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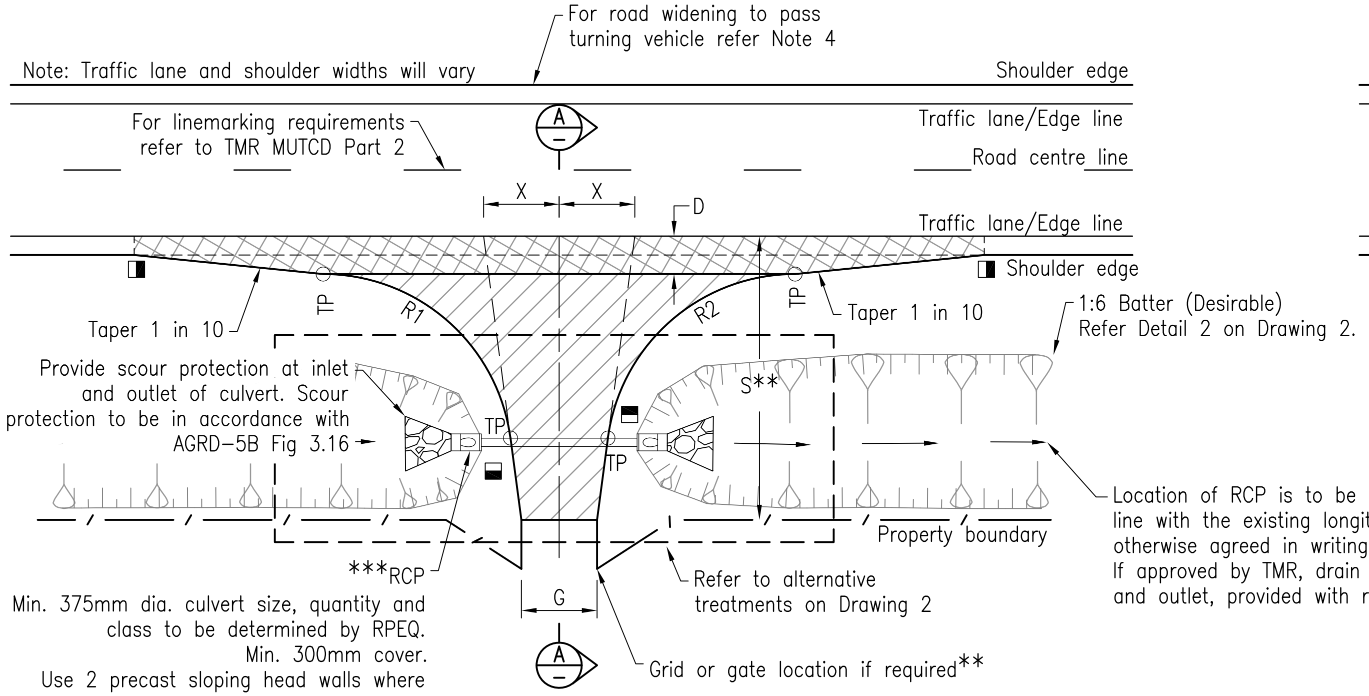
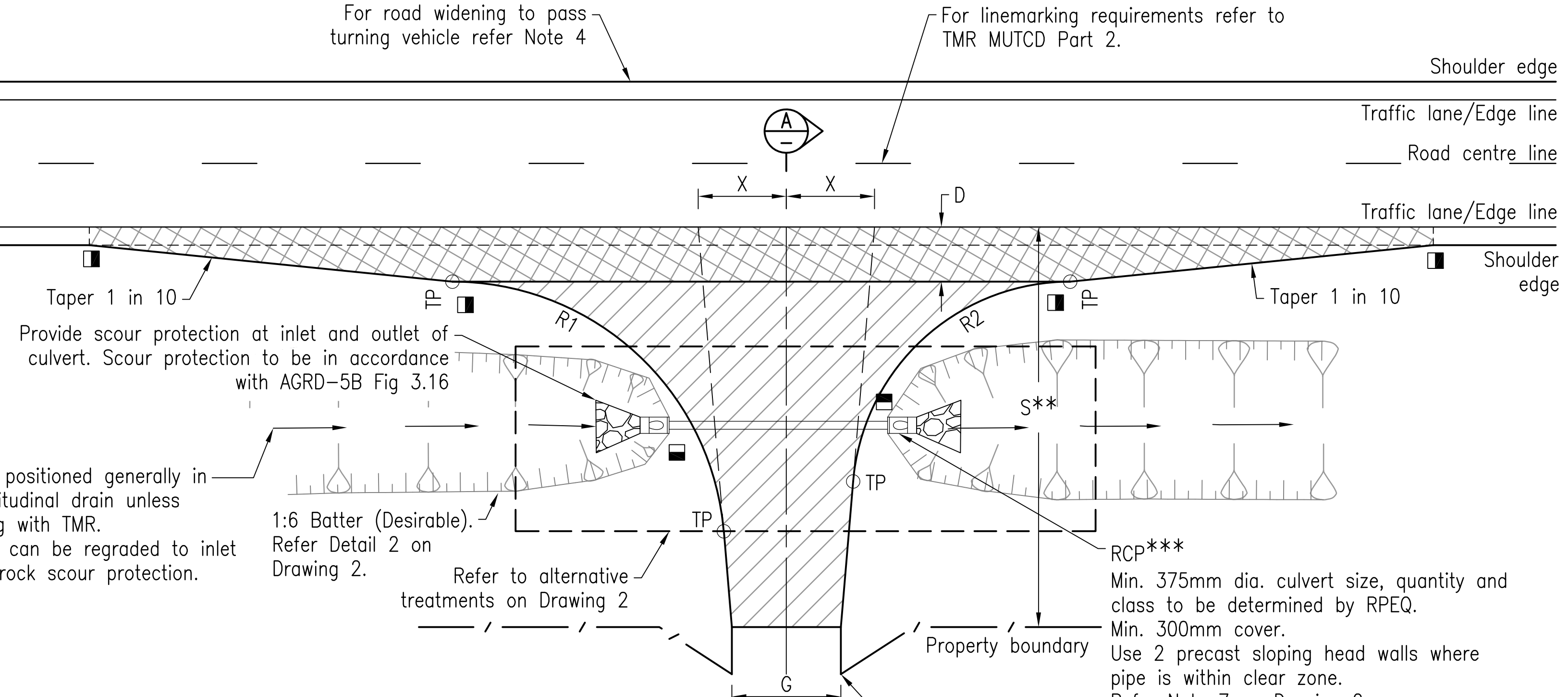

Note: Traffic lane and shoulder widths will vary
For road widening to pass turning vehicle refer Note 4
Shoulder edge
For linemarking requirements refer to TMR MUTCD Part 2
A
Traffic lane/Edge line
Road centre line
X
X
D
Traffic lane/Edge line
Shoulder edge
Taper 1 in 10
TP
R1
R2
TP
Taper 1 in 10
1:6 Batter (Desirable) Refer Detail 2 on Drawing 2.
Provide scour protection at inlet and outlet of culvert. Scour protection to be in accordance with AGRD-5B Fig 3.16
TP
TP
S**
Location of RCP is to be positioned generally in line with the existing longitudinal drain unless otherwise agreed in writing with TMR. If approved by TMR, drain can be regraded to inlet and outlet, provided with rock scour protection.
Property boundary
***RCP
Min. 375mm dia. culvert size, quantity and class to be determined by RPEQ. Min. 300mm cover. Use 2 precast sloping head walls where pipe is within clear zone. Refer Note 7 on Drawing 2.
G
Refer to alternative treatments on Drawing 2
A
Grid or gate location if required**

TYPE A and B

(Refer Table 1)


For road widening to pass turning vehicle refer Note 4
For linemarking requirements refer to TMR MUTCD Part 2.
Shoulder edge
Traffic lane/Edge line
A
Road centre line
X
X
D
Traffic lane/Edge line
Shoulder edge
Taper 1 in 10
TP
R1
R2
TP
Taper 1 in 10
Provide scour protection at inlet and outlet of culvert. Scour protection to be in accordance with AGRD-5B Fig 3.16
S**
TP
TP
1:6 Batter (Desirable). Refer Detail 2 on Drawing 2.
Refer to alternative treatments on Drawing 2
RCP***
Min. 375mm dia. culvert size, quantity and class to be determined by RPEQ. Min. 300mm cover. Use 2 precast sloping head walls where pipe is within clear zone. Refer Note 7 on Drawing 2.
Property boundary
G
A
Grid or gate location if required**

TYPE C and D

(Refer Table 1)

TABLE 1 – SETOUT DIMENSIONS

	TYPE A Residential (Car/Service Vehicle)	TYPE B Commercial (Single Unit Truck/Bus)	TYPE C Special (Articulated Vehicles)	TYPE D Special (Road Train Type 1)
R1	10m	10m	15m	20m
R2	10m	10m	12m	12m
D	2m	2m	3m	3m
X	3m	5m	4m	5m
S	12m	15m	22m	30m**
G	4–6m ∅	4–6m ∅	6m	6m

∅ 6m Minimum width for two-way two-lane access.

LEGEND

▩	Pavement Type 1 – Bitumen surfacing, 2 coat bitumen seal. Pavement depth and type to match existing or proposed through road pavement. Refer to Table 2 for minimum depths.
▨	Pavement Type 2 – Gravel, unbound pavement. Refer to Table 2 for depths. Access may be required to be sealed for up to 10m width from edge line (to minimise gravel on through road) to be determined by the RPEQ.
*	Maintain existing shoulder crossfall and superelevation.
**	Length 'S' to property boundary by TMR. Where length 'S' is greater than the road reserve boundary, then fencing and grid/gate shall be recessed at the cost of owner from property boundary to ensure vehicle does not impede through lane.
***	RCBC (min. size 600x300) can be used instead of RCP, or invert option where table drain is of insufficient depth for a culvert.
◨	Denotes Road Edge Guide Post The Filled in portion denotes a red reflector and the open portion a white reflector.

TABLE 2 – MINIMUM PAVEMENT DETAILS AND DEPTH

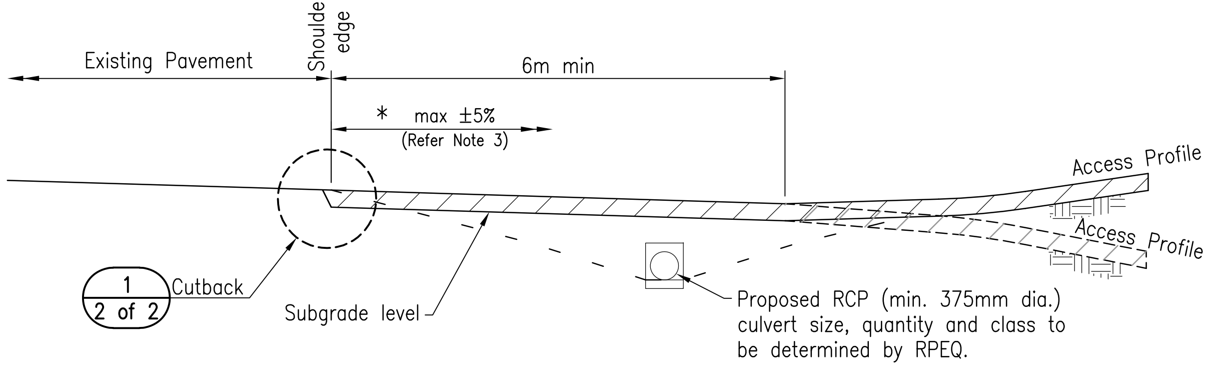
	TYPE A Residential (Car/Service Vehicle)	TYPE B Commercial (Single Unit Truck/Bus)	TYPE C & D Special (Articulated Vehicles)
Sealed Pavement Base Course	150mm(Min.) Type 2.2◆or match existing	200mm(Min.) Type 2.2◆or match existing	280mm(Min.) Type 2.2◆or match existing
Unsealed Pavement Base Course	150mm(Min.) Type 2.4◆or match existing	200mm(Min.) Type 2.4◆or match existing	#

NOTE:

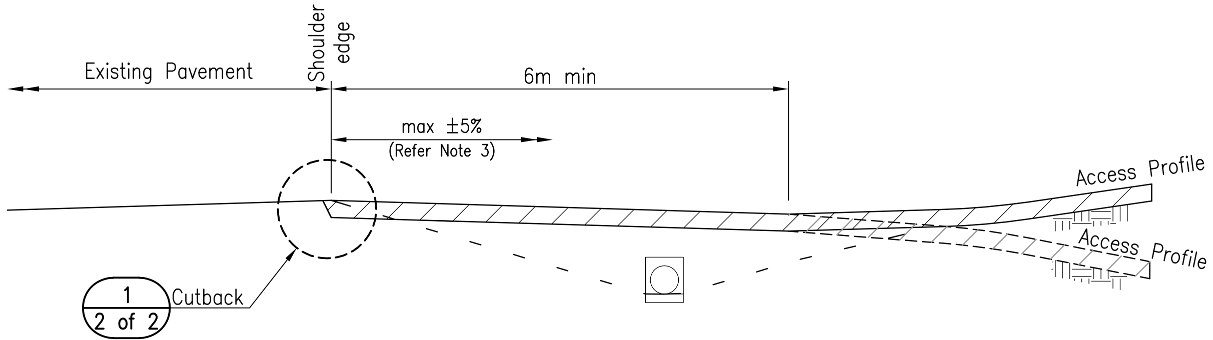
1. Pavement to be sealed if through road is sealed to minimum of width 'D' of Table 1.
2. Where access is located on curves, intersections or is Type C, or excessive screwing motion will occur, pavement seal to extend to property boundary at the owner's cost to the engineer's/designer's discretion.

# Bitumen sealed pavement only.

◆ Type 3.1 or 4.3 or match existing is permissible if Type 2.2/2.4 is unable to be used.


Existing Pavement
Shoulder edge
6m min
* max ±5%
(Refer Note 3)
Access Profile
Access Profile
1
2 of 2
Cutback
Subgrade level
Proposed RCP (min. 375mm dia.) culvert size, quantity and class to be determined by RPEQ.

ON STRAIGHTS AND INSIDE OF CURVES


Existing Pavement
Shoulder edge
6m min
max ±5%
(Refer Note 3)
Access Profile
Access Profile
1
2 of 2
Cutback

ON OUTSIDE OF SUPERELEVATED CURVES

SECTION A

NOTES:

1. Details shown on this drawing are the minimum layout requirements for a private rural property access. For additional requirements and other design considerations refer to Sections 7.2.1 and 7.2.3 of the AGRD-4 (2009).
2. For sight distance requirements refer to Section 3.4 of the RPDM (2nd Edition) Volume 3 Supplement to AGRD-4A, and Section 3 of the AGRD-4A (2010).
3. Vertical clearance checks to be carried out for proposed vehicle in accordance with AS 2890.2 – Parking Facilities Off-Street Commercial Vehicle Facilities.
4. RPEQ or designer to conduct traffic impact assessment to determine if turning treatments are required. Rural right-turn treatments maybe appropriate, refer to Section 7.5 of the AGRD-4A (2010) for pavement widening requirements. Pavement type to match existing or minimums specified in Table 2 of this drawing.
5. This drawing is to be read in conjunction with Drawing 2 of 2.
6. All dimensions in metres and are minimum unless specified.

REFERENCED DOCUMENTS:

Departmental Standard Drawings:

1243	Precast Culvert Headwalls – Headwall Connections for Culverts
1305	Pipe Culverts - Headwall and Apron for Pipe Diameter 375 to 675
1359	Culverts - Installation, Bedding and Filling/Backfilling Against/Over Culverts

Departmental Documents:

RPDM	Road Planning and Design Manual (2nd Edition)
MRTS03	Drainage, Retaining Structures and Protective Treatment

Austroads Guide to Road Design:

AGRD-4 (2009)	Part 4: Intersections and Crossings – General (2009)
AGRD-4A (2010)	Part 4A: Unsignalised and Signalised Intersections (2010)
AGRD-5B (2013)	Part 5B: Drainage – Open Channels, Culverts and Floodways (2013)

Department of Transport and Main Roads

PROPERTY ACCESS

RURAL PROPERTY ACCESS
DRAWING 1 OF 2

Queensland Government

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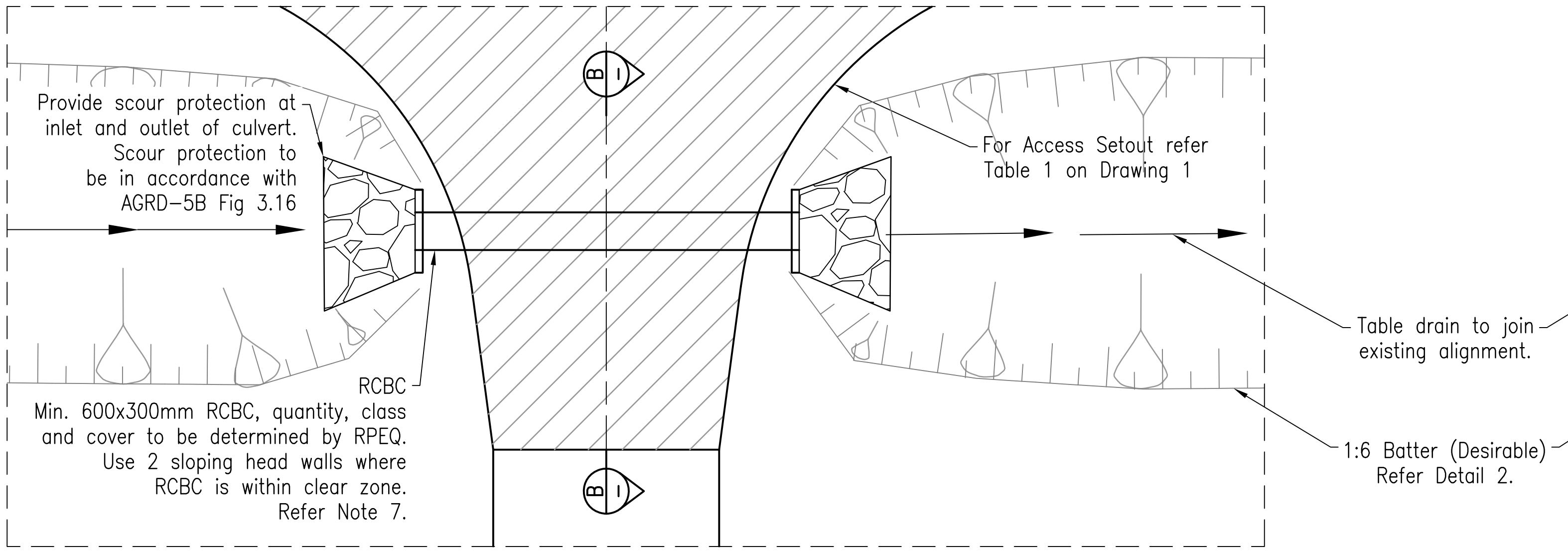
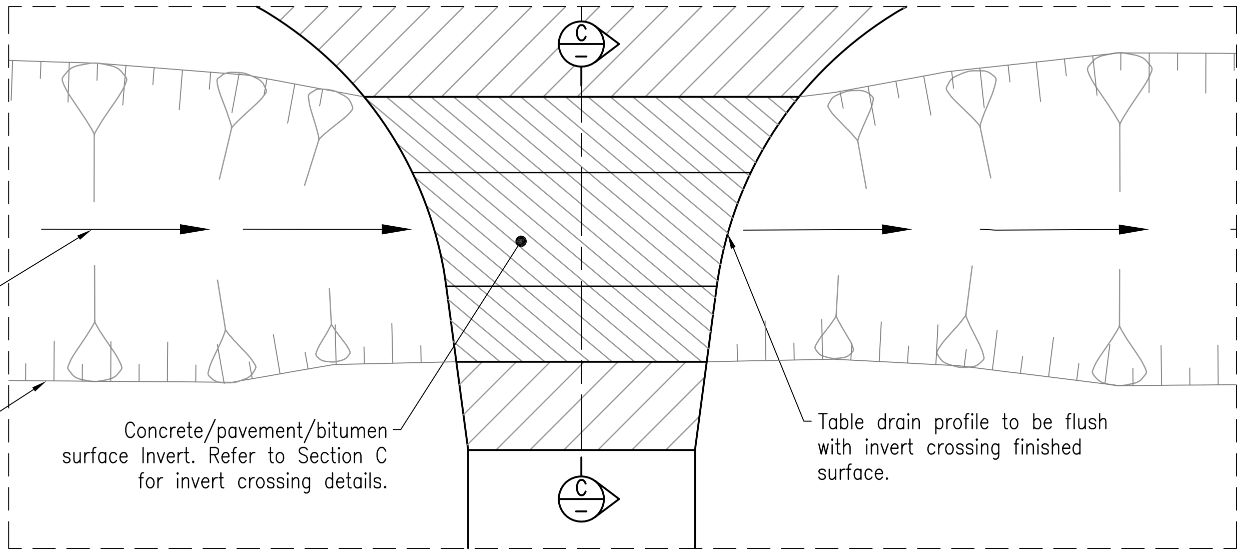
A3
Not to Scale

Standard Drawing No
1807
Date 11/2021

~~A~~ B


Provide scour protection at inlet and outlet of culvert. Scour protection to be in accordance with AGRD–5B Fig 3.16
B
I
RCBC
Min. 600x300mm RCBC, quantity, class and cover to be determined by RPEQ. Use 2 sloping head walls where RCBC is within clear zone. Refer Note 7.
For Access Setout refer Table 1 on Drawing 1
Table drain to join existing alignment.
1:6 Batter (Desirable) Refer Detail 2.

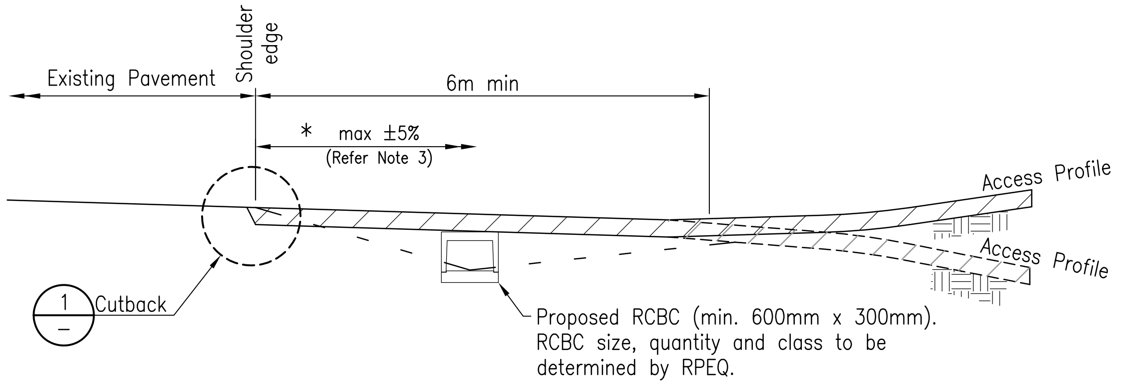
RC BOX CULVERT PLAN VIEW


C
I
Concrete/pavement/bitumen surface Invert. Refer to Section C for invert crossing details.
Table drain profile to be flush with invert crossing finished surface.

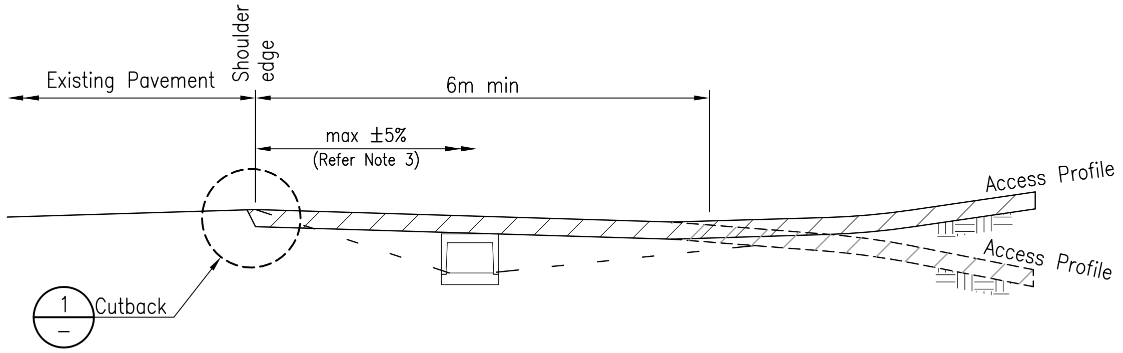
INVERT CROSSING PLAN VIEW

LEGEND

▨	Pavement Type 2 – Gravel, unbound pavement. Refer to Table 2 of Drawing 1 for depths. Access may be required to be sealed for up to 10m width from edge line (to minimize gravel on through road) to be determined by the RPEQ.
▧	Invert crossing surface
*	Maintain existing shoulder crossfall and superelevation.

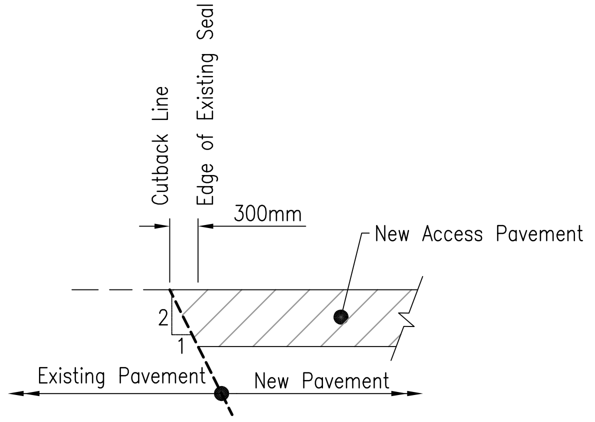

Existing Pavement
Shoulder edge
6m min
* max ±5%
(Refer Note 3)
Access Profile
Access Profile
1
–
Cutback
Proposed RCBC (min. 600mm x 300mm). RCBC size, quantity and class to be determined by RPEQ.

ON STRAIGHTS AND INSIDE OF CURVES


Existing Pavement
Shoulder edge
6m min
max ±5%
(Refer Note 3)
Access Profile
Access Profile
1
–
Cutback

ON OUTSIDE OF SUPERELEVATED CURVES

SECTION B / –


Cutback Line
Edge of Existing Seal
300mm
New Access Pavement
2
1
Existing Pavement
New Pavement

CUTBACK DETAIL

DETAIL 1 / –

NOTES:

1. This drawing is to be read in conjunction with Drawing 1 of 2.
2. Minimum longitudinal fall for concrete or bitumen invert is 0.3%.
3. 1 in 6 grade can be further levelled for larger design vehicles. Ensure sufficient area for drainage remains. Dimensions to be based on stormwater flow rate for appropriate design ARI event to ensure invert crossing can meet required capacity. Type 22 and Type 28 inverts can be used if drainage design criteria is met.
4. Vertical clearance checks to be carried out for small rigid vehicle to ensure adequate transition between change in grade. Refer to AS 2890.2.
5. For pavement or bitumen surfacing inverts, refer Table 2 on Drawing 1 for minimum depths.
6. Concrete access to have minimum N32 concrete, 100mm thick on 100mm thick sub–base gravel. Concrete access to be reinforced with SL72 mesh with minimum 40mm top cover.
7. Culvert clear zone varies with location and speed environment. Refer to TMR Road Planning and Design Manual – Supplement to AGRD Part 6, and Austroads Guide to Road Design - Part 6.

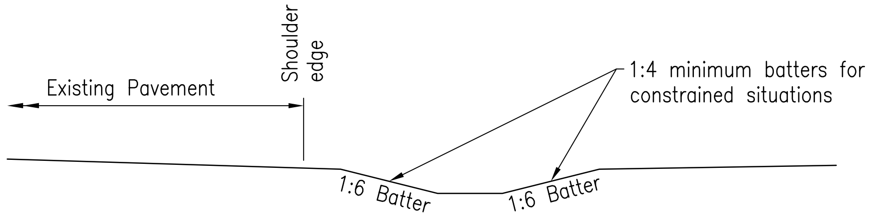
REFERENCED DOCUMENTS:

Departmental Standard Drawings:

1260	R C Box Culverts and Slab Link Box Culverts – Culverts Height = 375 To 600
1033	Kerb and Channel – Profiles

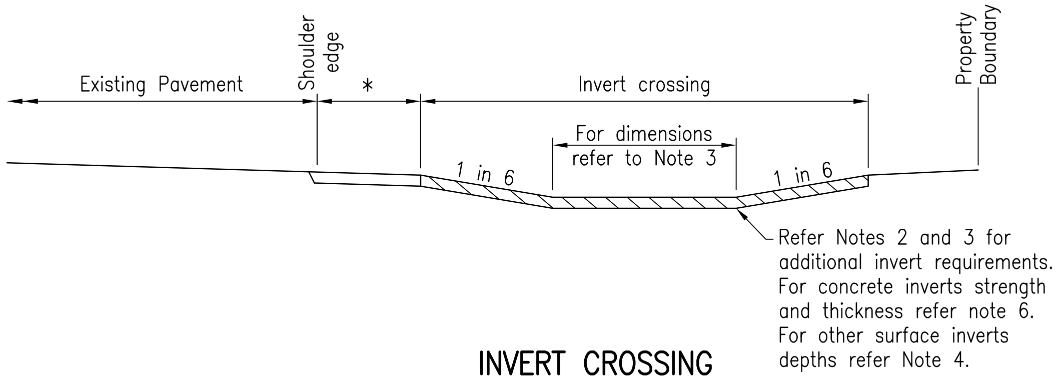
Australian Standards Documents:

AS2890.2	Parking Facilities – Off–Street Commercial Vehicle Facilities


Existing Pavement
Shoulder edge
1:4 minimum batters for constrained situations
1:6 Batter
1:6 Batter

BATTER DETAIL

DETAIL 2 / –


Existing Pavement
Shoulder edge
*
Invert crossing
Property Boundary
For dimensions refer to Note 3
1 in 6
1 in 6
Refer Notes 2 and 3 for additional invert requirements. For concrete inverts strength and thickness refer note 6. For other surface inverts depths refer Note 4.

INVERT CROSSING

SECTION C / –

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PROPERTY ACCESS

RURAL PROPERTY ACCESS
DRAWING 2 OF 2

A3

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Standard Drawing No
1807
Date 11/2021

A	B						