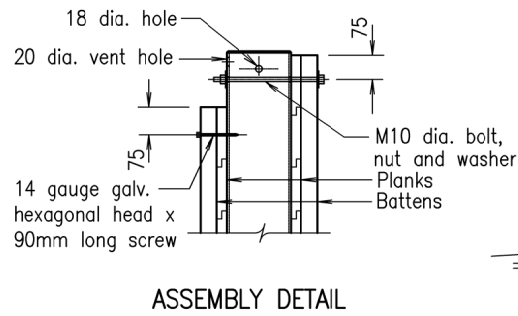
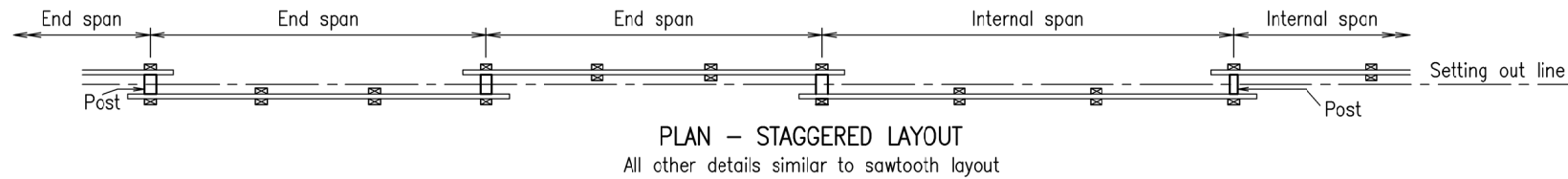


Galvanizing on inside of 12mm dia. drilled hole is not to be damaged during construction

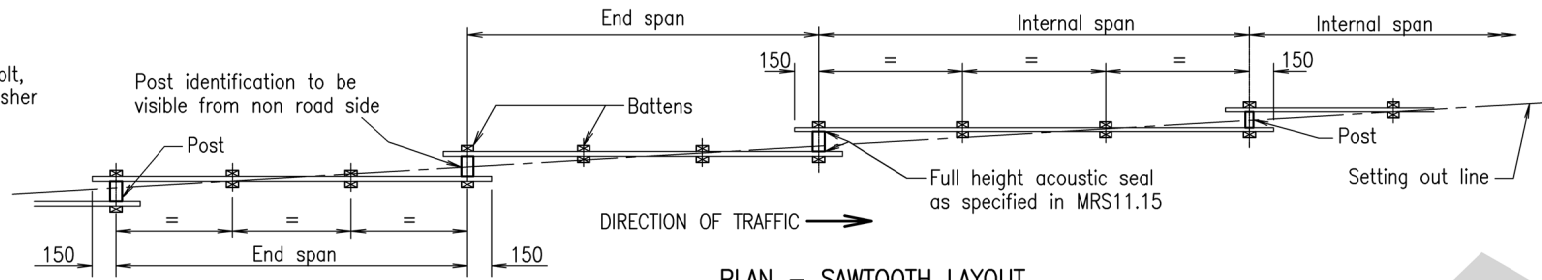


ASSEMBLY DETAIL



PLAN - STAGGERED LAYOUT

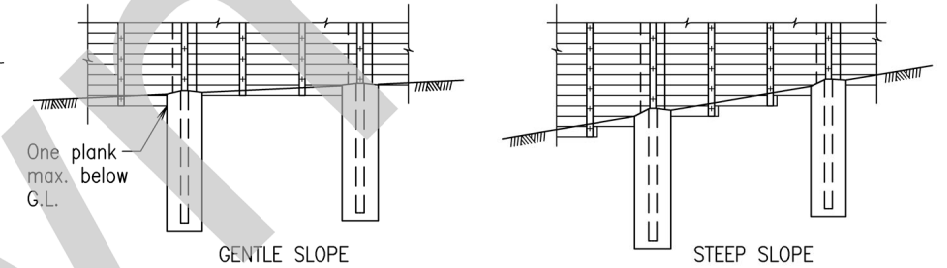
All other details similar to sawtooth layout



PLAN - SAWTOOTH LAYOUT

MAXIMUM SPACING OF FASTENERS AND BATTENS

ITEM	INTERNAL SPAN	END SPAN
	Internal span	End span
BATTENS	3	3
Plank Fasteners	540mm	540mm
Batten Fasteners	540mm	270mm
Clouts	540mm	-

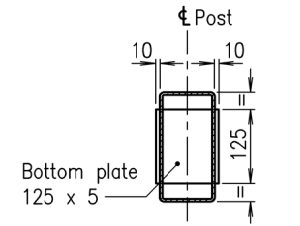


BARRIERS ON SLOPES

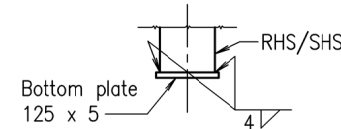
NOTES:

- ALL DIMENSIONS to be verified on site by Contractor before fabrication of steel posts.
- POSTS to be RHS/SHS Grade 350 to AS 1163.
- ALL HOLES IN POSTS shall be drilled prior to hot dip galvanizing to AS/NZS 4680.
- ALL STEEL POSTS shall be identified by welding (or by other method approved by the Superintendent) the barrier label and post number on the barrier post. This shall be carried out prior to galvanizing and shall be clearly visible after galvanizing. eg. [B2] ie. Barrier B, Post No. 2.
- POSTS to have weld splatter and welding slag removed prior to hot dip galvanizing to AS/NZS 4680.
- STEEL PLATES to be Grade 250 to AS/NZS 3678.
- WELDING SYMBOLS are to AS 1101.3. Welding to be to AS/NZS 1554.1.
- SCREWS shall be self tapping 14 gauge type 17 and 14 gauge hexagon head as specified in MRS11.15. Noise Barriers.
- WASHERS FOR SCREWS shall be 32mm OD Dekfast Part No. DS332145 metal/bonded washers or approved equivalent. The support material shall be 1mm galvanized steel or approved equivalent and the moulded material shall be EPDM Polymer.
- BOLTS grade 4.6 to AS/NZS 1111, nuts grade 5 to AS/NZS 1112 and LS washers to AS 1237.
- BOLTS AND NUTS to be hot dip galvanized to AS 1214 and washers to be hot dip galvanized to AS/NZS 4680 unless shown otherwise.
- M10 BOLTS to be positioned so that the head is on the road face side of the noise barrier.
- FOOTING DIAMETER shall be 450mm unless shown otherwise.
- TIMBER PLANKS shall be softwood graded to no. 5 structural grade to AS 2858 with overriding limitations as specified in MRS11.15. Timber planks shall be treated to hazard level 4 (H4) if in contact with the ground and to hazard level 3 (H3) elsewhere.
- TIMBER BATTENS shall be structural sawn softwood F5 or better to AS/NZS 1748 or AS 2858 and treated to hazard level 4 (H4).
- CONCRETE GRADE to be N25/20. 45mm min. concrete cover to steel posts.
- EXPOSED HOLES IN POSTS shall be filled with silicon prior to post erection.
- DETAILS to be shown elsewhere in the documents:
Layout type
Barrier height H
RHS and SHS post sizes
Extension mounting holes
Drainage slot details
Span lengths: End span and internal span
Footing depths D
Footing diameter if not standard 450mm
Barrier labels and post numbers
Design permissible wind speed (Vzp)
- DIMENSIONS are in millimeters

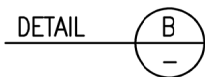
This Standard Drawing is withdrawn. Timber plank noise barriers are not to be used on new projects or installations within the TMR network. This drawing can be used for the purpose of maintaining and repair of existing installations. This drawing shall be read in conjunction with the superseded TMR Specification MRTS15 Noise Fences (July 2017).



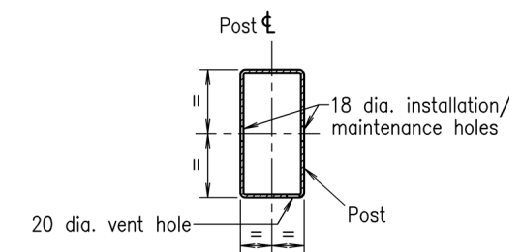
SECTIONAL PLAN



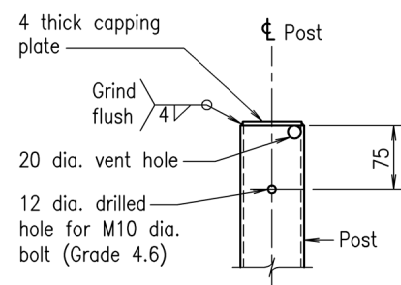
ELEVATION



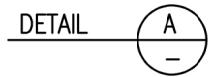
DETAIL B



SECTIONAL PLAN

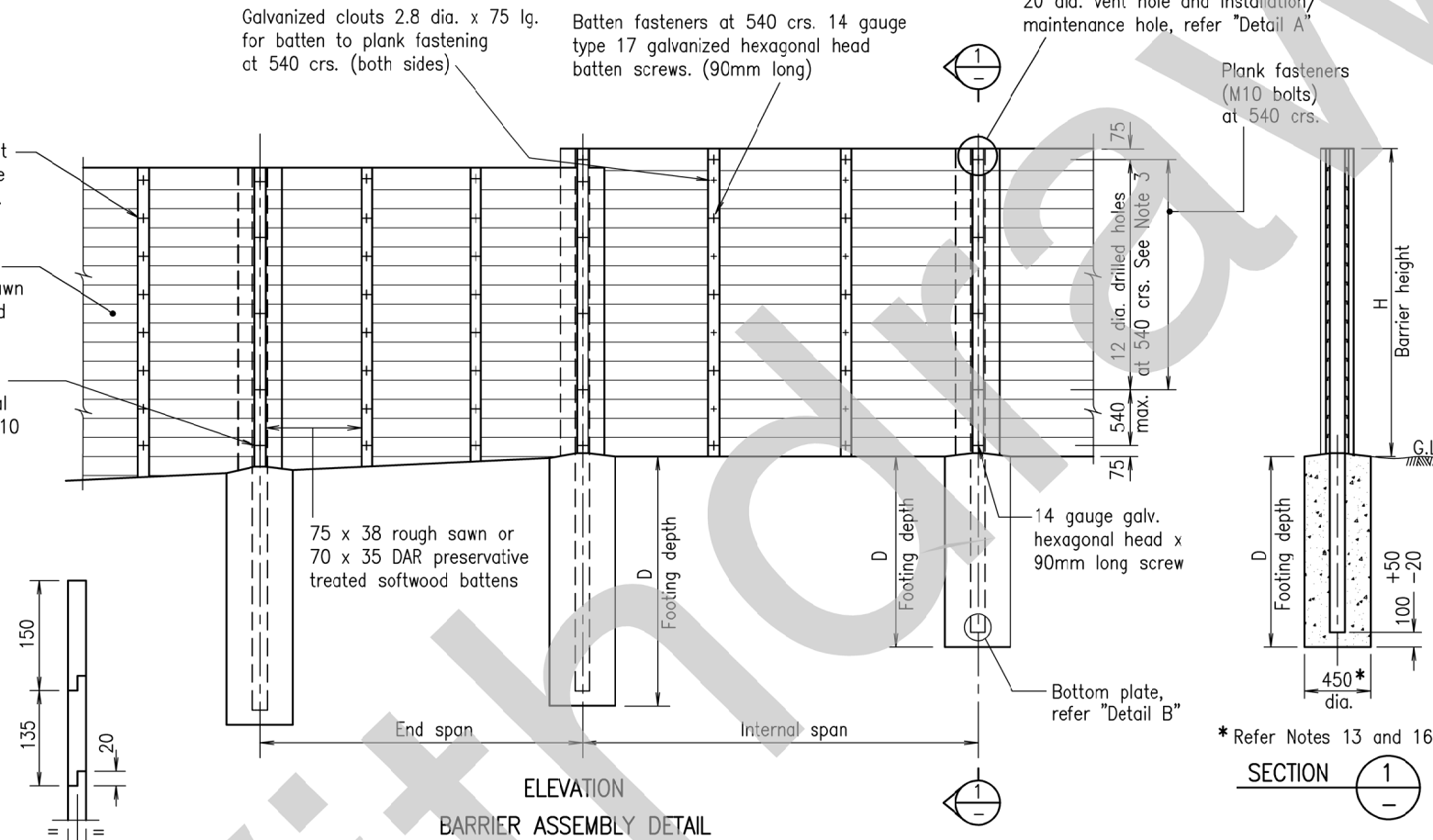


ELEVATION



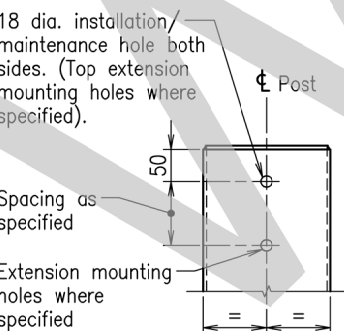
DETAIL A

Batten fasteners at 270 crs. 14 gauge type 17 x 90 hex. head screws
150 x 25 finished thickness rough sawn preservative treated softwood planks
Plank fasteners at 540 crs. Hexagonal head galvanized M10 bolts, nuts & L.S. washers.

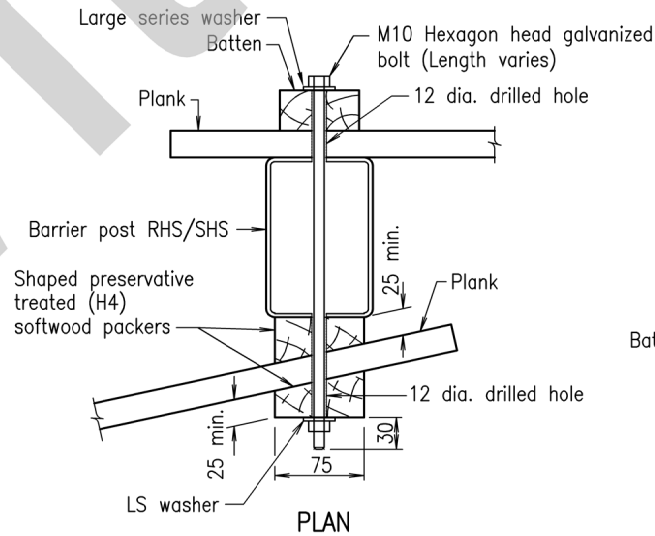


ELEVATION BARRIER ASSEMBLY DETAIL

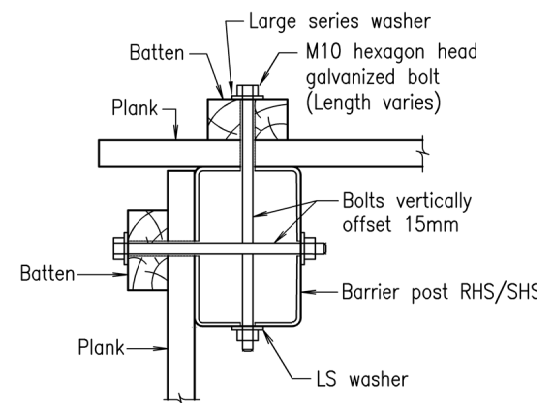
SHIP PLANK LAP DETAIL



SIDE ELEVATION

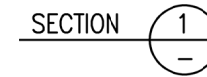


PLAN DETAIL AT ANGLED CONNECTIONS



PLAN DETAIL AT RIGHT ANGLED CONNECTIONS

* Refer Notes 13 and 16



SECTION 1

NOISE BARRIERS	Queensland Government Department of Main Roads	
	Size A3	Drawing No 1605
STRUCTURAL DETAIL RHS AND SHS STEEL POSTS TIMBER PLANKS	Scales as shown	Date 4/04
	A	B