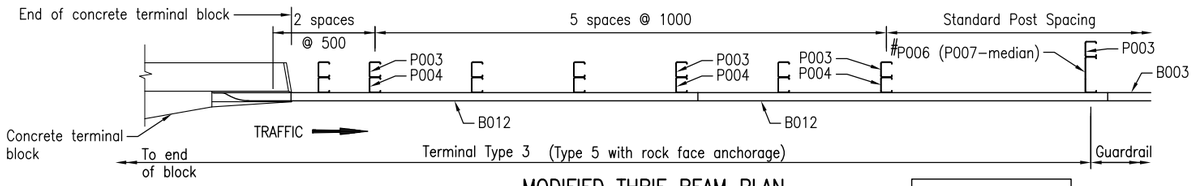
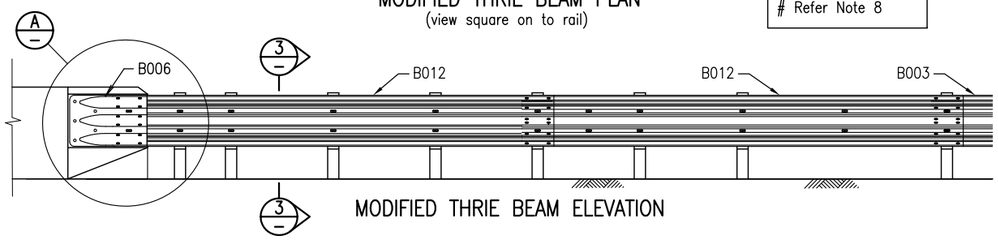
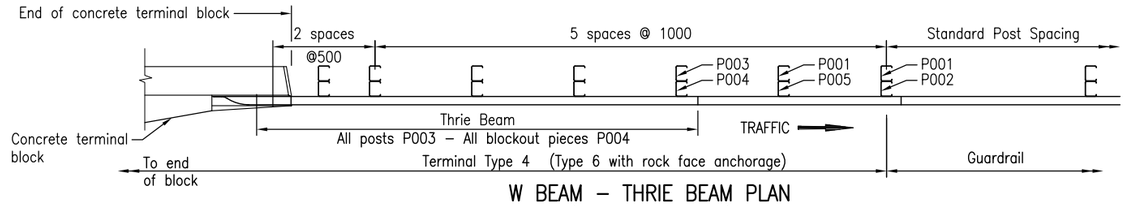


MODIFIED THRIE BEAM PLAN
(view square on to rail)

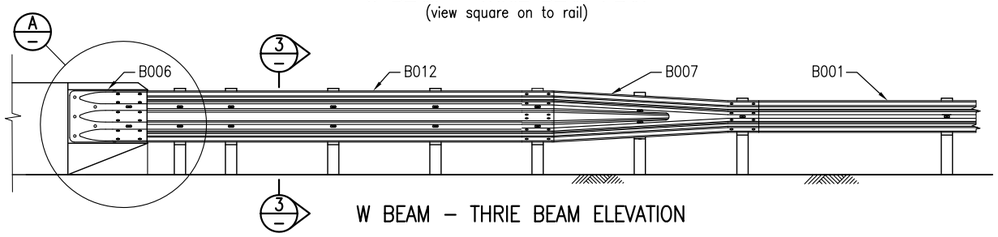
Refer Note 8



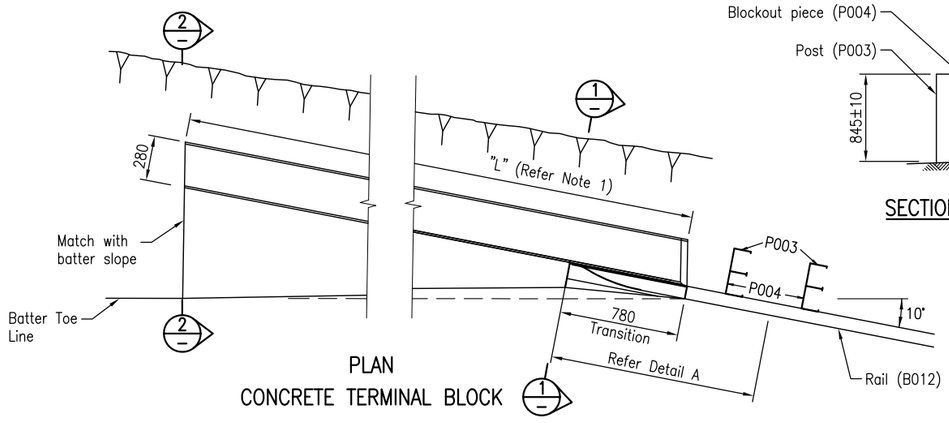
MODIFIED THRIE BEAM ELEVATION



W BEAM – THRIE BEAM PLAN
(view square on to rail)

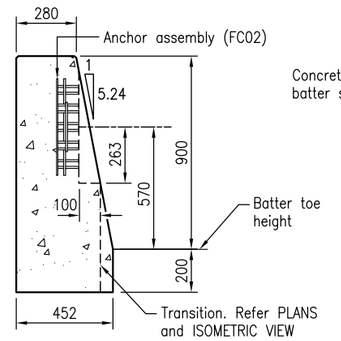


W BEAM – THRIE BEAM ELEVATION

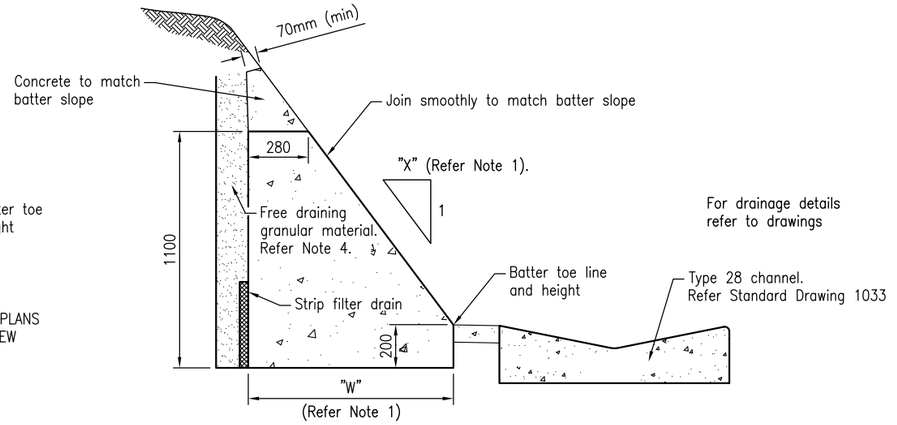


PLAN
CONCRETE TERMINAL BLOCK

SECTION 3

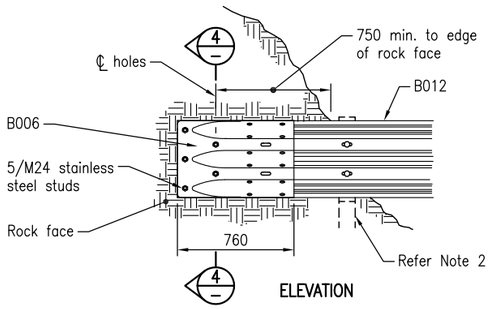


SECTION 1

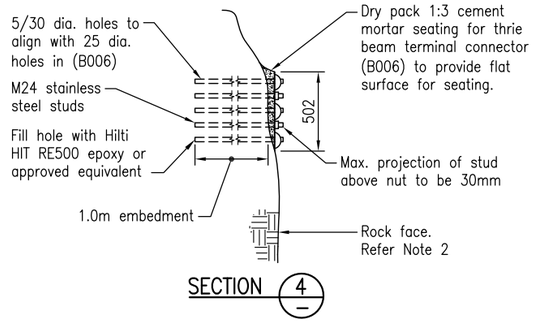


For drainage details refer to drawings

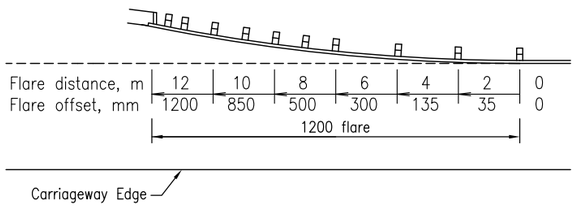
SECTION 2



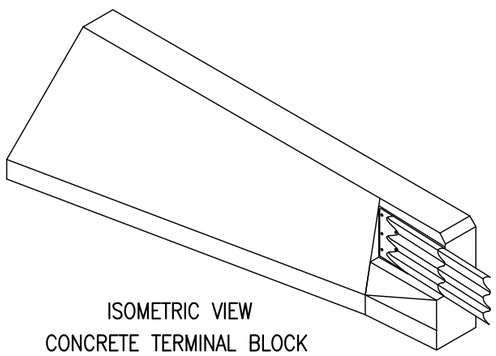
ELEVATION
ROCK FACE ANCHORAGE



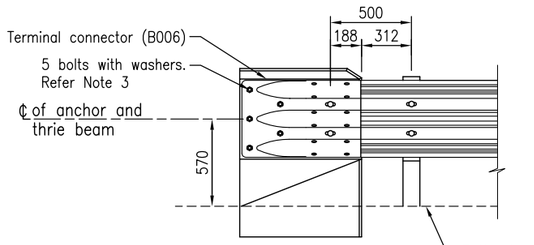
SECTION 4



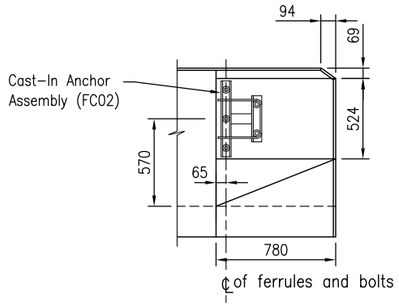
GUARDRAIL FLARE LAYOUT



ISOMETRIC VIEW
CONCRETE TERMINAL BLOCK



DETAIL A



ANCHOR ASSEMBLY

NOTES:

1. CONCRETE TERMINAL BLOCK:
   - Concrete Class shall be S32/20 to MRTS 70.
   - Reinforcing Details: Refer Standard Drawing 1485.
   - Batter slope "X" to conform with existing batter slope or batter slope shown in the drawing. Flattest batter slope limit shall be 1 on 1.
   - Length "L" (and width "W") to be as shown on the drawing providing a smooth transition from batter slope to single slope concrete barrier profile (Section 1).
   - Minimum length "L" is to be 1.5m.
2. ROCK FACE ANCHORAGE may be used, in lieu of the concrete terminal block, only in sound rock approved by a geotechnical Engineer. Where the batter slope prevents the use of adjacent posts, a blockout or approved spacer may be used in lieu of the post. Fixing of a blockout to rock face to be similar to the anchorage detail shown using 2/M16 stainless steel studs in 20mm dia. holes.
3. ANCHOR ASSEMBLIES (including bolts) are detailed on Standard Drawing 1467.
4. SHEET FILTER DRAIN may be used, in lieu of free draining granular material, in conjunction with a strip filter drain. Filter drains are to be in accordance with the standard specification MRSTS03.
5. POST ON BASE PLATE, detailed on Standard Drawing 1478, is to be used where rock encountered prevents driving of guardrail posts.
6. RAIL LAP, post and blockout orientation in relation to traffic direction as shown is essential.
7. STIFFENER PLATES shall be used at posts without a rail lap.
8. NOTCHED BLOCKOUTS P006 and P007 are used for modified thrie beam guardrail as detailed on Standard Drawing 1483 and shall not be used in terminals.
9. STEEL BEAM GUARDRAIL shall be in accordance with the requirements of AS/NZS 3845.
10. DIMENSIONS are in millimetres unless shown otherwise.

ASSOCIATED DOCUMENTS:
Main Roads Standard Drawings Roads Manual
Main Roads Specifications and Technical Standards Manual

REFERENCED DOCUMENTS:
Standard Drawings:
1033 Kerb and Channel – Kerbs, Channels and Ramped Vehicular Crossing
1467 Concrete Barrier/Bridge Parapet – Cast–in Anchor Assembly for W and Thrie Beam Guardrail Connection
1478 Steel Beam Guardrail – W Beam Anchor Bracket Delineation Unit Post on Base Plate Abraham Blockout
1483 Steel Beam Guardrail – Thrie Beam Layouts
1485 Steel Beam Guardrail – Reinforcing Details for Concrete Terminal Block
Standard Specifications:
MRTS14A Road Furniture (Steel Work)
MRTS03 Drainage, Retaining Structures and Protective Treatments
MRTS70 Concrete
Australian Standards:
AS/NZS 3845 Road Safety Barrier Systems

STEEL BEAM GUARDRAIL	Queensland Government Department of Transport and Main Roads	
BATTER SLOPE TERMINALS (1 ON 1 AND STEEPER)	A3 Not to Scale	Standard Drawing No 1484 Date 1/11
	A | B	