



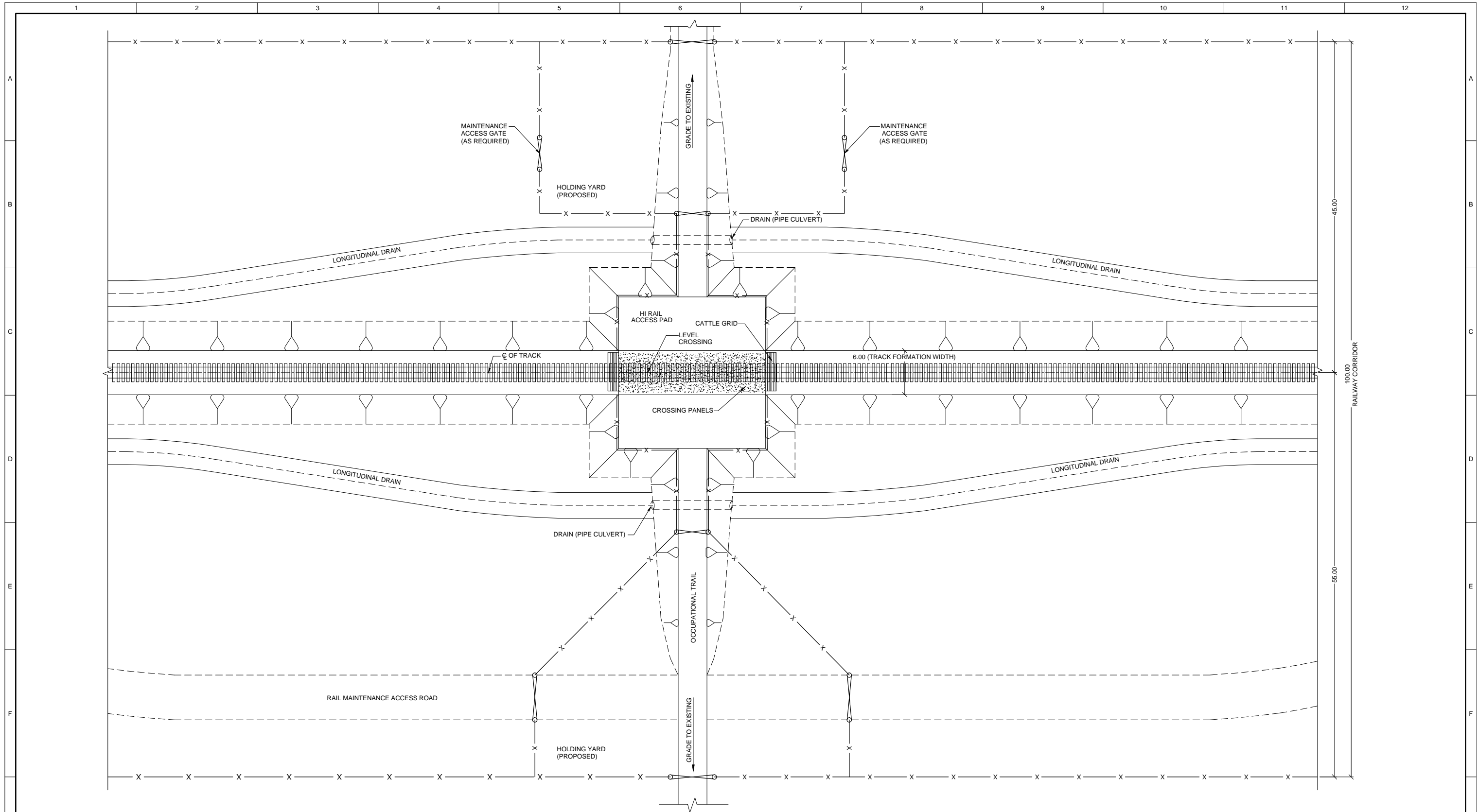
Adani Mining Pty Ltd

NORTH GALILEE BASIN RAIL PROJECT

Environmental Impact Statement

Appendix T Concept design drawings

November 2013

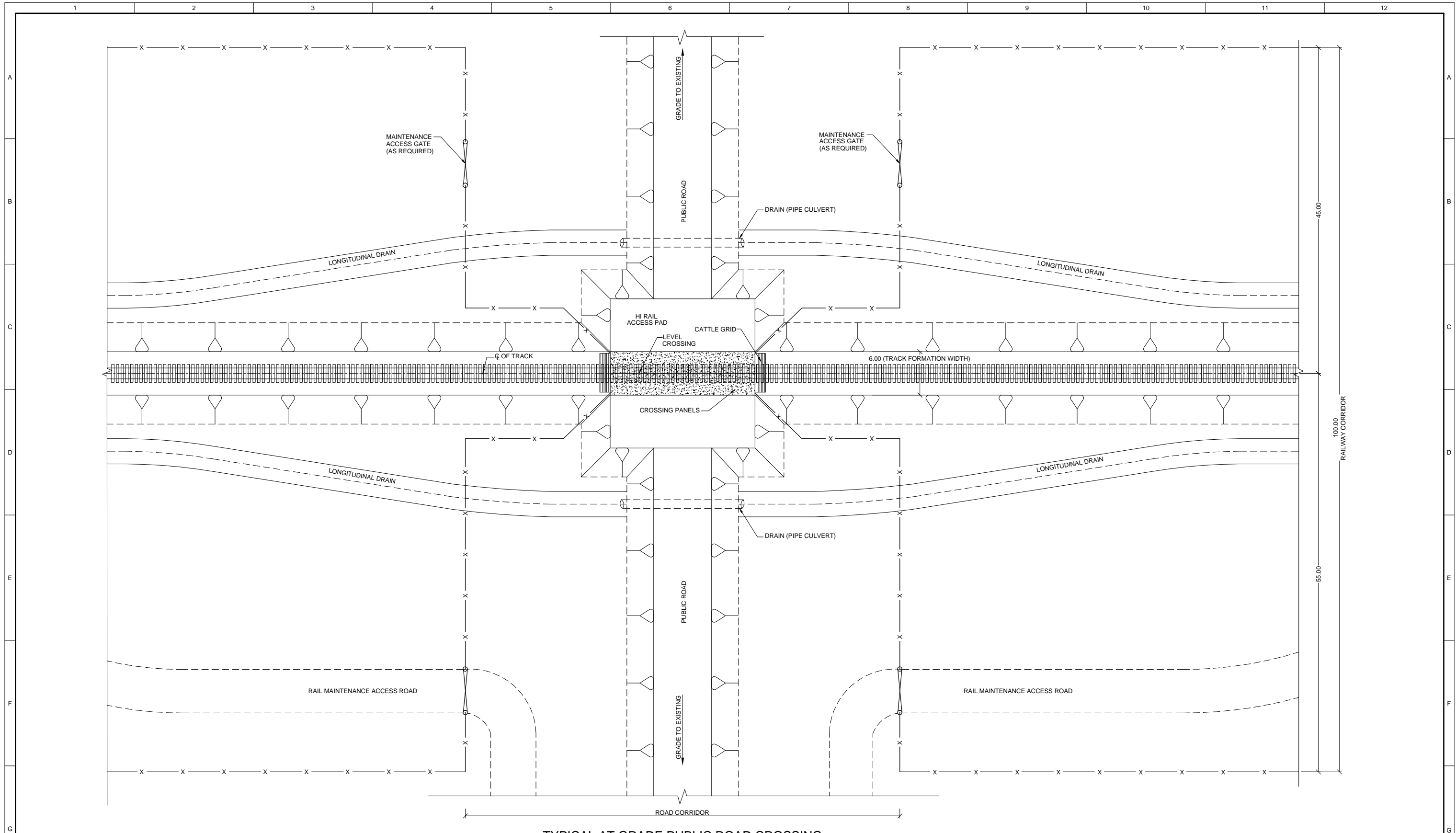


TYPICAL AT GRADE OCCUPATIONAL CROSSING
SCALE 1:250

- NOTES:**
1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
 2. UNDERGROUND UTILITIES / SERVICES ARE TO BE LOCATED PRIOR TO WORKS BEING UNDERTAKEN.

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B	ISSUED FOR CLIENT REVIEW	SYAM		15-06-13							
A	ISSUED FOR INTERNAL REVIEW	SYAM		10-06-13							
Last Modified :-Jun 15,2013 - 3:10PM											

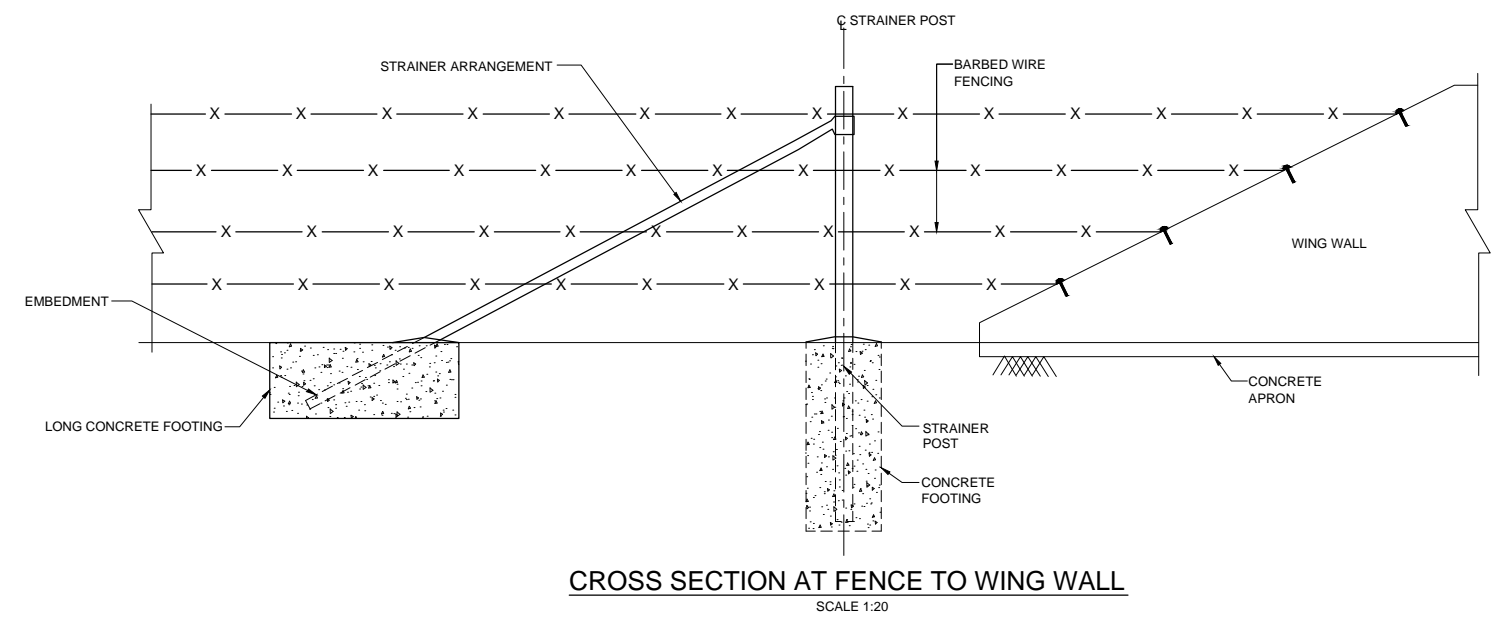
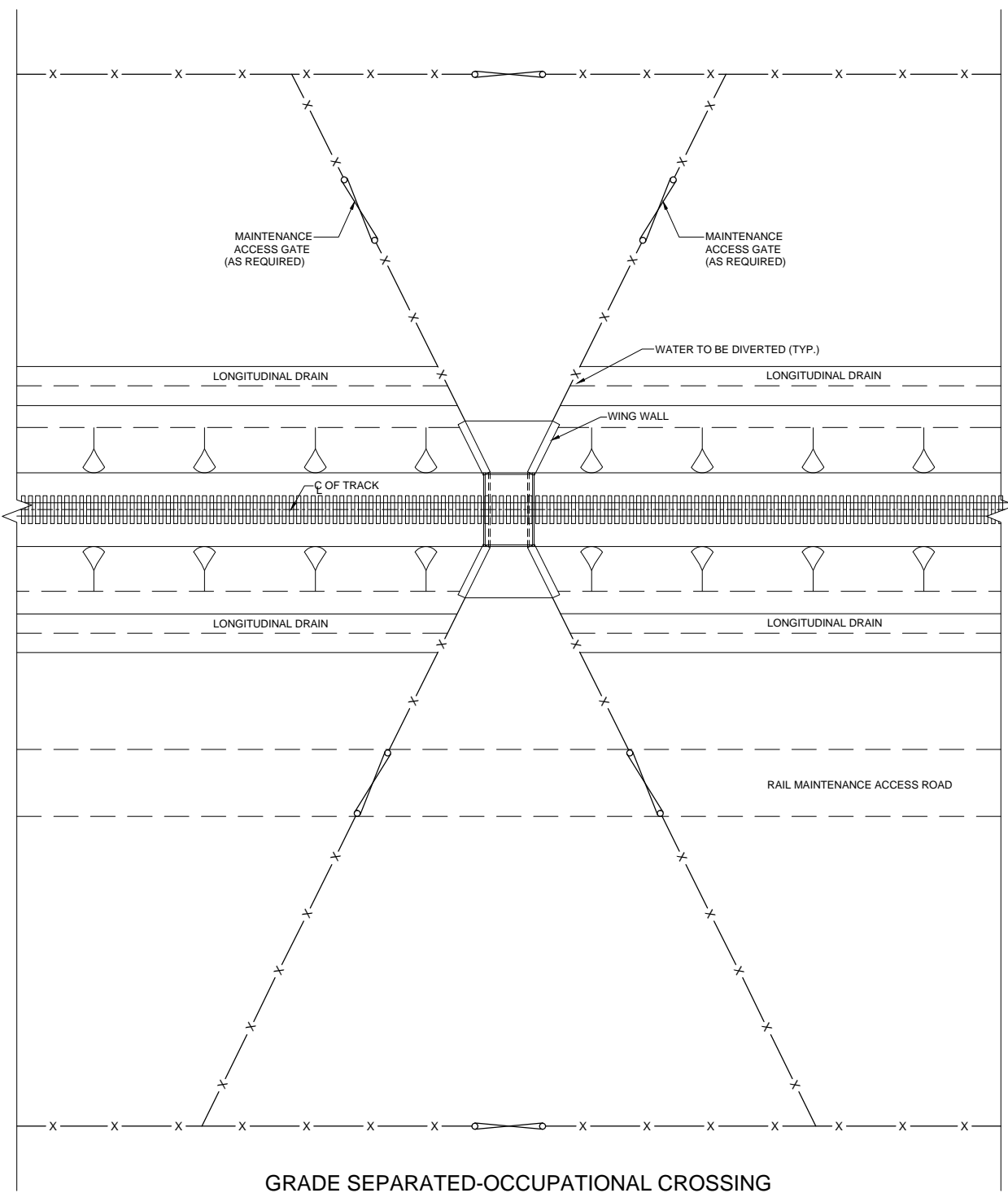


TYPICAL AT GRADE PUBLIC ROAD CROSSING
SCALE 1:250

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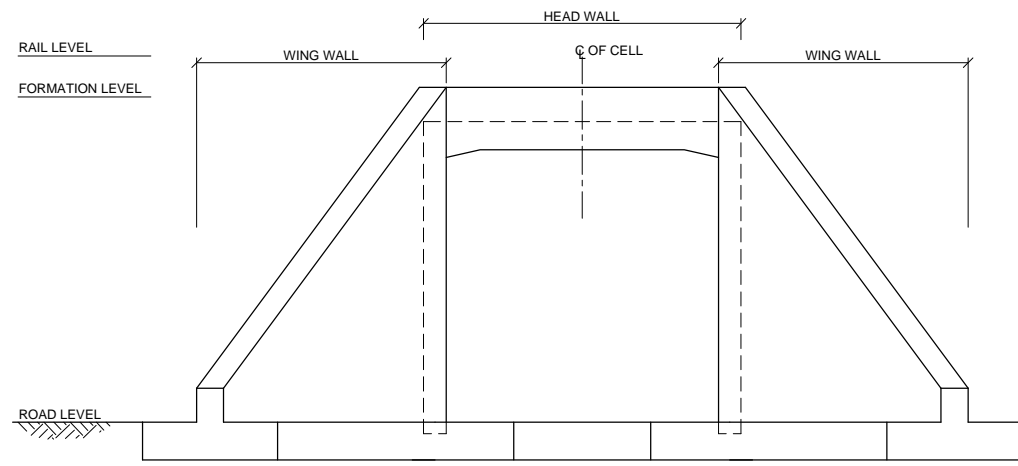
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Rev</th> <th>Description</th> <th>By</th> <th>Verified</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>ISSUED FOR CLIENT REVIEW</td> <td>SYAM</td> <td></td> <td>15-06-13</td> </tr> <tr> <td>A</td> <td>ISSUED FOR INTERNAL REVIEW</td> <td>SYAM</td> <td></td> <td>10-06-13</td> </tr> </tbody> </table> <p style="font-size: 8px;">Last Modified :- Jun 15, 2013 - 5:23PM</p>	Rev	Description	By	Verified	Date	B	ISSUED FOR CLIENT REVIEW	SYAM		15-06-13	A	ISSUED FOR INTERNAL REVIEW	SYAM		10-06-13	<p align="center">1 : 250</p> <p>LEGEND</p> <p>— X — FIELD GATE</p> <p>— X — FENCING</p>	<p align="center">aarvee associates architects engineers & consultants pvt.ltd.</p> <p style="font-size: 8px;">Ravula Residency, Srinagar Colony Main Rd., Hyderabad-500082, India</p> <p style="font-size: 8px;">Tel: +91-40-93737633 Fax: +91-40-93736277 e-mail: railways@aarvee.net web: www.aarvee.net</p> <p style="font-size: 8px;">DISCLAIMER: Aarvee Associates has endeavored to ensure accuracy of the drawing. Data sourced from LIDAR, DEM, Contours, Property Owners and other sources as provided by ADANI who make no warranties about the completeness, accuracy, suitability or reliability. Drawings are produced for best possible accuracy based on available data. Alignment design is based on information provided/available at the time of preparation of drawings. Reasonable assumptions have been made to prepare the drawings and are subject to further review on availability of complete information/data. However, AARVEE cannot accept any liability for any damages, losses, expenses which are or may be incurred as a result of any discrepancies as may be found in case any discrepancies are found, these are to be reported to AARVEE, which in turn shall report them to Adani Mining Pty Ltd.</p>	<p align="center">adani Adani Mining Pty Ltd.</p> <p style="font-size: 8px;">COPYRIGHT The concepts, diagrams and information contained in this document are the sole property and copyright of Adani Mining Pty Ltd. Any use, copying, reproduction or disclosure of the document, whether directly or indirectly, or in whole or in part without the prior written permission of Adani Mining Pty Ltd, is prohibited.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Drawn SYAM</td> <td>Checked KARTHIK A</td> </tr> <tr> <td>Designed SUBRAHMAYAM</td> <td>Approved A N KESKAR</td> </tr> <tr> <td>RPEQ No.</td> <td></td> </tr> <tr> <td>Date</td> <td></td> </tr> </table>	Drawn SYAM	Checked KARTHIK A	Designed SUBRAHMAYAM	Approved A N KESKAR	RPEQ No.		Date		<p>Drawing Title NORTH GALILEE BASIN RAIL PROJECT OCCUPATIONAL & STOCK CROSSINGS AT GRADE - PUBLIC ROAD CROSSING</p> <p>Client Drawing No. _____</p> <p>Consultant/Contractor Drawing No. NGBR1551-C-DWG-D-012</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Rev B</td> </tr> </table>	Rev B
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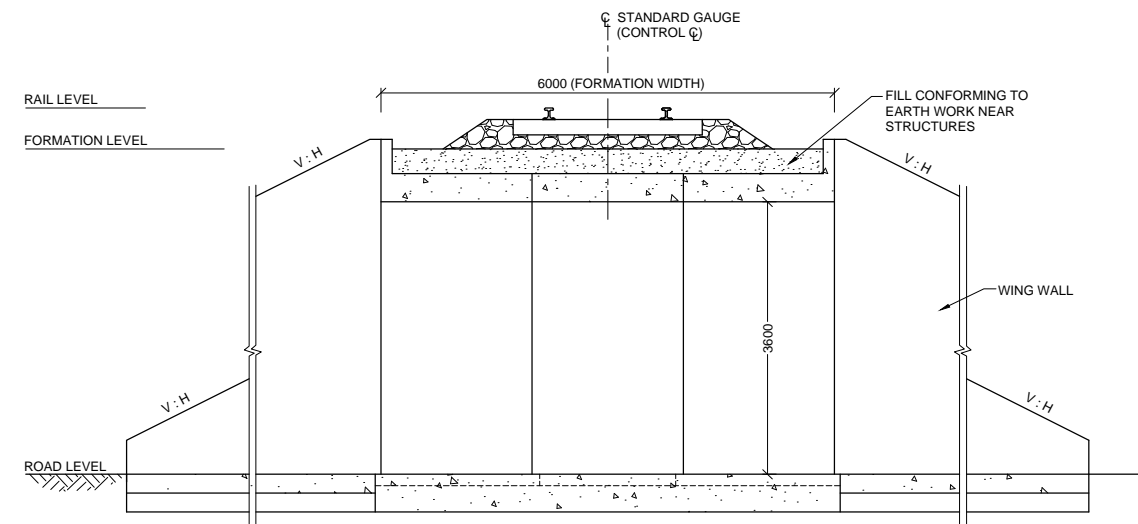
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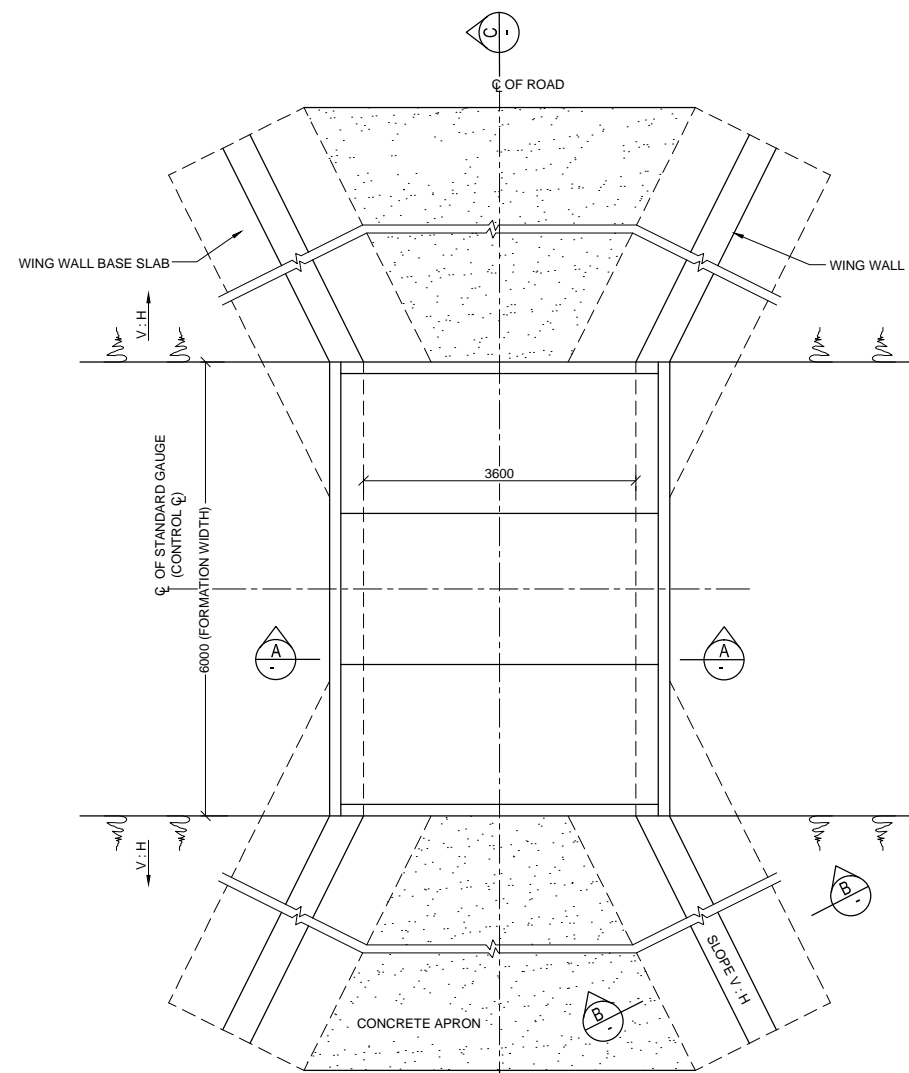


ELEVATION
SCALE 1:50

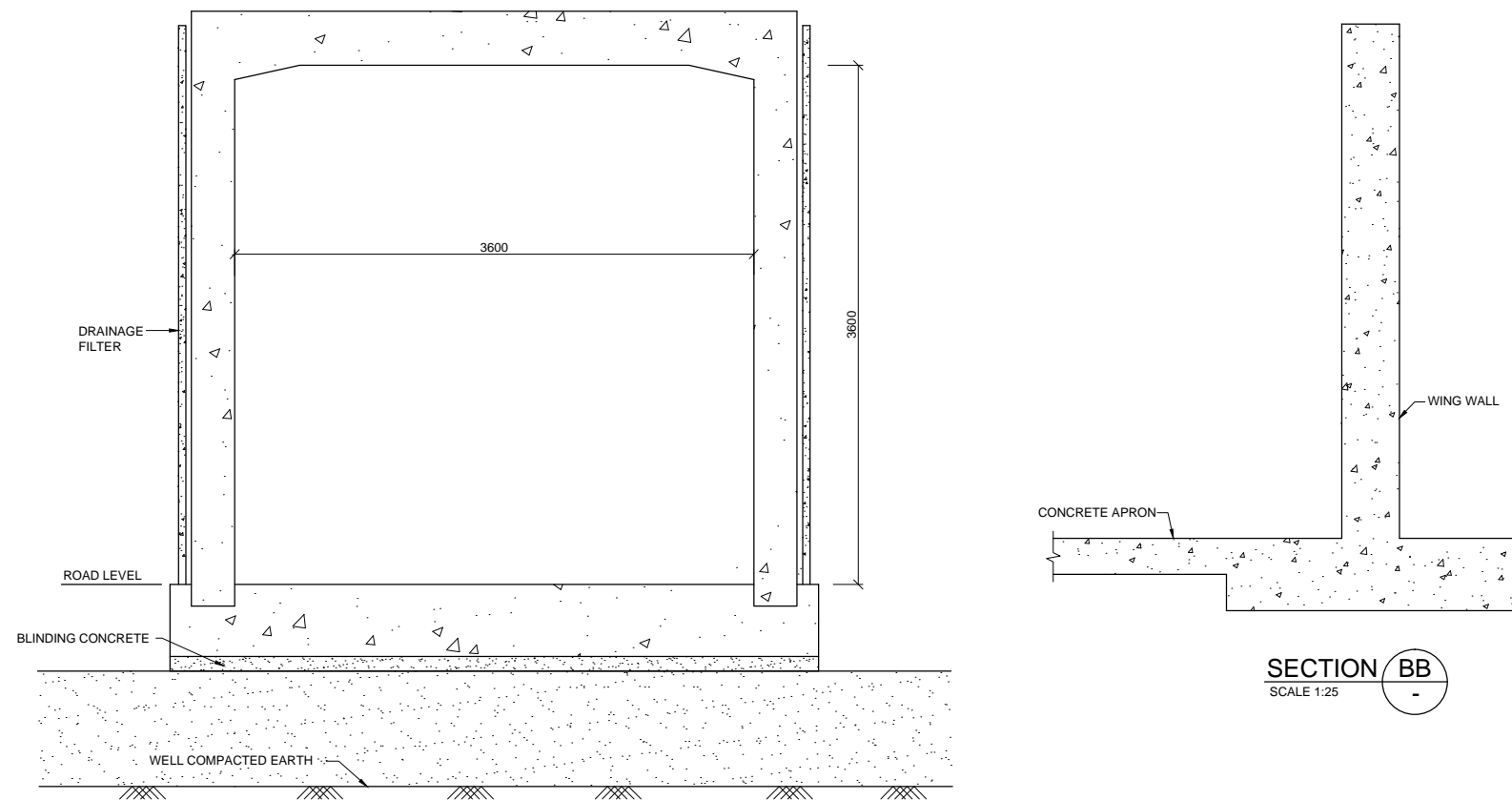


SECTION CC
SCALE 1:50

- GENERAL NOTES :**
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 2. CONCRETE GRADE SHALL BE AS FOLLOWS
 PRECAST CONCRETE : S50.
 CAST-IN-SITU CONCRETE : S40.



TYPICAL PLAN - SINGLE CELL
SCALE 1:50



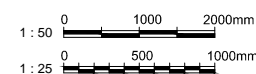
SECTION AA
SCALE 1:25

SECTION BB
SCALE 1:25

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SCALES SHOWN ARE FOR AN A1 SIZE ORIGINAL DRAWING

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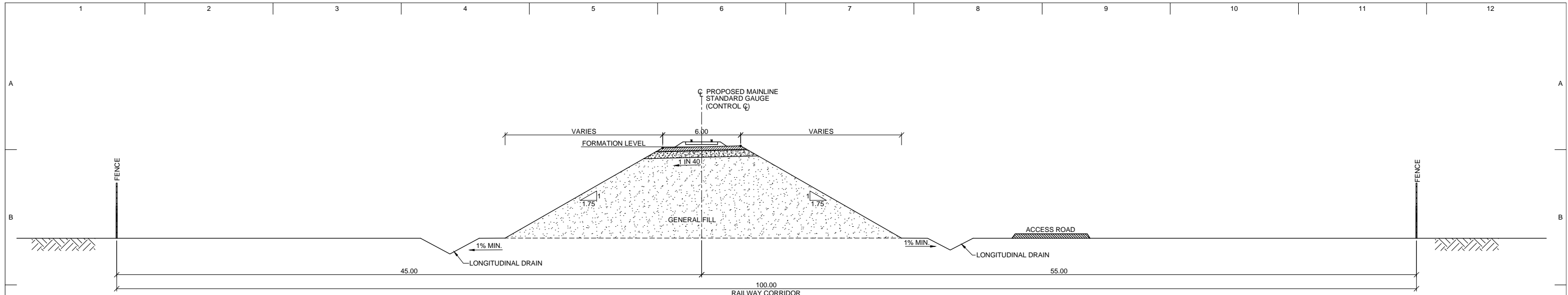
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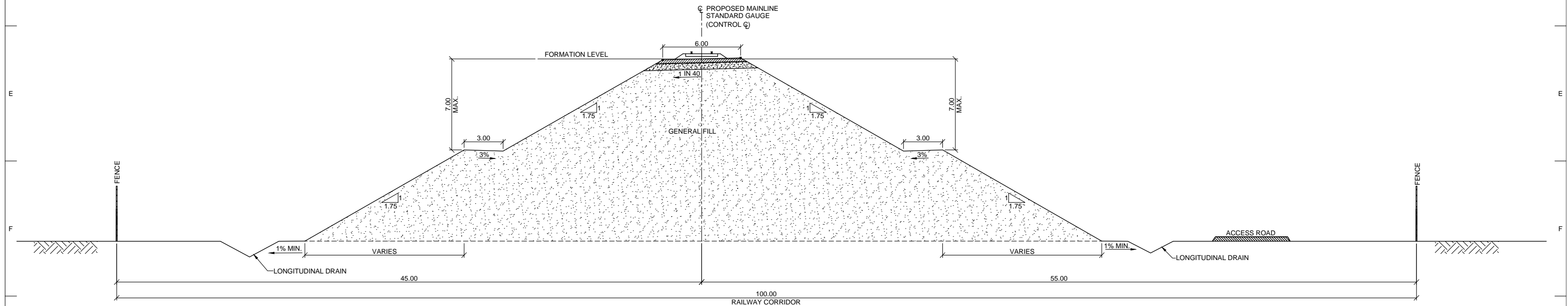
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Designed V RAMESH	Approved A N KESKAR
RPEQ No.	
Date	

Drawing Title NORTH GALILEE BASIN RAIL PROJECT OCCUPATIONAL & STOCK CROSSINGS TYPICAL BOX CULVERT (UNDERPASS)	
Client Drawing No.	Consultant/Contractor Drawing No. NGBR1551-C-DWG-D-031
Rev B	



CROSS SECTION FOR EMBANKMENT HEIGHT $\leq 7m$
SCALE 1:150

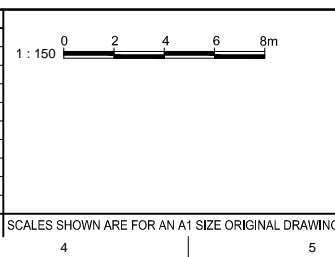


CROSS SECTION FOR EMBANKMENT HEIGHT $> 7m$ & $\leq 14m$
SCALE 1:150

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 2. CROSS SECTION IS DEVELOPED BASED ON CENTERLINE OF MAINLINE STANDARD GAUGE.

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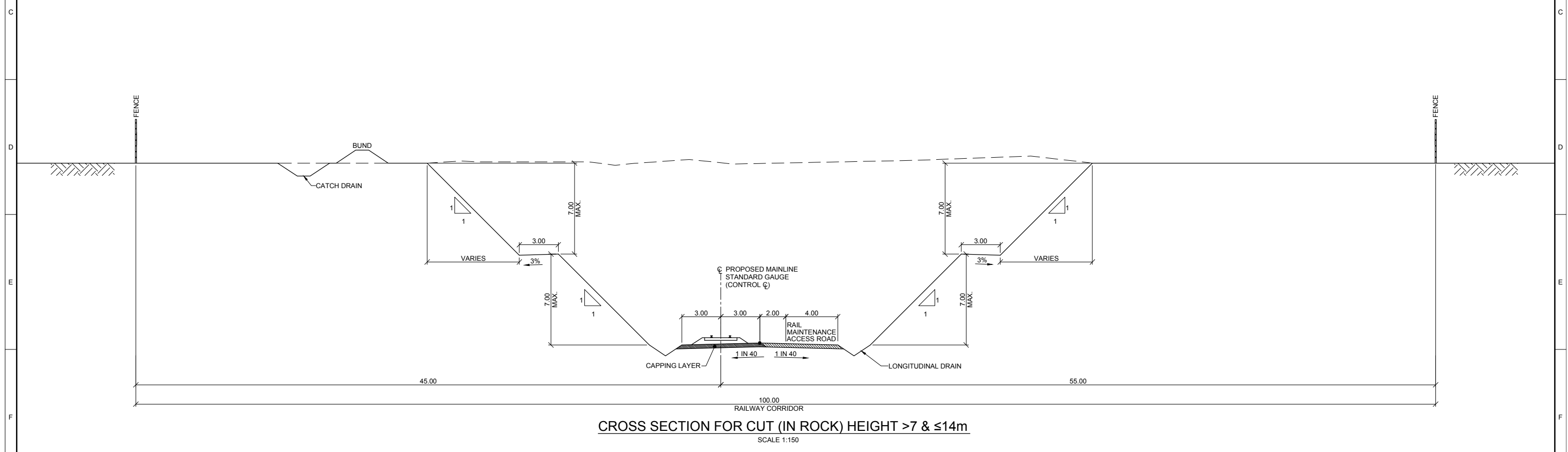
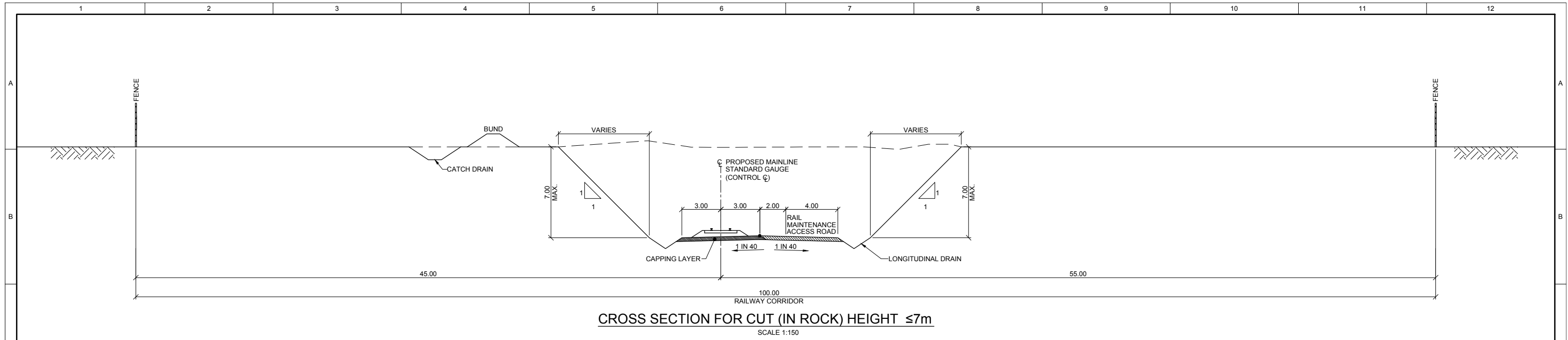
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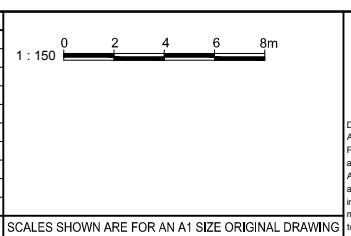
Drawing Title NORTH GALILEE BASIN RAIL EARTHWORKS TYPICAL FILL FORMATION DETAILS	
NGBR1551-C-DWG-E-201	
Client Drawing No.	Consultant/Contractor Drawing No.
	Rev



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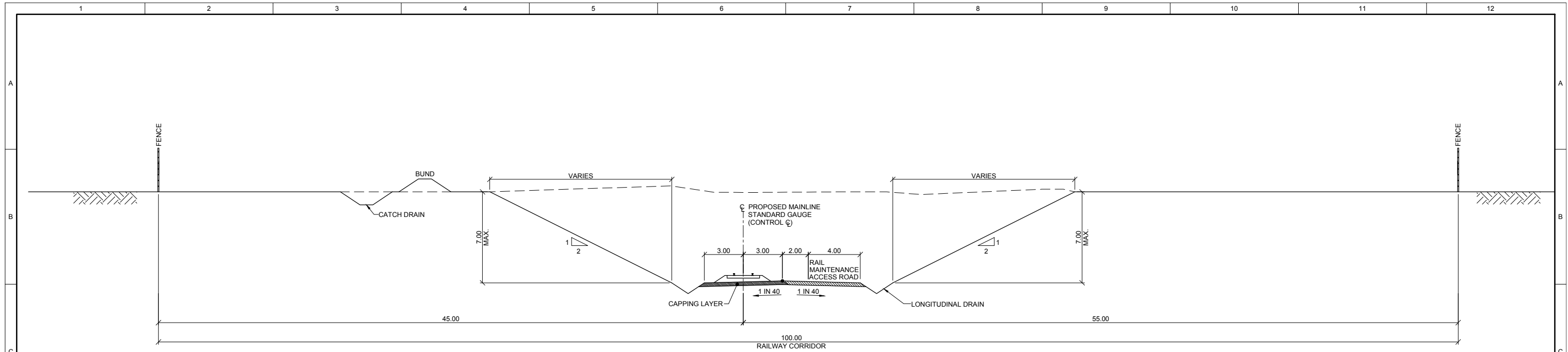
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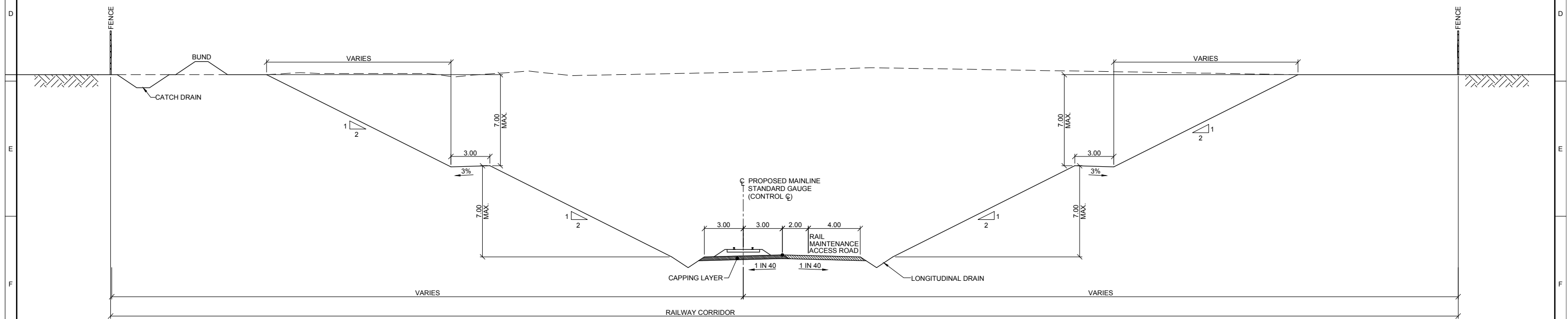
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RPEQ No.	
Date	

Drawing Title NORTH GALILEE BASIN RAIL PROJECT	
EARTHWORKS	
TYPICAL CUT DETAILS (IN ROCK)	
(SHEET 1 OF 1)	
Client Drawing No.	Consultant/Contractor Drawing No. NGBR1551-C-DWG-E-203
Rev B	



CROSS SECTION FOR CUT (IN SOIL) HEIGHT $\leq 7m$
SCALE 1:150

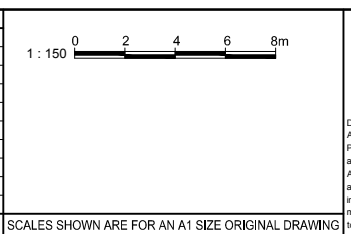


CROSS SECTION FOR CUT (IN SOIL) HEIGHT $>7m$ & $\leq 14m$
SCALE 1:150

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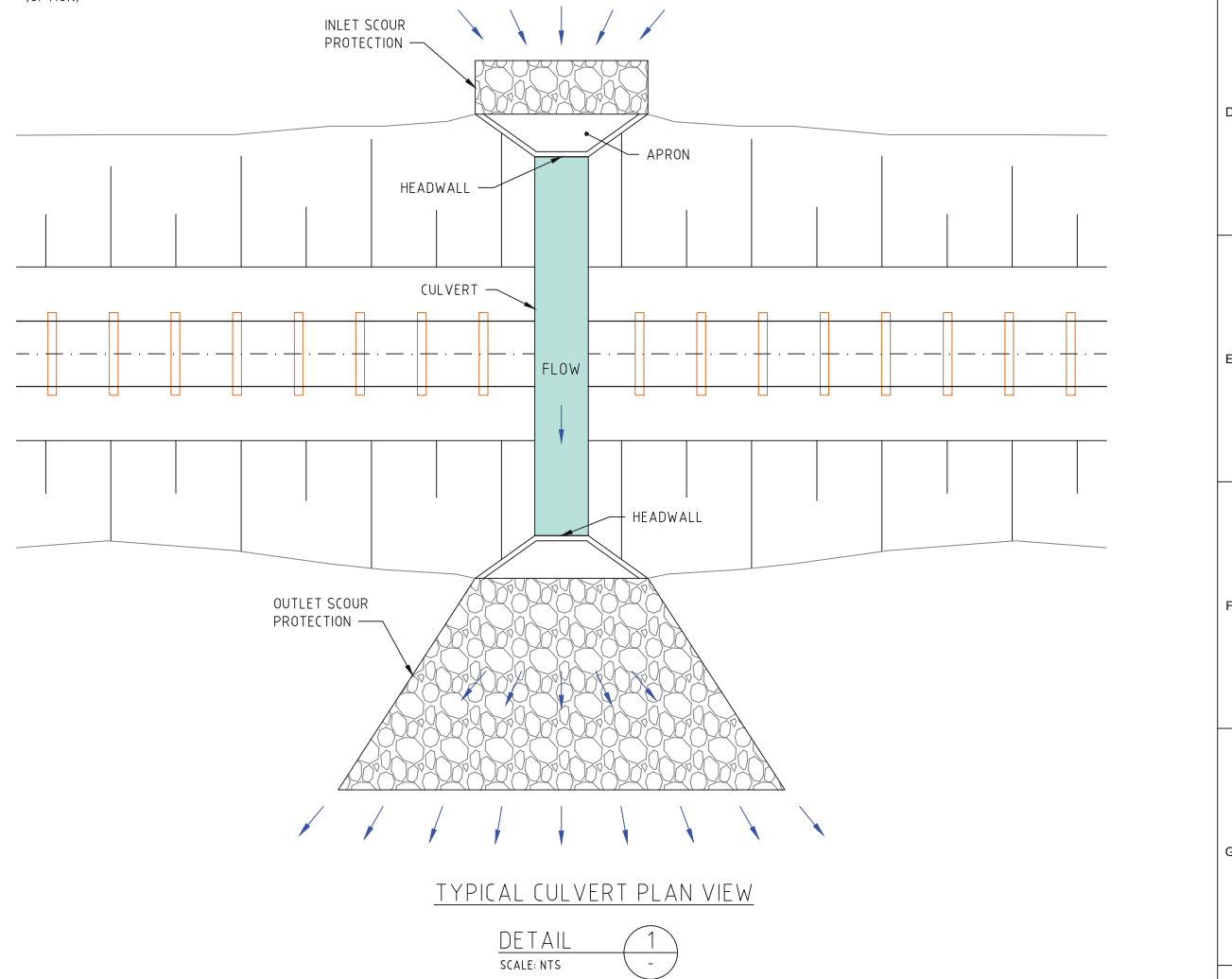
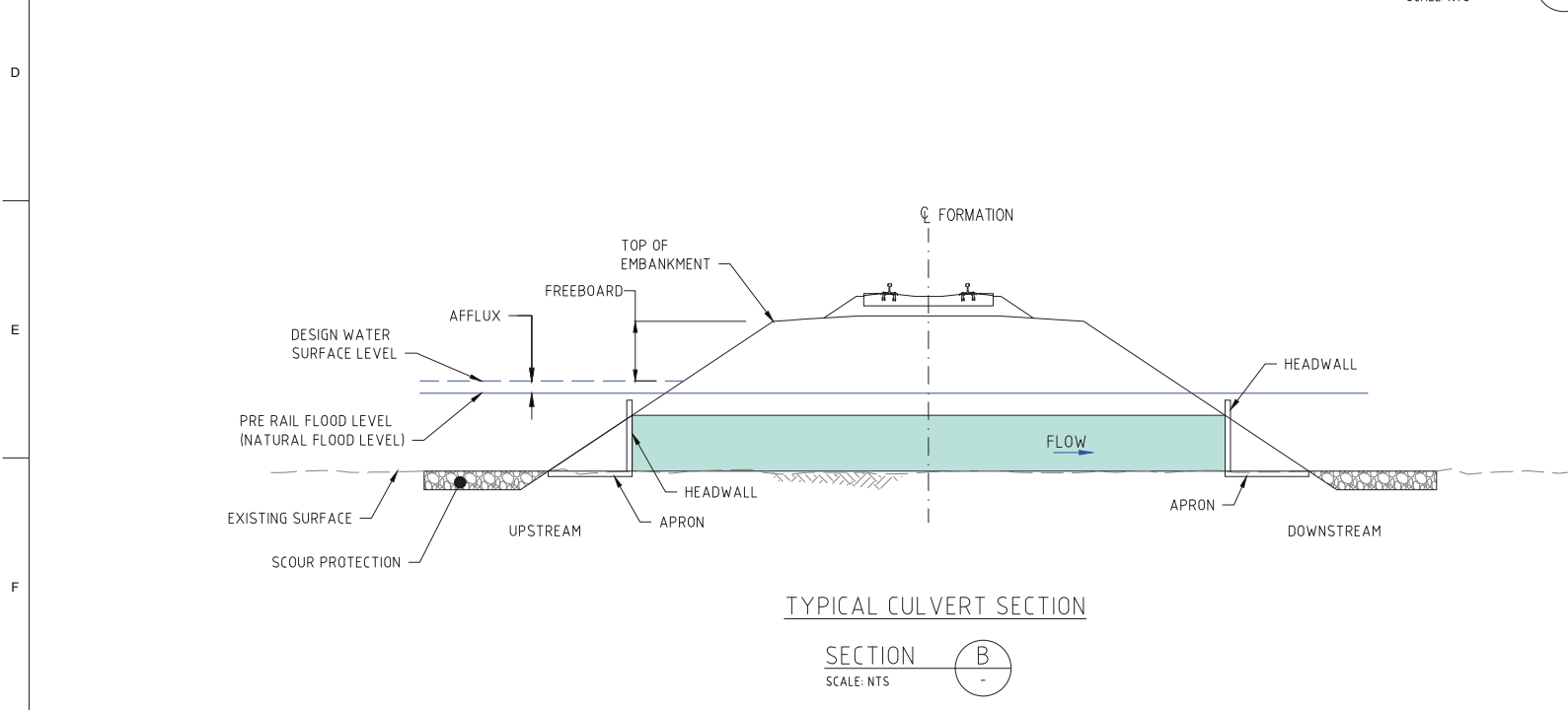
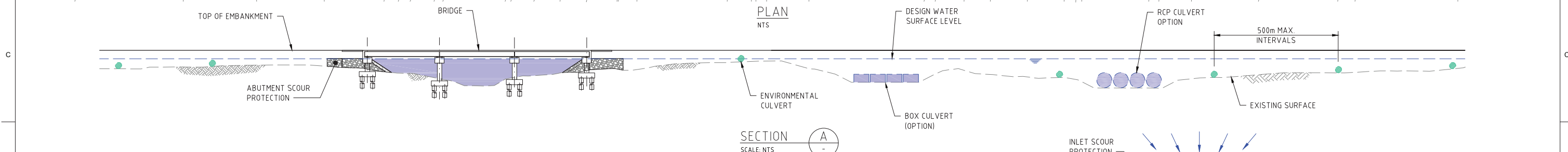
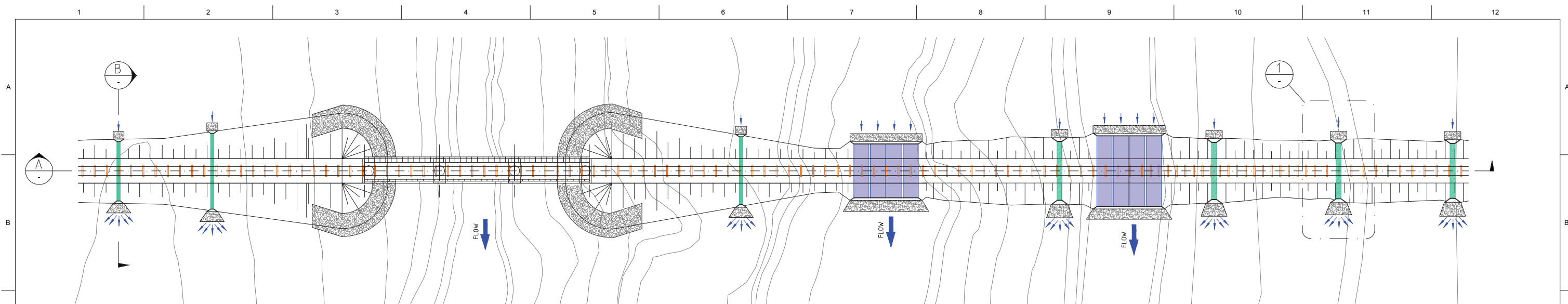
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Date	

Drawing Title NORTH GALILEE BASIN RAIL PROJECT	
EARTHWORKS	
TYPICAL CUT DETAILS (IN SOIL)	
(SHEET 1 OF 1)	
Client Drawing No.	Consultant/Contractor Drawing No.
	NGBR1551-C-DWG-E-205
Rev B	



REV	BY	DATE	DESCRIPTION	CKD	APP
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ENG. APPROVED	K. BARIAR	18.12.12
PROJECT MANAGER	S. LOWDEN	18.12.12
RPEQ APPROVAL	SIGNED: _____	
	NAME: _____	
	RPEQ No: _____	

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Fax: +61 (0)7 3001 6050

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RAIL PROJECT
RAIL CIVIL DRAINAGE METHODOLOGY

PROJECT No. _____
DRG No. _____
REV **0**