

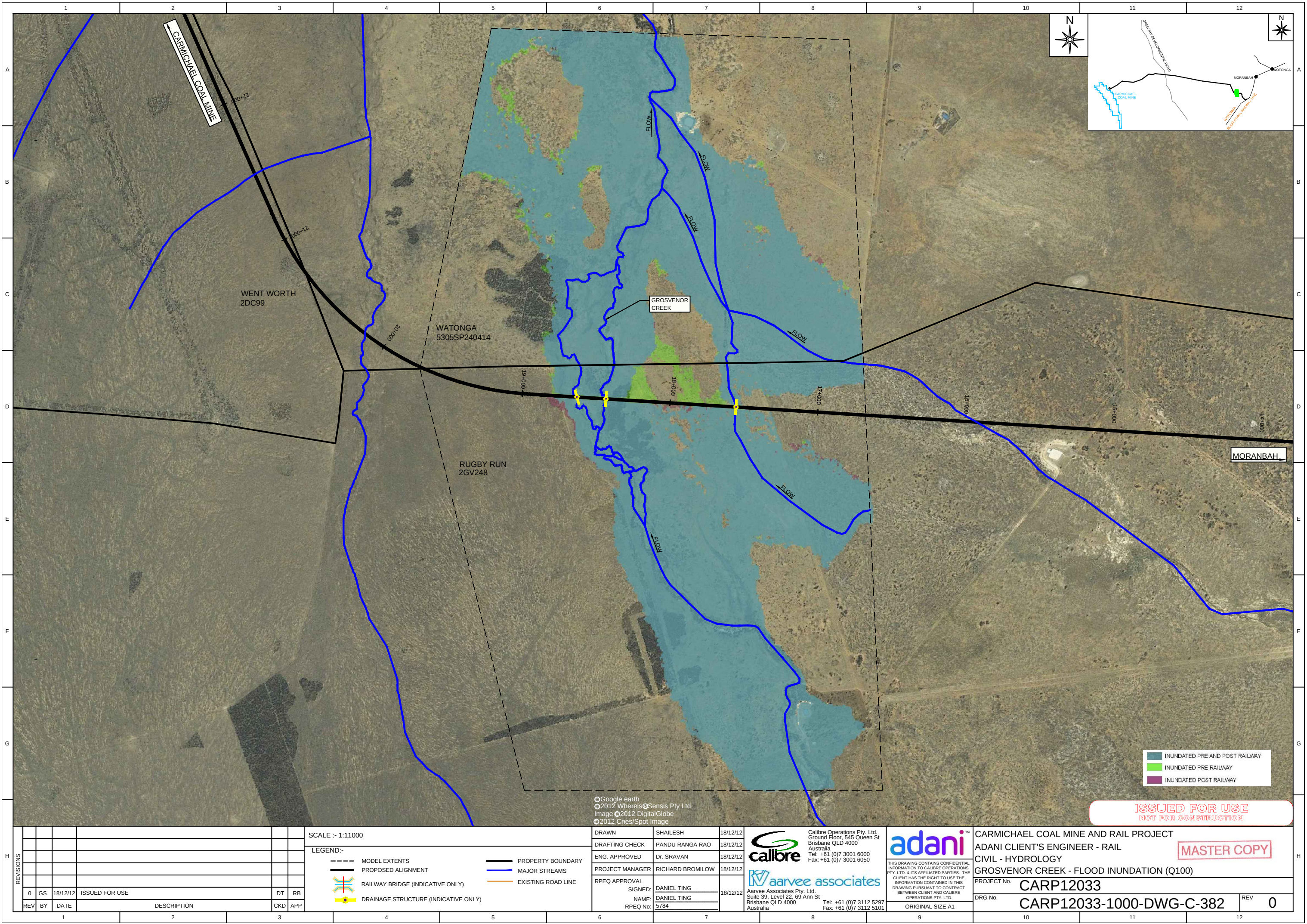


**Carmichael Coal Mine and Rail Project
Supplementary Environmental Impact Statement**

Volume 4, Appendix C3b – Operational Works Excavation and Filling

Containing

- Part 7 – Continued Supporting drawings



INUNDATED PRE AND POST RAILWAY
INUNDATED PRE RAILWAY
INUNDATED POST RAILWAY

ISSUED FOR USE
NOT FOR CONSTRUCTION

SCALE :- 1:11000

LEGEND:-

- MODEL EXTENTS
- PROPOSED ALIGNMENT
- RAILWAY BRIDGE (INDICATIVE ONLY)
- DRAINAGE STRUCTURE (INDICATIVE ONLY)
- PROPERTY BOUNDARY
- MAJOR STREAMS
- EXISTING ROAD LINE

DRAWN	SHAILESH	18/12/12
DRAFTING CHECK	PANDU RANGA RAO	18/12/12
ENG. APPROVED	Dr. SRAVAN	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	DANIEL TING	18/12/12
NAME:	DANIEL TING	
RPEQ No:	5784	

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Fax: +61 (0)7 3112 5101

adani

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ORIGINAL SIZE A1

CARMICHAEL COAL MINE AND RAIL PROJECT
ADANI CLIENT'S ENGINEER - RAIL
CIVIL - HYDROLOGY
GROSVENOR CREEK - FLOOD INUNDATION (Q100)

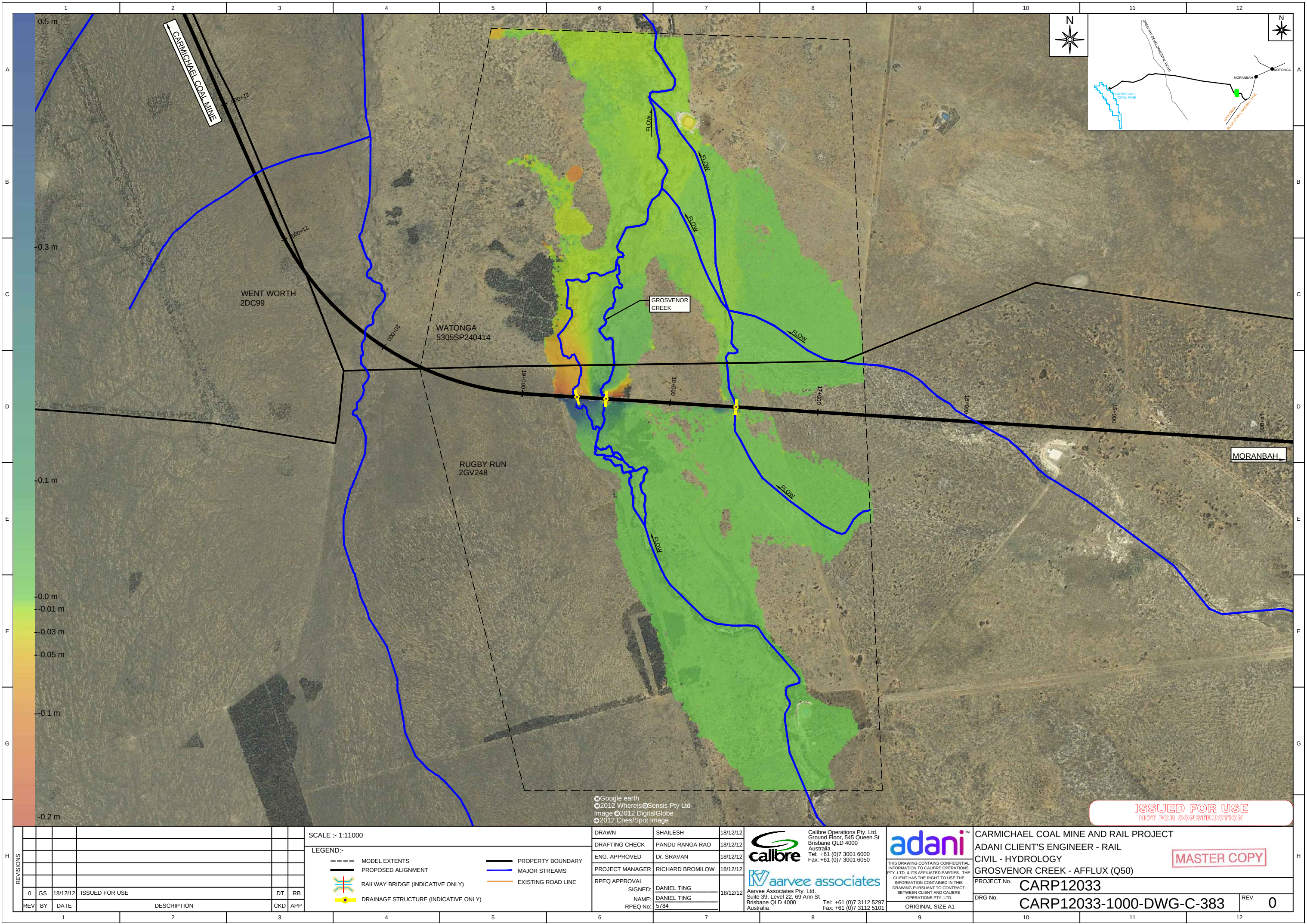
PROJECT No. **CARP12033**

DRG No. **CARP12033-1000-DWG-C-382**

REV **0**

MASTER COPY

REVISIONS						
REV	BY	DATE	DESCRIPTION	CKD	APP	
0	GS	18/12/12	ISSUED FOR USE	DT	RB	



ISSUED FOR USE
NOT FOR CONSTRUCTION

REVISIONS							
REV	BY	DATE	DESCRIPTION	CKD	APP		
0	GS	18/12/12	ISSUED FOR USE	DT	RB		

SCALE :- 1:11000			
LEGEND:-			
	MODEL EXTENTS		PROPERTY BOUNDARY
	PROPOSED ALIGNMENT		MAJOR STREAMS
	RAILWAY BRIDGE (INDICATIVE ONLY)		EXISTING ROAD LINE
	DRAINAGE STRUCTURE (INDICATIVE ONLY)		

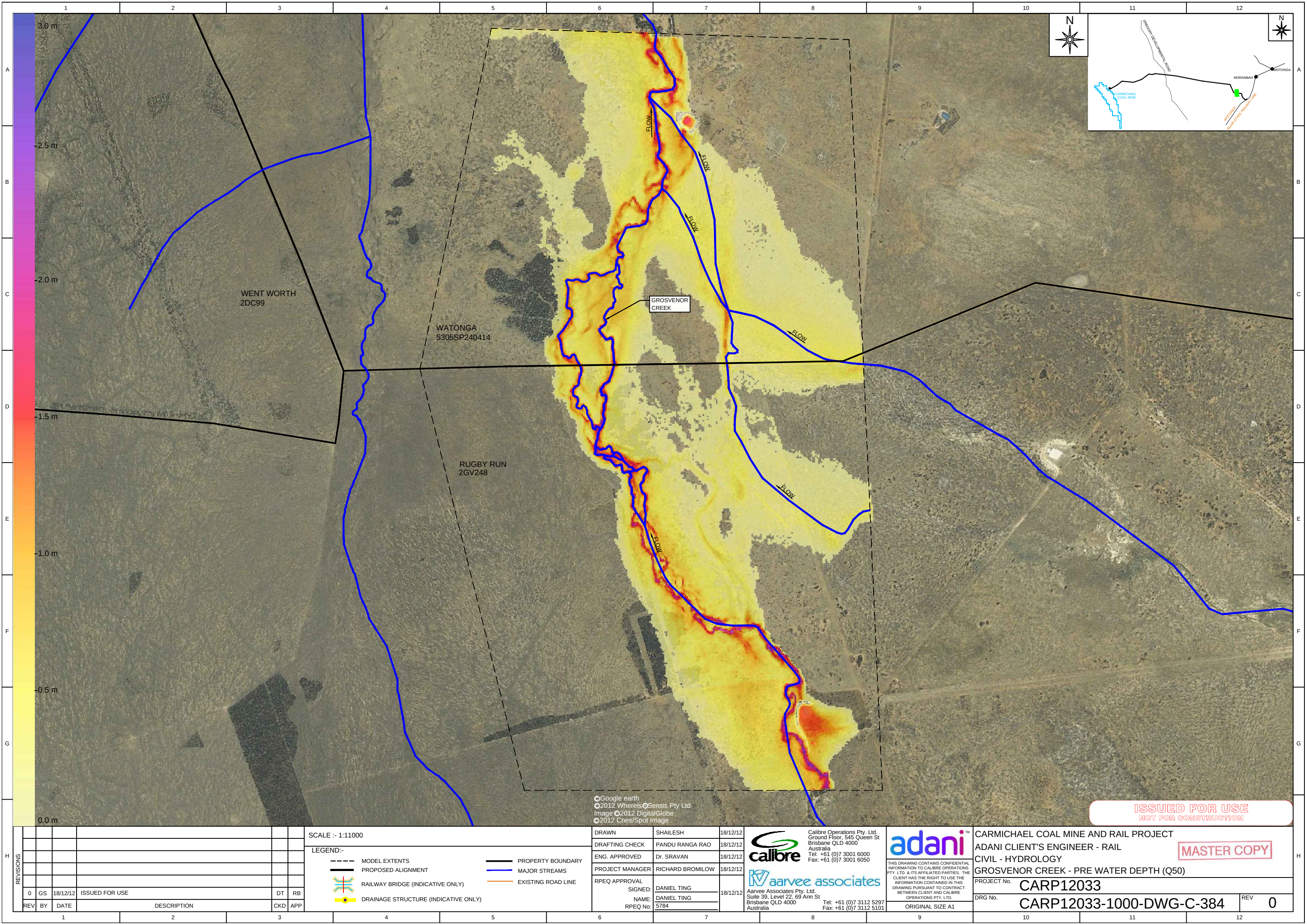
DRAWN	SHAILESH	18/12/12
DRAFTING CHECK	PANDU RANGA RAO	18/12/12
ENG. APPROVED	Dr. SRAVAN	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	DANIEL TING	18/12/12
NAME:	DANIEL TING	
RPEQ No:	5784	

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CARMICHAEL COAL MINE AND RAIL PROJECT			
ADANI CLIENT'S ENGINEER - RAIL			
CIVIL - HYDROLOGY			
GROSVENOR CREEK - AFFLUX (Q50)			
PROJECT No.	CARP12033		
DRG No.	CARP12033-1000-DWG-C-383		
REV	0		



REVISIONS						
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10						
11						
12						

SCALE :- 1:11000	
LEGEND:-	
---	MODEL EXTENTS
---	PROPOSED ALIGNMENT
---	RAILWAY BRIDGE (INDICATIVE ONLY)
---	DRAINAGE STRUCTURE (INDICATIVE ONLY)
---	PROPERTY BOUNDARY
---	MAJOR STREAMS
---	EXISTING ROAD LINE

DRAWN	SHAILESH	18/12/12
DRAFTING CHECK	PANDU RANGA RAO	18/12/12
ENG. APPROVED	Dr. SRAVAN	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	DANIEL TING	18/12/12
NAME:	DANIEL TING	
RPEQ No:	5784	



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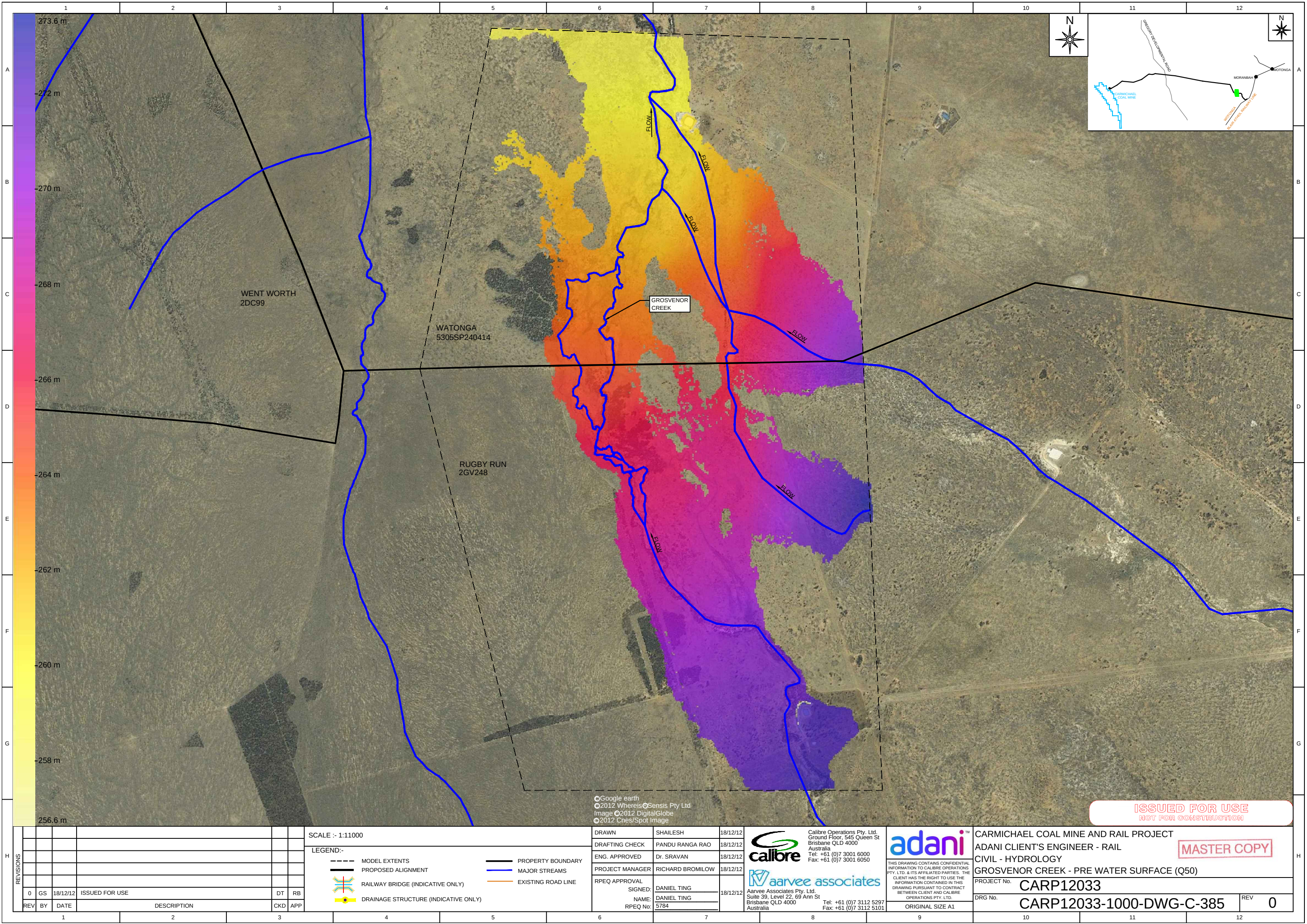
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ORIGINAL SIZE A1

CARMICHAEL COAL MINE AND RAIL PROJECT
ADANI CLIENT'S ENGINEER - RAIL
CIVIL - HYDROLOGY
GROSVENOR CREEK - PRE WATER DEPTH (Q50)

MASTER COPY

PROJECT No.	CARP12033	
DRG No.	CARP12033-1000-DWG-C-384	REV 0



REV	REVISIONS			DT	RB
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	1	GS	18/12/12		
	2	GS	18/12/12		
REV	BY	DATE	DESCRIPTION	CKD	APP

SCALE :- 1:11000					
LEGEND:-					
--- MODEL EXTENTS			--- PROPERTY BOUNDARY		
--- PROPOSED ALIGNMENT			--- MAJOR STREAMS		
--- RAILWAY BRIDGE (INDICATIVE ONLY)			--- EXISTING ROAD LINE		
--- DRAINAGE STRUCTURE (INDICATIVE ONLY)					

DRAWN	SHAILESH	18/12/12
DRAFTING CHECK	PANDU RANGA RAO	18/12/12
ENG. APPROVED	Dr. SRAVAN	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	DANIEL TING	18/12/12
NAME:	DANIEL TING	
RPEQ No:	5784	



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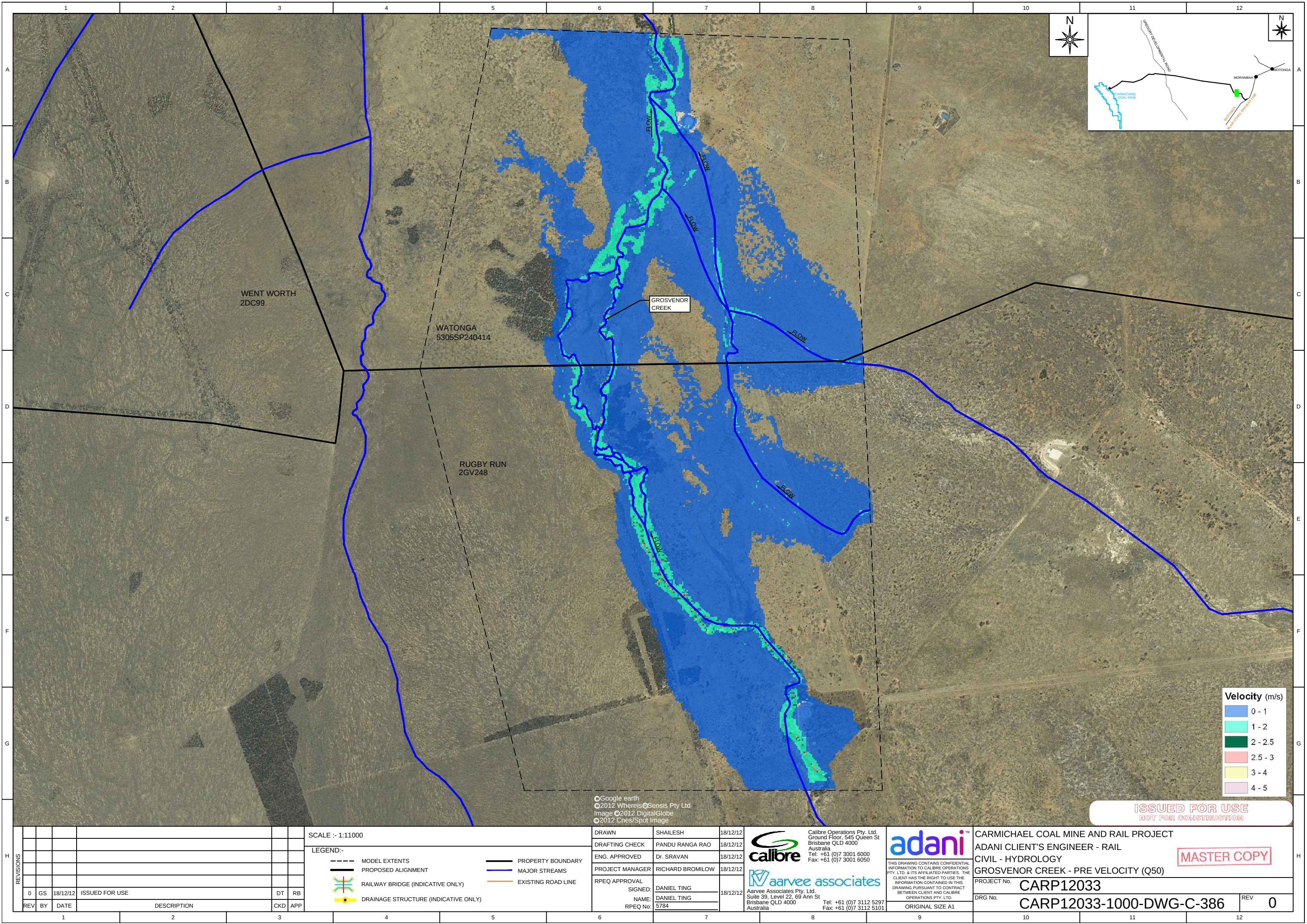
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ORIGINAL SIZE A1

CARMICHAEL COAL MINE AND RAIL PROJECT
ADANI CLIENT'S ENGINEER - RAIL
CIVIL - HYDROLOGY
GROSVENOR CREEK - PRE WATER SURFACE (Q50)

MASTER COPY

PROJECT No.	DRG No.	REV
CARP12033	CARP12033-1000-DWG-C-385	0



REVISIONS						
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REV	BY	DATE	DESCRIPTION		CKD	APP

SCALE :- 1:11000

LEGEND:-

MODEL EXTENTS

PROPOSED ALIGNMENT

RAILWAY BRIDGE (INDICATIVE ONLY)

DRAINAGE STRUCTURE (INDICATIVE ONLY)

PROPERTY BOUNDARY

MAJOR STREAMS

EXISTING ROAD LINE

DRAWN	SHAILESH	18/12/12
DRAFTING CHECK	PANDU RANGA RAO	18/12/12
ENG. APPROVED	Dr. SRAVAN	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	DANIEL TING	18/12/12
NAME:	DANIEL TING	
RPEQ No:	5784	

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ORIGINAL SIZE A1

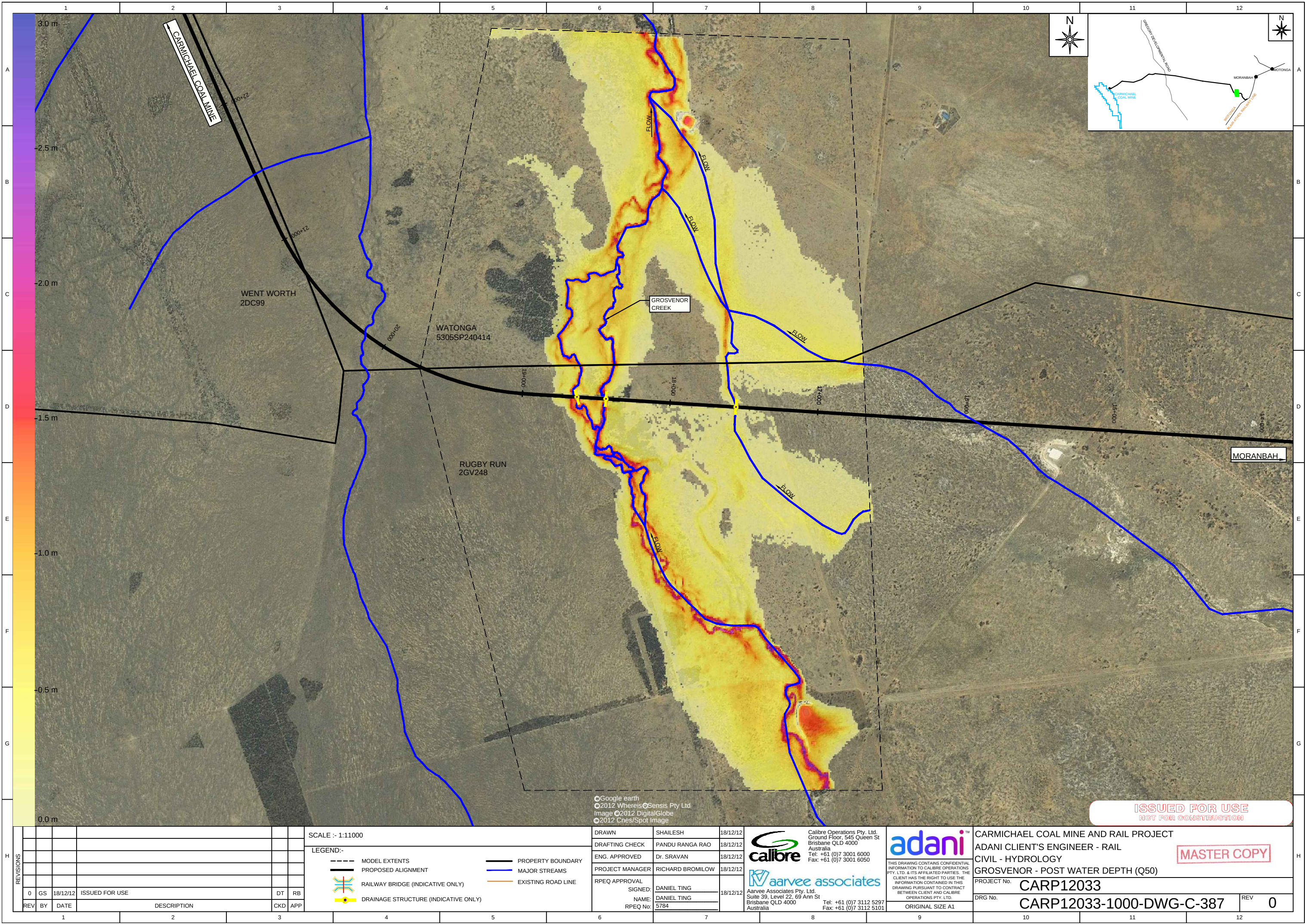
CARMICHAEL COAL MINE AND RAIL PROJECT
ADANI CLIENT'S ENGINEER - RAIL
CIVIL - HYDROLOGY
GROSVENOR CREEK - PRE VELOCITY (Q50)

PROJECT No. **CARP12033**

DRG No. **CARP12033-1000-DWG-C-386**

REV **0**

MASTER COPY



REVISIONS						
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REV	BY	DATE	DESCRIPTION		CKD	APP
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SCALE :- 1:11000

LEGEND:-

MODEL EXTENTS

PROPOSED ALIGNMENT

RAILWAY BRIDGE (INDICATIVE ONLY)

DRAINAGE STRUCTURE (INDICATIVE ONLY)

PROPERTY BOUNDARY

MAJOR STREAMS

EXISTING ROAD LINE

DRAWN	SHAILESH	18/12/12
DRAFTING CHECK	PANDU RANGA RAO	18/12/12
ENG. APPROVED	Dr. SRAVAN	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	DANIEL TING	18/12/12
NAME:	DANIEL TING	
RPEQ No:	5784	

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ORIGINAL SIZE A1

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NOT FOR CONSTRUCTION

CARMICHAEL COAL MINE AND RAIL PROJECT
ADANI CLIENT'S ENGINEER - RAIL
CIVIL - HYDROLOGY
GROSVENOR - POST WATER DEPTH (Q50)

PROJECT No.

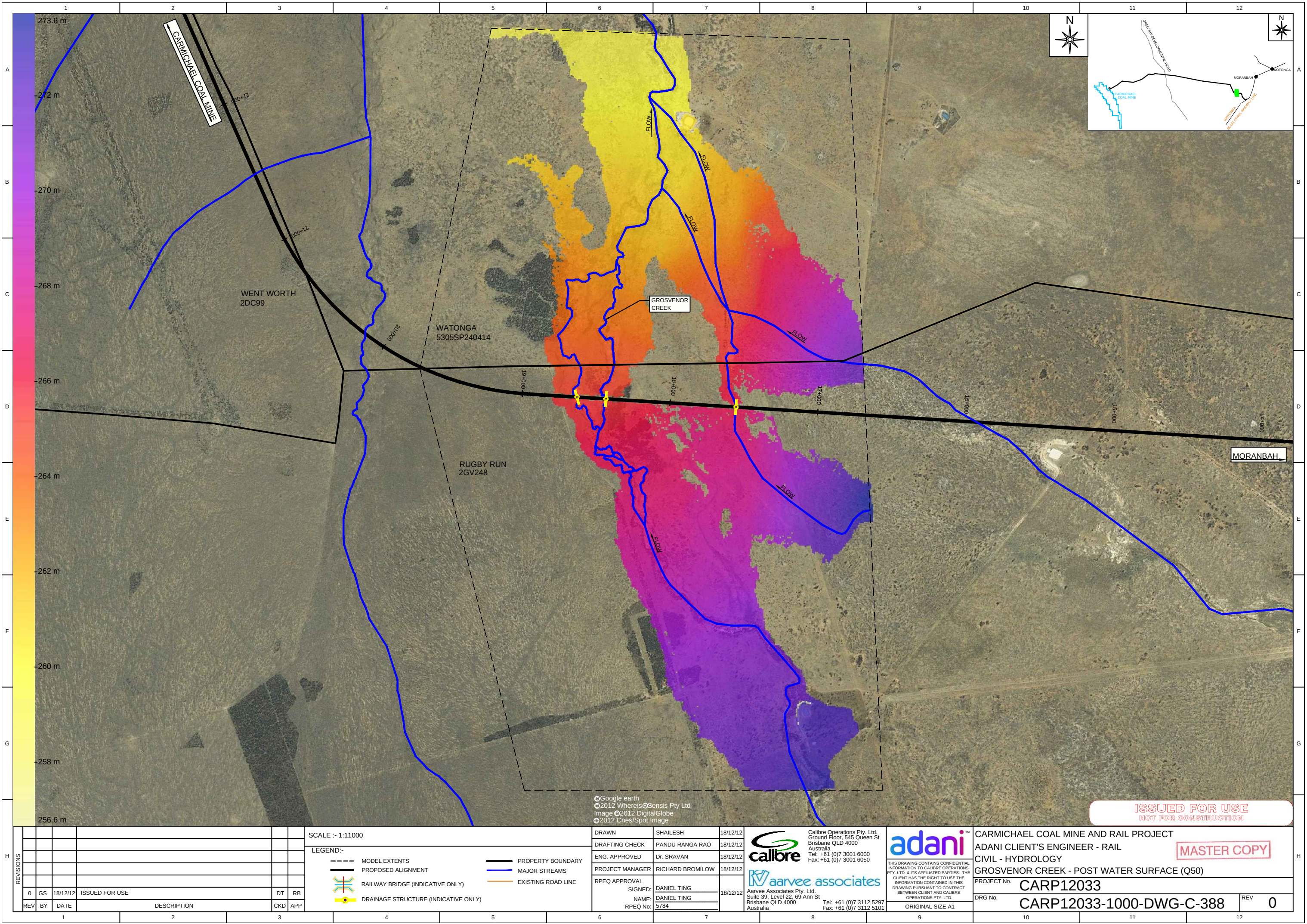
CARP12033

DRG No.

CARP12033-1000-DWG-C-387

REV

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ISSUED FOR USE
NOT FOR CONSTRUCTION

REVISIONS							
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0	GS	18/12/12	ISSUED FOR USE	DT	RB		

SCALE :- 1:11000			
LEGEND:-			
---	MODEL EXTENTS	---	PROPERTY BOUNDARY
---	PROPOSED ALIGNMENT	---	MAJOR STREAMS
---	RAILWAY BRIDGE (INDICATIVE ONLY)	---	EXISTING ROAD LINE
---	DRAINAGE STRUCTURE (INDICATIVE ONLY)		

DRAWN	SHAILESH	18/12/12
DRAFTING CHECK	PANDU RANGA RAO	18/12/12
ENG. APPROVED	DR. SRAVAN	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	DANIEL TING	18/12/12
NAME:	DANIEL TING	
RPEQ No:	5784	



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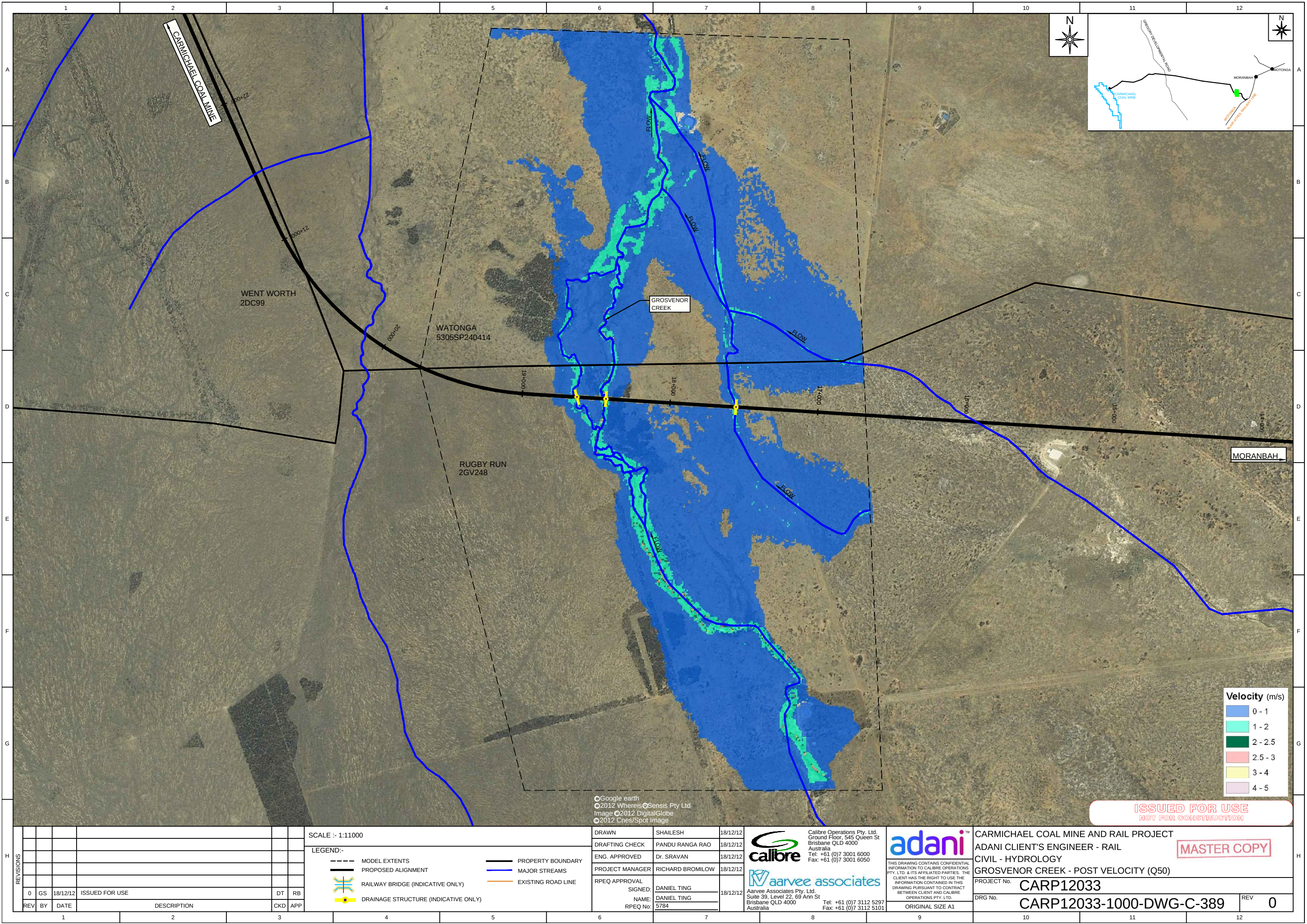
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Brisbane QLD 4000
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ORIGINAL SIZE A1

CARMICHAEL COAL MINE AND RAIL PROJECT			
ADANI CLIENT'S ENGINEER - RAIL			
CIVIL - HYDROLOGY			
GROSVENOR CREEK - POST WATER SURFACE (Q50)			
PROJECT No. CARP12033			
DRG No. CARP12033-1000-DWG-C-388			
REV 0			



REVISIONS						
	0	GS	18/12/12	ISSUED FOR USE	DT	RB
REV	BY	DATE	DESCRIPTION		CKD	APP

SCALE :- 1:11000

LEGEND:-

MODEL EXTENTS

PROPOSED ALIGNMENT

RAILWAY BRIDGE (INDICATIVE ONLY)

DRAINAGE STRUCTURE (INDICATIVE ONLY)

PROPERTY BOUNDARY

MAJOR STREAMS

EXISTING ROAD LINE

DRAWN	SHAILESH	18/12/12
DRAFTING CHECK	PANDU RANGA RAO	18/12/12
ENG. APPROVED	Dr. SRAVAN	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	DANIEL TING	18/12/12
NAME:	DANIEL TING	
RPEQ No:	5784	

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ORIGINAL SIZE A1

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NOT FOR CONSTRUCTION

CARMICHAEL COAL MINE AND RAIL PROJECT
ADANI CLIENT'S ENGINEER - RAIL
CIVIL - HYDROLOGY
GROSVENOR CREEK - POST VELOCITY (Q50)

PROJECT No. **CARP12033**

DRG No. **CARP12033-1000-DWG-C-389**

REV **0**

MASTER COPY

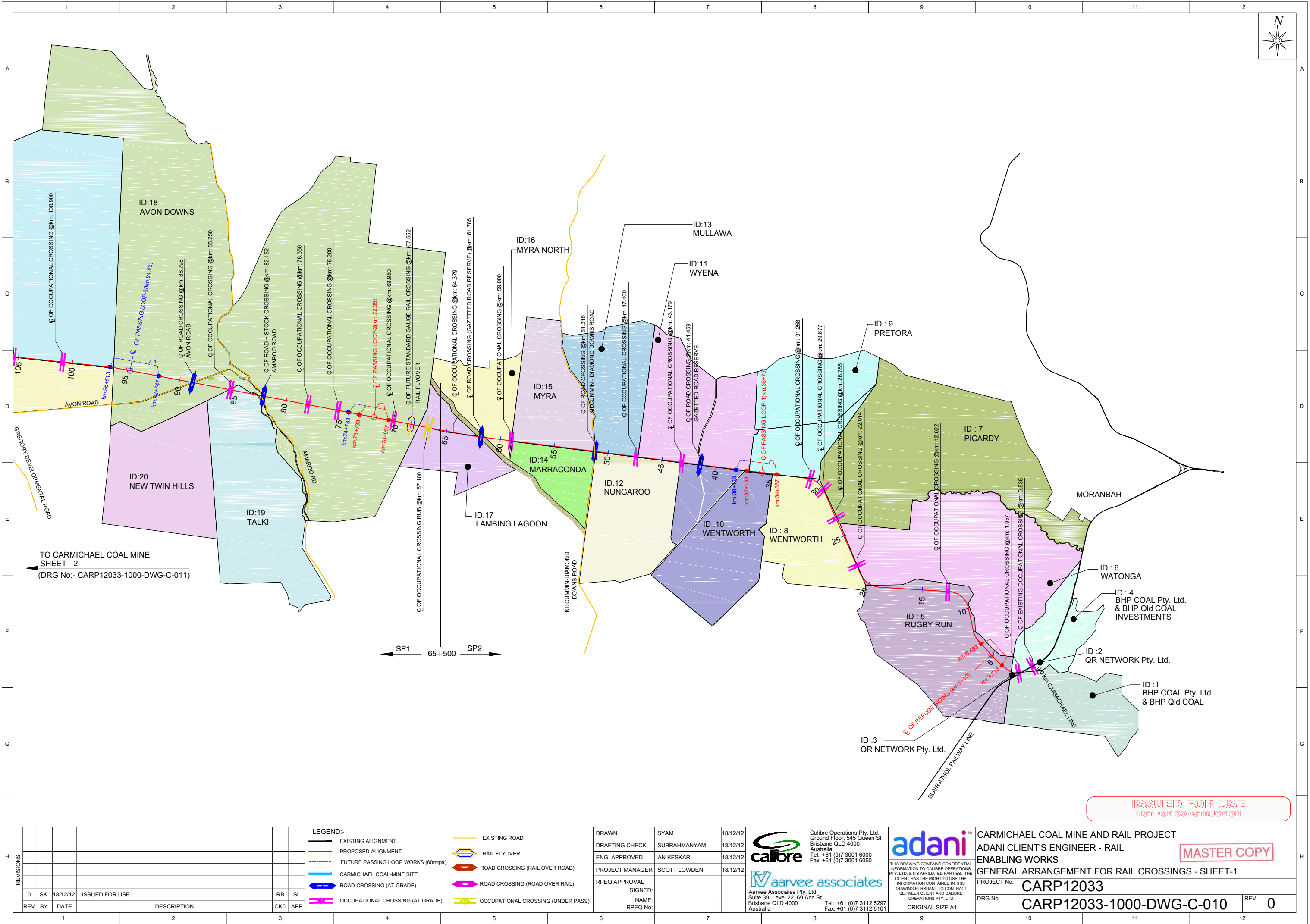
Enabling Works Drawings

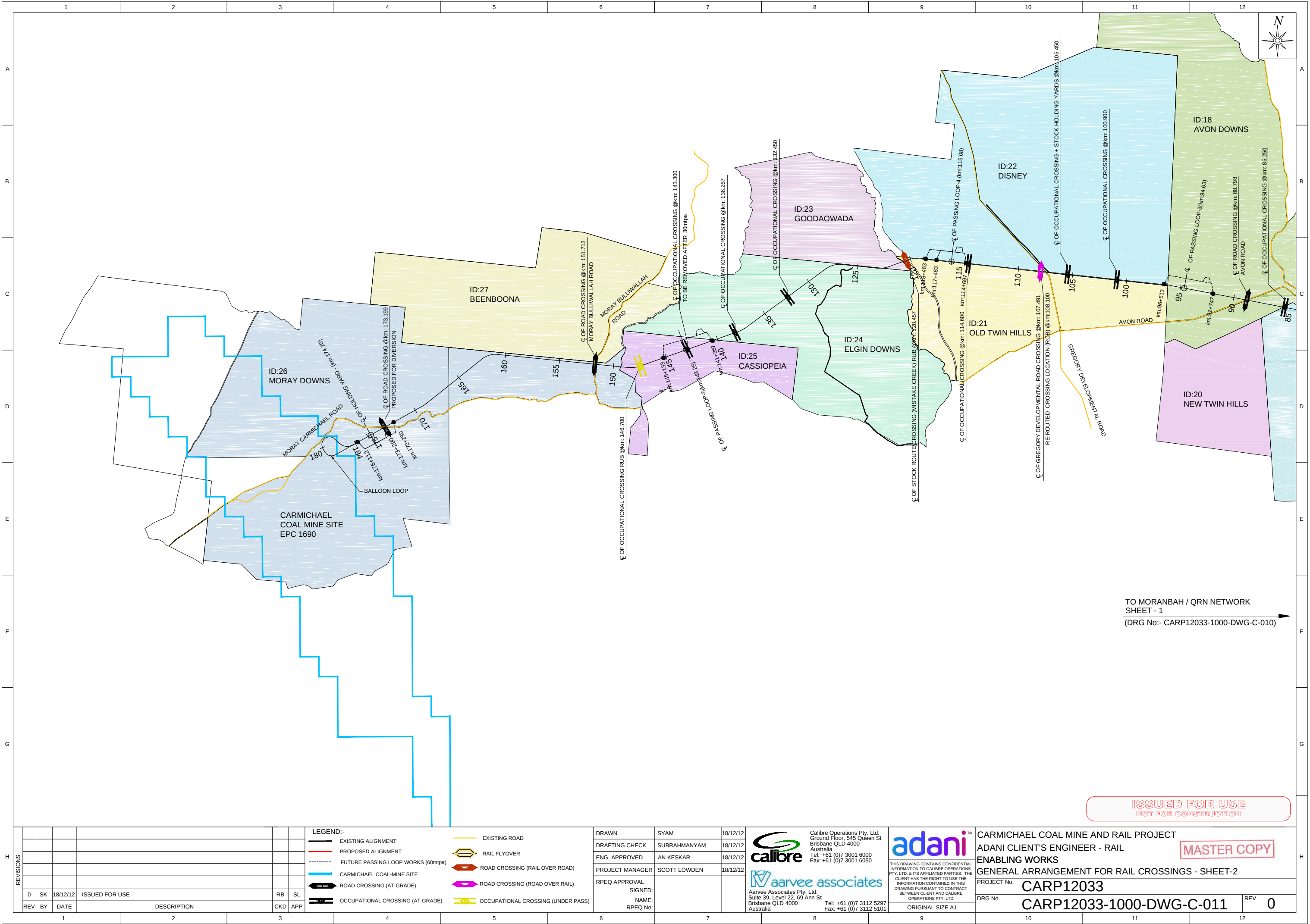
Carmichael Coal Mine & Rail Project Front End Engineering Design Report - RAIL

Adani Mining Pty Ltd

CARP12033-REP-G-100 Rev 0
VOLUME 4 - DRAWINGS







TO MORANBAH / QRN NETWORK
SHEET - 1
(DRG No:- CARP12033-1000-DWG-C-010)

ISSUED FOR USE
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REVISIONS					
REV	BY	DATE	DESCRIPTION	CKD	APP
0	SK	18/12/12	ISSUED FOR USE	RB	SL

LEGEND:-	
	EXISTING ALIGNMENT
	PROPOSED ALIGNMENT
	FUTURE PASSING LOOP WORKS (60mtpa)
	CARMICHAEL COAL-MINE SITE
	ROAD CROSSING (AT GRADE)
	OCCUPATIONAL CROSSING (AT GRADE)
	EXISTING ROAD
	RAIL FLYOVER
	ROAD CROSSING (RAIL OVER ROAD)
	ROAD CROSSING (ROAD OVER RAIL)
	OCCUPATIONAL CROSSING (UNDER PASS)

DRAWN	SYAM	18/12/12
DRAFTING CHECK	SUBRAHMANYAM	18/12/12
ENG. APPROVED	AN KESKAR	18/12/12
PROJECT MANAGER	SCOTT LOWDEN	18/12/12
RPEQ APPROVAL	SIGNED: NAME: RPEQ No:	

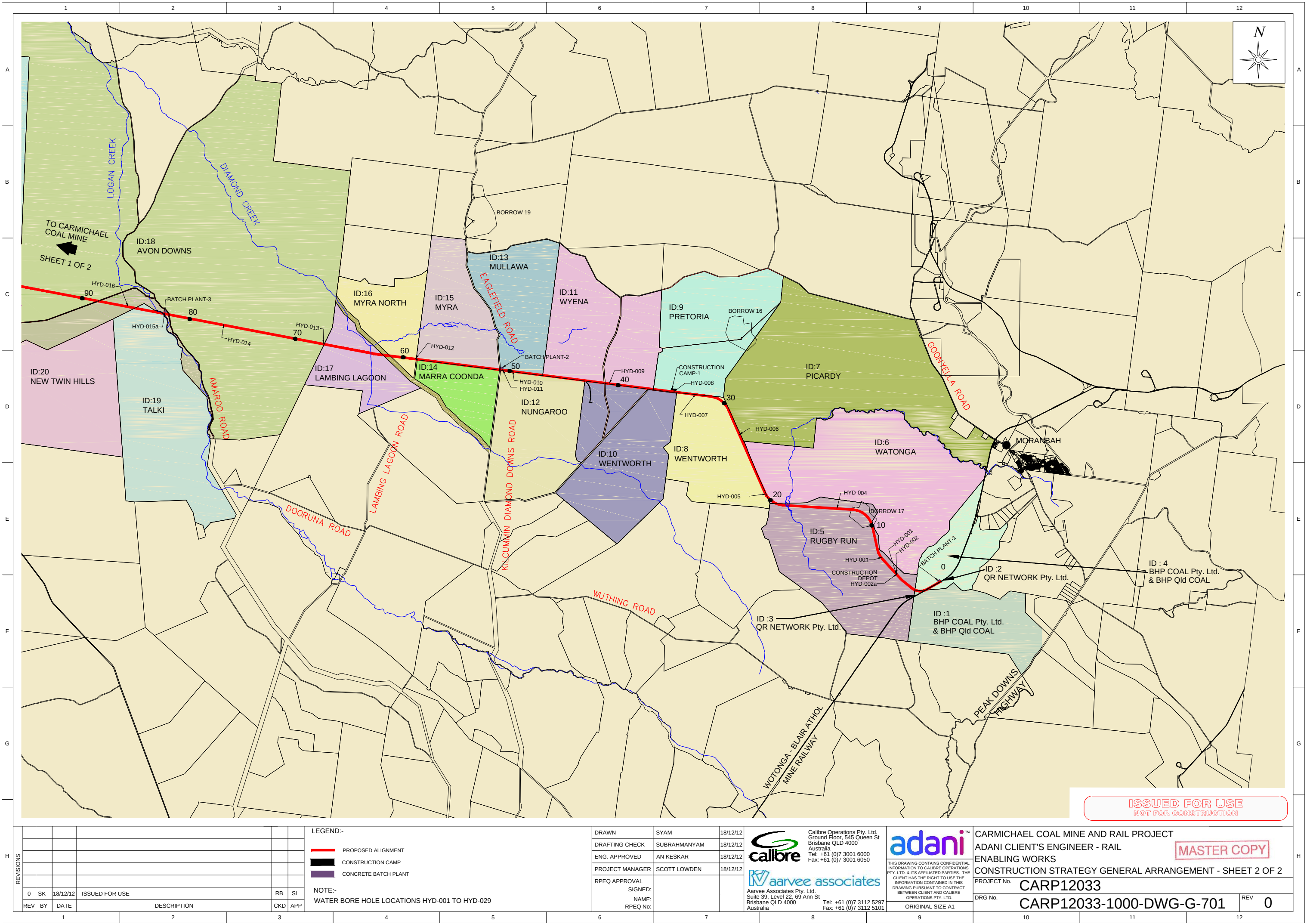
Calibre Operations Pty. Ltd.
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ORIGINAL SIZE A1

CARMICHAEL COAL MINE AND RAIL PROJECT ADANI CLIENT'S ENGINEER - RAIL ENABLING WORKS GENERAL ARRANGEMENT FOR RAIL CROSSINGS - SHEET-2			MASTER COPY	
PROJECT No.	CARP12033			
DRG No.	CARP12033-1000-DWG-C-011		REV	0



ISSUED FOR USE
NOT FOR CONSTRUCTION

- LEGEND:-
- PROPOSED ALIGNMENT
 - CONSTRUCTION CAMP
 - CONCRETE BATCH PLANT

NOTE:-
WATER BORE HOLE LOCATIONS HYD-001 TO HYD-029

DRAWN	SYAM	18/12/12
DRAFTING CHECK	SUBRAHMANYAM	18/12/12
ENG. APPROVED	AN KESKAR	18/12/12
PROJECT MANAGER	SCOTT LOWDEN	18/12/12
RPEQ APPROVAL	SIGNED: NAME: RPEQ No:	



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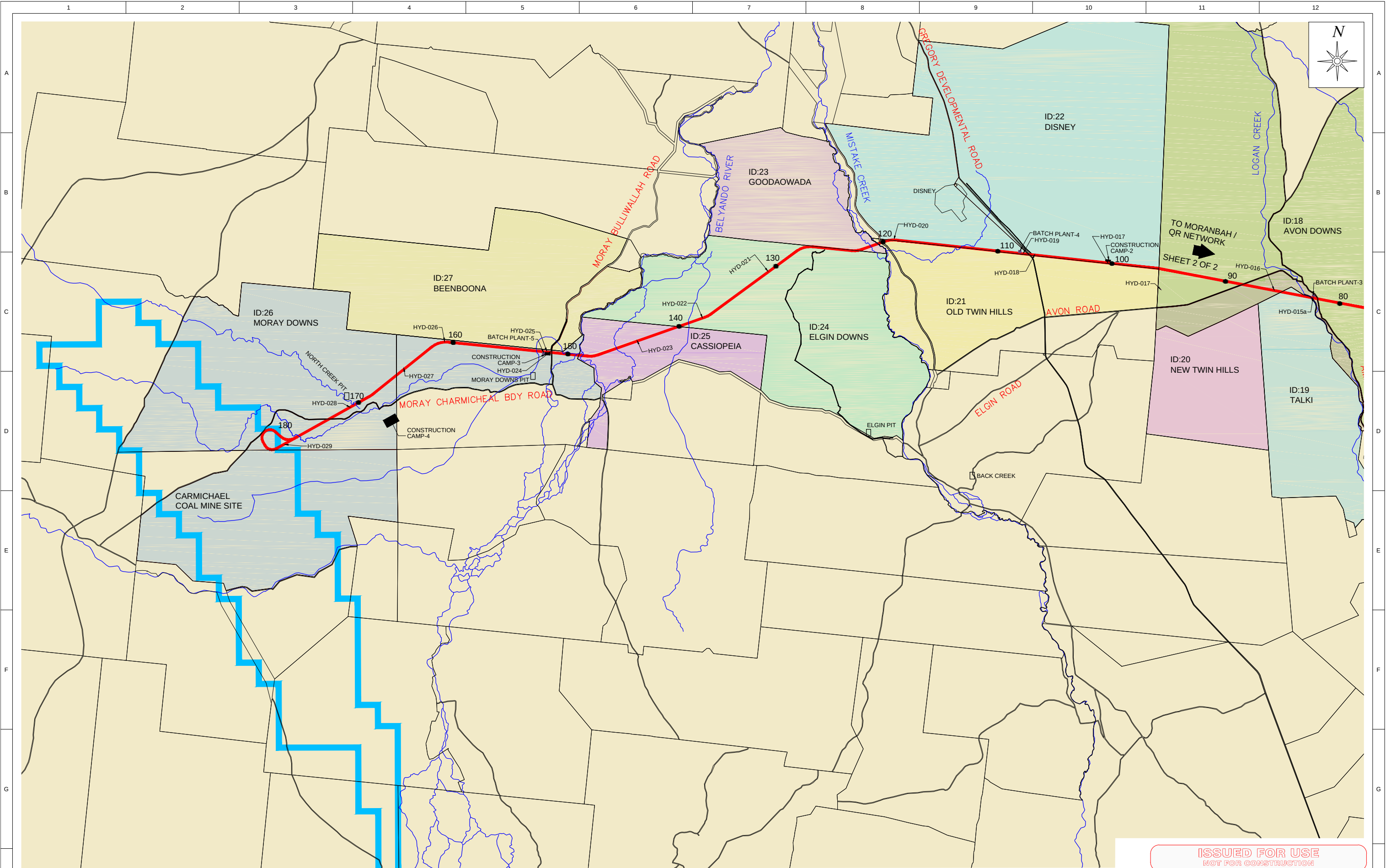
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ORIGINAL SIZE A1

CARMICHAEL COAL MINE AND RAIL PROJECT		
ADANI CLIENT'S ENGINEER - RAIL		
ENABLING WORKS		
CONSTRUCTION STRATEGY GENERAL ARRANGEMENT - SHEET 2 OF 2		
PROJECT No.	CARP12033	
DRG No.	CARP12033-1000-DWG-G-701	
REV	0	



ISSUED FOR USE
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REVISIONS							
REV	BY	DATE	DESCRIPTION	CKD	APP		
0	SK	18/12/12	ISSUED FOR USE	RB	SL		

LEGEND:-

- PROPOSED ALIGNMENT
- CONSTRUCTION CAMP
- CONCRETE BATCH PLANT

NOTE:-
WATER BORE HOLE LOCATIONS HYD-001 TO HYD-029

DRAWN	SYAM	18/12/12
DRAFTING CHECK	SUBRAHMANYAM	18/12/12
ENG. APPROVED	AN KESKAR	18/12/12
PROJECT MANAGER	SCOTT LOWDEN	18/12/12
RPEQ APPROVAL	SIGNED: NAME: RPEQ No:	

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CARMICHAEL COAL MINE AND RAIL PROJECT
ADANI CLIENT'S ENGINEER - RAIL
ENABLING WORKS
CONSTRUCTION STRATEGY GENERAL ARRANGEMENT - SHEET 1 OF 2
PROJECT NO. **CARP12033**
DRG No. **CARP12033-1000-DWG-G-702** REV **0**

MASTER COPY

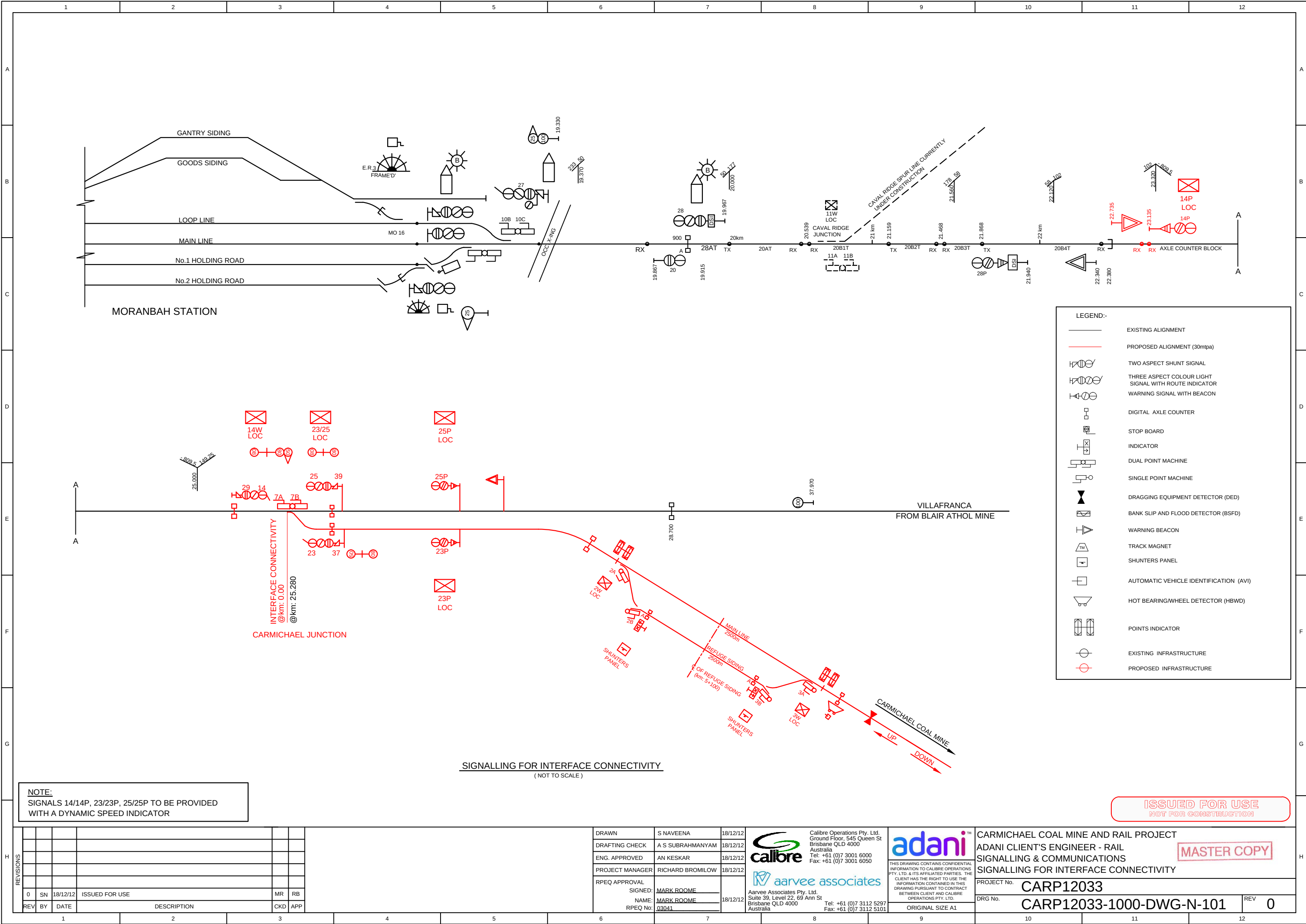
Signalling and Communications Drawings

Carmichael Coal Mine & Rail Project
Front End Engineering Design Report - RAIL

Adani Mining Pty Ltd

CARP12033-REP-G-100 Rev 0
VOLUME 4 - DRAWINGS





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REVISIONS					
REV	BY	DATE	DESCRIPTION	CKD	APP
0	SN	18/12/12	ISSUED FOR USE	MR	RB

DRAWN	S NAVEENA	18/12/12
DRAFTING CHECK	A S SUBRAHMANYAM	18/12/12
ENG. APPROVED	AN KESKAR	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL	SIGNED: MARK ROOME	18/12/12
	NAME: MARK ROOME	
	RPEQ No: 03041	



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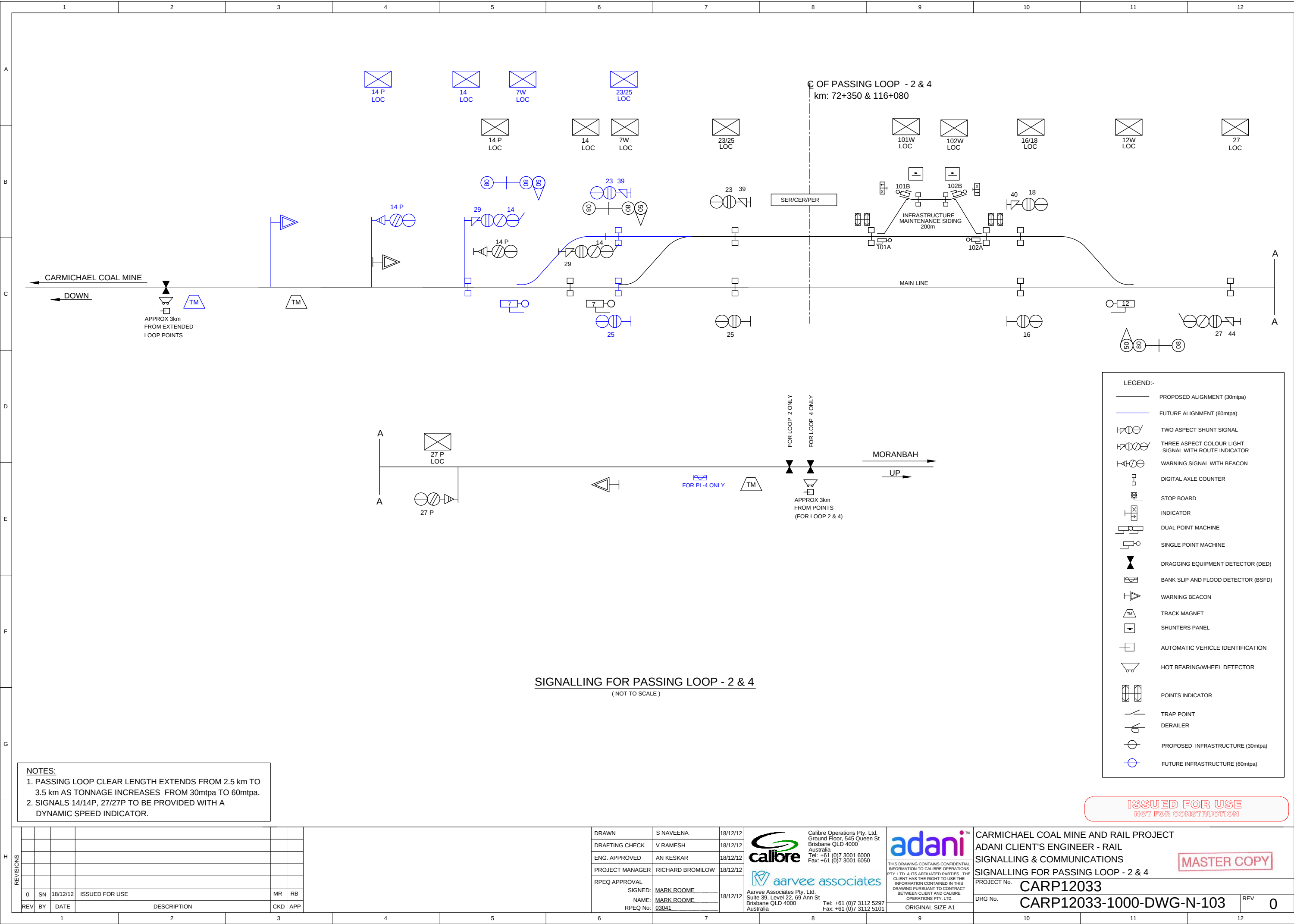
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Fax: +61 (0)7 3112 5101

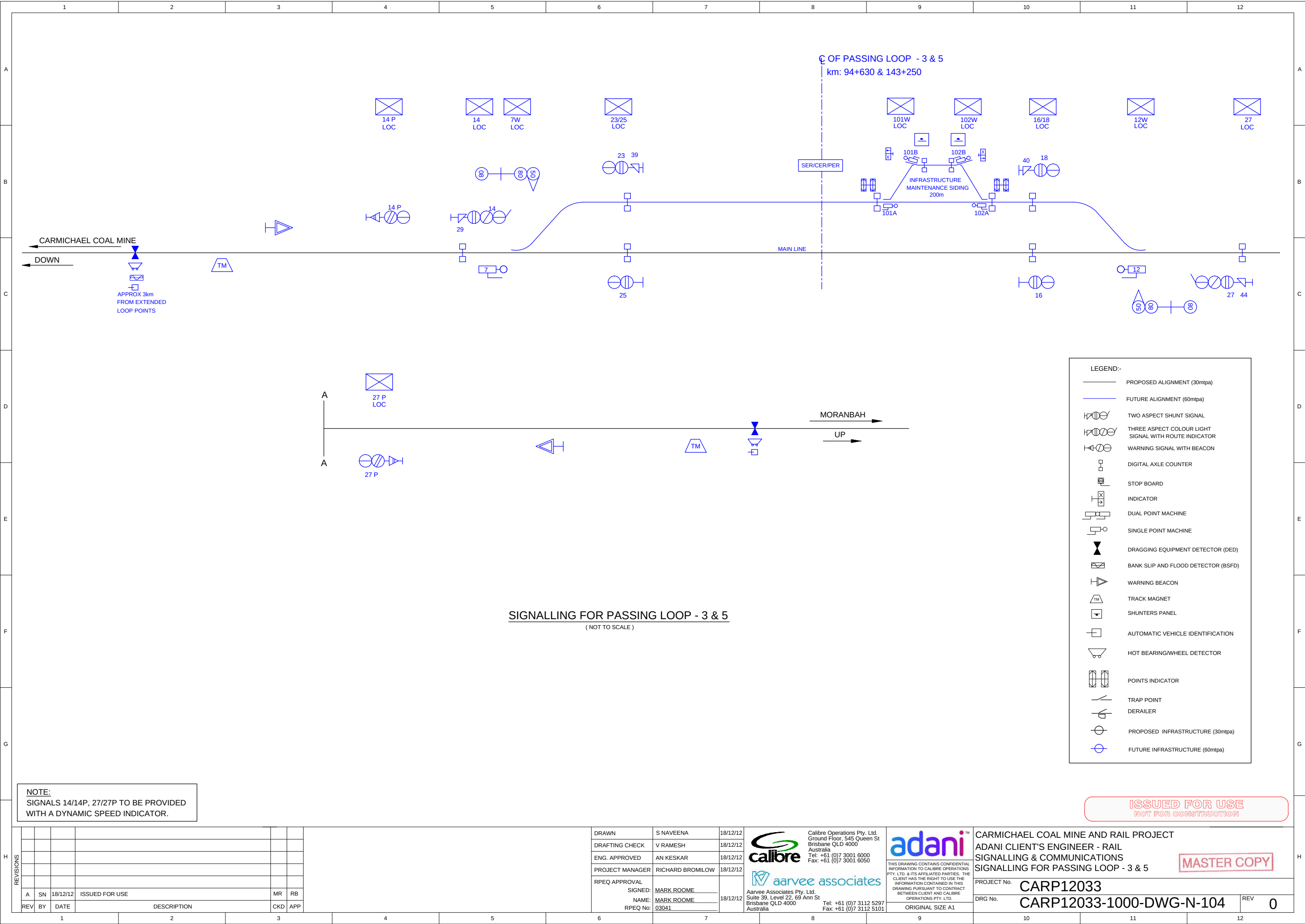


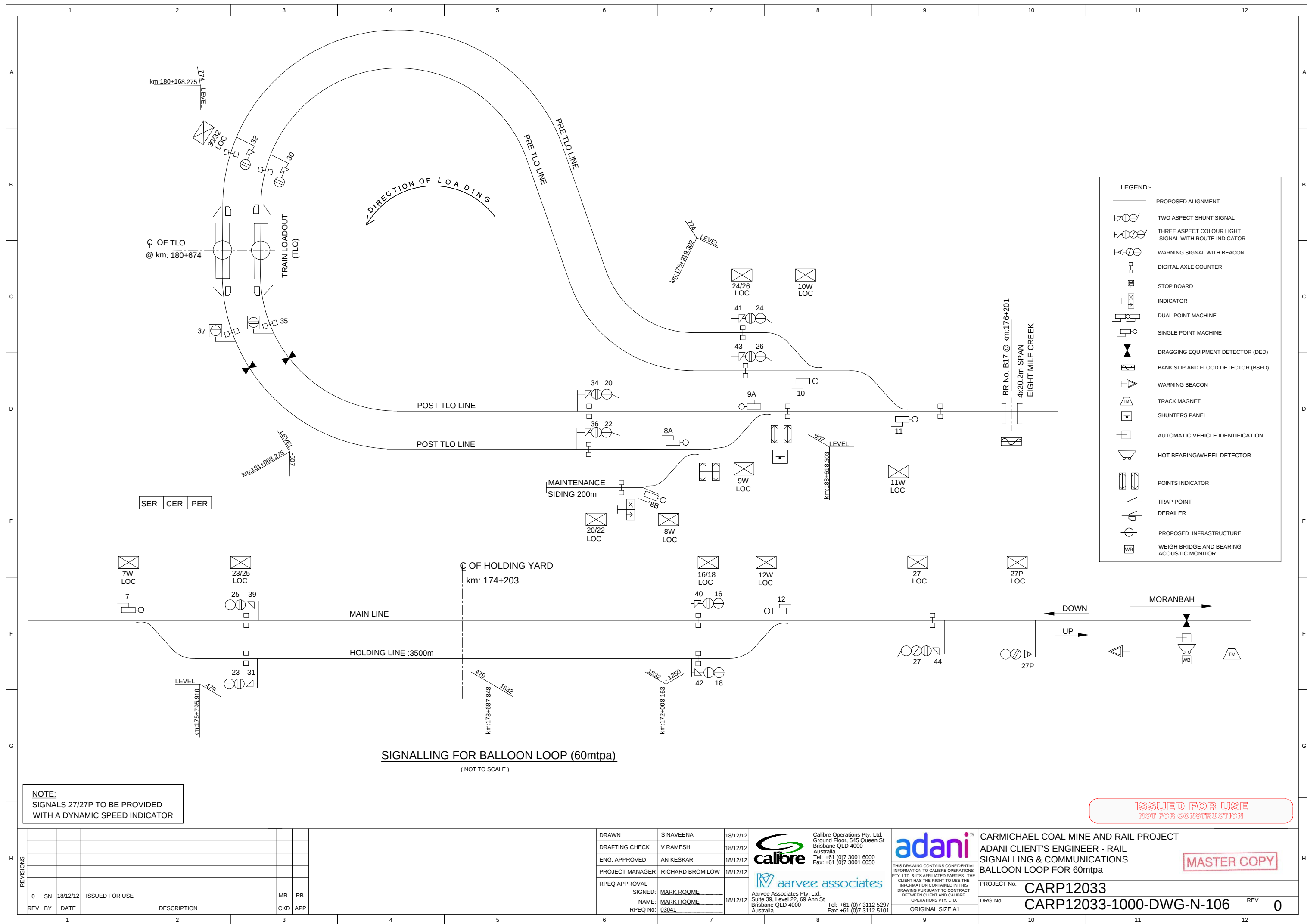
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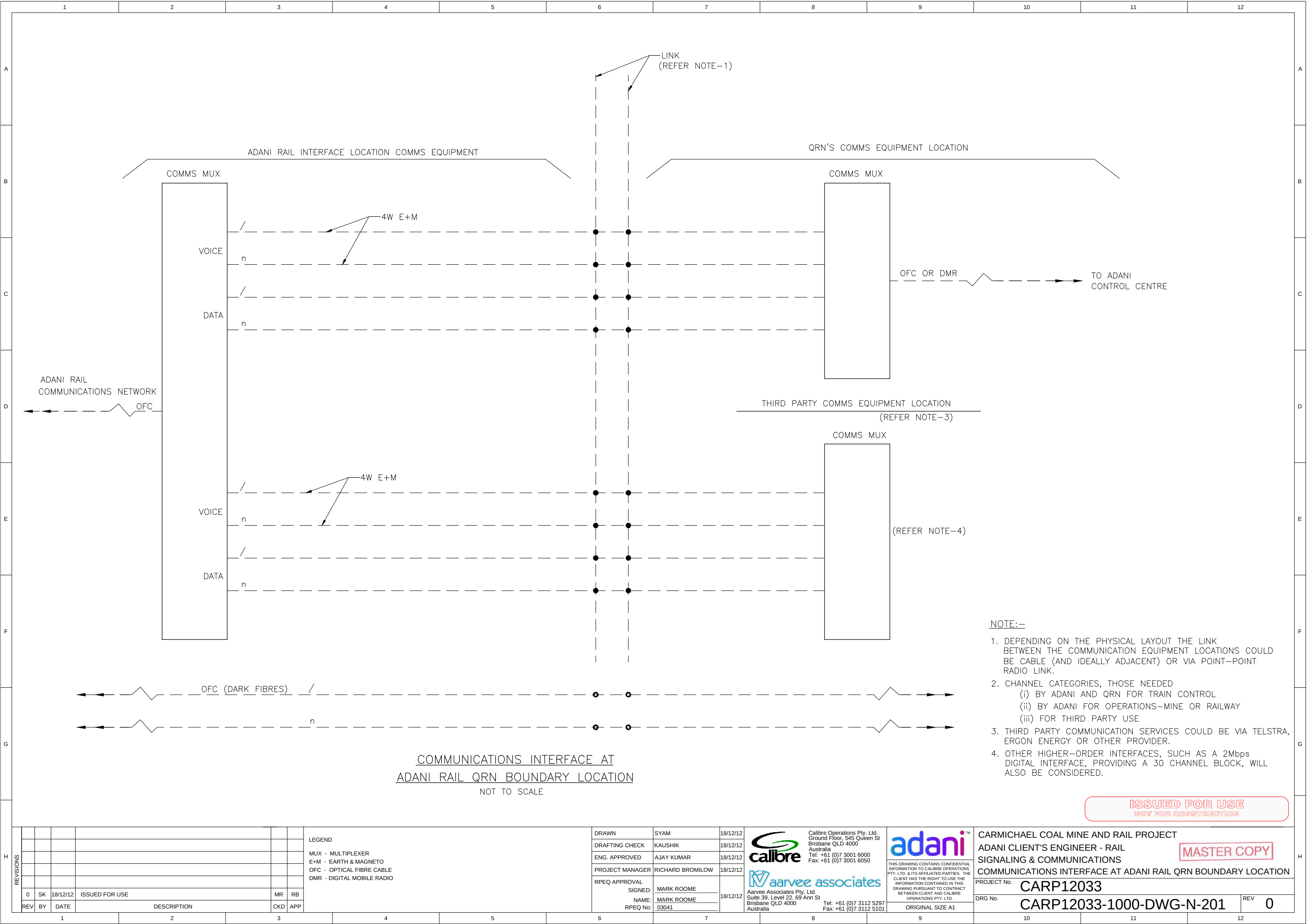
ORIGINAL SIZE A1

CARMICHAEL COAL MINE AND RAIL PROJECT			
ADANI CLIENT'S ENGINEER - RAIL			
SIGNALLING & COMMUNICATIONS			
SIGNALLING FOR INTERFACE CONNECTIVITY			
PROJECT No.	CARP12033		
DRG No.	CARP12033-1000-DWG-N-101		
REV	0		









- NOTE:-
1. DEPENDING ON THE PHYSICAL LAYOUT THE LINK BETWEEN THE COMMUNICATION EQUIPMENT LOCATIONS COULD BE CABLE (AND IDEALLY ADJACENT) OR VIA POINT-POINT RADIO LINK.
 2. CHANNEL CATEGORIES, THOSE NEEDED
 - (i) BY ADANI AND QRN FOR TRAIN CONTROL
 - (ii) BY ADANI FOR OPERATIONS-MINE OR RAILWAY
 - (iii) FOR THIRD PARTY USE
 3. THIRD PARTY COMMUNICATION SERVICES COULD BE VIA TELSTRA, ERGON ENERGY OR OTHER PROVIDER.
 4. OTHER HIGHER-ORDER INTERFACES, SUCH AS A 2Mbps DIGITAL INTERFACE, PROVIDING A 30 CHANNEL BLOCK, WILL ALSO BE CONSIDERED.

ISSUED FOR USE
NOT FOR CONSTRUCTION

REVISIONS							
0	SK	18/12/12	ISSUED FOR USE	MR	RB		
REV	BY	DATE	DESCRIPTION	CKD	APP		

LEGEND

MUX - MULTIPLEXER
E+M - EARTH & MAGNETO
OFC - OPTICAL FIBRE CABLE
DMR - DIGITAL MOBILE RADIO

DRAWN	SYAM	18/12/12
DRAFTING CHECK	KAUSHIK	18/12/12
ENG. APPROVED	AJAY KUMAR	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	MARK ROOME	18/12/12
NAME:	MARK ROOME	
RPEQ No:	03041	



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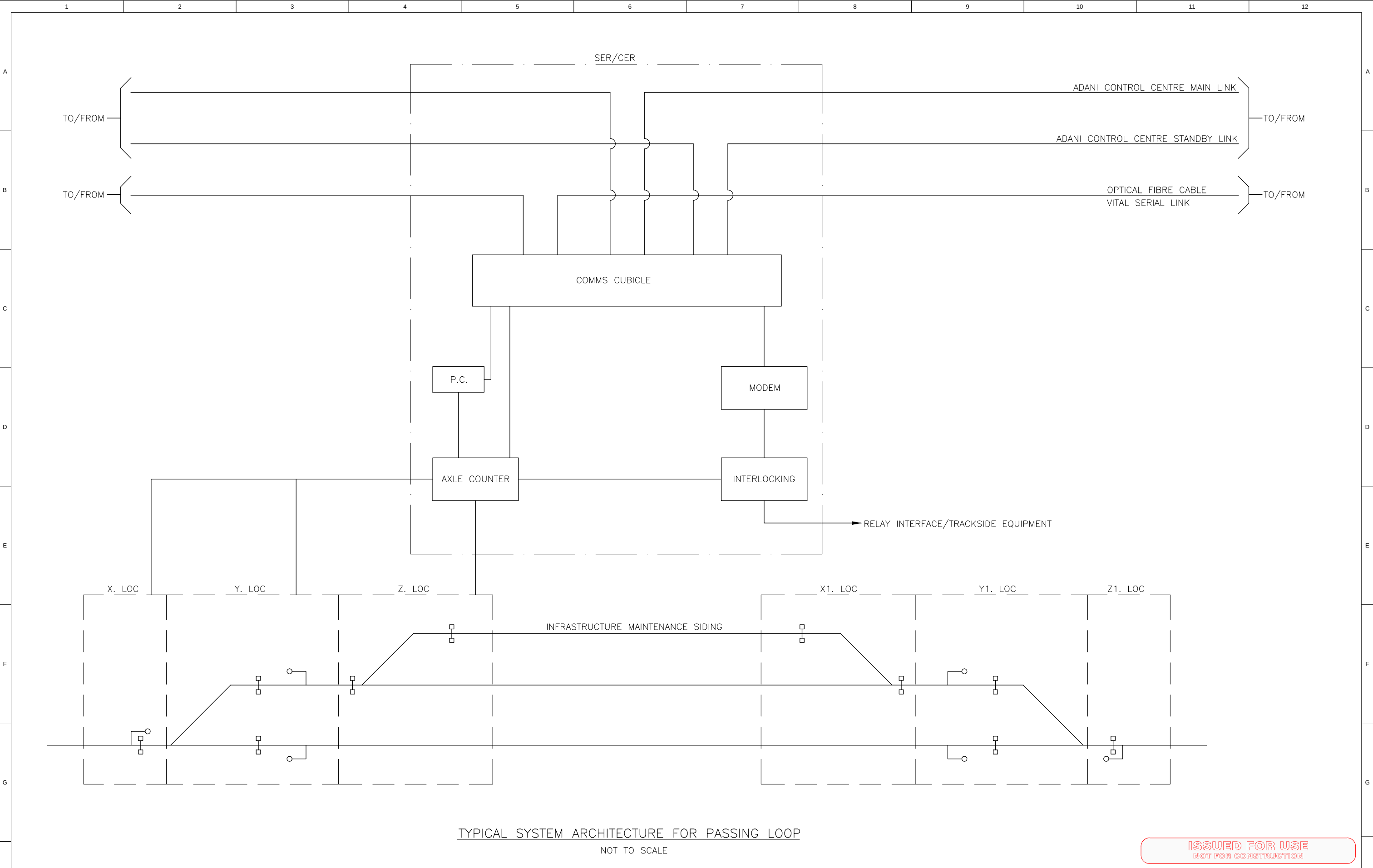
Aarvee Associates Pty. Ltd.
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ORIGINAL SIZE A1

CARMICHAEL COAL MINE AND RAIL PROJECT			
ADANI CLIENT'S ENGINEER - RAIL			
SIGNALLING & COMMUNICATIONS			
COMMUNICATIONS INTERFACE AT ADANI RAIL QRN BOUNDARY LOCATION			
PROJECT No.	CARP12033		
DRG No.	CARP12033-1000-DWG-N-201		
REV	0		



TYPICAL SYSTEM ARCHITECTURE FOR PASSING LOOP
NOT TO SCALE

ISSUED FOR USE
NOT FOR CONSTRUCTION

REVISIONS					
REV	BY	DATE	DESCRIPTION	CKD	APP
0	SK	18/12/12	ISSUED FOR USE	MR	RB

LEGEND
SER - SIGNALLING EQUIPMENT ROOM
CER - COMMUNICATIONS EQUIPMENT ROOM
LOC - LOCATION

DRAWN	SYAM	18/12/12
DRAFTING CHECK	KAUSHIK	18/12/12
ENG. APPROVED	AJAY KUMAR	18/12/12
PROJECT MANAGER	RICHARD BROMILOW	18/12/12
RPEQ APPROVAL		
SIGNED:	MARK ROOME	18/12/12
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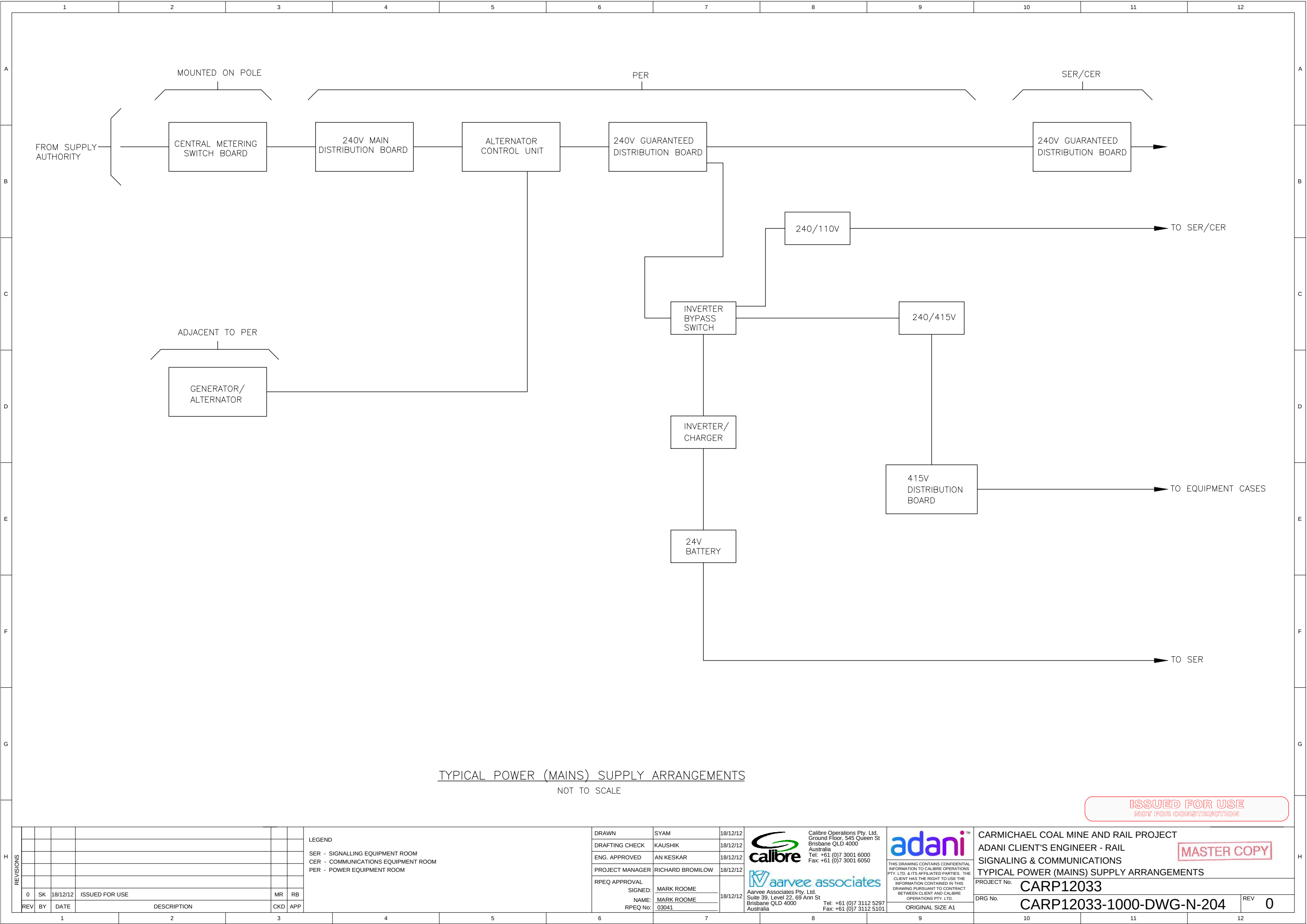
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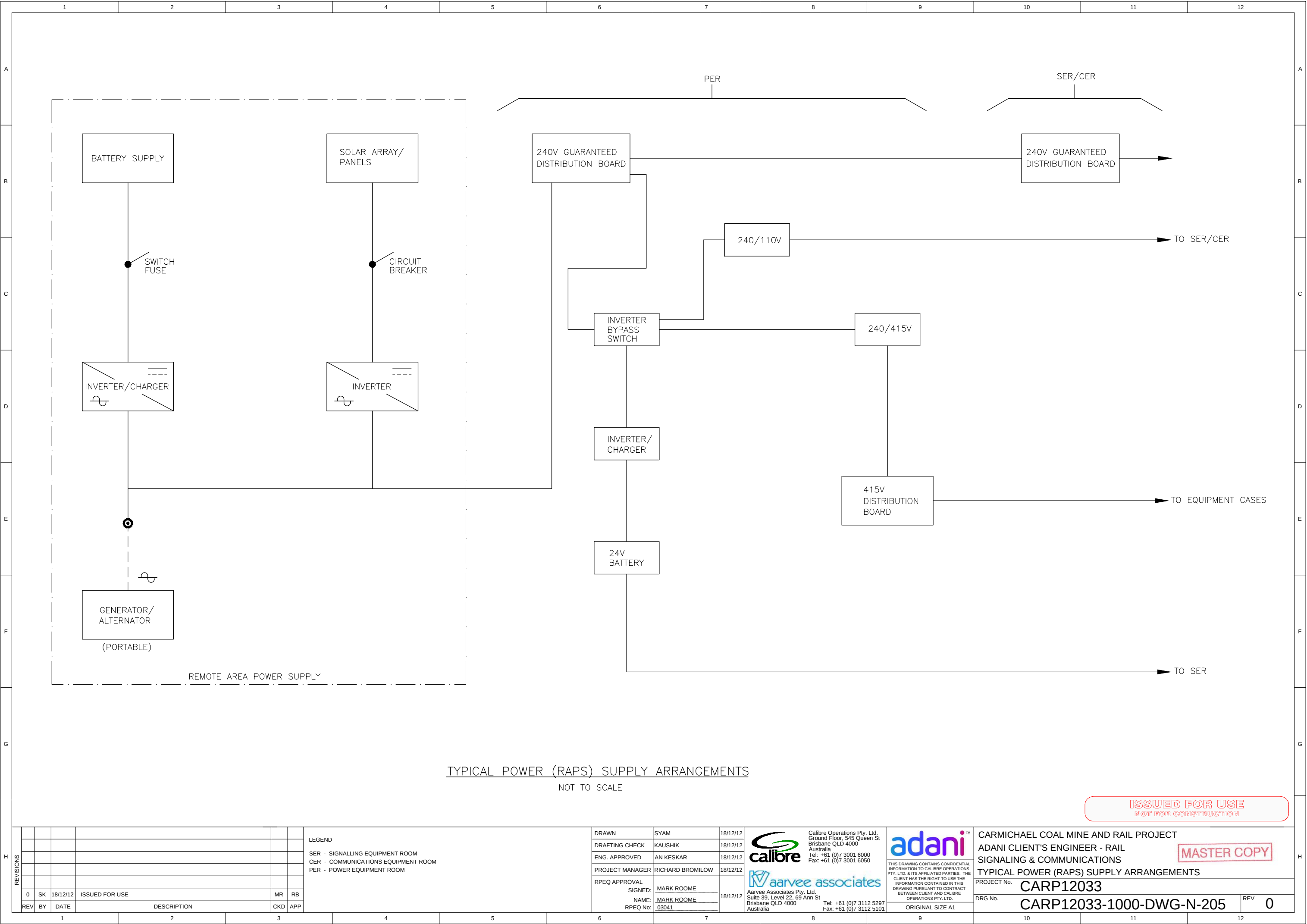
adani
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BETWEEN CLIENT AND CALIBRE
OPERATIONS PTY. LTD.

CARMICHAEL COAL MINE AND RAIL PROJECT
ADANI CLIENT'S ENGINEER - RAIL
TYPICAL SYSTEM ARCHITECTURE
TYPICAL SYSTEM ARCHITECTURE FOR PASSING LOOP
PROJECT No. **CARP12033**
DRG No. **CARP12033-1000-DWG-N-203** REV **0**

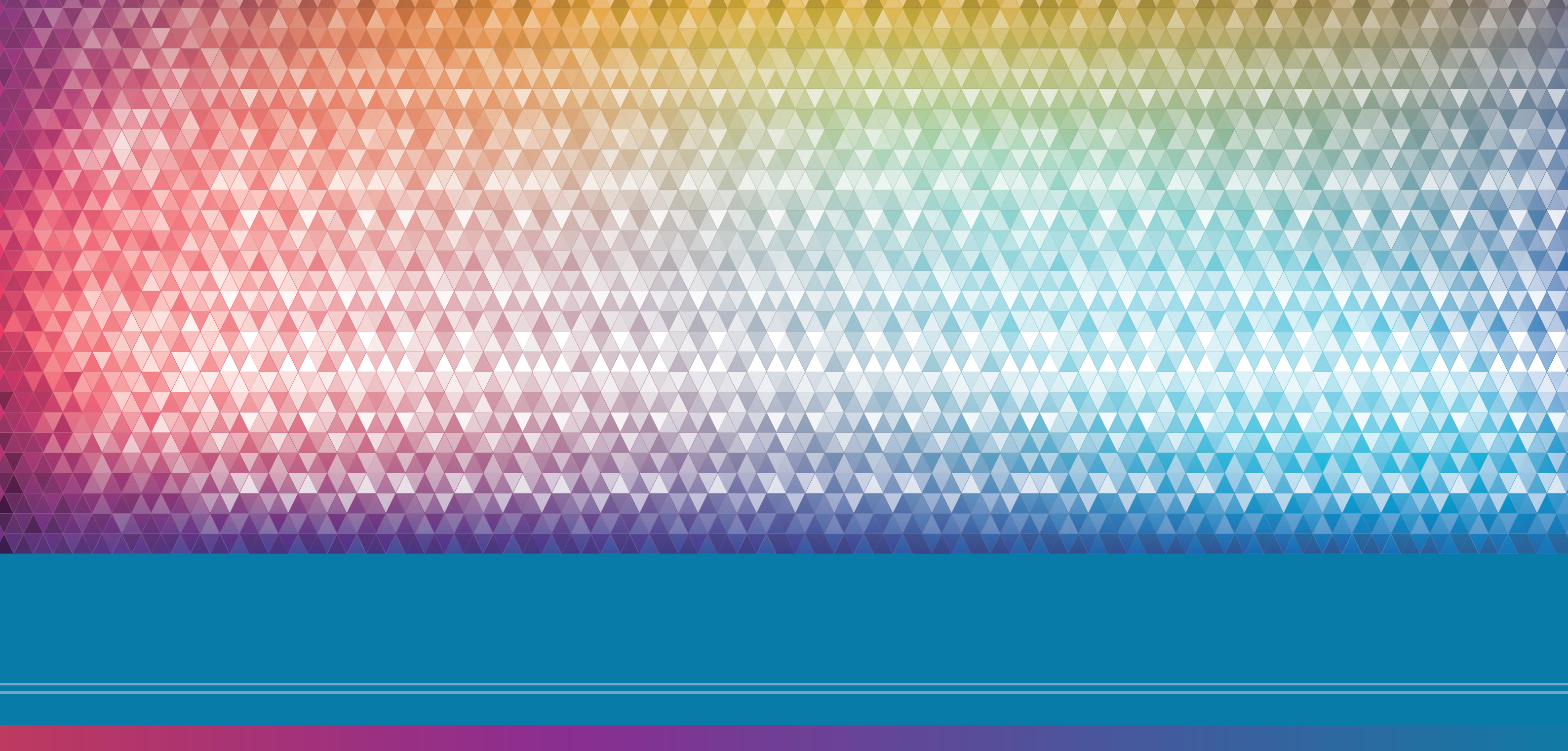
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ORIGINAL SIZE A1





TYPICAL POWER (RAPS) SUPPLY ARRANGEMENTS
NOT TO SCALE



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