SPECIFICATION FOR THE CONSTRUCTION OF VEHICULAR CROSSINGS

1 GENERAL

The Local Government Act, 1993 and the Roads Act, 1993 places on Council the responsibility for the care and control of public road reserves. Council's approval is, therefore, necessary prior to undertaking any works within the road reserve. This includes the construction of vehicle crossings on public footpaths and vehicular entrances to rural and village allotments.

Procedures and specifications are set out below to facilitate the achievement of a satisfactory level of workmanship, performance and public safety, thereby enabling Council to meet its obligations.

2 SAW CUTTING OF PAVED AREAS ASPHALT/CONCRETE PAVEMENTS ONLY

Where sealed or paved areas are to be disturbed to accommodate excavations, such surfaces shall be saw cut parallel to an existing edge or joint line prior to excavation.

3 FOUNDATIONS

Excavations shall be made to the required depth so as to provide a compact subgrade surface, parallel to finished surface levels.

Where the proposed driveway is located on filled ground, the fill shall be well compacted.

4 CONSTRUCTION DETAILS

Construction details are shown on Council's Standard Drawings **B 163, D 243 (URBAN) and B 238 (RURAL)**.

CONCRETE:

- Concrete reinforcement required for all applications.
- Reinforcement is to be accurately placed and securely supported utilising metal or plastic bar chairs.
- Clear top cover to reinforcement shall be 35 mm $\pm$ 5 mm.
- Gutters and drainage lines shall be kept clear so as to permit the free flow of water.

BITUMEN:

- Bitumen sealing of driveways in rural areas shall be 14 mm seal first coat, 7 mm seal second coat (Two coat seal).

5 CONCRETE CHARACTERISTICS

Only ready-mixed concrete is to be used.

Minimum Concrete Strength:	Grade 25 MPa
Slump:	80 mm $\pm$ 15 mm
Nominal Maximum Aggregate Size:	20 mm

6 CONCRETE FINISH

A non-skid texture is to be provided by either:

a. exposed aggregate finish; or
b. broom finish at right angles to the direction of traffic flow.

7 CONCRETE CURING AND PROTECTION

Concrete is to be cured for at least 72 hours, taking precautions to prevent rapid drying out or freezing of the concrete. Acceptable methods are:

c. Covering concrete, which has been moistened with an impermeable membrane in such a manner so as to prevent air circulation at the concrete surface.

d. Using an absorptive cover, kept continuously moist.

e. Applying an approved curing agent.

Forms should remain in place for at least 48 hours.

Light vehicles are to be prevented from using the driveways for at least 7 (seven) days after the concrete is poured. This period should be extended during cold periods. Heavy vehicles should not use the driveway for at least 21 (twenty-one) days after pouring.

Applicants/Owners are to ensure no concrete is washed into kerb and gutter/stormwater drainage at any time during construction. This includes cleanout of concrete delivery vehicles.

8 RESTORATION OF SITE

Immediately upon completion of concrete works, the Contractor shall remove and dispose of all surplus material and rubbish. The site shall be left clean and tidy, finished to uniform grades, free of depressions and with all surfaces making smooth junctions with existing levels.
All adjoining road and footpath pavements are to be reinstated. Disturbed nature strips are to be regressed.

9 MAINTENANCE

Future maintenance of the work will be the property owner's responsibility. Any work not executed to the Engineer's satisfaction, shall be made good at the Applicant's expense.

10 INSPECTIONS

Arrangements are to be made for inspections by the Engineer at the following stages:

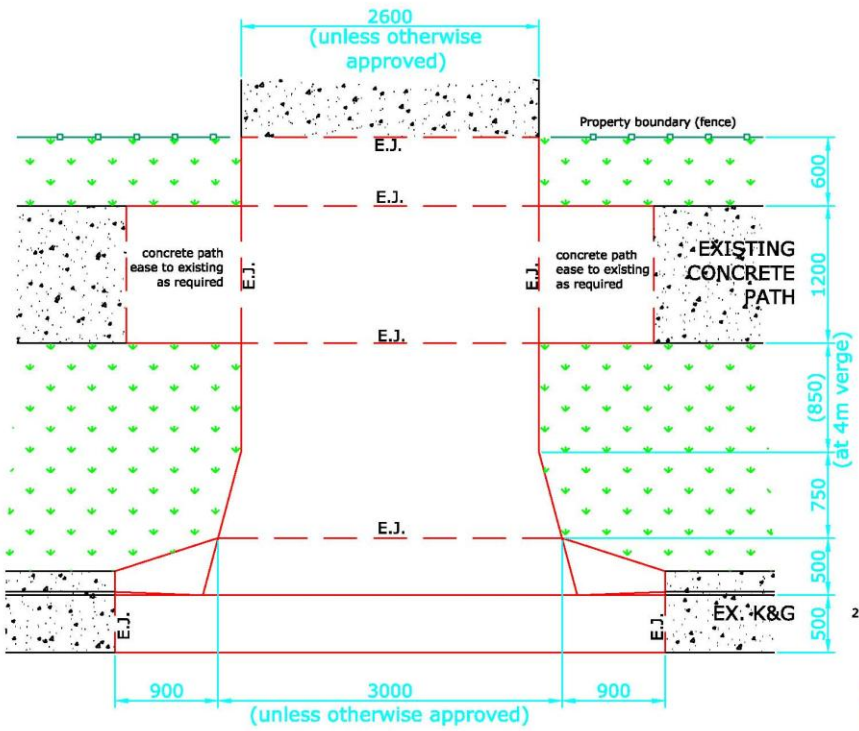
(a) Prior to construction works the erection/implementation of the approved Traffic Management Plan's provisions.

(b) Following erection of formwork and reinforcement, prior to pouring concrete or prior to the construction of a culvert.

(c) Prior to bitumen sealing.

(d) On completion.

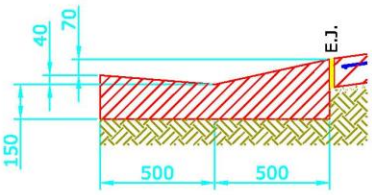
Following the inspection of works required in respect of the Traffic Management Plan, the applicant can proceed with the works providing the inspections indicated above are undertaken prior to further works. Where possible concurrent inspections may be made following inspection of work associated with the Traffic Management Plan.



PLAN OF STANDARD CROSSING

(Standard location of footpath 600mm from boundary)

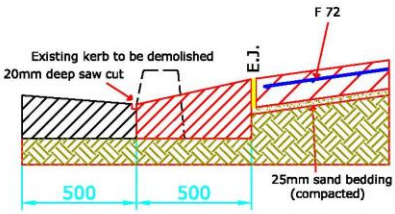
SCALE 1:40



DETAIL A

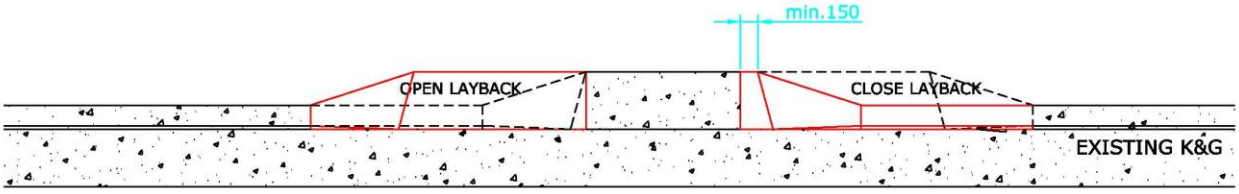
(new K&G layback)

SCALE 1:20

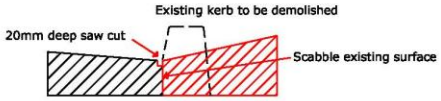


DETAIL B (new layback only)

SCALE 1:20



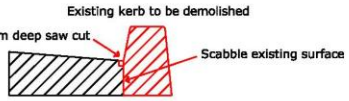
LAYBACK OPENING AND CLOSING DETAIL SCALE 1:40



DETAIL SECTION

FOR "OPEN LAYBACK"

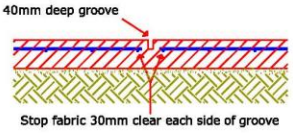
SCALE 1:20



DETAIL SECTION

FOR "CLOSE LAYBACK"

SCALE 1:20



CONTRACTION JOINT DETAIL

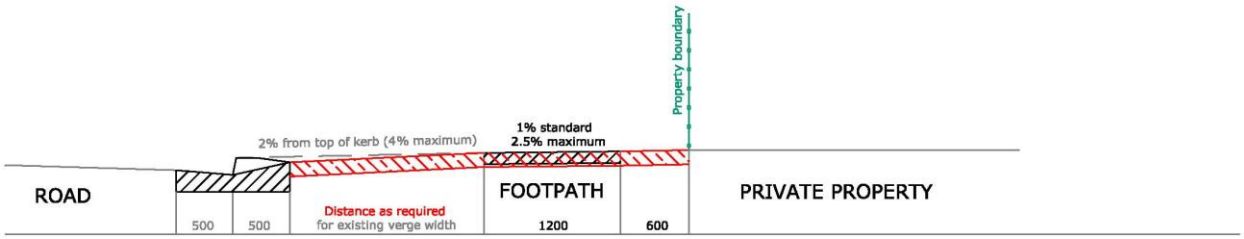
SCALE 1:20

NOTES:

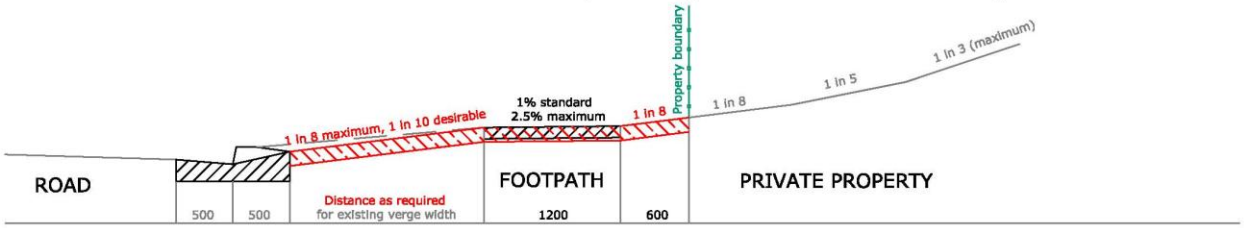
1. Read this drawing in conjunction with the specification and other contract documents.
2. Minimum concrete slab thickness shall be: Light duty 125mm, medium duty 150mm, heavy duty 175mm. Minimum concrete strength 25MPa. All slabs to be reinforced.
3. Where new concrete is to be bonded to existing, scabble the existing surface and clean with water.
4. Expansion joint "E.J." shall be filled with 10mm thick bitumen impregnated preformed jointing material. Installed flush with concrete surface.
5. Contraction joints (see detail) shall be provided where shown or where slab length exceeds 5m. Refer to Engineer for location.
6. All exposed concrete edges shall be rounded to 10mm radius.
7. Provide 35mm top cover to reinforcing fabric.

NOTE: This drawing supersedes the 1992 original drawing.

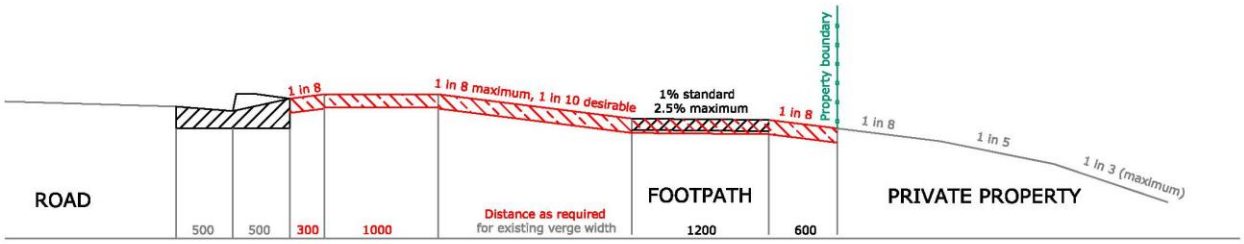
SCALES: as shown @A3	DRAWN BY: W.H., 11/04/2011	COOMA-MONARO SHIRE COUNCIL	SHEET: 1 of 1
NOTES:	FILE: AUTOCAD 'FOOTPATH CROSSING'	STANDARD VEHICULAR FOOTPATH (URBAN) CROSSING, PLAN & DETAIL	B 163
	CHECKED / APPROVED BY: P.B.		
	ORIGINALLY ADOPTED: 18/11/1992		



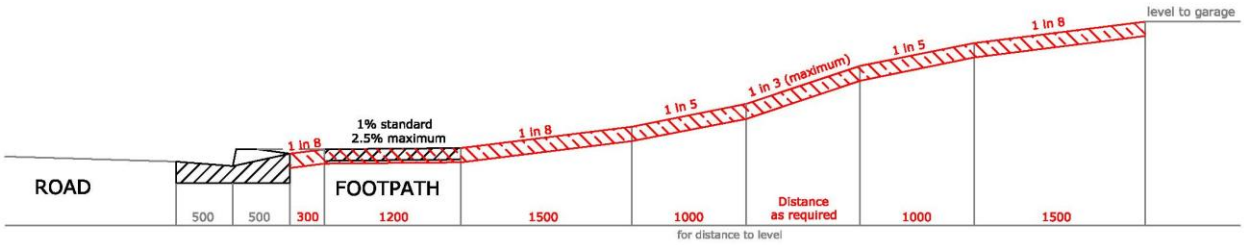
STANDARD FOOTPATH SECTION, Footpath in standard position



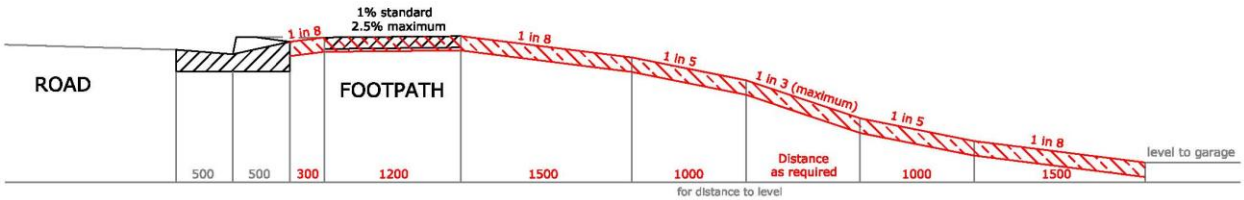
HIGH LEVEL SECTION, Footpath in standard position



LOW LEVEL SECTION, Footpath in standard position



HIGH LEVEL SECTION, Footpath behind gutter crossing

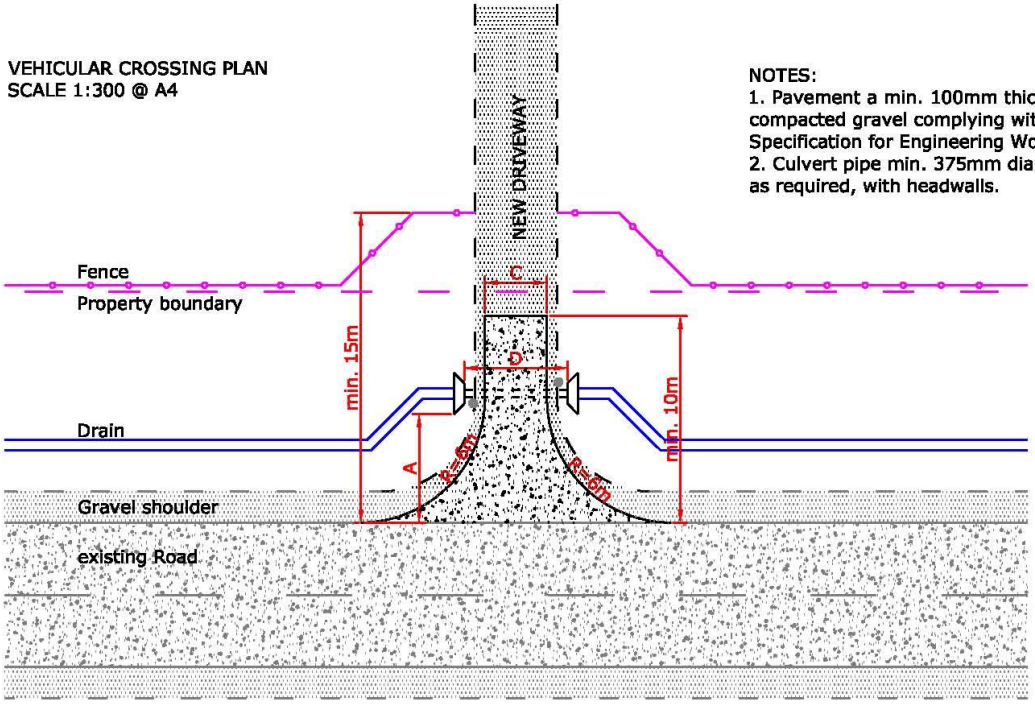


LOW LEVEL SECTION, Footpath behind gutter crossing

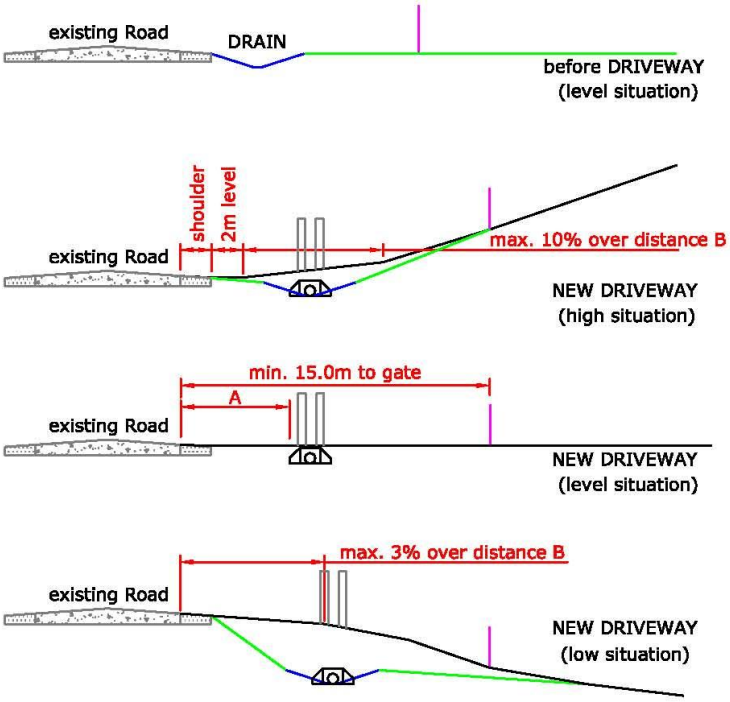
NOTE: This drawing supersedes the 1977 and 2001 drawings.

SCALES: 1:40 @A3	DRAWN BY: W.H., 11/04/2011	COOMA-MONARO SHIRE COUNCIL	SHEET: 1 of 1
NOTES:	FILE: AUTOCAD 'FOOTPATH CROSSING'	STANDARD VEHICULAR FOOTPATH (URBAN) CROSSING, LONG SECTIONS	D 243
	CHECKED / APPROVED BY: P.B.		
	ORIGINALLY ADOPTED: 8.9.1977		

VEHICULAR CROSSING PLAN
SCALE 1:300 @ A4



NOTES:
1. Pavement a min. 100mm thick compacted gravel complying with Council Specification for Engineering Works.
2. Culvert pipe min. 375mm diameter or as required, with headwalls.



VEHICULAR CROSSING LONG SECTIONS
N.T.S.

CODE	DIMENSION
A	6m - 100kph design speed
A	4m - 80kph design speed
A	2.5m - 60kph design speed
B	6m
C	3m - single entrance
C	6m - double entrance
D	7m for C=3m, A=2.5m
D	5m for C=3m, A=4or6m
D	10m for C=6m, A=2.5m
D	8m for C=6m, A=4or6m

NOTES:
3. On sealed roads, provide bitumen sealed vehicular crossings for at least the first 10m.
4. Any gate to be set back min. 15m from the edge of the pavement. Increase set back to 20m if gate opens towards the road.
5. Guideposts are to be erected as shown and in accordance with Council Specification.

NOTE: This drawing supersedes all earlier editions.

SCALES: as shown	DRAWN BY: W.H., 11/04/2011	COOMA-MONARO SHIRE COUNCIL	SHEET: 1 of 1
NOTES: Amended 25.3.11, W.H.	FILE: AUTOCAD 'VEHICULAR CROSSING'	STANDARD VEHICULAR RURAL CROSSING Roads other than State Highways	B 238
	CHECKED / APPROVED BY: P.B.		
	ORIGINALLY ADOPTED: 7/1/2002		