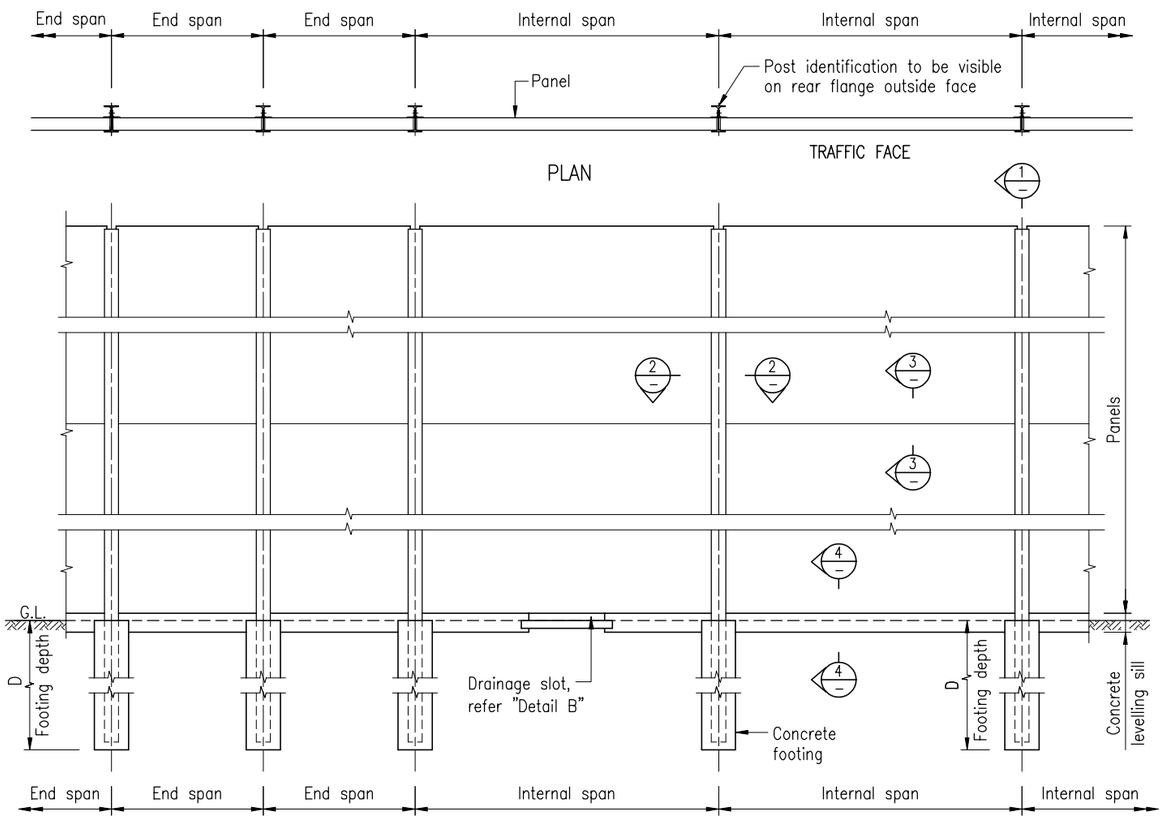
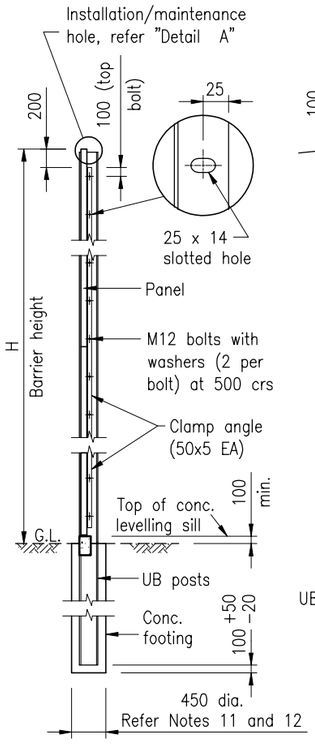
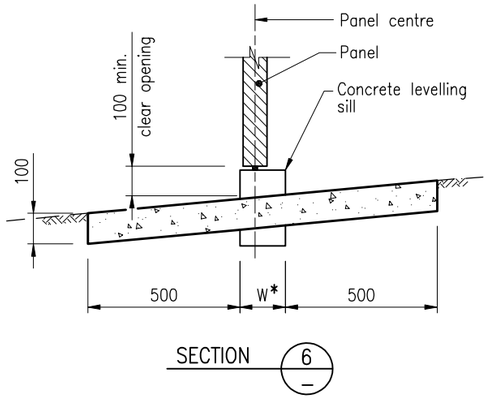
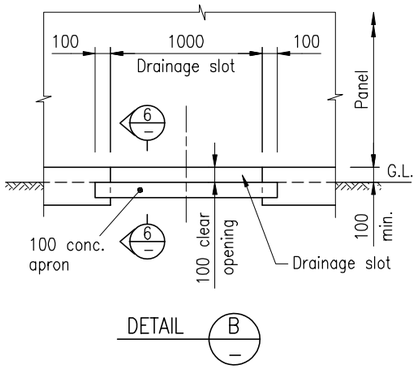
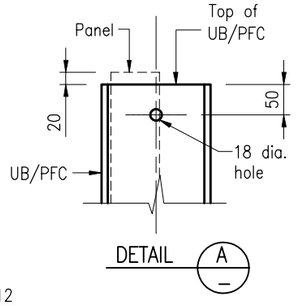








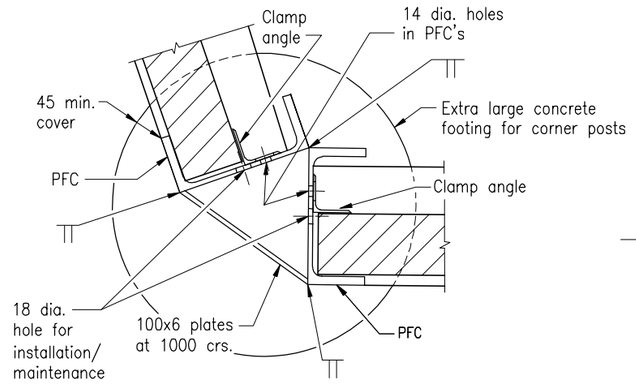


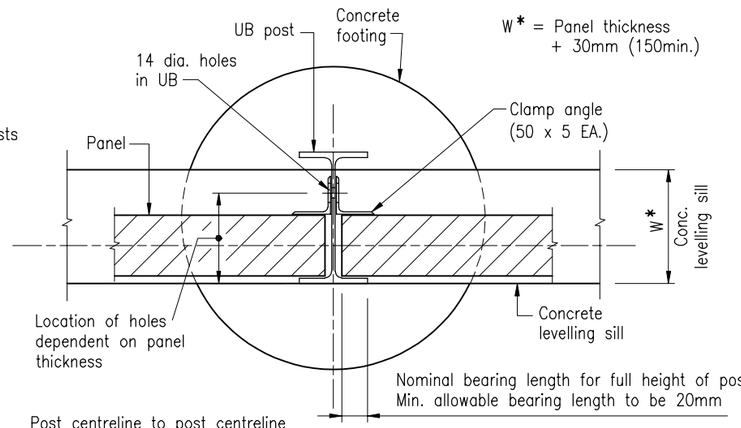
NOTES:

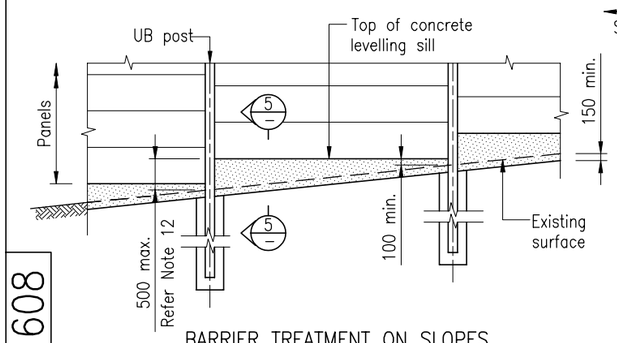
1. ALL DIMENSIONS to be verified on site by Contractor before fabrication of posts.
2. STEEL POSTS:
   - 2.1 Posts to be UB's except at corners. Posts to be composite PFC's at corners.
   - 2.2 The barrier label and post number shall be welded (or by other method approved by the Superintendent) on each post and to be clearly visible after galvanizing eg [B2] ie Barrier B, Post No. 2.
   - 2.3 14mm diameter holes, for M12 bolts at 500mm centres, to be drilled.
   - 2.4 Corner posts to be fabricated as detailed.
   - 2.5 After fabrication, all posts to have weld splatter and welding slag removed prior to hot dip galvanizing to AS/NZS 4680.
3. CLAMP ANGLES:
   - 3.1 Clamp angles to be fabricated from 50x5 EA.
   - 3.2 25x14mm slotted holes at 500mm centres to align with 14mm diameter holes in posts.
   - 3.3 Fabricated clamp angles shall be hot dip galvanized to AS/NZS 4680.
4. HOT ROLLED SECTIONS shall be grade 300 or as specified to AS/NZS 3679.1.
5. STEEL PLATES to be grade 250 to AS/NZS 3678.
6. WELDING to be to AS/NZS 1554.1. Welding symbols are to AS 1101.3.
7. REINFORCING MESH to AS/NZS 4671.
8. CONCRETE PANELS/STEEL PANELS shall comply with the requirements of standard specification MRS11.15.
9. ACOUSTIC SEAL/MECHANICAL INTERLOCK SYSTEM shall be as specified in standard specification MRS 11.15.
10. BOLTS to be grade 4.6 to AS/NZS 1111, nuts to be grade 5 to AS/NZS 1112 and washers to AS 1237. Bolts and nuts to be hot dip galvanized to AS 1214. Washers to be hot dip galvanized to AS/NZS 4680.
11. CONCRETE in footings, levelling sills and aprons to be grade N25/20. 45mm Minimum concrete cover to steel posts and reinforcing mesh.
12. DETAILS to be shown elsewhere in the documents:
    - Location of end and internal spans
    - Span lengths: End span and internal span
    - Barrier height H
    - Footing depths D
    - Footing diameter if not standard 450mm
    - Location of drainage slots
    - Design details for concrete levelling sills higher than 500mm
    - UB and PFC sizes
    - Barrier labels and post numbers
    - Panel type and thickness
    - Design permissible wind speed (Vzp)
13. DIMENSIONS are in millimetres unless shown otherwise.

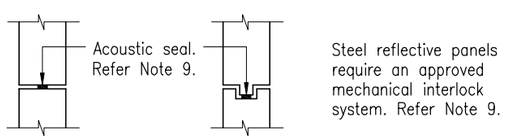
ASSOCIATED DOCUMENTS:
Department of Main Roads Manual of Standard Drawings Roads
Department of Main Roads Manual of Standard Specifications Roads

REFERENCED DOCUMENTS:
Standard Specifications:
MRS11.15 Noise Barriers

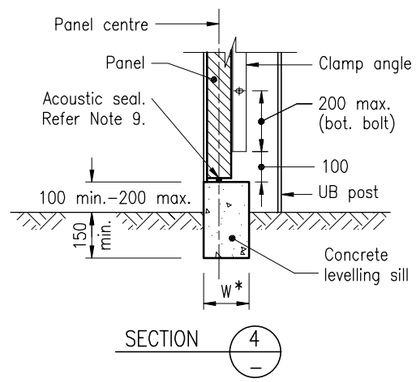


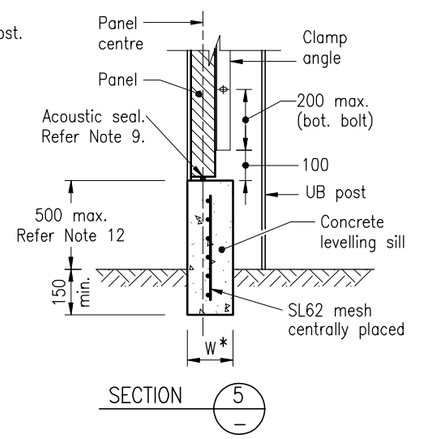






Steel reflective panels require an approved mechanical interlock system. Refer Note 9.





1608

NOISE BARRIERS	Queensland Government Department of Main Roads	
STRUCTURAL DETAIL UNIVERSAL BEAM POSTS CONCRETE PANELS STEEL PANELS	Size A3	Drawing No 1608
	Scales as shown	Date 4/04
		A