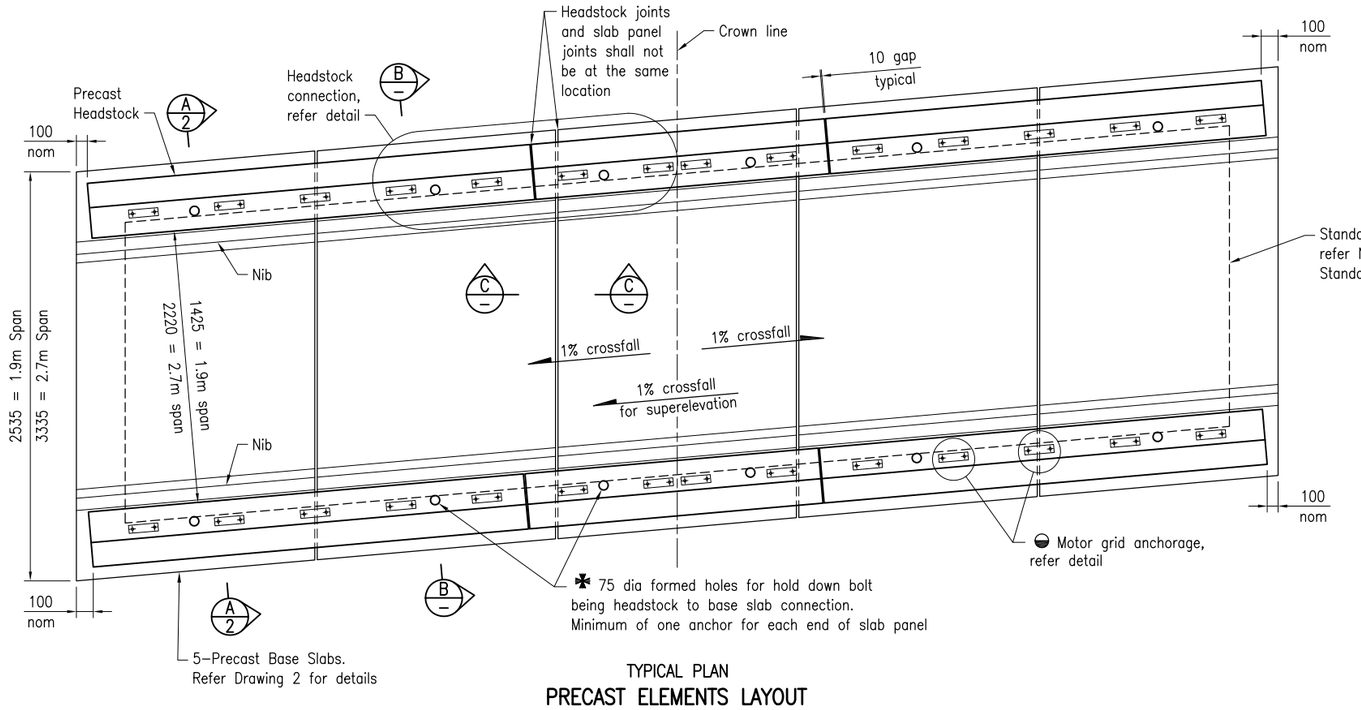


TYPICAL PLAN

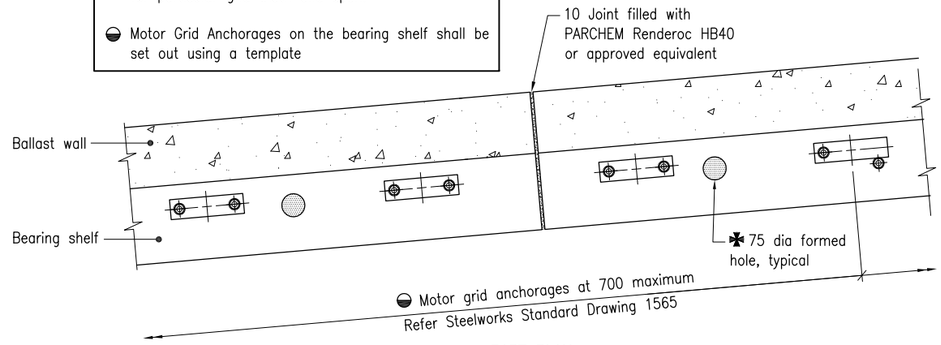
PRECAST ELEMENTS LAYOUT

MOTOR GRID CONSTRUCTION SEQUENCE

1. Level ground with suitable fill, or existing ground with suitable bearing capacity. Refer NOTES 4 and 5.
2. Place precast base slabs.
3. Install hold down bolts into ferrules located in the precast base slabs. Lower precast headstocks onto precast base slabs.
4. Use a template to ensure motor grid anchorages on the bearing shelf of the headstocks are matching with the spacing of the Bearers. Refer Standard Drawing 1565 for details for details of Motor Grid Steelworks.
5. Use mortar to fill hold down bolt holes with minimum 1 day curing and 10MPa strength.
6. Place approved grout into abutment joints.
7. Place steel motor grids onto headstocks.
8. Tighten nut and washer on UB sections, for motor grid anchorages.

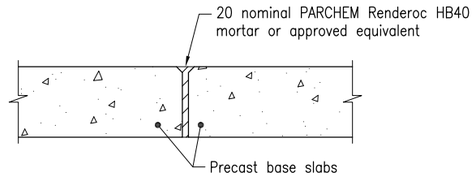
✠ Location of ferrules for hold down bolts are indicative only. Accurate location of these is project specific and shall be shown on the project drawings for particular grid width and span.

◒ Motor Grid Anchorages on the bearing shelf shall be set out using a template

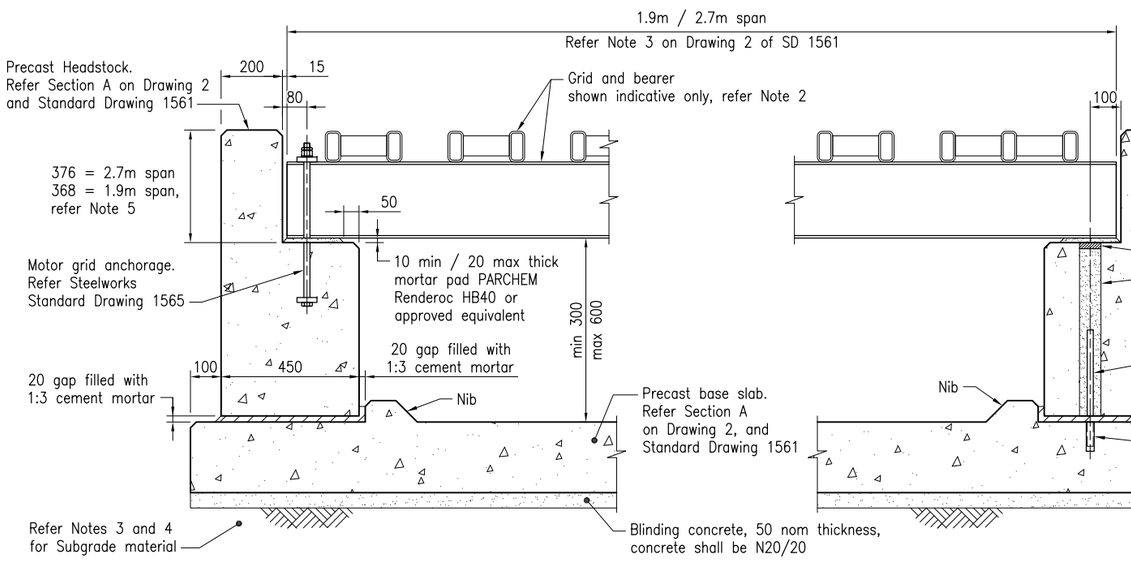


PART PLAN

PRECAST HEADSTOCK CONNECTION DETAIL

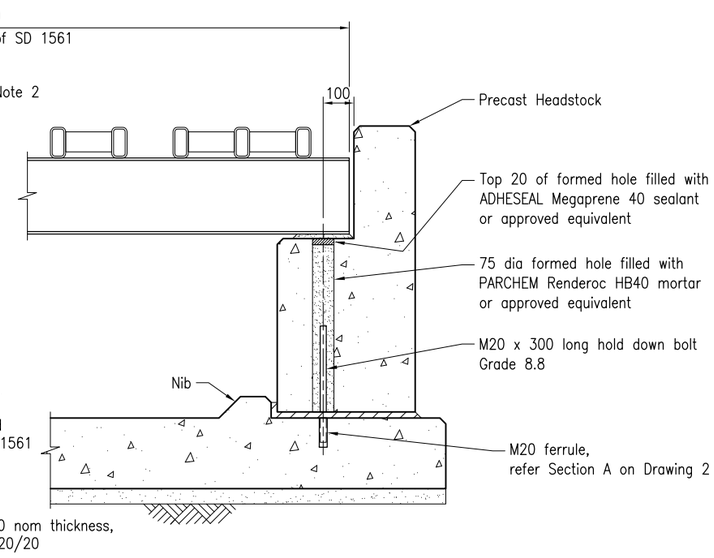


SECTION C –



TYPICAL DETAIL OF PRECAST HEADSTOCK AT MOTOR GRID ANCHORAGE

SECTION B –



TYPICAL DETAIL OF PRECAST HEADSTOCK AT HOLD DOWN BOLT HOLE

NOTES:

1. Refer Standard Drawing 1561 for General Notes, Grid Construction Scenarios and General Arrangements for Standard Motor Grids.
2. Refer Standard Drawing 1565 for Motor Grid Steelwork details.
3. Location of hold down bolt holes and motor grid anchorages are indicative only. Accurate location of these is project specific and shall be shown on the project drawings for particular grid width and span.
4. DESIGN BEARING PRESSURE under the slab bases is 100kPa.
5. SLABS shall be constructed on a filled or existing subgrade of minimum 500 thick, with minimum 10% soaked CBR to the width of the abutment (compacted to 95% relative dry density), unless the actual bearing capacity of founding material has been assessed by a RPEQ (Geotechnical).
6. FINISHED LEVELS of the ballast wall of the headstock and top of edge RHS rails shall be within +0, −5mm tolerance

PRECAST HEADSTOCK AND PRECAST BASE SLABS ASSEMBLY

Department of Transport and Main Roads

ROAD FURNITURE

MOTOR GRID – PRECAST BASE SLAB DRAWING 1 of 2

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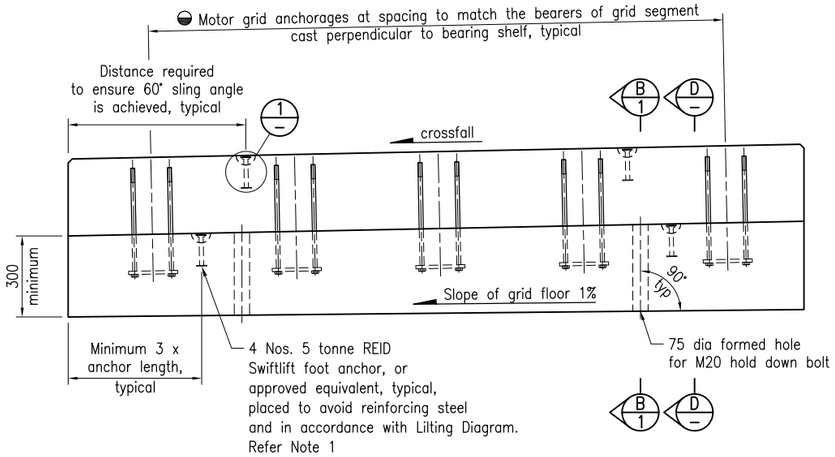
Standard Drawing No 1564

Date 11/19

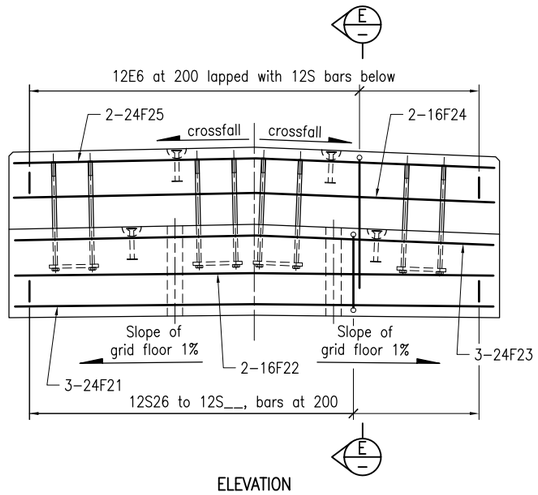
A | B | C



ELEVATION

TYPICAL PRECAST HEADSTOCK ASSEMBLY

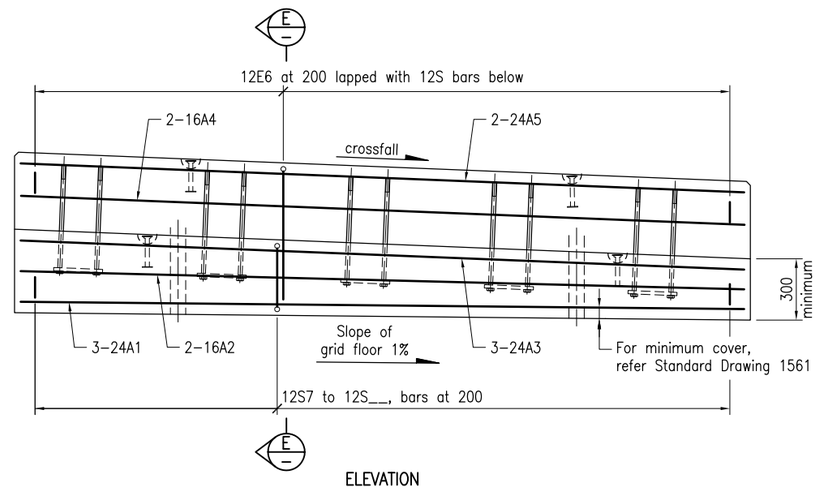
Crossfall Type shown, Superelevation similar.
No OFF and geometry of each headstock is project specific



ELEVATION

TYPICAL PRECAST HEADSTOCK AT CROWN

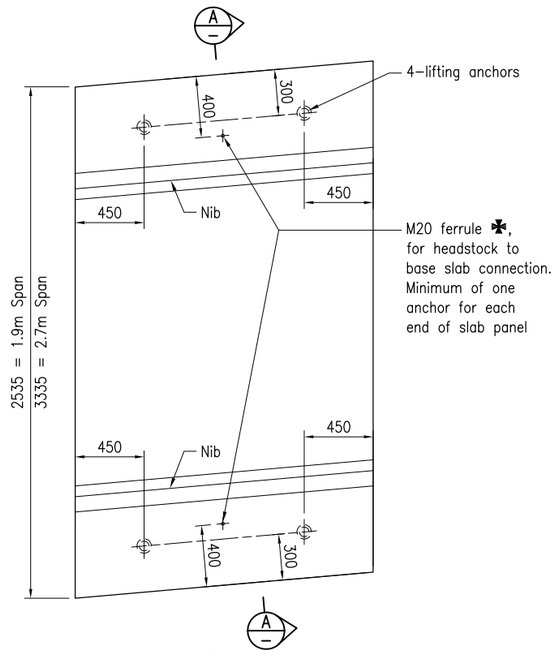
Crossfall Type shown, Superelevation similar.
No OFF and geometry of each headstock is project specific



ELEVATION

TYPICAL PRECAST HEADSTOCK REINFORCEMENT

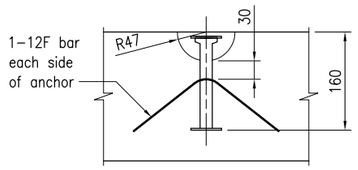
Crossfall Type shown, Superelevation similar.
No OFF and geometry of each headstock is project specific



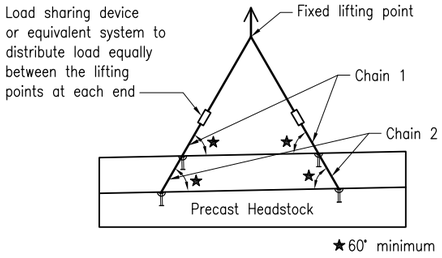
PLAN

TYPICAL PRECAST SLAB

No OFF and width of each slab is project specific

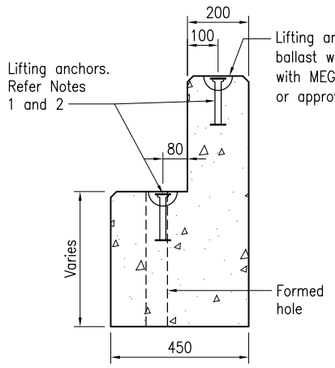


DETAIL 1

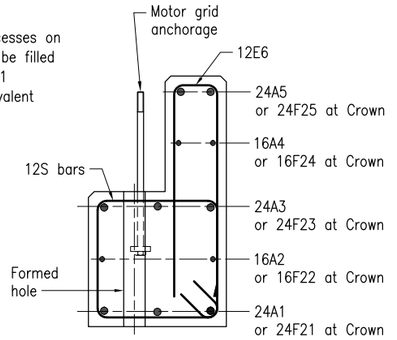


LIFTING DIAGRAM

Precast Headstock shown, Base Slab similar

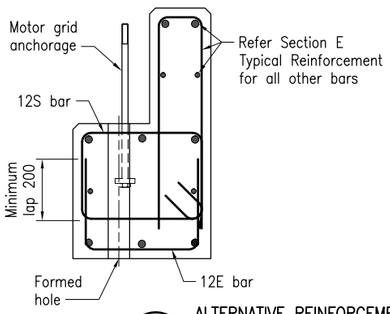


SECTION D



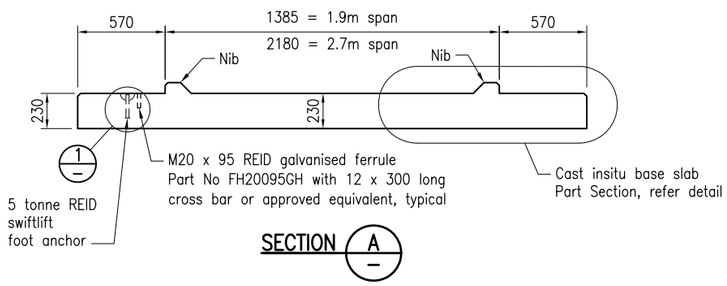
SECTION E

TYPICAL REINFORCEMENT FOR BALLAST WALL AND ABUTMENT

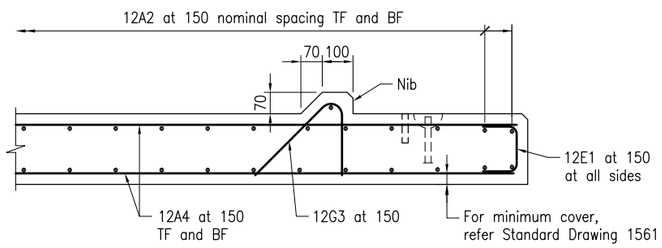


SECTION E

ALTERNATIVE REINFORCEMENT TO ACCOMMODATE VARYING HEIGHT OF ABUTMENT



SECTION A



PART SECTION

CAST INSITU BASE SLAB – TYPICAL REINFORCEMENT DETAILS

✠ Location of ferrules for hold down bolts are indicative only. Accurate location of these is project specific and shall be shown on the project drawings for particular grid width and span.

Motor Grid Anchorages on the bearing shelf shall be set out using a template

NOTES:

1. For superelevation (single slope) road surface, the reinforcement similar.
2. The Lifting anchor details shown are for maximum precast item weight of 5t. For all other cases, lift points and devices shall be designed in accodance with MRTS72 and shown on project drawings.
   Dynamic load allowance for lifting anchor design is 1.5.
3. Lifting anchors shall maintain minimum cover to reinforcement.
4. The width of the Precast Slab panels shall be defined to suit project specific Motor Grid width.

DETAILS OF PRECAST BASE SLABS AND PRECAST HEADSTOCKS

Department of Transport and Main Roads

ROAD FURNITURE

MOTOR GRID – PRECAST BASE SLAB DRAWING 2 of 2

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Standard Drawing No 1564

Date 11/19

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