



CUSTOMER INFORMATION CONDITIONS AND STANDARDS FOR CONSTRUCTION OF A PRIVATE VEHICLE CROSSING

Rural Areas

For crossovers located on a freeway or arterial road refer all enquiries to VicRoads on 13 11 71 or visit www.vicroads.vic.gov.au

Why do I need a private vehicle crossing permit?

The area between your title boundary and the edge of the road is public land. To ensure consistency in the design and construction of driveway crossings it is necessary to obtain a crossing permit.

This permit is required in **addition** to any planning and/or building permits.

The permit contains information on how the driveway is to be constructed, what type of finish is allowed, the minimum and maximum widths of driveways and other important information on the construction and finish of driveways.

Important matters for you to note:

Works **need** to be undertaken in **accordance** with the **conditions of the permit**, details of which are attached. Key matters are to note are:

- You must obtain a valid permit from the Wangaratta Government Centre, prior to commencing any work on the road reserve. A valid permit will have a receipt issued by Customer Services.
- You must undertake works in accordance with the conditions of the permit.
- Public Liability Insurance (PLI) is required to conduct works in the road reserve. A current copy of the applicant/contractors PLI is to be provided to Council before work commences.
- A permit is only valid for 12 months from the date of the receipt. If the permit expires you will need to obtain a supplementary permit.
- You must arrange for Council staff to inspect the site by giving a minimum of 24 hours' notice before pouring the concrete. Council is unable to guarantee that a staff member will be available if less than 24 hours' notice is provided.

Please see the 'Conditions of Permit' for more detail on the points listed below. If you have any further questions regarding the permit conditions or the construction of a crossover please contact the Rural City of Wangaratta on (03) 5722 0888 or email council@wangaratta.vic.gov.au

- Any damage to the bituminous road surface resulting from construction activities is to be reinstated with a suitable premix by the applicant.
- Owners remain responsible for the ongoing maintenance of the crossing (not including the footpath section) and can be held liable for any injury caused by failure to maintain the crossing in a safe condition free of trip hazards.

PLEASE NOTE THAT IF YOU FAIL TO MEET THE REQUIREMENTS FOR CONSTRUCTING AND MAINTAINING A VEHICLE CROSSING, YOU MAY BE FINED UP TO \$500.

CONDITIONS OF THE PERMIT

PART A DEFINITIONS

A vehicle crossover, when completed, is the constructed portion of the nature strip which provides vehicular access from the edge of the road to the property boundary. The crossover comprises several components in an rural environment, these components are:

Culvert is usually a reinforced concrete pipe but may be a reinforced concrete box culvert in some instances. The culvert is to allow roadside drainage to pass under the crossing.

End walls (wingwall) are provided on each end of the culvert and depending upon the distance of the culvert from the edge of shoulder may be low profile head walls or drivable end walls.

The remaining **infill area** is the section of the crossover between the edge of shoulder and the property boundary and is usually crushed rock or other approved equivalent.

PART B SITE CONSIDERATIONS

Before construction of a crossover, consideration should be given to site conditions and locations of infrastructure such as trees, light/service poles, road signs, bus stops and speed zoning.

Council will not relocate, nor pay for the relocation, of these types of infrastructure and advises applicants to carefully consider site conditions and service locations.

Any modification or relocation will be at the owner's expense and must be carried out according to the relevant authority's specifications.

PART C GENERAL CONDITIONS

1. **BEFORE** construction of the crossing commences the owner or his representative **MUST** contact Council to have the **LOCATION** and **LEVEL** of the proposed crossing approved.
2. **24 HOURS** notice must be provided to Council **BEFORE** construction of any section of the crossover to enable inspection of the crossover.
3. The property owner agrees to ensure the vehicle crossing is constructed to the Rural City of Wangaratta specification and relevant standard drawing, and any instructions given by Council officers regarding line, level and location.
4. All liability for claims and damages that arise from the construction of the vehicle crossing is the responsibility of the property owner.
5. The road verge is to be reinstated to a clean and tidy condition.
6. The works site must have appropriate temporary warning signs and safety barricade. The permit holder shall be solely responsible for safety of traffic, pedestrians and others. If barriers are necessary between the hours of sunset and sunrise, at least two amber flashing lights shall be provided, one either side of the crossing installation to accord with the requirements of the Road Management Act.
7. Should the new vehicle crossing render an existing vehicle crossing redundant, the existing vehicle crossing will be removed. This is to be done within one month of the new crossing being completed.

PART D TECHNICAL REQUIREMENTS

CULVERTS

- The minimum diameter of a culvert is 375mm.
- Culvert diameters greater than 375mm may be specified by Council if flow rates are determined to warrant this.
- Where it is not possible, or undesirable, to install a pipe with a diameter greater or equal to 375mm, the installation of a box culvert or a crown unit type structure is no less than that provided by the use of an appropriately sized pipe.

- If an alternative structure is to be used, the request is to be submitted to Council and approval **must** be given in writing and inspected by Council prior to any construction taking place.

REINSTATEMENT

- Construction adjacent to a bitumen road surface requires a saw cut edge to be prepared prior to excavation and removal of the kerb section of the driveway crossover. Any damage to the bituminous surface is to be reinstated to a standard acceptable by Council.
- If the damage to the road surface is not reinstated to a standard acceptable to Council within 30 days after the construction of the layback, then Council will repair the damage at the owner's cost.

GATEWAYS

- The minimum distance from the edge of shoulder to the gate is 8.2m. The gate is to be set back into the property boundary to achieve the minimum dimension. This provision does not apply if a suitable cattle grid is provided at the property boundary.

ENDWALLS

- Wherever practical the culvert must be located outside the designated clear zone and have end walls in accordance with SD465. Where this is not possible, driveable endwalls must be installed. This is also a general requirement within rural residential zones.
- In some instances where erosion is likely to occur, rock beaching and/or a sediment trap may be required to mitigate erosion on the downstream side of the crossover culvert.

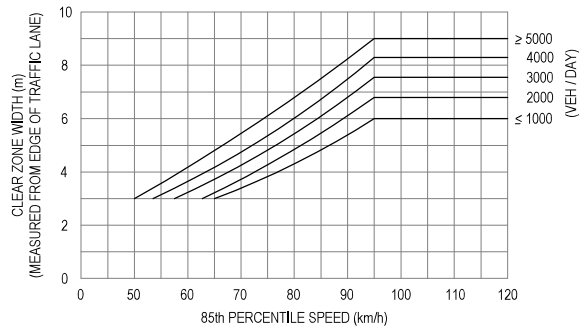
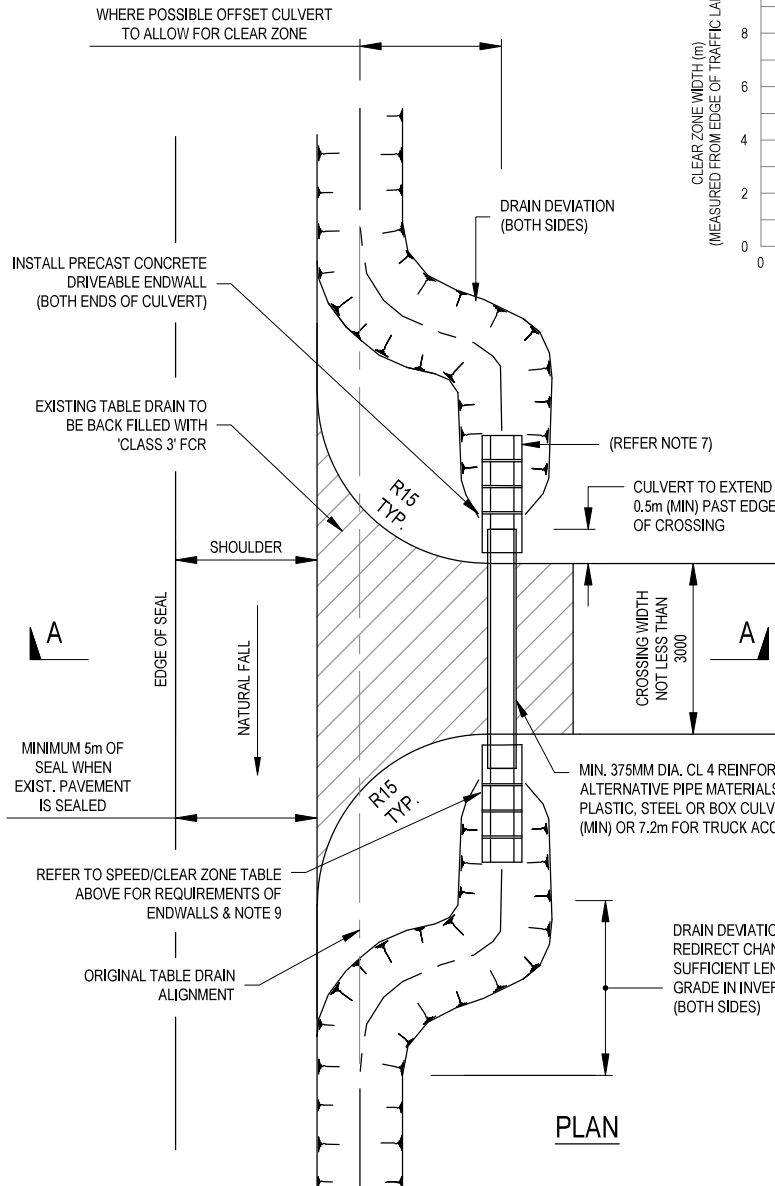
INSPECTIONS

Prior to placing of concrete, the following conditions must be complied with:

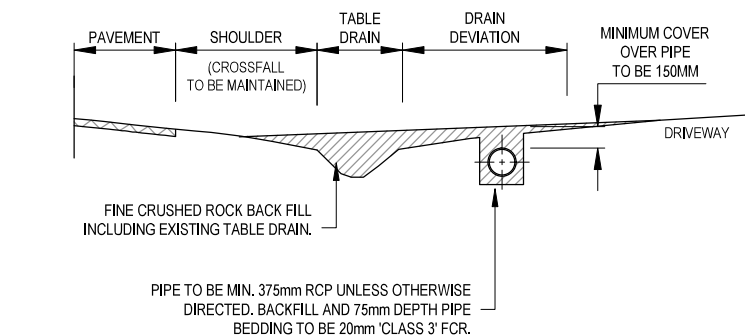
- **The Technical Services unit of the Rural City of Wangaratta must be contacted to arrange for an inspection (a minimum of 24 hours' notice is required for an inspection).**
- At the time of the inspection, a valid vehicular crossing permit must be supplied to a Council officer and is to be signed by both parties.

PART E STANDARD DRAWINGS

- Standard drawings attached.



TYPICAL CLEAR ZONE WIDTHS
(REFER NOTE 8)



SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

NOTES:

1. THIS ARRANGEMENT IS INTENDED FOR RURAL LOW DENSITY RESIDENTIAL & FARMING ACCESS WAYS.
2. COUNCIL RESERVES THE RIGHT TO DIRECT THE USE OF CULVERT END WALL TYPE.
3. THIS IS A TYPICAL CROSSING PLAN. SLIGHT VARIATIONS MAY OCCUR AFTER INSPECTION AND APPROVAL OF LOCATION BY COUNCIL.
4. PRIOR TO THE CONSTRUCTION, THE CROSSING LOCATION SHALL BE APPROVED BY COUNCIL.
5. ALL WORKS TO BE COMPLETED TO THE SATISFACTION OF COUNCIL.
6. MAINTENANCE OF THE CROSSOVER REMAINS THE RESPONSIBILITY OF THE LAND OWNER.
7. INSTALL LOW PROFILE HEAD WALLS OUTSIDE CLEAR ZONE & DRIVEABLE END WALLS WITHIN CLEAR ZONE. NO CULVERT TO BE WITHIN 3m OF EDGE OF SEAL.
8. THE CLEAR ZONE TABLE SHOWN IS A GUIDE ONLY AND FOR FURTHER ACCURATE CLEAR ZONE GUIDELINES REFER TO AUSTRoadS 'GUIDE TO ROAD DESIGN - PART 6: ROADSIDE DESIGN, SAFETY AND BARRIERS' TABLE 4.1: 'CLEAR ZONES DISTANCES FROM EDGE OF THROUGH TRAVELLED WAY'.
9. TABLE DRAINS ARE NOT TO BE CLOSER THAN 1.0m FROM FENCE LINES OR SERVICES.
10. CROSSING PAVEMENT TO BE SEALED WHERE ABUTS A SEALED ROAD.
11. GATE OFFSET DIMENSIONS:

STANDARD VEHICLE TYPE	MINIMUM GATE OFFSET FROM EDGE OF THROUGH LANE (m)
CAR (5.0m)	8.2
RIGID TRUCK (12.0m)	12.5
SEMI (19.0m)	22
B-DOUBLE (25.0m)	28

**TYPICAL SWALE DRAIN VEHICLE CROSSING
(RURAL ENTRANCE)**

LAST UPDATED 29/03/2016

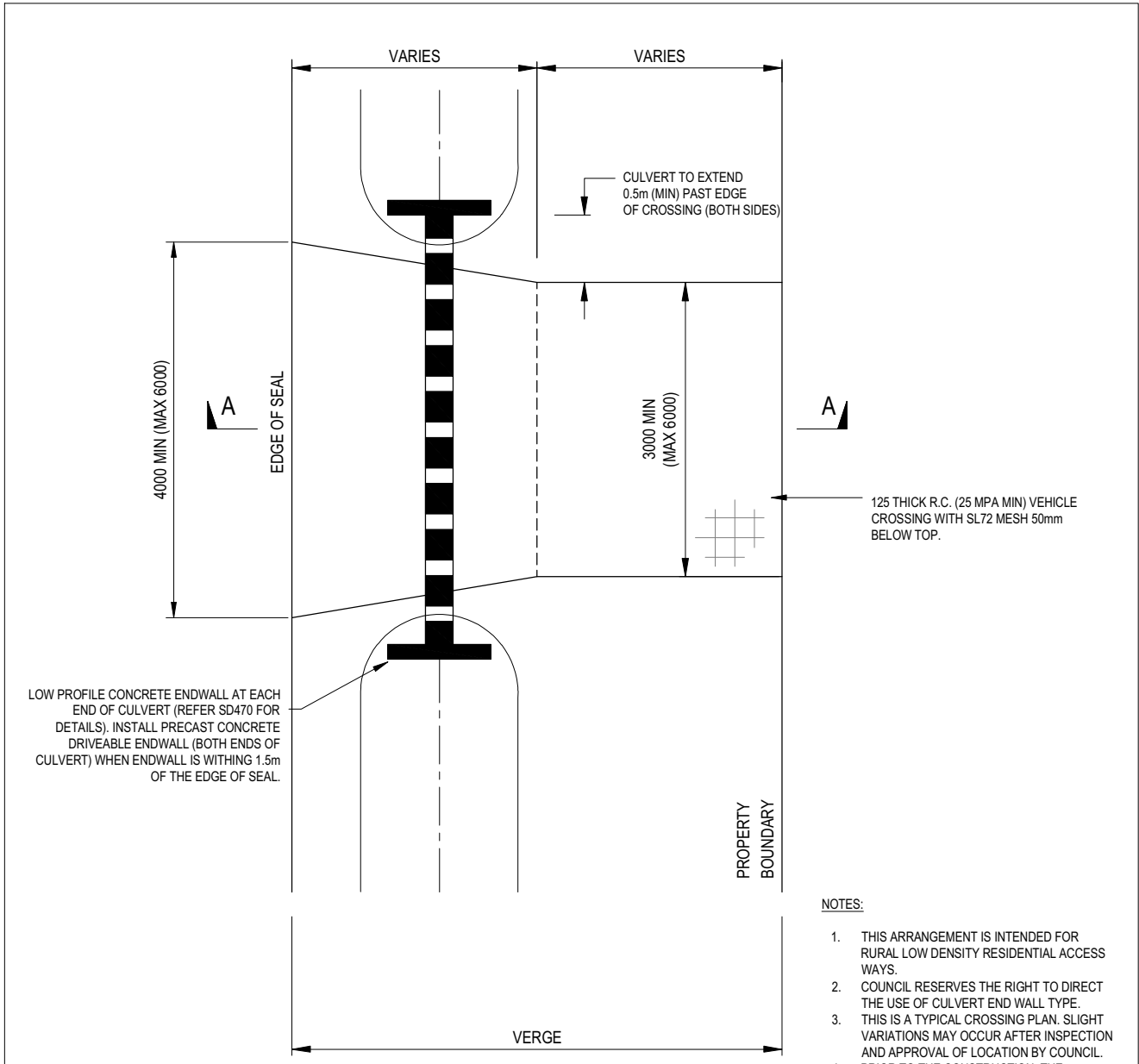
SD 255

NOT TO SCALE

Infrastructure Design Manual Standard Drawings



A copy of the Infrastructure Design Manual can be viewed on the Design Manual website www.designmanual.com.au



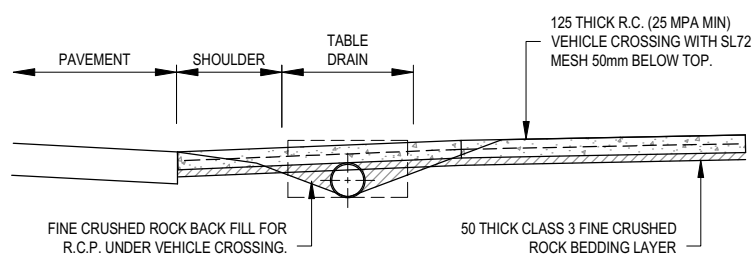
LOW PROFILE CONCRETE ENDWALL AT EACH END OF CULVERT (REFER SD470 FOR DETAILS). INSTALL PRECAST CONCRETE DRIVEABLE ENDWALL (BOTH ENDS OF CULVERT) WHEN ENDWALL IS WITHING 1.5m OF THE EDGE OF SEAL.

125 THICK R.C. (25 MPA MIN) VEHICLE CROSSING WITH SL72 MESH 50mm BELOW TOP.

PLAN

NOTES:

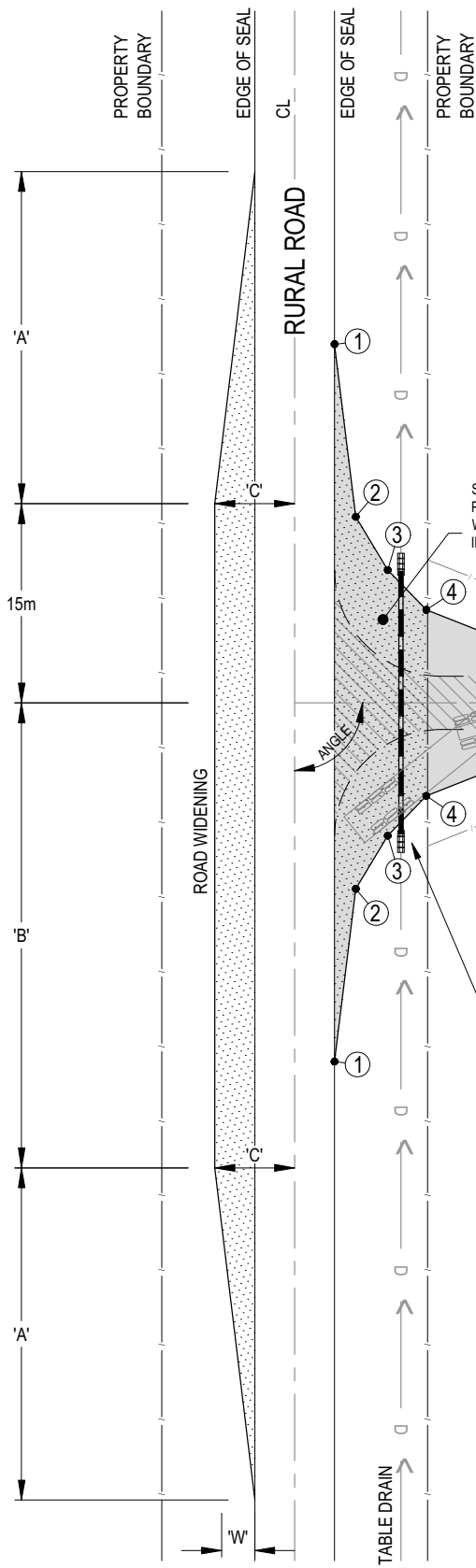
1. THIS ARRANGEMENT IS INTENDED FOR RURAL LOW DENSITY RESIDENTIAL ACCESS WAYS.
2. COUNCIL RESERVES THE RIGHT TO DIRECT THE USE OF CULVERT END WALL TYPE.
3. THIS IS A TYPICAL CROSSING PLAN. SLIGHT VARIATIONS MAY OCCUR AFTER INSPECTION AND APPROVAL OF LOCATION BY COUNCIL.
4. PRIOR TO THE CONSTRUCTION, THE CROSSING LOCATION SHALL BE APPROVED BY COUNCIL.
5. ALL WORKS TO BE COMPLETED TO THE SATISFACTION OF COUNCIL.
6. MAINTENANCE OF THE CROSSOVER REMAINS THE RESPONSIBILITY OF THE LAND OWNER.
7. DRIVEABLE ENDWALLS TO BE USED WITHIN 1.5m OF THE EDGE OF SEAL.
8. TABLE DRAINS ARE NOT TO BE CLOSER THAN 1.0m FROM FENCE LINES OR SERVICES.
9. CULVERT TO BE LOCATED AT LEAST 600mm FROM EDGE OF SEAL.



SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL SWALE DRAIN VEHICLE CROSSING (FRINGE URBAN RESIDENTIAL ENTRANCE)		LAST UPDATED 29/03/2016
Infrastructure Design Manual Standard Drawings	A copy of the Infrastructure Design Manual can be viewed on the Design Manual website www.designmanual.com.au	SD 260
		NOT TO SCALE



SETOUT TABLE:

POINT No.	OFFSET DISTANCE FROM EDGE OF SEAL (m)	OFFSET DISTANCE FROM ACCESS CENTRELINE (m)
1	0.0	27.0
2	1.6	14.0
3	4.0	10.0
4	6.9	7.0
5	18.3	2.5
6	22.0	2.0

ROAD WIDENING:

A	=	$\frac{0.5 \times \text{SPEED (km/h)} \times W \text{ (m)}}{3.6}$								
B	=	<table border="1"> <tr> <td>ANGLE:</td> <td>70°</td> <td>90°</td> <td>110°</td> </tr> <tr> <td>LENGTH (m):</td> <td>40</td> <td>35</td> <td>30</td> </tr> </table>	ANGLE:	70°	90°	110°	LENGTH (m):	40	35	30
ANGLE:	70°	90°	110°							
LENGTH (m):	40	35	30							
C	=	ON STRAIGHT: 6.0m (MIN) ON CURVE: 2 x (3.0m + CORRESPONDING WIDENING FOR CURVE RADIUS)								
W	=	FORMATION WIDENING (IF REQUIRED BY COUNCIL)								

SEALED PAVEMENT TO PROPERTY BOUNDARY WHERE SPECIFIED BY INDIVIDUAL COUNCIL'S

ACCESS CENTRELINE

CROSSING WIDTH NOT LESS THAN 3000

FENCE TO BE SPLAYED AND GATE SET BACK TO ALLOW FOR STATIONARY VEHICLE IN SITUATIONS WHERE THE BOUNDARY LINE IS CLOSE TO THE EDGE OF ROAD. (SEE NOTE 11.)

16m (MIN) LENGTH OF 375Ø (MIN) CLASS 2 RCP WITH A MINIMUM COVER OF 200mm AND DRIVEABLE END WALLS (BOTH ENDS) WHERE REQUIRED WITHIN CLEAR ZONE

LEGEND:

TYPICAL EXISTING ACCESS =	
RECOMENDED ACCESS SPLAY =	
AREA TO BE SEALED =	

NOTES:

1. THIS ARRANGEMENT IS INTENDED FOR RURAL / FARMING ACCESS WAYS THAT REQUIRE SEMI / B DOUBLE ACCESS.
2. PAVED AREAS TO BE A MINIMUM OF 150mm DEPTH COMPACTED GRAVEL. PAVEMENT AREAS & TYPE TO BE APPROVED BY COUNCIL.
3. COUNCIL RESERVES THE RIGHT TO DIRECT THE USE OF CULVERT END WALL TYPE.
4. THIS IS A TYPICAL CROSSING PLAN. SLIGHT VARIATIONS MAY OCCUR AFTER INSPECTION AND APPROVAL OF LOCATION BY COUNCIL.
5. PRIOR TO THE CONSTRUCTION, THE CROSSING LOCATION SHALL BE APPROVED BY COUNCIL.
6. ALL WORKS TO BE COMPLETED TO THE SATISFACTION OF COUNCIL.
7. MAINTENANCE OF THE CROSSOVER REMAINS THE RESPONSIBILITY OF THE LAND OWNER.
8. REFER SD 255 FOR CLEAR ZONE OFFSETS.
9. DRIVEABLE ENDWALLS TO BE USED INSIDE CLEARZONE.
10. TABLE DRAINS ARE NOT TO BE CLOSER THAN 1.0m FROM FENCE LINES OR SERVICES.
11. COUNCIL MAY REQUIRE THAT CROSSING PAVEMENT BE SEALED DEPENDING ON SITE LOCATION AND SPECIFICS.
12. GATE OFFSET DIMENSIONS:

STANDARD VEHICLE TYPE	MINIMUM GATE OFFSET FROM EDGE OF THROUGH LANE (m)
SEMI (19.0m)	22
B-DOUBLE (25.0m)	28

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL B DOUBLE VEHICLE CROSSING (RURAL ENTRANCE)

LAST UPDATED 20/03/2015

SD 265

NOT TO SCALE

Infrastructure Design Manual Standard Drawings

A copy of the Infrastructure Design Manual can be viewed on the Design Manual website www.designmanual.com.au

DIMENSIONS

TYPE 1 *SLOPE AT 1.5:1				TYPE 2 *SLOPE AT 2:1				TYPE 3 *SLOPE AT 3:1			
B	C	D	F	B	C	D	F	B	C	D	F
138	1037	197	240	138	1129	262	320	275	1312	393	480
221	1286	315	385	294	1433	420	513	441	1727	630	769
307	1547	438	535	409	1752	584	713	613	2161	876	1069
394	1804	563	687	525	2066	750	916	788	2591	1125	1373

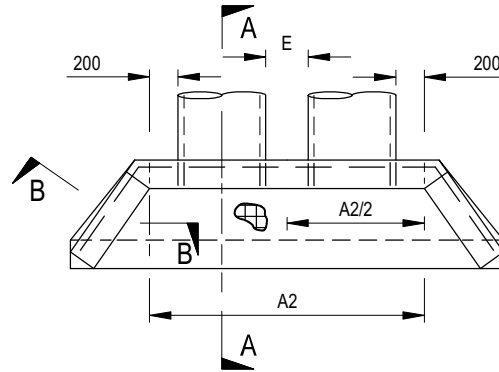
* THEORETICAL SLOPE OF WINGWALL MEASURED AT RIGHT ANGLES TO THE ROADWAY.

** A2=A+E+EXTERNAL DIAMETER OF PIPE

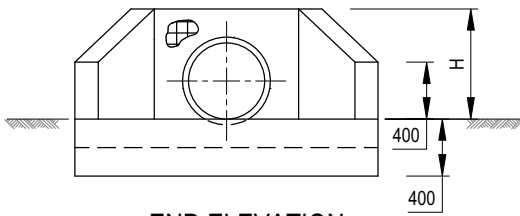
APPROXIMATE ONLY

NOM PIPE DIA	EXTERNAL PIPE DIA [#]	A**	E	H
300	362	762	300	531
375	445	845	300	610
450	534	934	300	692
525	616	1016	300	775

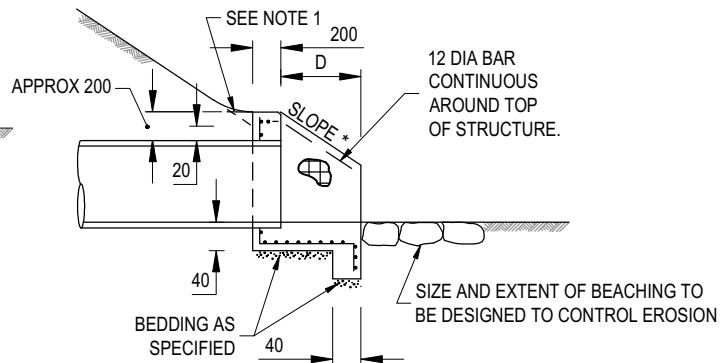
FOR LARGER PIPE DIAMETERS REFER TO VICROADS SD1931 REV B



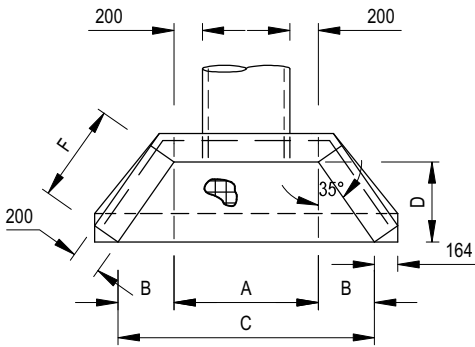
PLAN



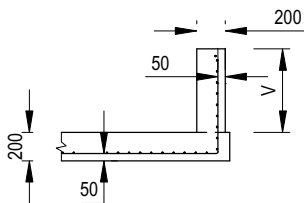
END ELEVATION



SECTION A-A



PLAN



SECTION B-B

V = VARIABLE HEIGHT OF THE WINGWALL

NOTES:

1. BECAUSE THE RELATION OF THE BATTER TO THE TOP OF THE ENDWALL IS ESSENTIAL FOR THE SAFETY OF THE MOTORIST THE DETAILS AS SHOWN IN SECTION A-A MUST BE ADHERED TO DURING CONSTRUCTION.
2. REINFORCEMENT, F82 UNLESS OTHERWISE SPECIFIED, SHALL BE CONTINUOUS AROUND CORNERS AND LOCATED AS SHOWN ON SECTIONS A-A AND B-B. CLEAR COVER 50 MIN. LAPS: FABRICS 300 MIN, BARS 25 X BAR DIAMETER MIN.
3. DISTRIBUTION BARS 12 DIA AT 200 CENTRES.
4. CONCRETE SHALL BE NORMAL-CLASS N32 STANDARD STRENGTH GRADE OR HIGHER COMPLYING WITH THE REQUIREMENTS OF AS 1379. EXPOSURE CLASSIFICATION UP TO AND INCLUDING B1.
5. EXPOSED EDGES SHALL HAVE 20 x 20 CHAMFERS.
6. COMPACTION PRESSURE BEHIND WALLS NOT TO EXCEED 15 kPa. (1.5 TONNE VIBRATORY ROLLER OR 300 kg VIBRATING PLATE WITHIN 0.5m OF WALL).
7. ENDWALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT PROVISIONS OF AS 3600.
8. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.

ALL MEASUREMENTS IN MILLIMETRES

REINFORCED CONCRETE WINGWALL (IN-SITU)

LAST UPDATED 20/03/2015

SD 465

NOT TO SCALE

Infrastructure Design Manual Standard Drawings

A copy of the Infrastructure Design Manual can be viewed on the Design Manual website www.designmanual.com.au