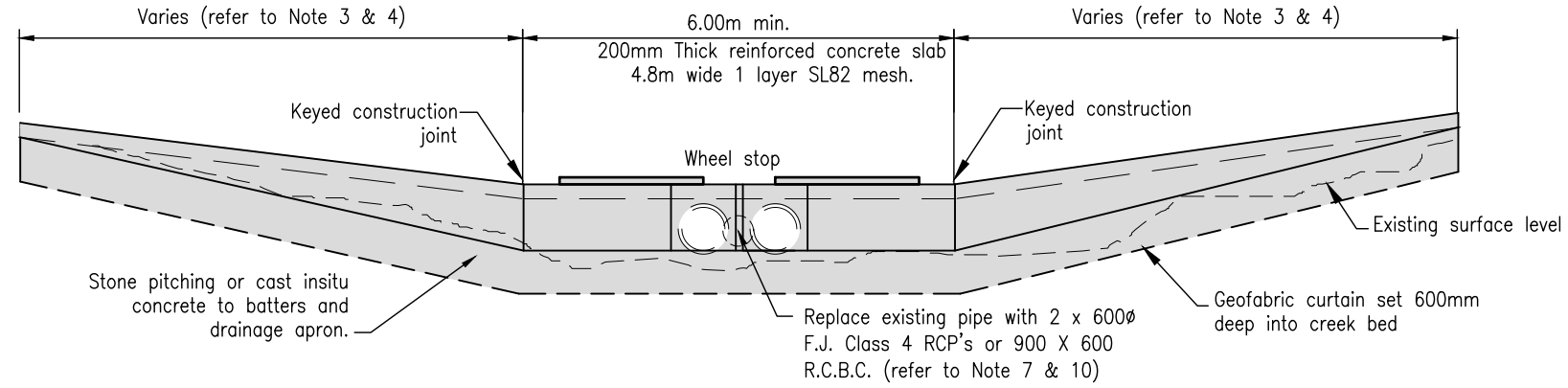
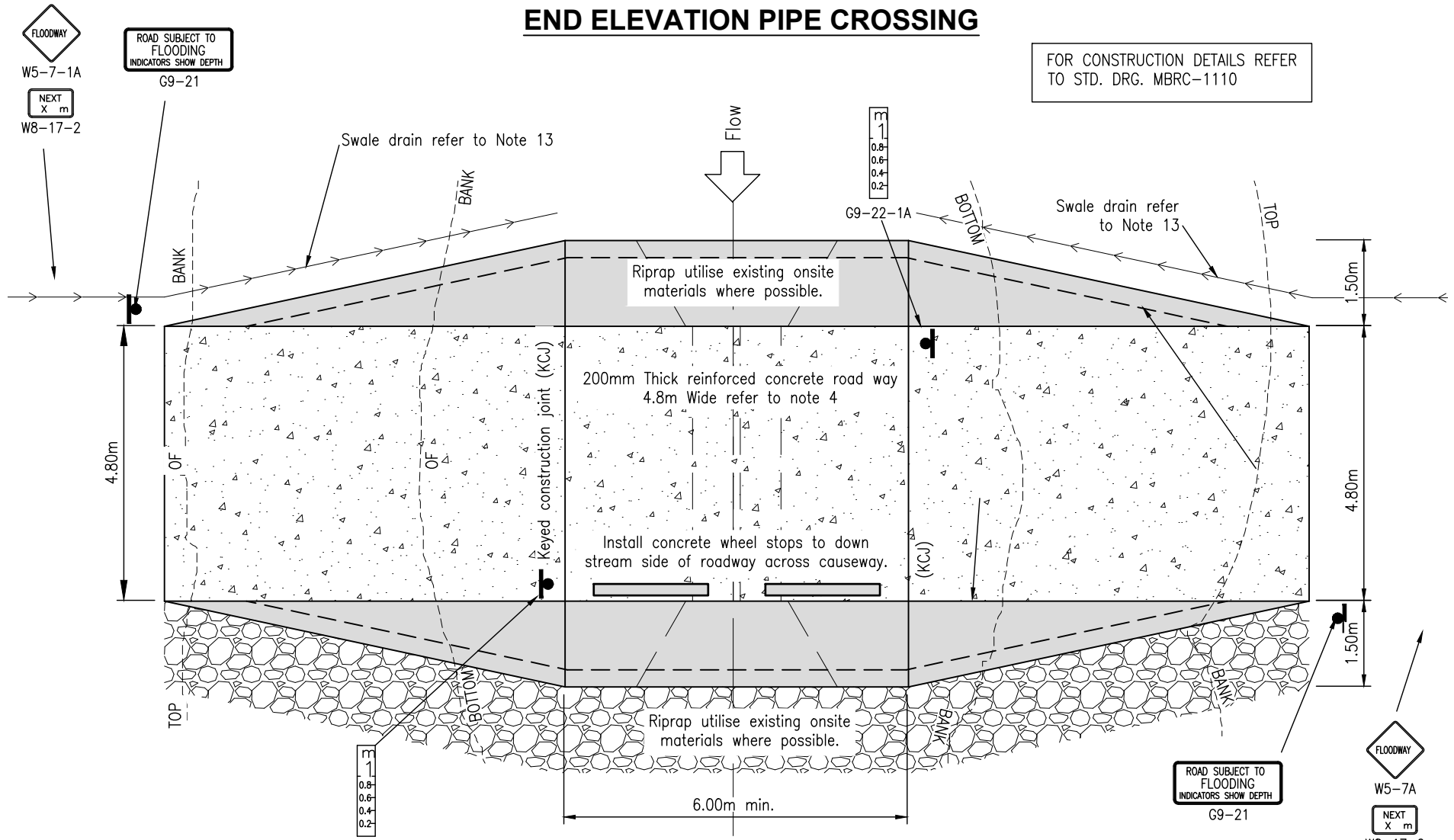


200mm Thick x 4.80m wide reinforced concrete slab 1 layer SL82. Length to be decided on site to match into existing approaches.



END ELEVATION PIPE CROSSING

FOR CONSTRUCTION DETAILS REFER TO STD. DRG. MBRC-1110



PLAN VIEW FLOODWAY CROSSING

NOTES

- Details are for the upgrading/reconstruction of an existing floodway on a one lane rural road only. Details are not to be used for new construction unless approved by councils engineer.
- These floodway details pertain to a 90° road crossing. Where a skewed crossing is required the general arrangements may be modified to suit.
- Floodway is designed to cater for Q10 flows <math>< 30m^3/sec.</math> with an assumed down stream standing water level of 150mm above invert level and may not suit all sites. Site approval is to be obtained from the Manager Project Management and Construction prior to commencing construction.
- Roadway approaches to floodway:-
 - Design and construct in accordance with Austroads "Guide to Road Design" Part 3 – Geometric Design and to the satisfaction of the site Supervisor/Contract Manager.
 - Causeway and approaches are to be 200mm thick reinforced concrete with SL82 mesh (75mm btm cover) with construction joints at 5m centres (max) or otherwise shown. Concrete to be N32 cured for 7 days where a side road is constructed or N50 cured for 12 hours where a side track is not constructed.
 - Approach grades are to be 1:20 max. Matching into existing road levels. Length of causeway approaches are to be determined on site by the site superintendent and to match into existing road levels at the top of the banks.
- Sign posting :-
 - Floodway
 - Next km (W8-17-2)
 - Road subject to flooding – indicators show depth (G9-21)
 - Depth indicator – (G9-22)
 - Guide posts, warning signs and depth indicators are to be installed as per the Manual of Uniform Traffic Control Devices.
- Temporary construction of side roads are to be determined on site by the site superintendent.
- Culvert crossing is to be reconstructed to match into existing levels. Clear and reshape creek bed where required.
- Box culvert preferred for permanent stream where fish passage is required.
- Riprap and rock pitching to utilise existing material on site where possible. Riprap to be selected angular rocks well graded D50 300mm rocks placed 450mm deep. Area, size and location to be determined on site by the site superintendent.
- Batter treatment, culvert headwall and apron to be keyed 600mm into creek bed. Batters to be shaped to match into existing creek channel.
- Rock pitching to batters and pipe surround, shape pitching to match into creek flow channel capacity. Precast headwalls or concrete cast in situ 150mm thick (nom.) may also be used.
- Rock pitching order of works:-
 - Place geofabric and insert apron ends 600mm min. into natural material.
 - Place rock/stone on geofabric.
 - Apply concrete to rock surfaces and crevices
 - Wash latent from rock surfaces.
- Geofabric to be non woven BIDIM A24 or equivalent meeting strength and permability requirements.
- Adjoining road swale drains are to be cleaned and reshaped to suit.

Swale drain	Treatment
0.4%-2%	Concrete lined
2%- 5%	Grass lined
5%-10%	Rock lined
10% or Great	Concrete lined
- Select fill to be (nom. Class 2.5 material) compacted to 100% standard (one (1) test each side of culvert).
- Install 150mm high wheel stops to down stream side of roadway only across causeway at 1.0m spacing.

STANDARD DRAWINGS

Drawing No	Title
DTMR 1174	Construction of End Structures H = 150 – 600
DTMR 1305	General Arrangement and Installation of Wingwalls Headwalls and Aprons
DTMR 1316	General Arrangement and Installation of Precast Units
DTMR 1359	Culverts – Installation, Bedding and Filling/Backfilling against/over Culverts

REVISIONS	INIT	DATE
E		
D		
C		
B	R.H.	02/16
A	R.H.	05/14

SCALES
A 0m 0.5 1.0 1.5 2.0 1:50 AT A1 1:100 AT A3

Drawn		Date	
Team Leader	K.S.	Date	5/2014
Coordinator	P.P.	Date	5/2014
AUTHORISED			
Manager Engineering RPEQ			

**FLOODWAY - GENERAL ARRANGEMENT
LOW VOLUME RURAL ROADS
Sheet 1 of 2**

Moreton Bay Regional Council

DRG No. **MBRC-1109**

ORIGINAL SIZE **A3** REVISION **B**