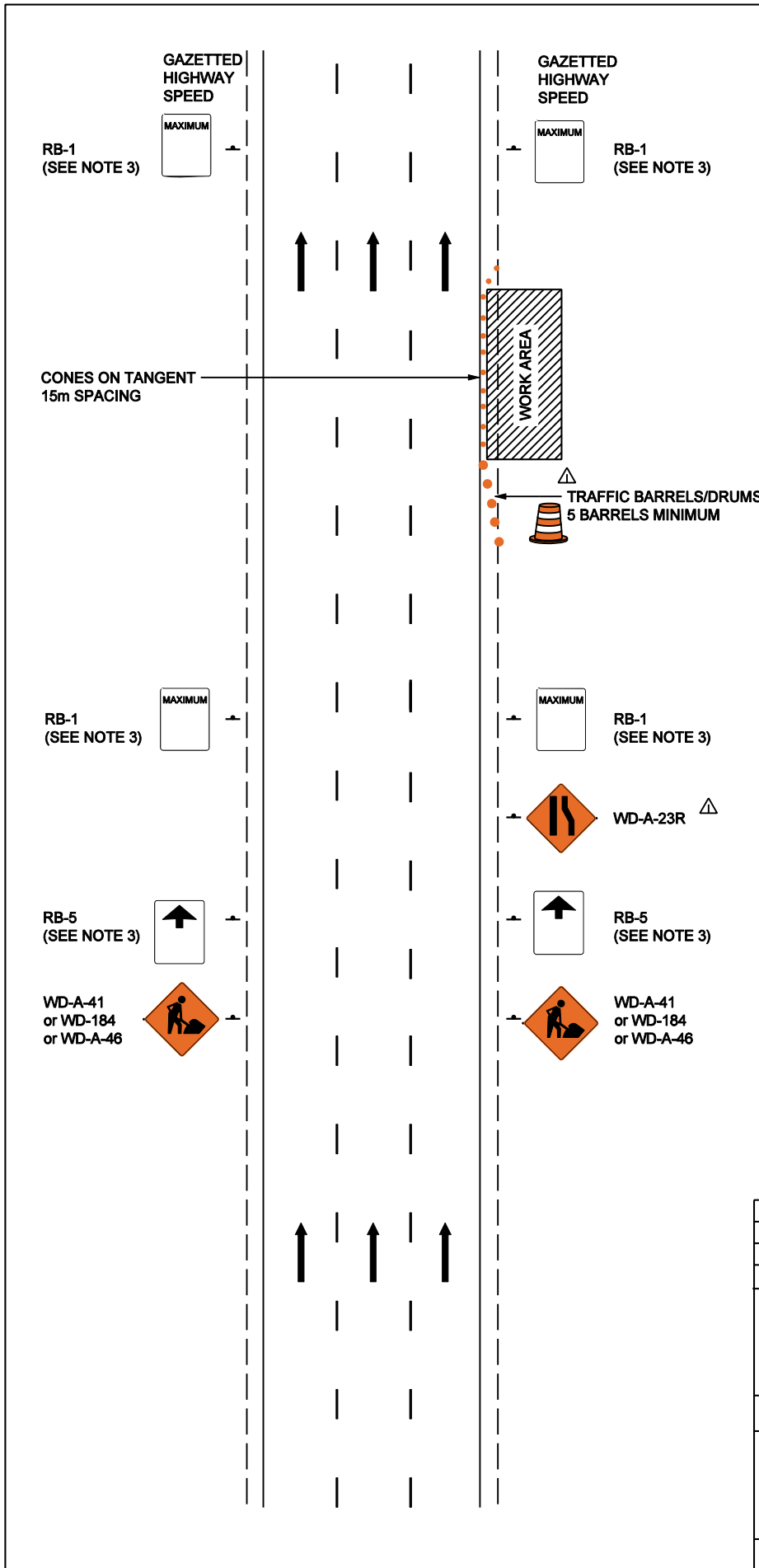
ORIGINAL SIGNED BY ALLAN KWAN

Executive Director, Technical Standards Branch

Date: MARCH, 2003





HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS
 DETOUR FOUR LANE TO OPPOSING TRAFFIC




NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. RB-5 and RB-1 signs will be required where a reduced speed zone is in place.
4.

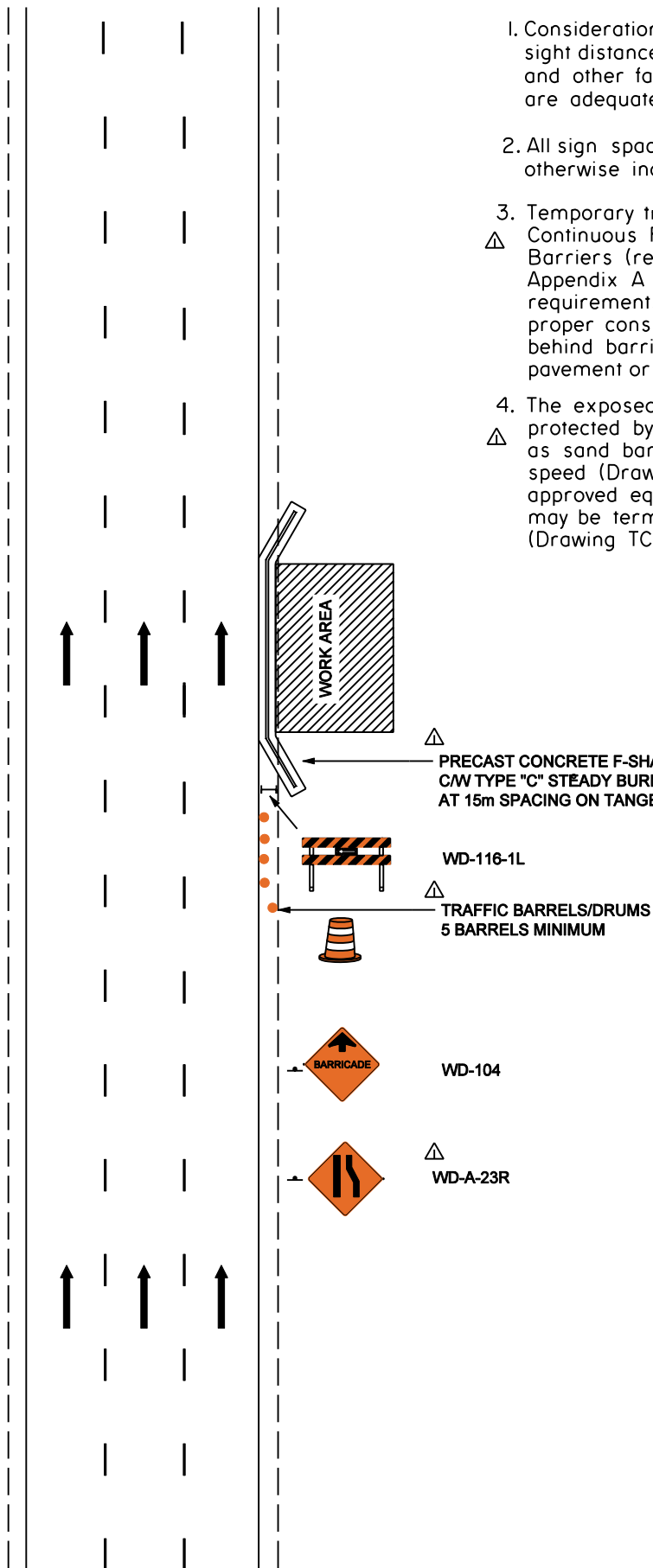

 WD-184


 WD-A-46
5. Delineators/Cones shall be placed at 15m spacing. If the drop-off has slope flatter than 3:1, cones are not required.

△			
△			
△	Title block, notes updated and sign added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved: ORIGINAL SIGNED BY ALLAN KWAN _____ Executive Director, Technical Standards Branch			
Date:		MARCH, 2003	
HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS △ WORK ON SHOULDER			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.6B

NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. Temporary traffic barriers shall be Approved
 - △ Continuous Precast Concrete F-shaped Barriers (refer to drawing CB6-4.2 MI6) (see Appendix A or approved equivalent) meeting the requirements of NCHRP 350 Test Level 3, with proper consideration for deflection allowance behind barriers. The barriers shall be placed on pavement or properly prepared granular base.
4. The exposed ends of the barriers shall be protected by crashworthy end treatments, such as
 - △ sand barrels, crash tested for the appropriate speed (Drawing TEB 3.19 see Appendix A), or approved equivalent. Alternatively, the barriers may be terminated outside the clear zone. (Drawing TCS-B-1.29, see Appendix A)



△ PRECAST CONCRETE F-SHAPED BARRIERS
C/W TYPE "C" STEADY BURN LIGHTS OR REFLECTORIZED MARKERS
AT 15m SPACING ON TANGENT

WD-116-1L

△ TRAFFIC BARRELS/DRUMMS
5 BARRELS MINIMUM

△ BARRICADE
WD-104

△
WD-A-23R

△			
△			
△	Title block, notes updated and notes added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved:

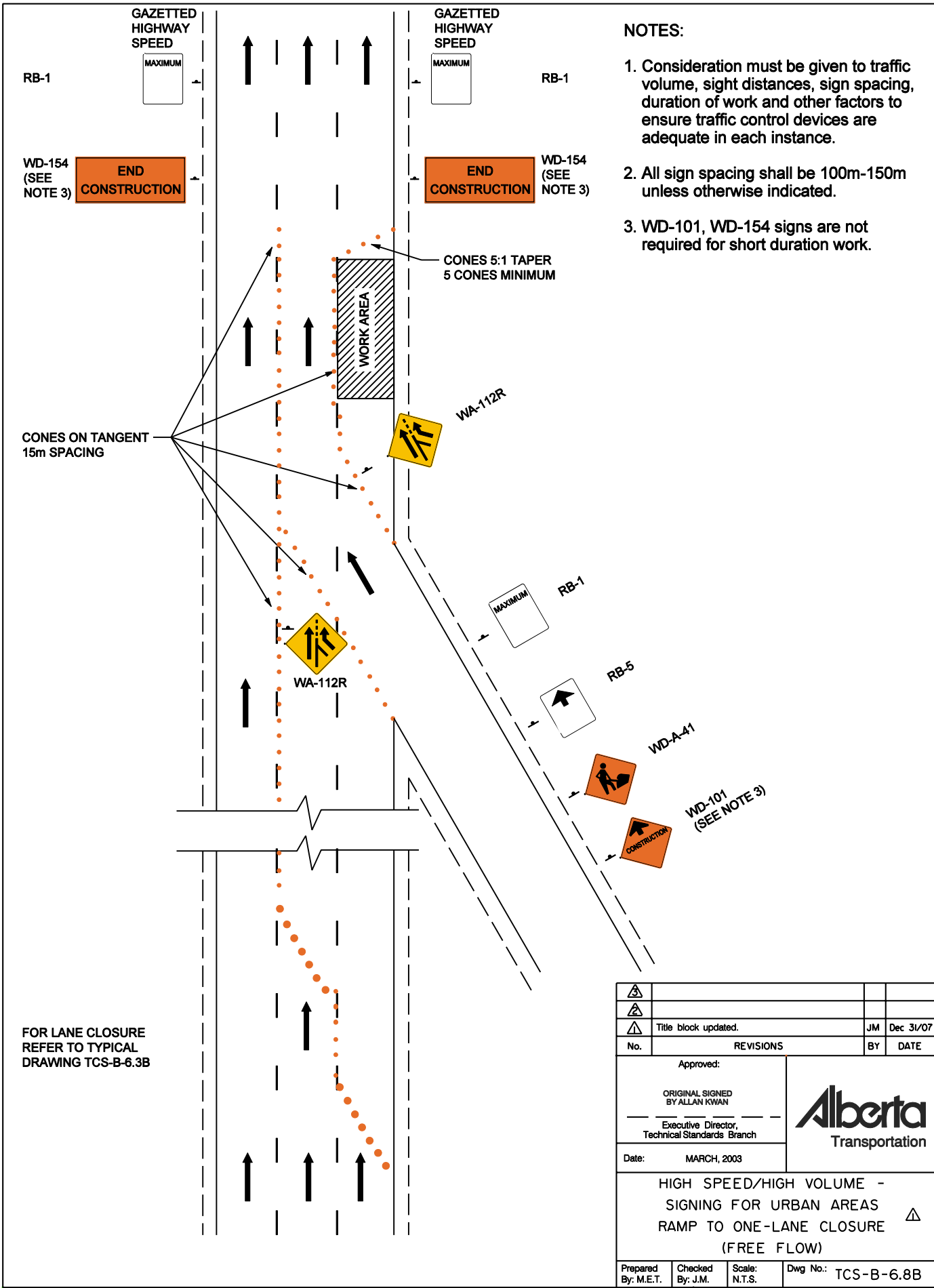
ORIGINAL SIGNED
BY ALLAN KWAN

Executive Director,
Technical Standards Branch

Date: MARCH, 2003

HIGH SPEED/HIGH VOLUME -
SIGNING FOR URBAN AREAS
LOCALIZED EXCAVATION ADJACENT △
TO SHOULDER (WITHIN WORK ZONE)

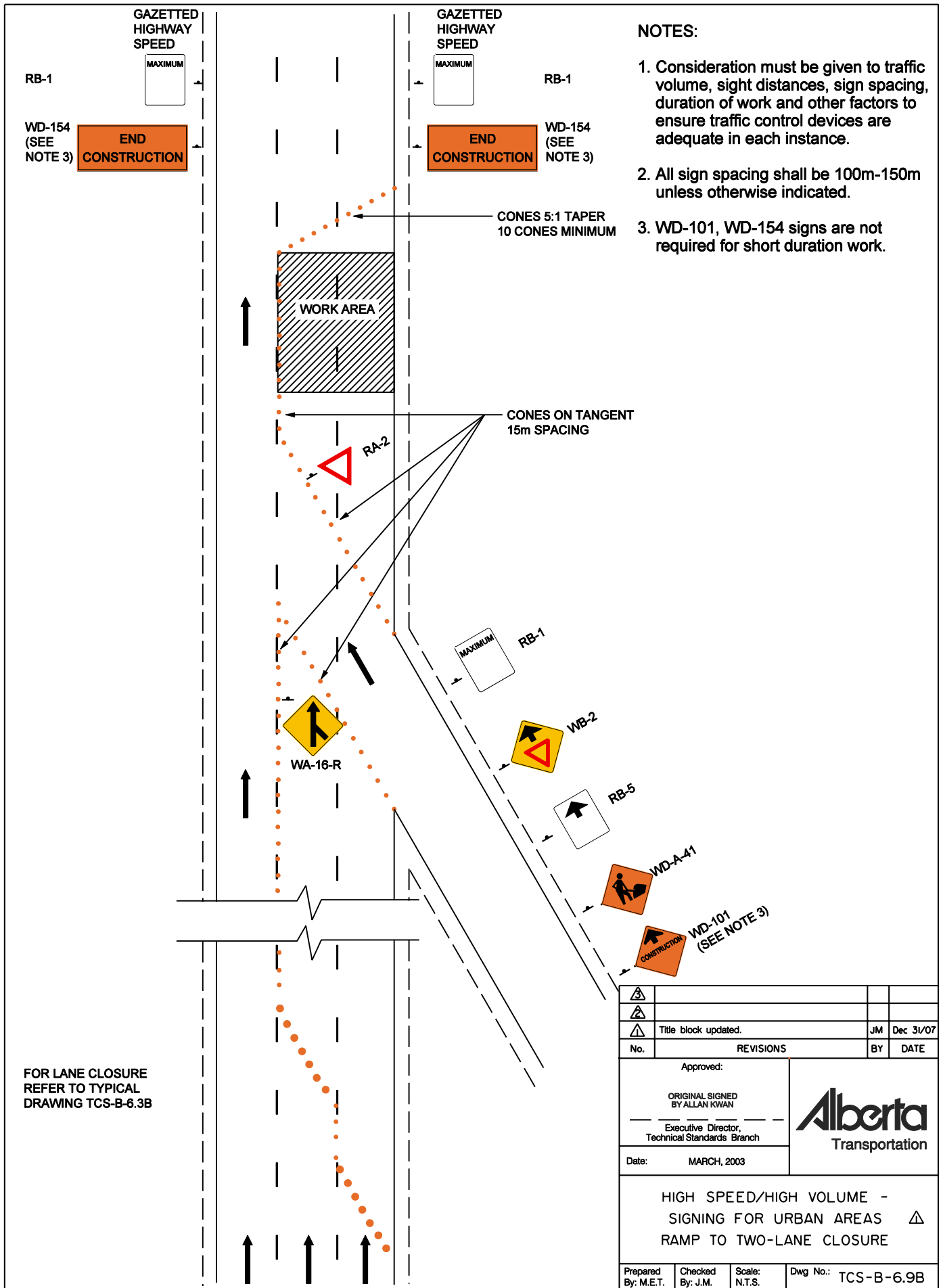
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.7B
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NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. WD-101, WD-154 signs are not required for short duration work.

	Title block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS RAMP TO ONE-LANE CLOSURE (FREE FLOW)			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.8B



NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work 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. WD-101, WD-154 signs are not required for short duration work.

FOR LANE CLOSURE
REFER TO TYPICAL
DRAWING TCS-B-6.3B

△			
△	Title block updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved:

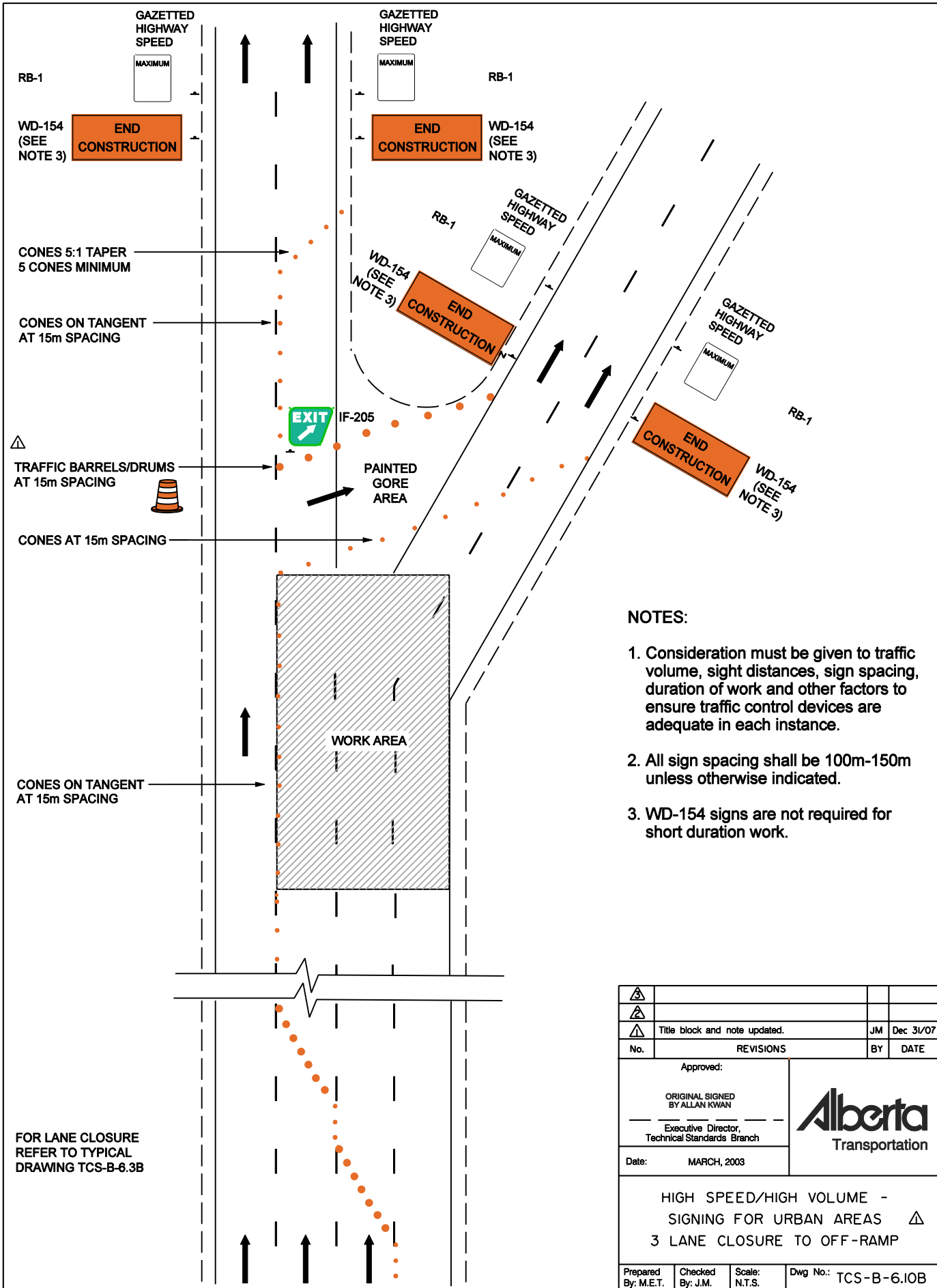
ORIGINAL SIGNED
BY ALLAN KWAN

Executive Director,
Technical Standards Branch
Date: MARCH, 2003



HIGH SPEED/HIGH VOLUME -
SIGNING FOR URBAN AREAS △
RAMP TO TWO-LANE CLOSURE

Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.9B
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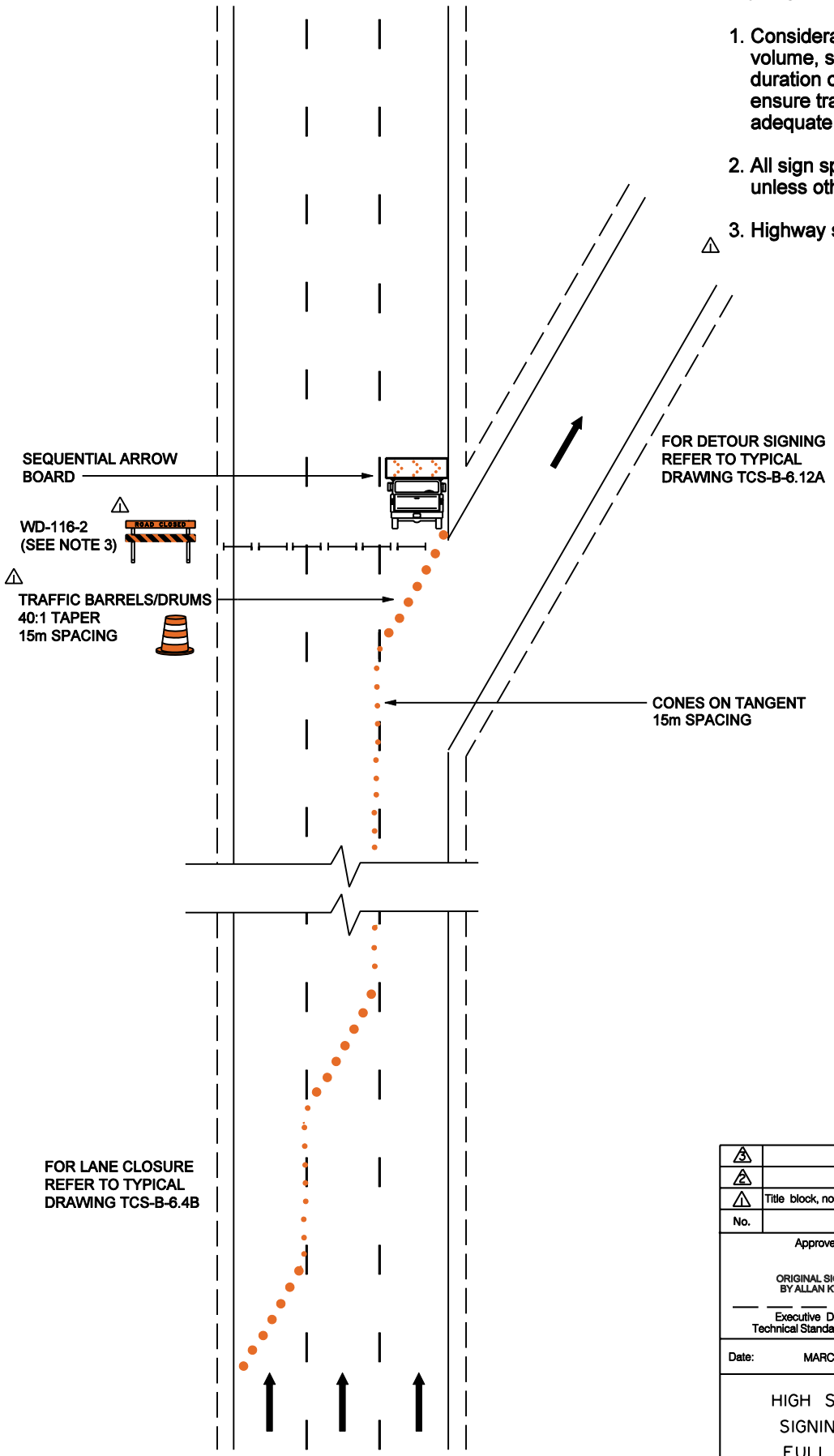


- NOTES:**
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
 2. All sign spacing shall be 100m-150m unless otherwise indicated.
 3. WD-154 signs are not required for short duration work.

△			
△			
△	Title block and note updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS △ 3 LANE CLOSURE TO OFF-RAMP			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.10B

NOTES:

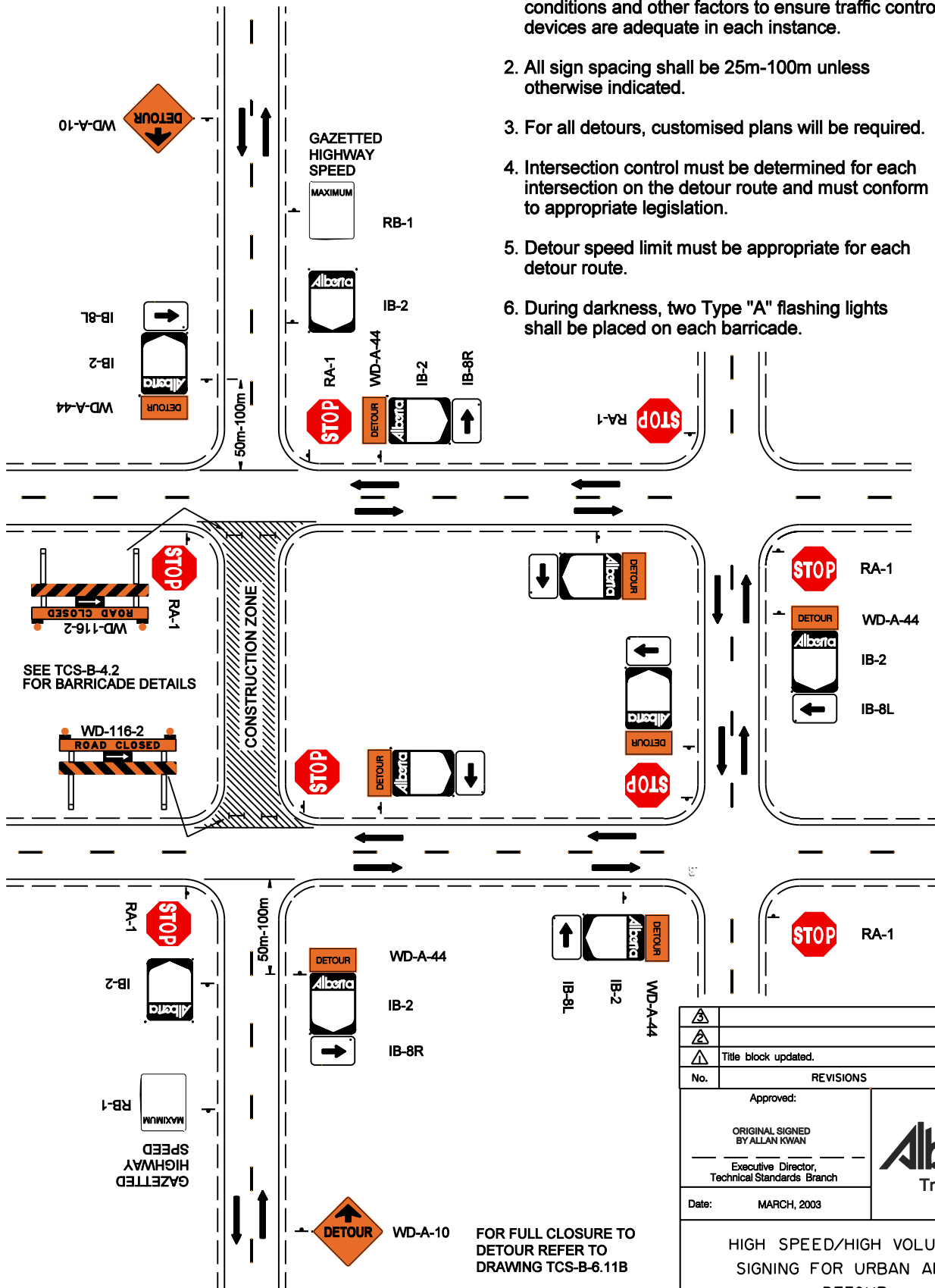
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.
3. Highway shall be completely barricaded.



△			
△			
△	Title block, notes updated and flashers eliminated	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS △ FULL CLOSURE TO DETOUR			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.IIB

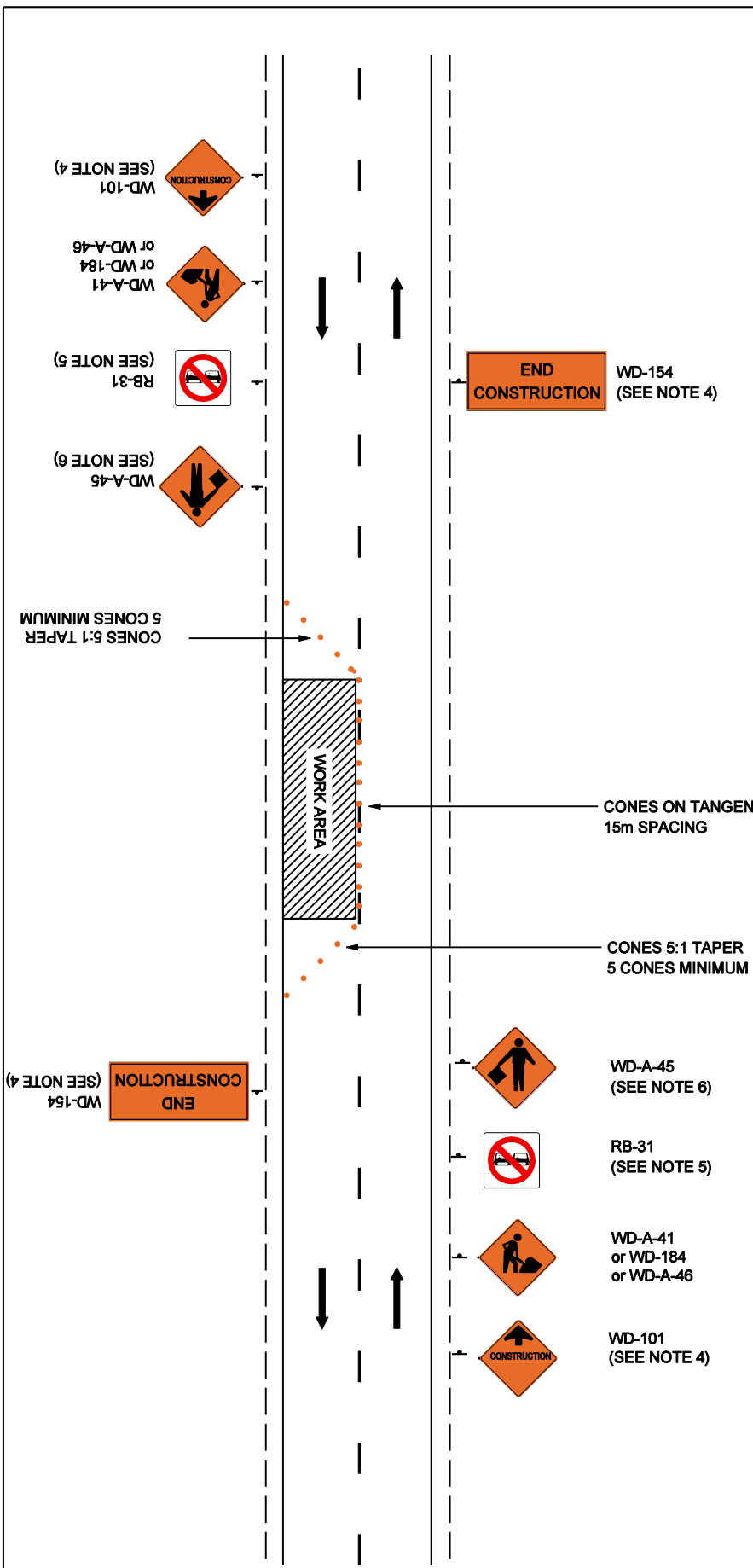
NOTES:

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 25m-100m unless otherwise indicated.
3. For all detours, customised plans will be required.
4. Intersection control must be determined for each intersection on the detour route and must conform to appropriate legislation.
5. Detour speed limit must be appropriate for each detour route.
6. During darkness, two Type "A" flashing lights shall be placed on each barricade.



FOR FULL CLOSURE TO
DETOUR REFER TO
DRAWING TCS-B-6.11B

Title block updated.		JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN Executive Director, Technical Standards Branch			
Date: MARCH, 2003			
HIGH SPEED/HIGH VOLUME - SIGNING FOR URBAN AREAS DETOUR			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-6.12A

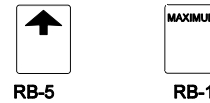


NOTES:

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 25m-100m unless otherwise indicated.
3. For mobile operation, cones may not be required.
4. WD-101 and WD-154 sign not required for short duration work.
5. RB-31 sign not required when existing solid yellow barrier line is in place.
6. WD-194 sign, together with RA-2 sign, may be used instead of WD-A-45 sign and flagperson if sight distance is adequate.



7. RB-5 and RB-1 signs will be used when a reduced speed zone is required. In this case gazetted speed to be posted after the work area.



8. Other hazard signs as shown in the schedule of signs may be used as required.



9.

WD-154 (SEE NOTE 4) END CONSTRUCTION

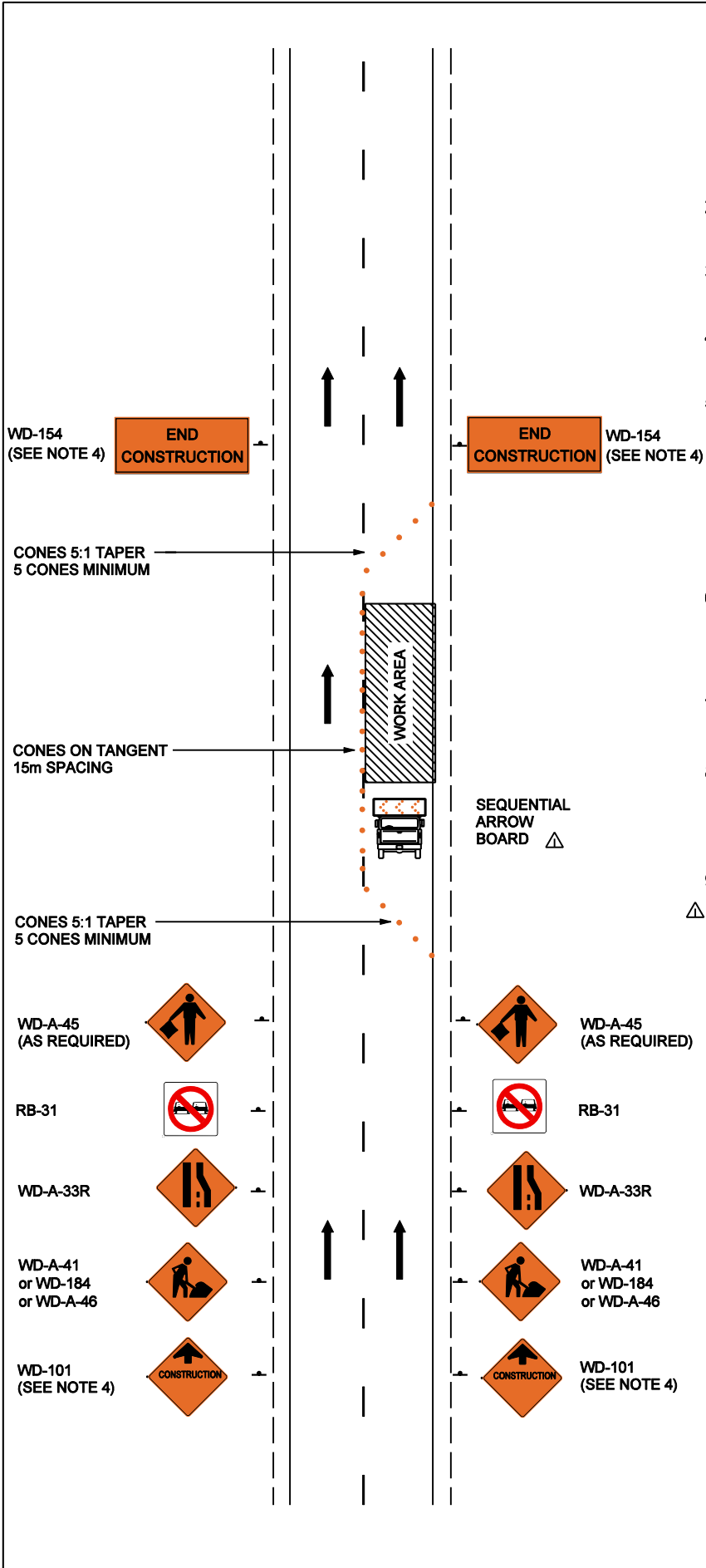
WD-A-45 (SEE NOTE 6)

RB-31 (SEE NOTE 5)

WD-A-41 or WD-184 or WD-A-46

WD-101 (SEE NOTE 4)

Title block updated.		JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:		MARCH, 2003	
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS ONE LANE CLOSURE (ONE LANE ALTERNATING TRAFFIC) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.1A



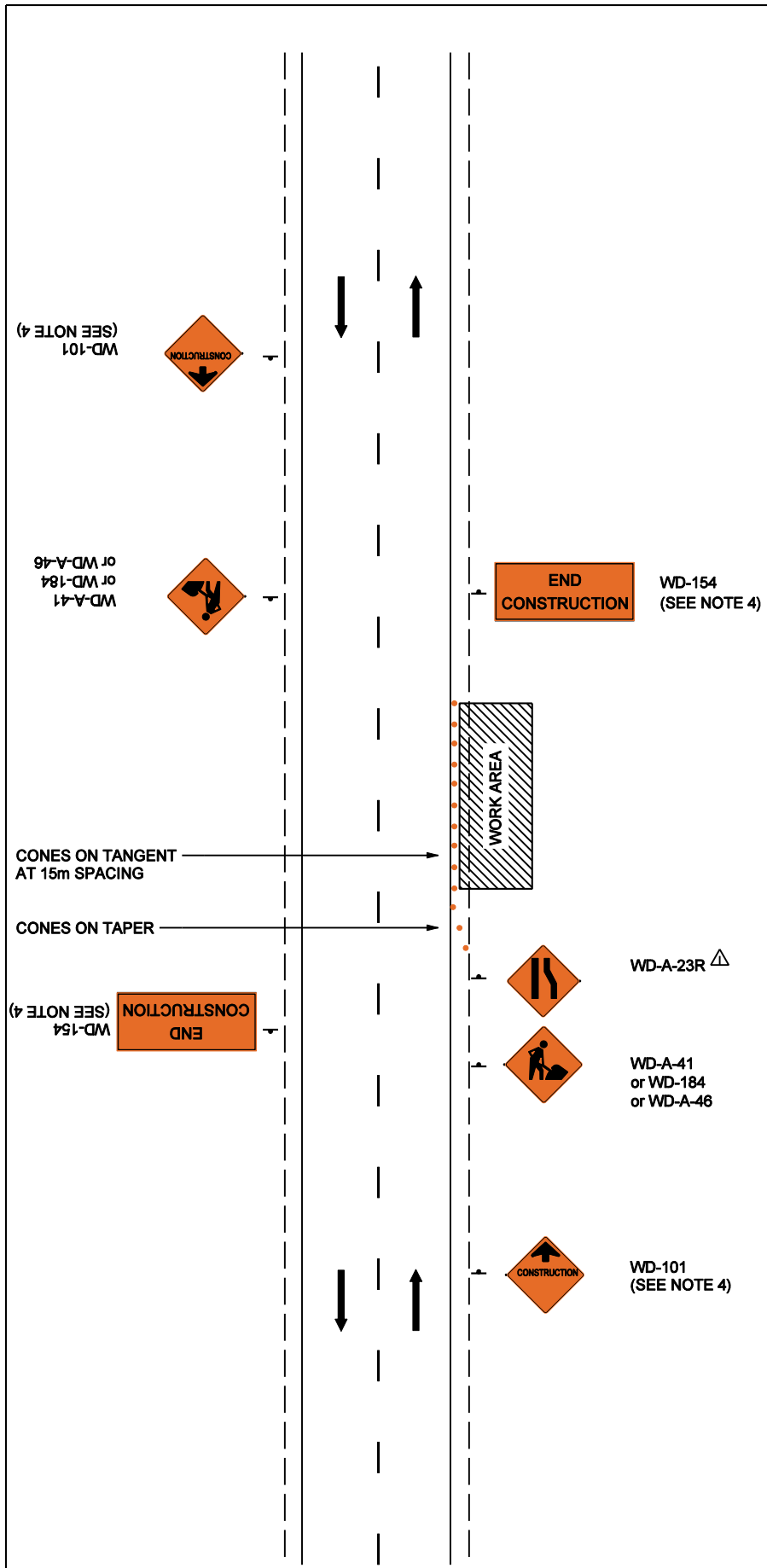
NOTES:

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 25m-100m unless otherwise indicated.
3. For mobile operation, cones may not be required.
4. WD-101 and WD-154 signs not required for short duration work.
5. RB-5 and RB-1 signs will be used when a reduced speed zone is required. In this case gazetted speed to be posted after the work area.



6. If construction operation is occurring on the opposite travel lanes, then applicable construction signing will also be required on those lanes.
7. Other hazard signs as shown in the schedule of signs may be used as required.
8.
 - WD-184
 - WD-A-46
9. The Sequential Arrow Board should be located in the centre of the closed lane.

	Title block updated, barricade removed and sequential arrow board and note added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS RIGHT LANE CLOSURE FOUR LANE DIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.2B



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 25m-100m unless otherwise indicated.
3. For mobile operation, cones may not be required.
4. WD-101 and WD-154 signs not required for short duration work.
5. RB-5 and RB-1 signs will be used when a reduced speed zone is required. In this case gazetted speed to be posted after the work area.



RB-5



RB-1

6. Other hazard signs as shown in the schedule of signs may be used as required.

7.



WD-184



WD-A-46

	Title block updated and sign added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved:

ORIGINAL SIGNED
BY ALLAN KWAN

Executive Director,
Technical Standards Branch

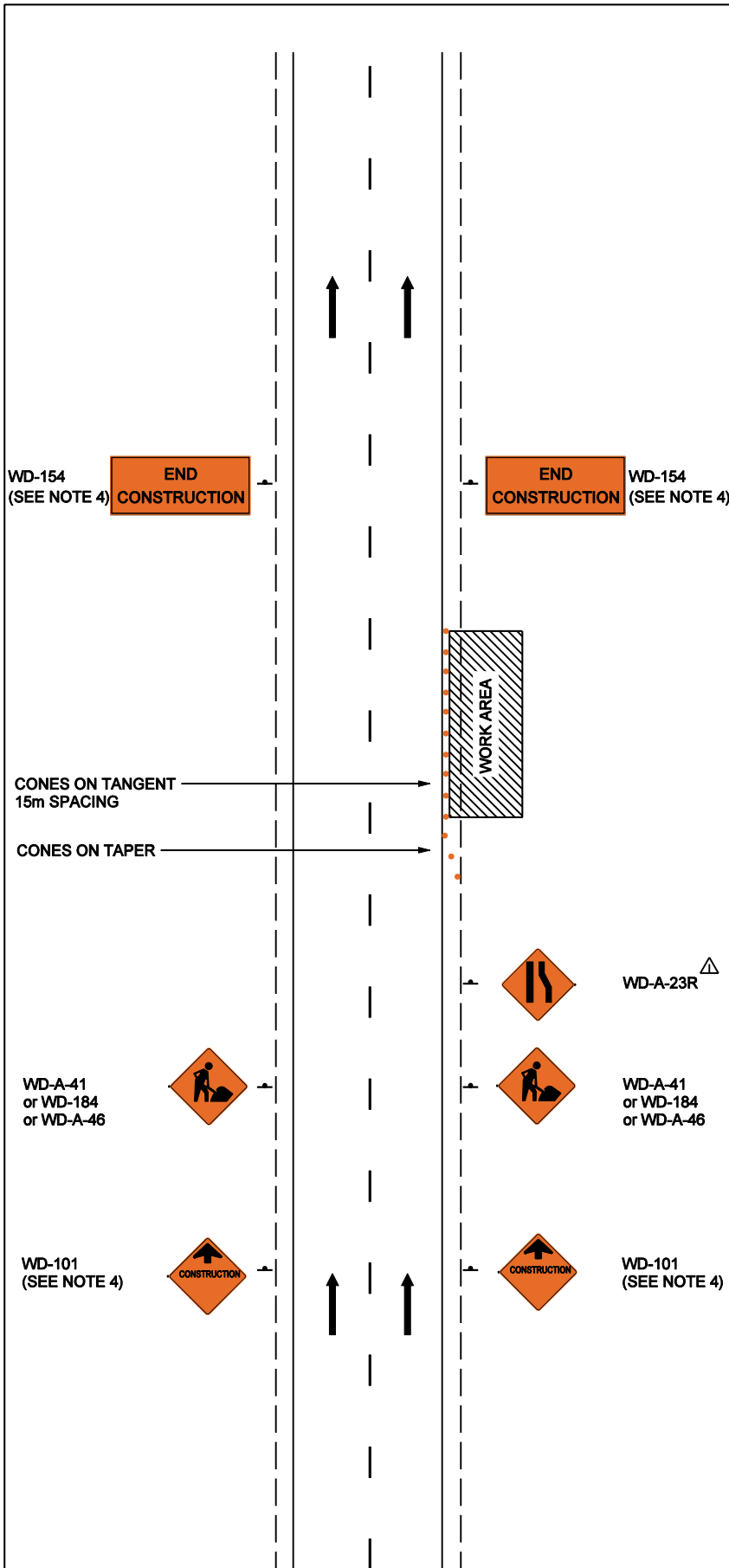
Date: MARCH, 2003

LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS

WORK ON SHOULDER

TWO LANE UNDIVIDED HIGHWAY

Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.3A
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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 25m-100m unless otherwise indicated.
3. For mobile operation, cones may not be required.
4. WD-101 and WD-154 signs not required for short duration work.
5. RB-5 and RB-1 signs will be used when a reduced speed zone is required. In this case gazetted speed to be posted after the work area.



6. If construction operation is occurring on the opposite travel lane, then applicable construction signing will also be required on those lanes.
7. Other hazard signs as shown in the schedule of signs may be used as required.

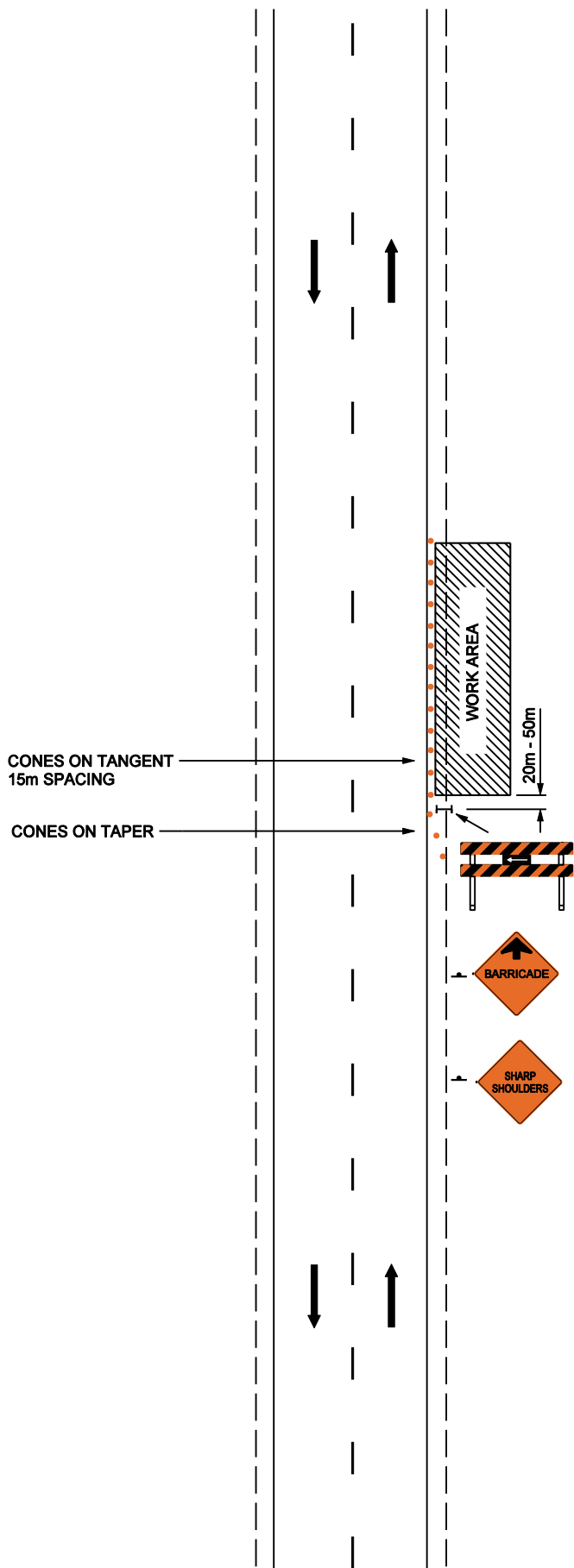
8.



△			
△	Title block, notes updated and sign added	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS △ WORK ON SHOULDER FOUR LANE DIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.3B

NOTES:

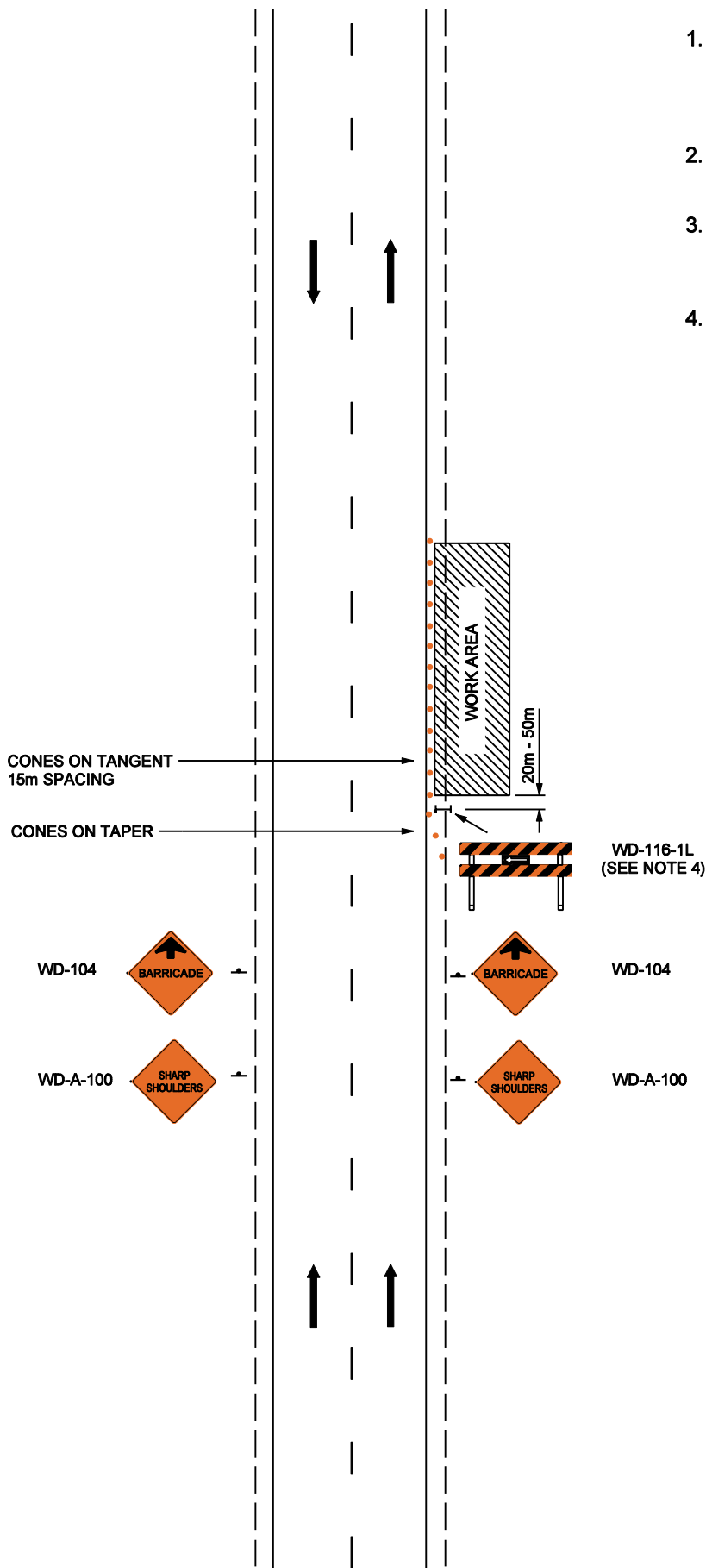
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 25m-100m unless otherwise indicated.
3. Delineators/Cones shall be placed at 15m spacing. If the drop-off has a slope flatter than 3:1, cones are not required.
- △ 4. Light-duty barricades, WD-116-4L may be used instead of WD-116-1L and WD-116-4R may be used instead of WD-116-1R, when space is limited or where curbs/gutters are present.



△			
△			
△	Title block updated, note added and flasher eliminated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS △ SHOULDER DROP-OFF (WITHIN WORK ZONE) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.4A

NOTES:

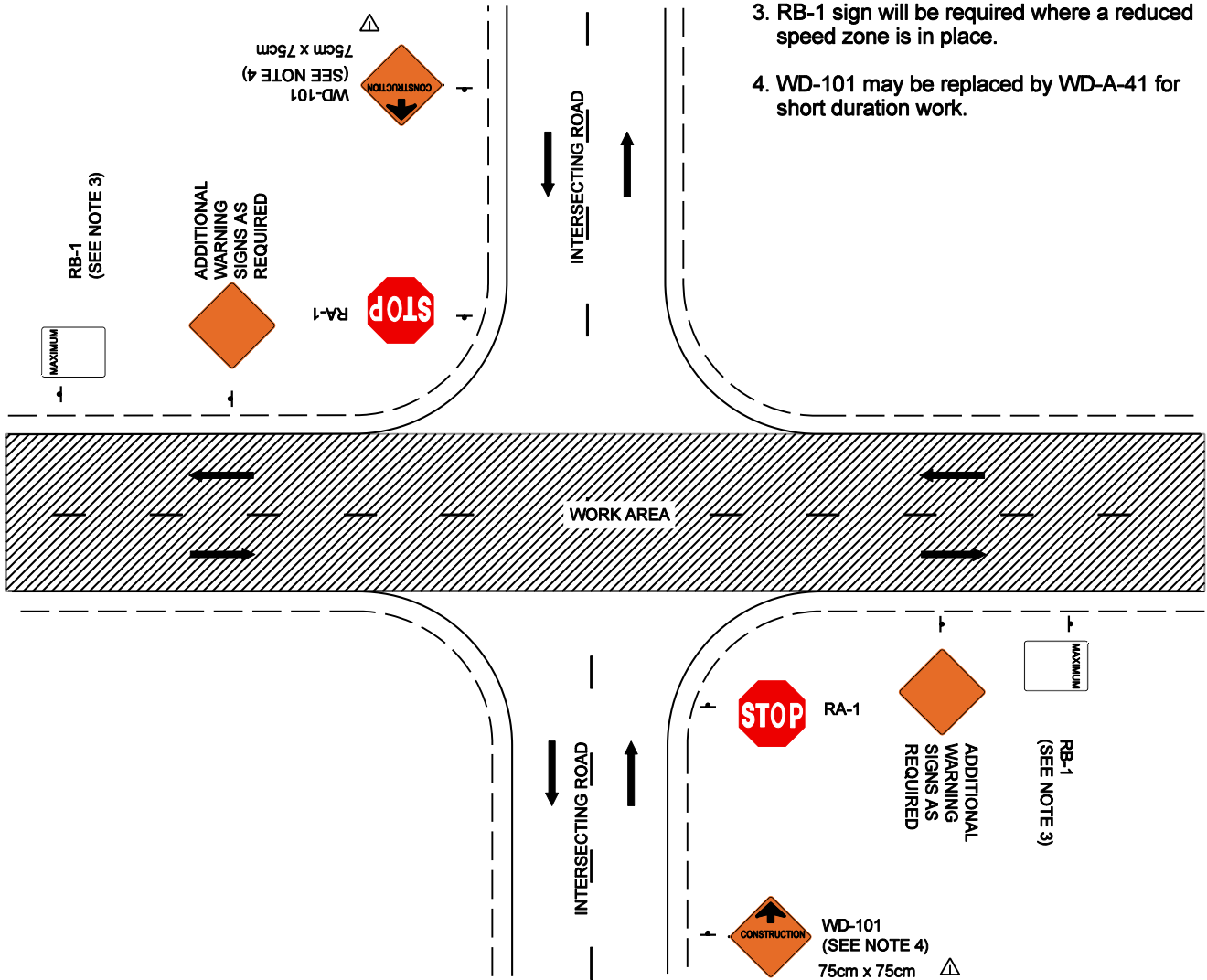
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 25m-100m unless otherwise indicated.
3. Delineators/Cones shall be placed at 15m spacing. If the drop-off has a slope flatter than 3:1, cones are not required.
4. Light-duty barricades, WD-116-4L may be used instead of WD-116-1L and WD-116-4R may be used instead of WD-116-1R, when space is limited or where curbs/gutters are present.



No.	REVISIONS	BY	DATE
Approved: Original signed by Allan Kwan Executive Director, Technical Standards Branch			
Date: OCTOBER, 2008			
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS SHOULDER DROP-OFF (WITHIN WORK ZONE) FOUR LANE DIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.4B

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 25m-100m unless otherwise indicated.
3. RB-1 sign will be required where a reduced speed zone is in place.
4. WD-101 may be replaced by WD-A-41 for short duration work.



△			
△	Title block updated and notes updated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved:

ORIGINAL SIGNED
BY ALLAN KWAN

Executive Director,
Technical Standards Branch

Date: MARCH, 2003

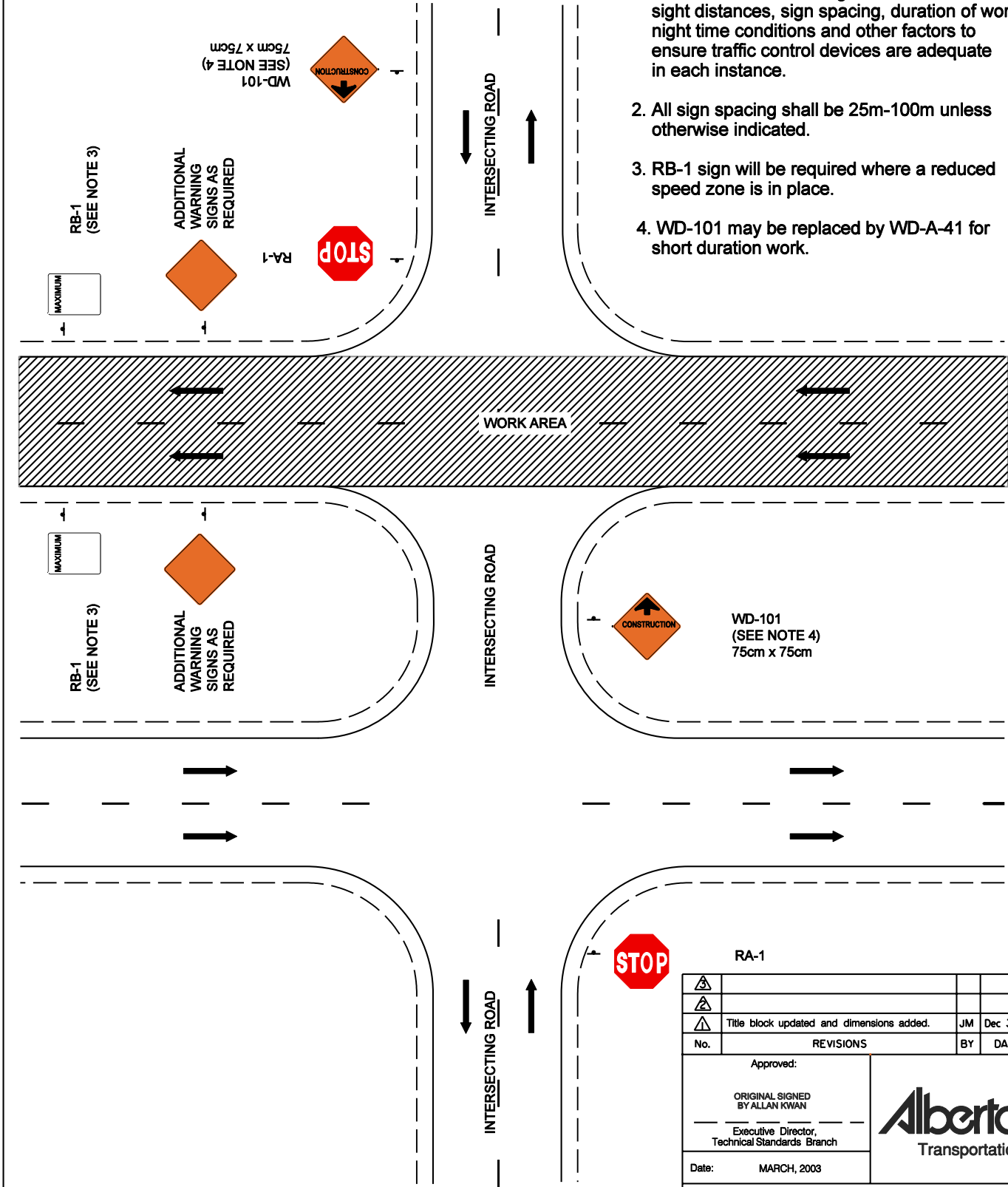
Alberta
Transportation

LOW SPEED/LOW VOLUME -
SIGNING FOR URBAN AREAS △
INTERSECTING ROADS
TWO LANE UNDIVIDED HIGHWAY

Prepared By: M.E.T. Checked By: J.M. Scale: N.T.S. Dwg No.: TCS-B-7.5A

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 25m-100m unless otherwise indicated.
3. RB-1 sign will be required where a reduced speed zone is in place.
4. WD-101 may be replaced by WD-A-41 for short duration work.



△			
△			
△	Title block updated and dimensions added.	JM	Dec 31/07
No.	REVISIONS	BY	DATE

Approved: _____

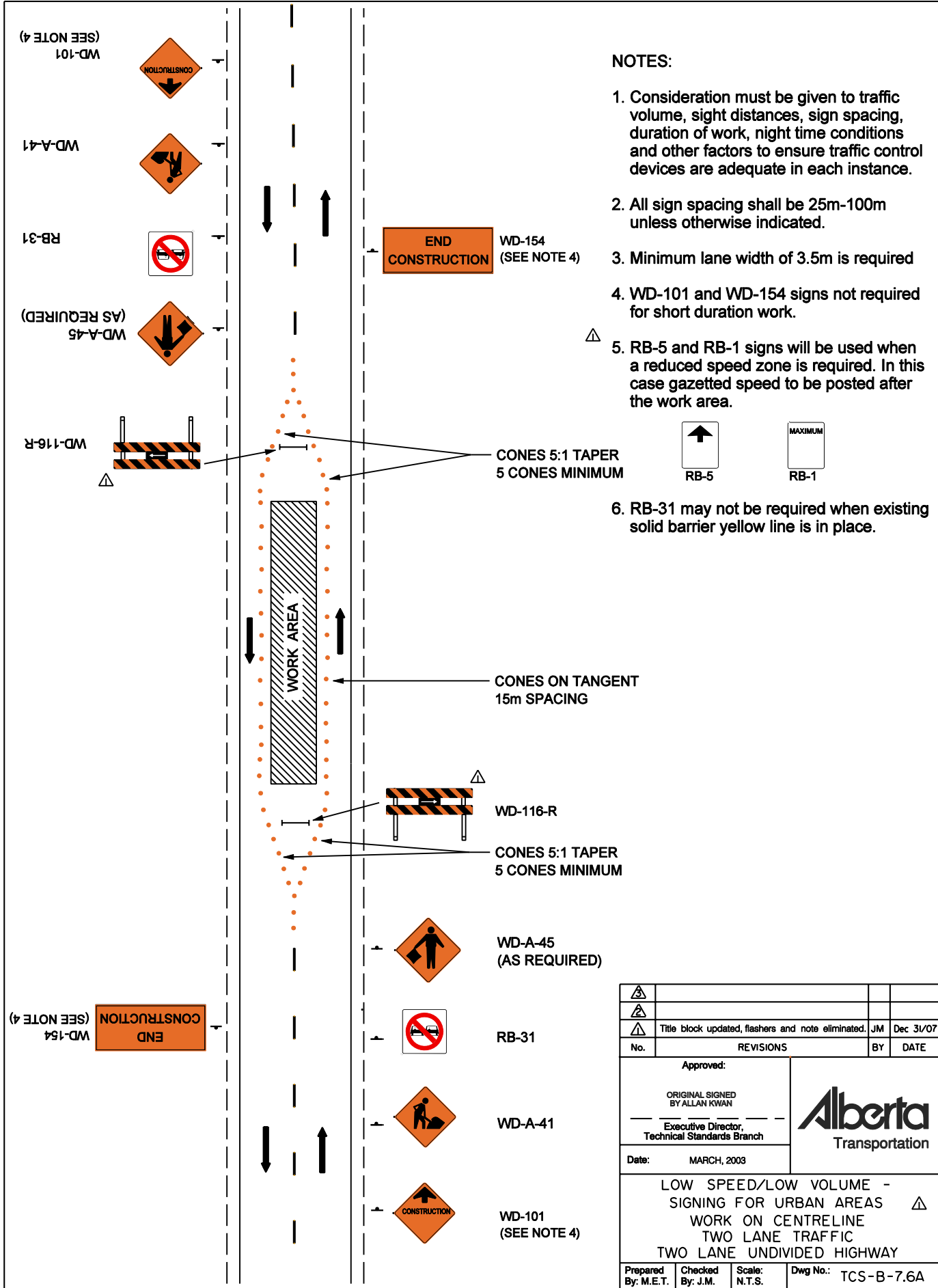
ORIGINAL SIGNED BY ALLAN KWAN

Executive Director,
Technical Standards Branch

Date: MARCH, 2003


LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS △
INTERSECTING ROADS
FOUR LANE DIVIDED HIGHWAY


Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.5B
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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 25m-100m unless otherwise indicated.
3. Minimum lane width of 3.5m is required
4. WD-101 and WD-154 signs not required for short duration work.
5. RB-5 and RB-1 signs will be used when a reduced speed zone is required. In this case gazetted speed to be posted after the work area.

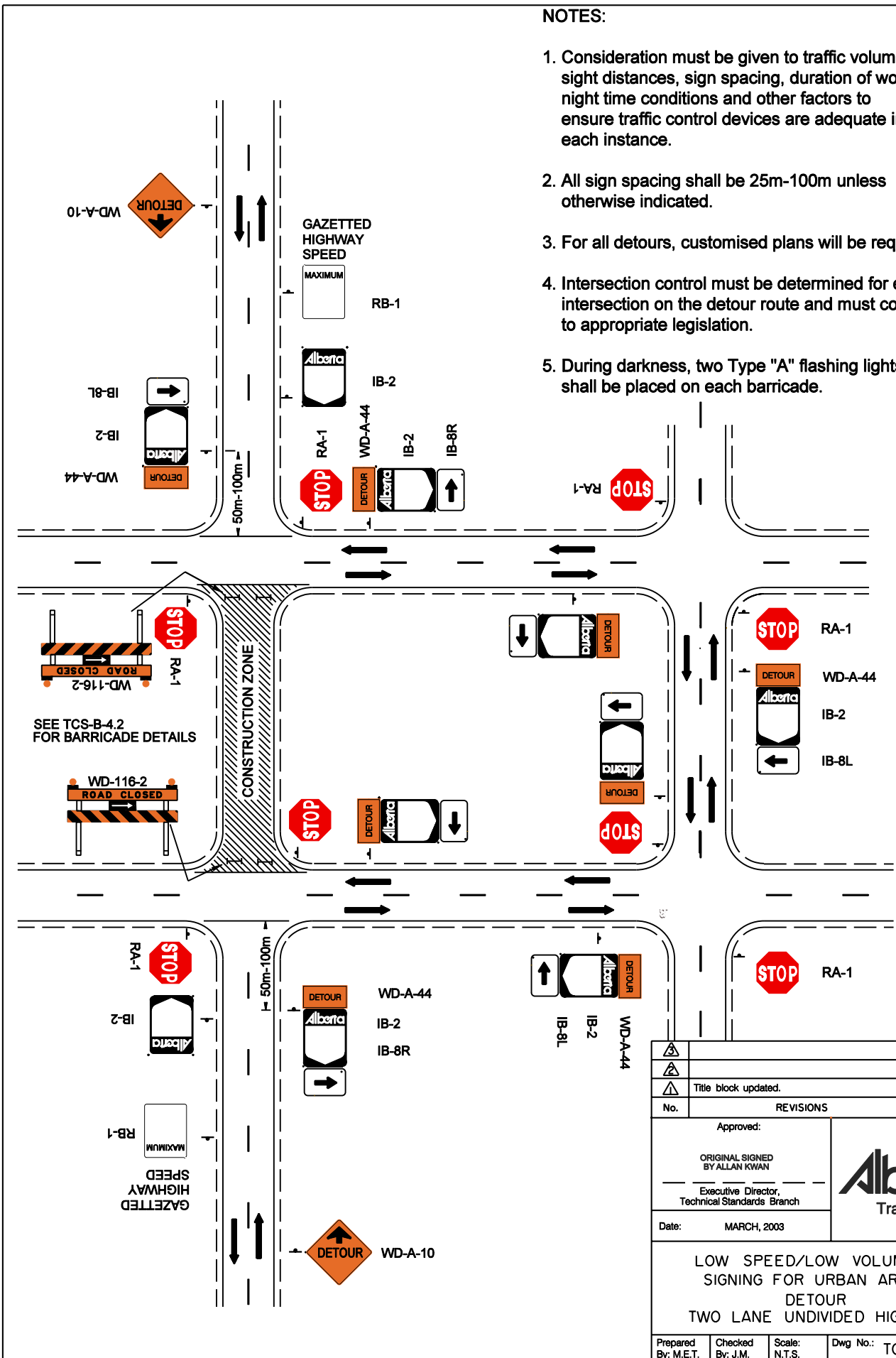

 RB-5


 RB-1
6. RB-31 may not be required when existing solid barrier yellow line is in place.

△			
△			
△	Title block updated, flashers and note eliminated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS △ WORK ON CENTRELINE TWO LANE TRAFFIC TWO LANE UNDIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.6A

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 25m-100m unless otherwise indicated.
3. For all detours, customised plans will be required.
4. Intersection control must be determined for each intersection on the detour route and must conform to appropriate legislation.
5. During darkness, two Type "A" flashing lights shall be placed on each barricade.



No.	REVISIONS	BY	DATE
	Title block updated.	JM	Dec 31/07

Approved:
 ORIGINAL SIGNED BY ALLAN KWAN
 Executive Director,
 Technical Standards Branch
 Date: MARCH, 2003

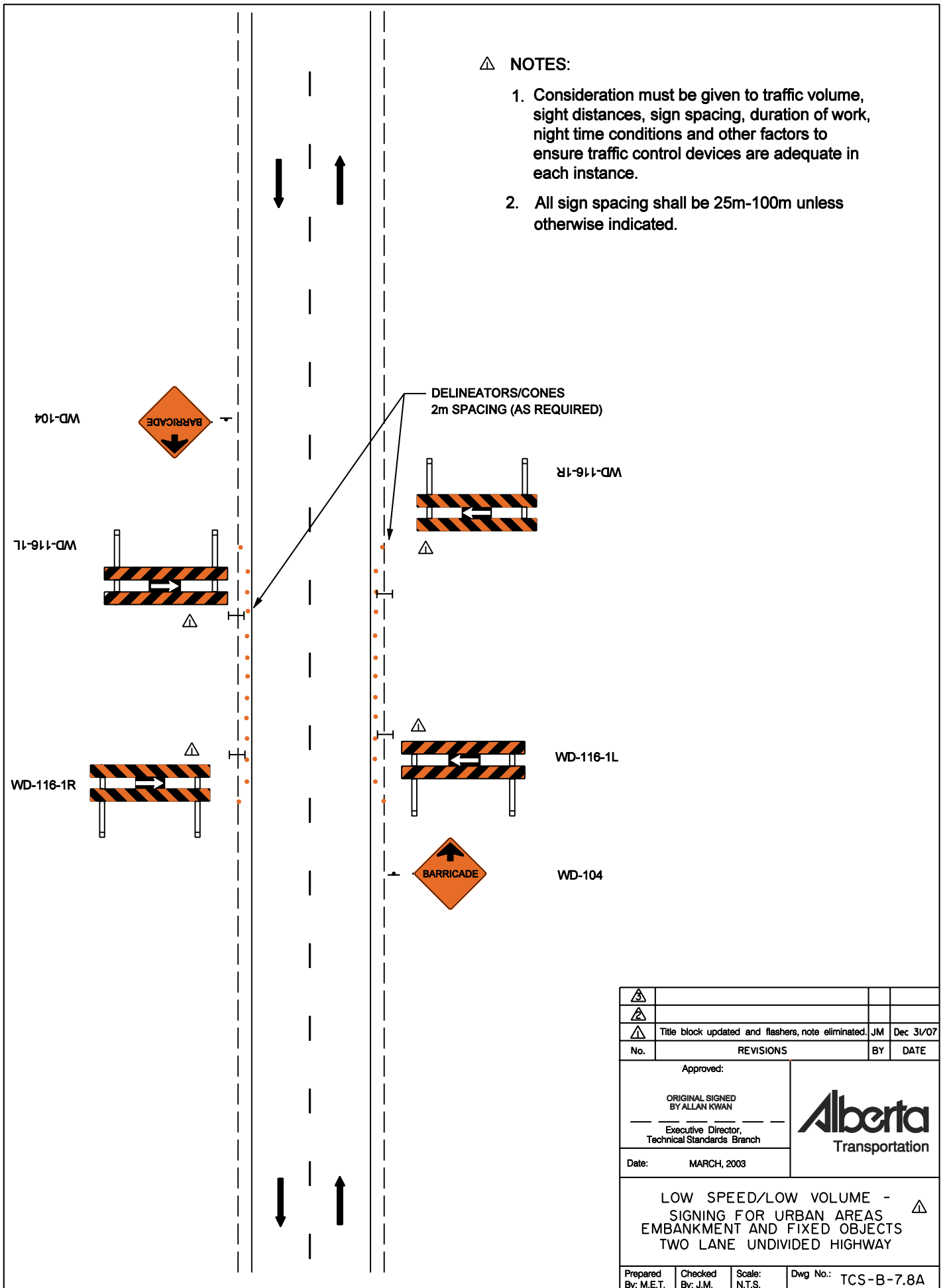


LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS
 DETOUR
 TWO LANE UNDIVIDED HIGHWAY

Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.7A
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△ NOTES:

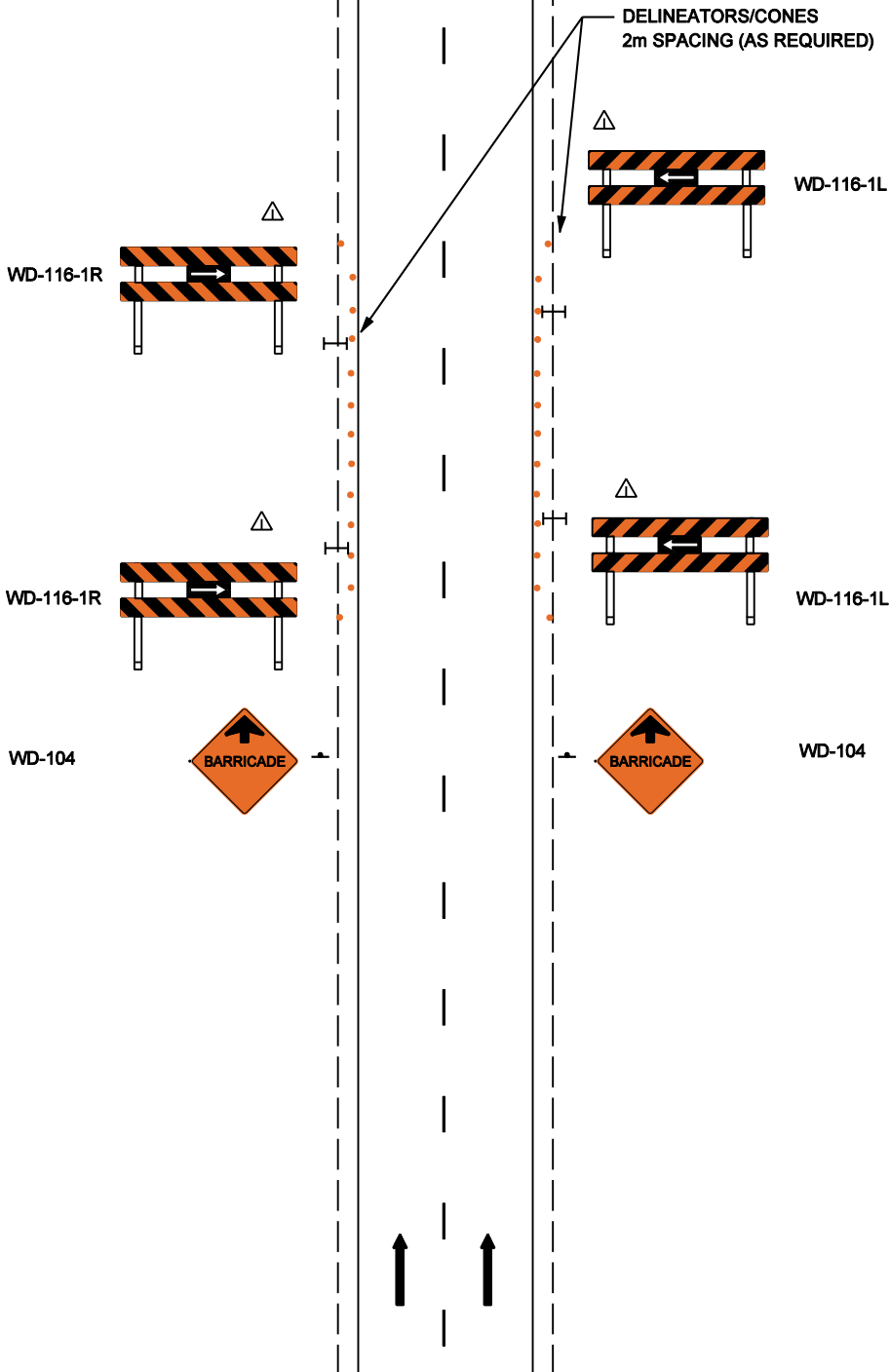
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 25m-100m unless otherwise indicated.



△			
△			
△	Title block updated and flashers, note eliminated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS EMBANKMENT AND FIXED OBJECTS TWO LANE UNDIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.8A

△ 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 25m-100m unless otherwise indicated.



△			
△			
△	Title block updated and flashers, note eliminated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS △ EMBANKMENT AND FIXED OBJECTS FOUR LANE DIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.8B

NOTE: DETAILS OF WARNING/REGULATORY SIGNS SAME AS THOSE ON OTHER SIDE OF HIGHWAY

PAINTED STOP LINE
10m
2m
TRAFFIC LIGHTS
TEMPORARY LANE MARKINGS

END CONSTRUCTION WD-154

CONES 5:1 TAPER
5 CONES MINIMUM

WD-116-1R
MINIMUM 4 BARRICADES

MINIMUM 1.07m HIGH DELINEATORS WITH RUBBERIZED HEAVY DUTY BASE AT 2.0m SPACING WILL BE PERMITTED ALONG THE EDGE OF THE WORK AREA WHEN THE DIFFERENCE IN ELEVATION BETWEEN THE ROADWAY SURFACE AND THE ADJACENT BRIDGE DECK IS LESS THAN 300mm (See Note 9).

WD-116-1L
MINIMUM 4 BARRICADES

CONES 5:1 TAPER
5 CONES MINIMUM

TEMPORARY LANE MARKINGS
PAINTED STOP LINE
TRAFFIC LIGHTS

WD-154
END CONSTRUCTION

WD-A-45
(AS REQUIRED)

BARRICADE WD-104

WD-B-4

RB-31
(SEE NOTE 7)

ONE LANE TRAFFIC WD-106

WD-A-41

WD-A-24

WD-B-4T

BRIDGE CONSTRUCTION WD-101B

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. When switching traffic during staged construction, a specialized traffic accommodation plan is required.
3. All sign spacing shall be 25m-100m unless otherwise indicated
4. Traffic lights shall be 300mm diameter.
5. A minimum lane width of 3.5m is required.
6. RB-31 sign not required when existing solid yellow barrier line is in place.
7. RB-5 and RB-1 signs will be used when a reduced speed zone is required. In this case gazetted speed to be posted after the work area.

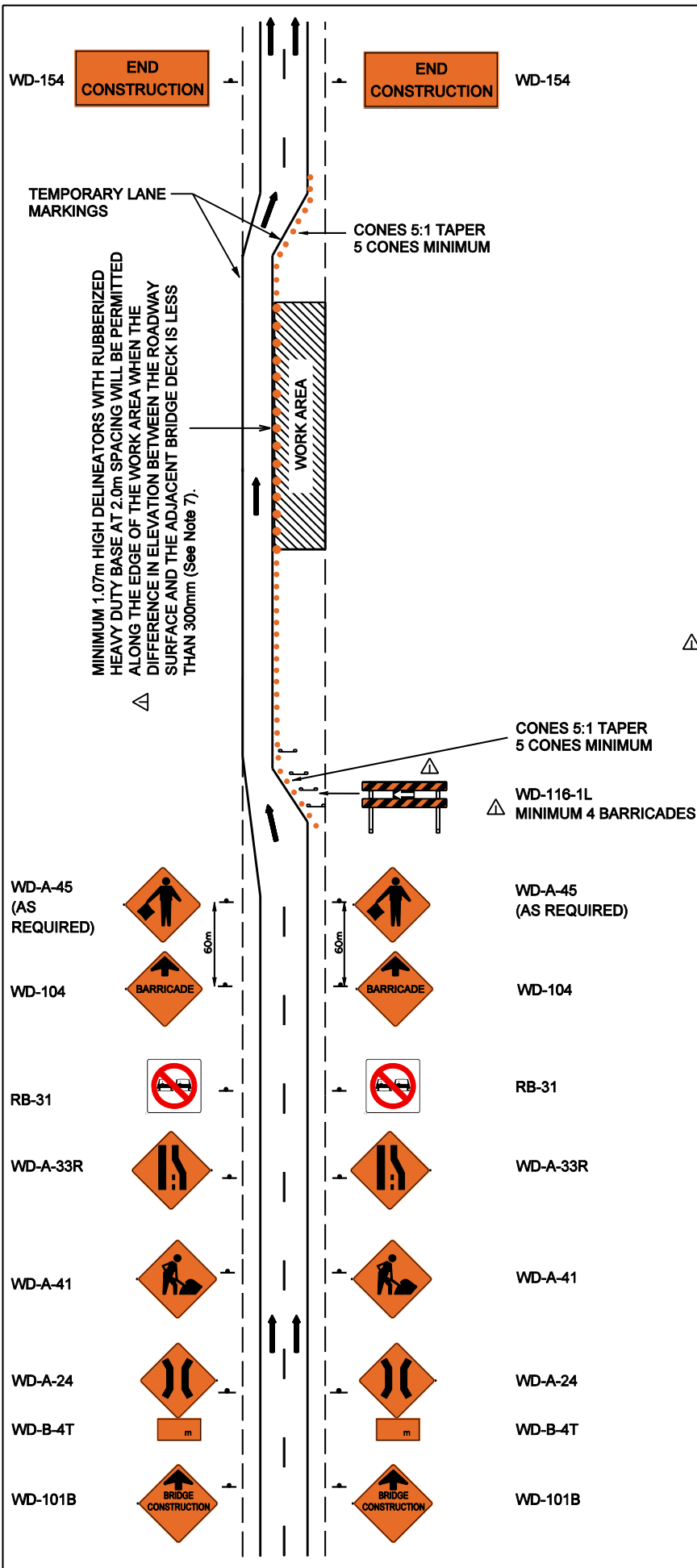


8. WD-194 sign, together with RA-2 sign, may be used instead of WD-A-45/traffic light if sight distance is adequate.



9. If the drop off is greater than 300mm use drawing TCS-B-1.27A (Long Duration).

△			
△	Title block and notes updated, note added and fasher eliminated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS △ TYPICAL EXCAVATION SIGNING FOR URBAN AREAS (ONE LANE ALTERNATING TRAFFIC) TWO LANE UNDIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.9A



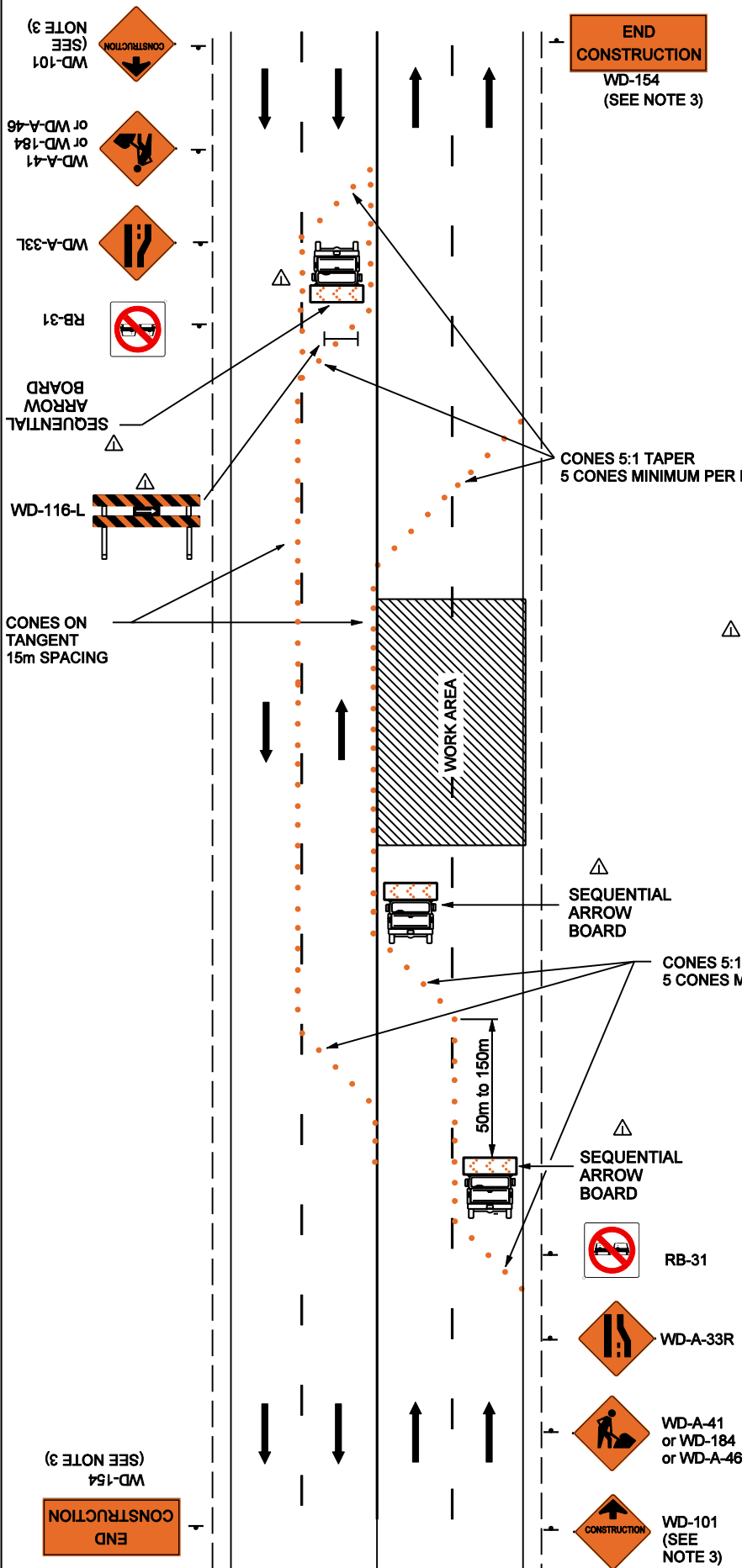
NOTES:

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. When switching traffic during staged construction, a specialized traffic accommodation plan is required.
3. All sign spacing shall be 25m - 100m unless otherwise indicated.
4. A minimum lane width of 3.5m is required.
5. Conflicting lane markings shall be removed.
6. RB-5 and RB-1 signs will be used when a reduced speed zone is required. In this case gazetted speed to be posted after the work area.



7. If the drop off is greater that 300mm use drawing TCS-B-1.21B (Long Duration)

△			
△			
△	Title block and notes updated, note added and flasher eliminated.	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN			
Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS △ TYPICAL EXCAVATION SIGNING FOR URBAN AREAS ONE-LANE CLOSURE FOUR LANE DIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.9B



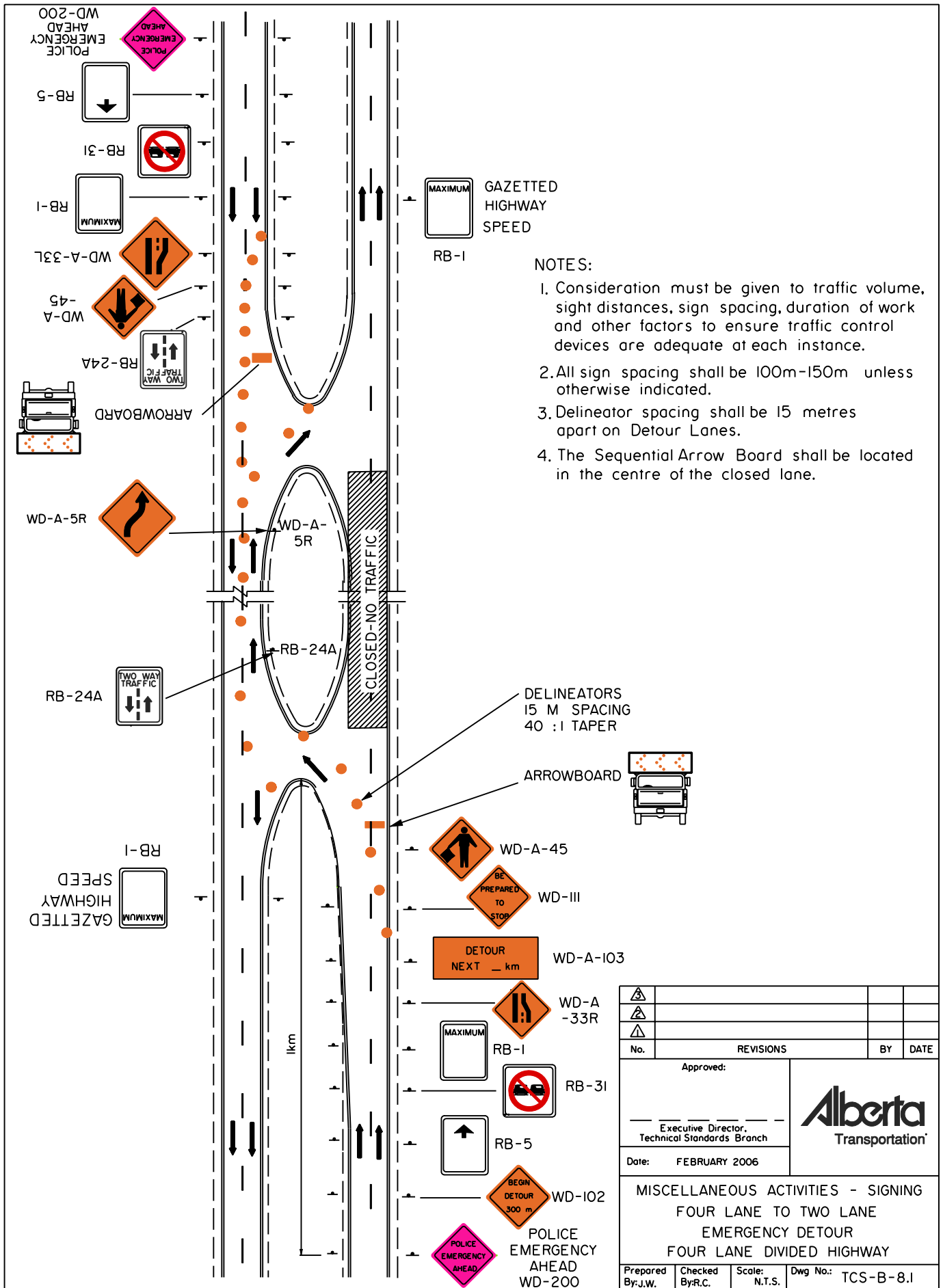
NOTES:

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 25m-100m unless otherwise indicated.
3. WD-101 and WD-154 sign not required for short duration work.
4. RB-5 and RB-1 signs will be used where a reduced speed zone is required. In this case gazetted speed to be posted after the work area.
5. Other hazard signs as shown in the schedule of signs may be used as required.
6. The Sequential arrow board shall be located in the centre of the closed lane.



7.
 - WD-184
 - WD-A-46

	Title block and notes updated, flashers and barriers eliminated, Sequential arrow board and cones added	JM	Dec 31/07
No.	REVISIONS	BY	DATE
Approved:			
ORIGINAL SIGNED BY ALLAN KWAN Executive Director, Technical Standards Branch			
Date:	MARCH, 2003		
LOW SPEED/LOW VOLUME - SIGNING FOR URBAN AREAS TWO-LANE CLOSURE WITH 2-WAY TRAFFIC FOUR LANE UNDIVIDED HIGHWAY			
Prepared By: M.E.T.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-7.10B

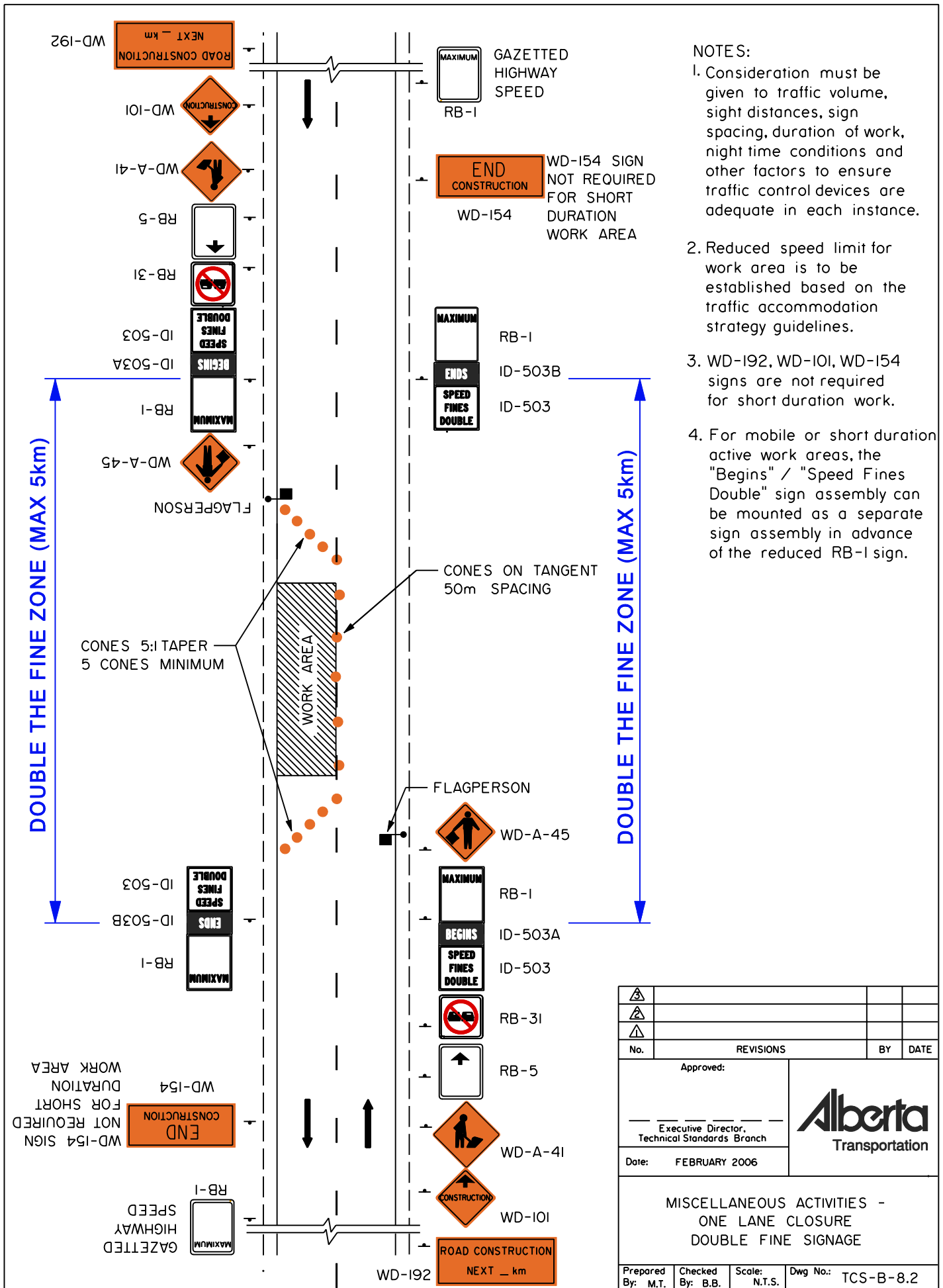


NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate at each instance.
2. All sign spacing shall be 100m-150m unless otherwise indicated.
3. Delineator spacing shall be 15 metres apart on Detour Lanes.
4. The Sequential Arrow Board shall be located in the centre of the closed lane.

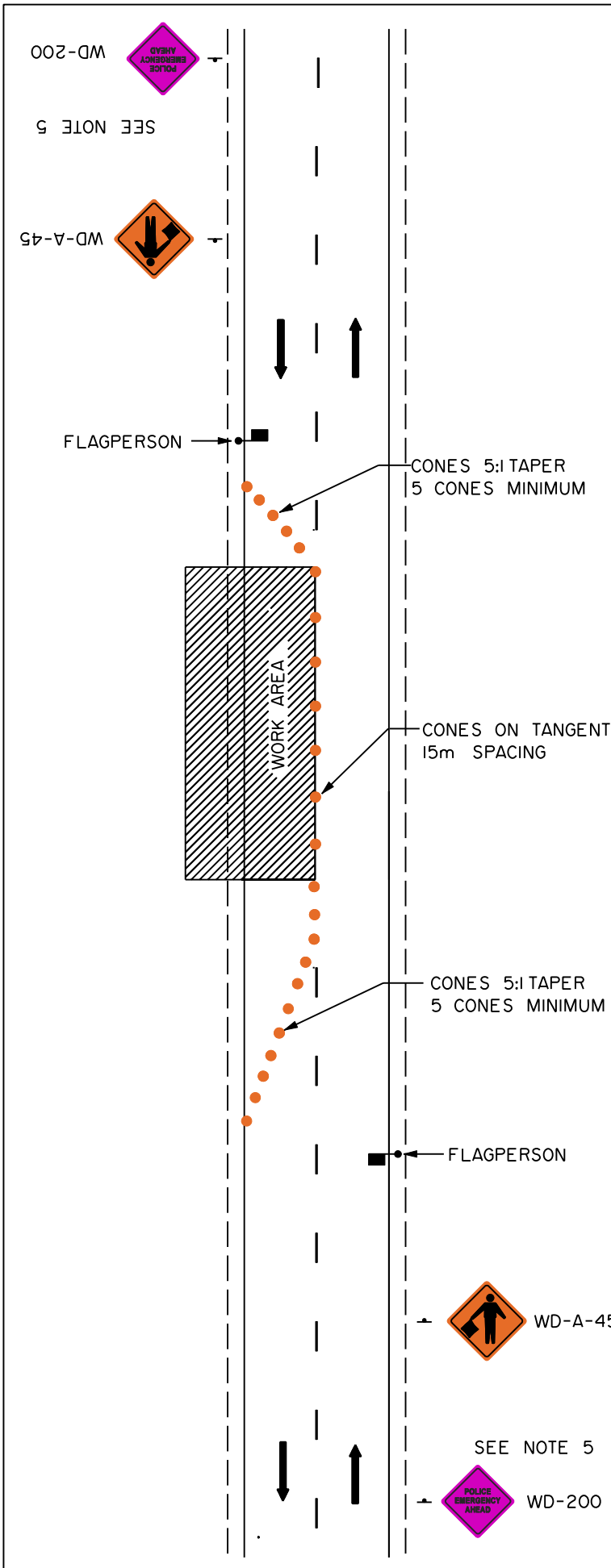
No.	REVISIONS	BY	DATE

Approved:			
Executive Director, Technical Standards Branch			
Date: FEBRUARY 2006			
MISCELLANEOUS ACTIVITIES - SIGNING FOUR LANE TO TWO LANE EMERGENCY DETOUR FOUR LANE DIVIDED HIGHWAY			
Prepared By: J.W.	Checked By: R.C.	Scale: N.T.S.	Dwg No.: TCS-B-8.1



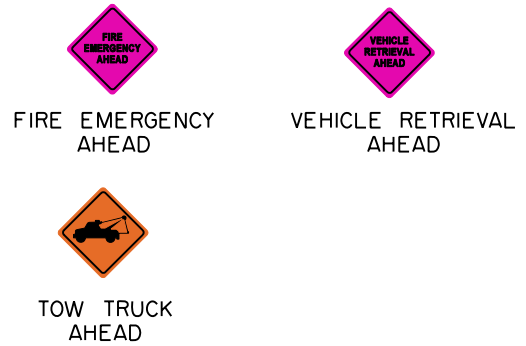
- NOTES:
1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work, night time conditions and other factors to ensure traffic control devices are adequate in each instance.
 2. Reduced speed limit for work area is to be established based on the traffic accommodation strategy guidelines.
 3. WD-192, WD-101, WD-154 signs are not required for short duration work.
 4. For mobile or short duration active work areas, the "Begins" / "Speed Fines Double" sign assembly can be mounted as a separate sign assembly in advance of the reduced RB-1 sign.





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No.	REVISIONS	BY	DATE
Approved:			
Executive Director, Technical Standards Branch			
Date:	FEBRUARY 2006		
MISCELLANEOUS ACTIVITIES - ONE LANE CLOSURE DOUBLE FINE SIGNAGE			
Prepared By: M.T.	Checked By: B.B.	Scale: N.T.S.	Dwg No.: TCS-B-8.2

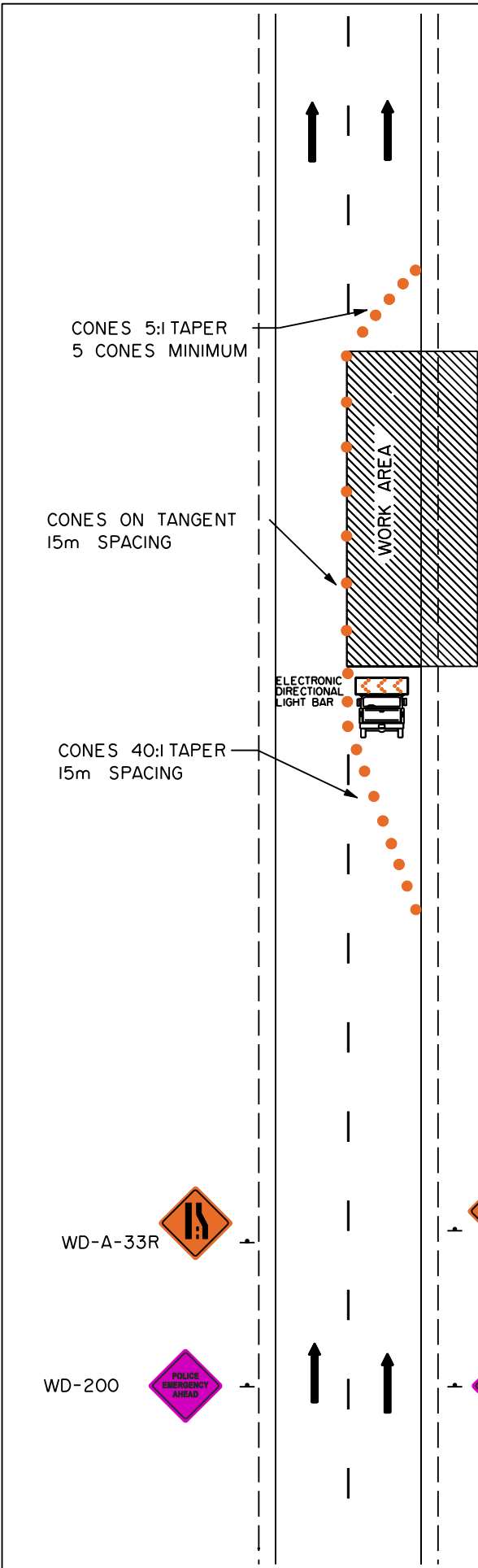


NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless there are sight restrictions.
3. For very short assistance, tire replacement, delivery of fuel, etc. signs may not be required if the vehicle does not encroach the driving lane.
4. If the vehicle is parked on the shoulder, not impeding the traffic lane, traffic cones should be placed around the vehicle.
5. For load transfer or retrieval, short duration Drawing No. TCS-B-2.1A must be used.
6. If there is no lane closure, the signage as shown on this drawing will not apply. Other hazard signs may be used as required.
7. Examples of other Warning signs that may be used:

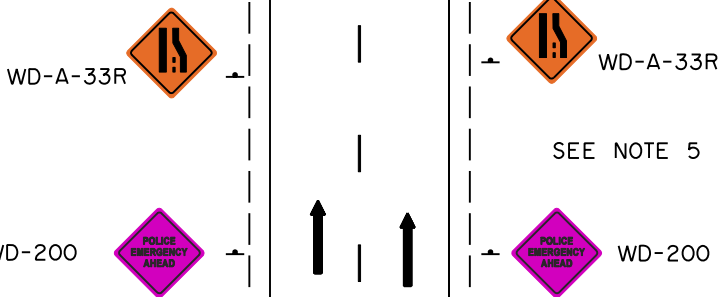
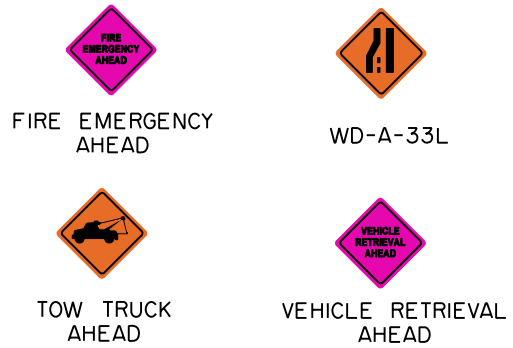


			
			
			
No.	REVISIONS	BY	DATE
Approved: Original signed by Allan Kwan Executive Director, Technical Standards Branch			
Date: OCTOBER, 2008			
EMERGENCY AGENCY RESPONSE ONE LANE CLOSURE TWO LANE UNDIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-8.3A



NOTES:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be 100m-150m unless there are sight restrictions.
3. For very short assistance, tire replacement, delivery of fuel, etc. signs may not be required if the vehicle does not encroach the driving lane.
4. If the vehicle is parked on the shoulder, not impeding the traffic lane, traffic cones should be placed around the vehicle.
5. For load transfer or retrieval, short duration Drawing No. TCS-B-2.1B must be used.
6. If there is no lane closure, the signage as shown on this drawing will not apply. Other hazard signs may be used as required.
7. Examples of other Warning signs that may be used:



SEE NOTE 5

No.	REVISIONS	BY	DATE
Approved: Original signed by Allan Kwan Executive Director, Technical Standards Branch			
Date: OCTOBER, 2008			
EMERGENCY AGENCY RESPONSE ONE LANE CLOSURE FOUR LANE DIVIDED HIGHWAY			
Prepared By: G.E.C.	Checked By: J.M.	Scale: N.T.S.	Dwg No.: TCS-B-8.3B