

GENERAL NOTES

1. THESE NOTES APPLY TO ALL CIVIL/STRUCTURAL WORK INCLUDED IN THIS PROJECT.
2. CIVIL/STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL RELATED PROJECT DOCUMENTATION. ANY DISCREPANCY IN THE PROJECT DOCUMENTATION AFFECTING WORK SHOWN ON THESE DRAWINGS SHALL BE REFERRED TO THE SUPERINTENDENT AND AN INSTRUCTION OBTAINED BEFORE PROCEEDING WITH WORK SO AFFECTED.
3. VERIFY SETTING OUT DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE COMMENCING WORK.
4. EXECUTE ALL WORK SHOWN ON THESE DRAWINGS IN ACCORDANCE WITH THE RELEVANT CODES AND STANDARDS.
5. ENSURE THAT ALL STRUCTURE IS MAINTAINED IN A SAFE AND STABLE STATE THROUGHOUT THE CONSTRUCTION PERIOD.
6. U.N.O. STANDARDS/CODES REFERENCED SHALL BE THOSE CURRENT AT THE DATE DRAWINGS WERE APPROVED.
7. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT 2000, WHICH REQUIRES EMPLOYERS TO ENSURE THE HEALTH, SAFETY AND WELFARE OF EMPLOYEES.
8. THE CONTRACTOR SHALL AT ALL TIMES EXERCISE ALL NECESSARY PRECAUTIONS APPROPRIATE TO ENSURE THE SAFETY OF ALL PERSONS ON THE WORK SITE OR IN THE VICINITY OF THE WORK SITE.
9. SEDIMENT AND EROSION CONTROL MEASURES AS DETAILED ON THE SOIL AND WATER MANAGEMENT PLANS AND IN ACCORDANCE WITH LANDCOM'S SOILS AND CONSTRUCTION VOLUME 1, 4TH EDITION, MARCH 2004 AND SCC DCP 100 ARE TO BE IN PLACE AND MAINTAINED AT ALL TIMES.
10. ALL CONSTRUCTION WORK IS TO BE CARRIED OUT SO THAT AT ANY TIME ADJOINING PROPERTY OWNERS ARE NOT DEPRIVED OF AN ALL-WEATHER ACCESS OR SUBJECTED TO ADDITIONAL STORM WATER RUN-OFF DURING THE PERIOD OF CONSTRUCTION.
11. TO LIMIT THE IMPACT OF THE CONSTRUCTION ON ADJOINING OWNERS, ALL WORKS SHALL BE RESTRICTED TO THE HOURS OF 7am-6pm MONDAY TO FRIDAY AND 8am-3pm SATURDAY. NO WORK SHALL TAKE PLACE ON SUNDAYS OR PUBLIC HOLIDAYS.
12. ALL WORK IS TO BE SET OUT BY A COMPETENT SURVEYOR APPROVED BY COUNCIL.
13. THE CONTRACTOR SHALL NOT DISTURB ANY SURVEY CONTROL MARKS. SHOULD ANY SURVEY CONTROL MARK BE DISTURBED OR OBLITERATED, THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENT IMMEDIATELY. THE CONTRACTOR SHALL HAVE THE MARKS REPLACED AT HIS EXPENSE.
14. PRIOR TO COMMENCEMENT OF EXCAVATION THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL SERVICES.
15. ALL WORKS ARE TO BE CONDUCTED TO THE REQUIREMENTS OF THE SUBDIVISION MANAGER OR DELEGATE.
16. ALL GREEN WASTE IS TO BE MULCHED, STOCKPILED AND USED (WHERE POSSIBLE) ON SITE AS DIRECTED BY THE SUPERINTENDENT. NO GREEN WASTE TO BE BURNT ON SITE. ALL EXCESS MULCH IS TO BE REMOVED OFF SITE.
17. THE DEPTH OF PAVEMENT MATERIAL SHALL BE AS DETERMINED BY THE DOUGLAS PARTNERS PAVEMENT DESIGN REPORT. THE TYPE OF PAVEMENT MATERIAL IS TO BE APPROVED BY COUNCIL.
18. ALL DISTURBED AREAS INCLUDING BATTERS, TABLE DRAINS AND FOOTPATH AREAS ARE TO BE TOP SOILED, FERTILIZED AND SEED TO THE SATISFACTION OF COUNCIL'S SUBDIVISION MANAGER OR DELEGATE. THE TYPE OF SEED (NATIVE MIX) IS TO BE APPROVED BY THE SUPERINTENDENT.
19. ENGINEERING PLANS ARE TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT CONTRACT DRAWINGS.
20. IF ROCK IS ENCOUNTERED THE SUPERINTENDENT SHALL BE NOTIFIED IMMEDIATELY SO MEASUREMENTS OF VOLUMES CAN BE MADE. NO VARIATIONS FOR ROCK WILL BE CONSIDERED UNLESS THE SUPERINTENDENT HAS VERIFIED THE AMOUNTS PRIOR TO BACKFILLING.
21. ALL WORKS TO BE IN ACCORDANCE WITH SHOALHAVEN CITY COUNCIL'S DCP 100.

REV	DATE	BY	APP.	DETAILS	DRAWING STATUS
					DESIGN BY J Blenkhorn JUNE 2010
					DRAWN BY J Blenkhorn 18/03/11
					DRAFTING CHECK MAK 24/03/11
					DESIGN CHECK MAK 24/03/11
					FINAL APPROVAL MAK 24/03/2011
PO					PRELIMINARY

REVISION IN PROGRESS

MODIFICATION  
#3 ISSUE  
MARCH 2011

SCALE:  
(on A1 Original)  
1:1250  
HEIGHT DATUM  
AHD



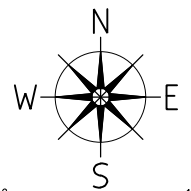
278 KEIRA STREET, WOLLONGONG, NSW 2500  
Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981  
This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd

PROJECT TITLE  
VINCENTIA DISTRICT CENTRE  
SHOPPING CENTRE PA  
VINCENTIA  
for  
FABCOT PTY LTD


DRAWING TITLE	Project No.	Com No.	Drawing No.	REV
CIVILWORKS GENERAL ARRANGEMENT KEYPLAN	104016	46	46860	P0



- NOTES:**
1. REFER DWG 46871 FOR PAVEMENT TYPES AND EXTENTS
  2. REFER DWG 46870 FOR KERB TYPES AND RETAINING WALLS
  3. REFER DWG 46872 & 873 FOR EARTHWORKS
  4. REFER DWG 46875 FOR TYPICAL DETAILS

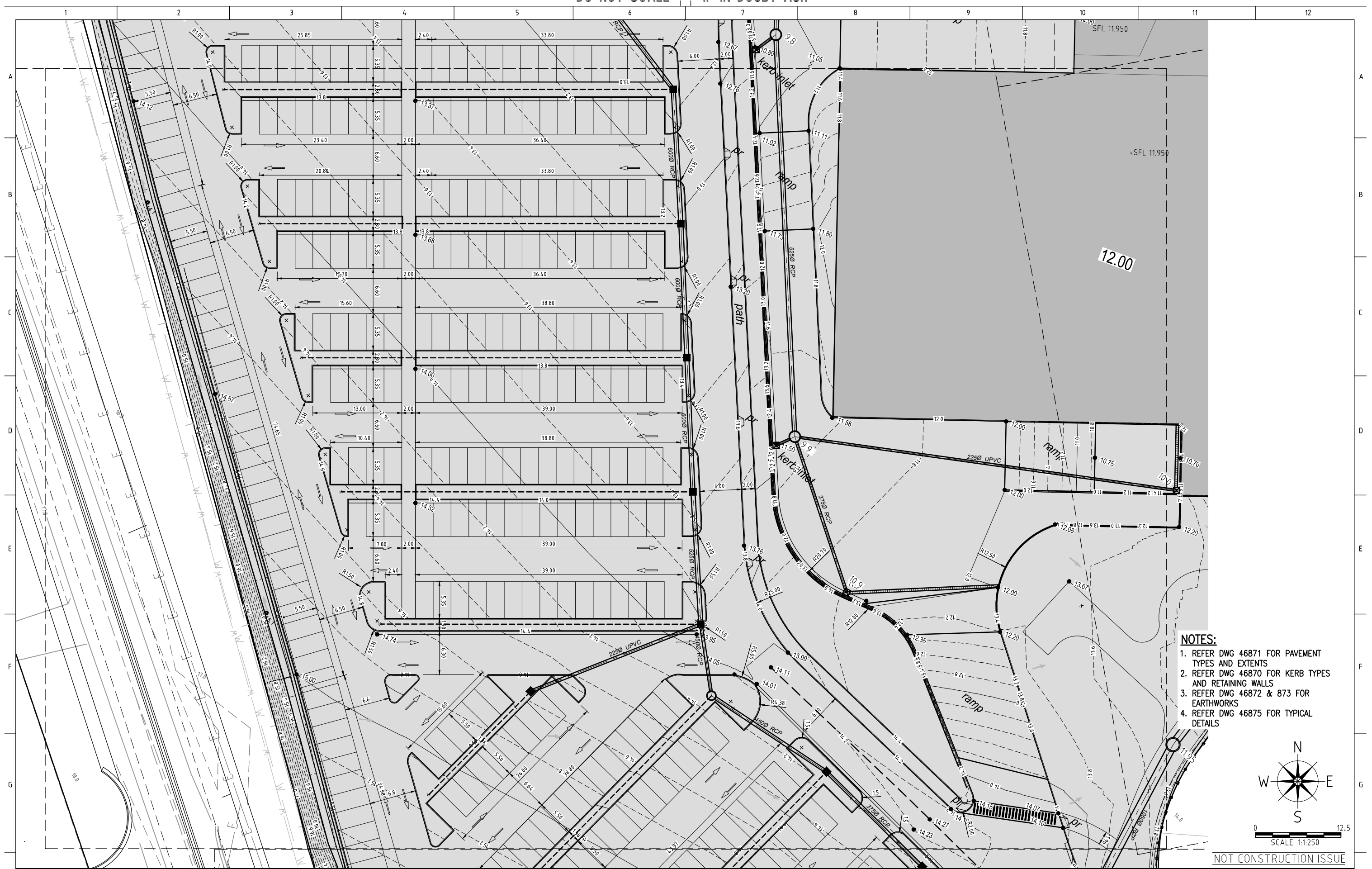


NOT CONSTRUCTION ISSUE

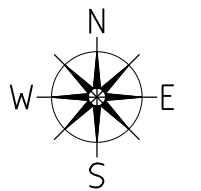
REV				DATE	BY	APP.	DETAILS	DRAWING STATUS				MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)	 278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd	PROJECT TITLE		DRAWING TITLE			
							DESIGN BY	J. Blenkhorn	JUNE 2010	1:250	VINCENTIA DISTRICT CENTRE		CIVILWORKS							
							DRAWN BY	J. Blenkhorn	18/03/11		SHOPPING CENTRE PA		ROADING AND DRAINAGE							
							DRAFTING CHECK	MAK	24/03/11		VINCENTIA		SHEET 1							
							DESIGN CHECK	MAK	24/03/11		for		NOT FOR CONSTRUCTION							
							FINAL APPROVAL	MAK	24/03/2011		FABCOT PTY LTD		SHEET 1							
REVISION IN PROGRESS								PRELIMINARY					HEIGHT DATUM AHD			Project No.	Com No.	Drawing No.	REV	
P0																104016	46	46861	P0	








- NOTES:**
1. REFER DWG 46871 FOR PAVEMENT TYPES AND EXTENTS
  2. REFER DWG 46870 FOR KERB TYPES AND RETAINING WALLS
  3. REFER DWG 46872 & 873 FOR EARTHWORKS
  4. REFER DWG 46875 FOR TYPICAL DETAILS



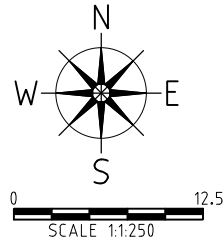
NOT CONSTRUCTION ISSUE

REV	DATE	BY	APP.	DETAILS	DRAWING STATUS		MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)	  278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	DRAWING TITLE CIVILWORKS ROADING AND DRAINAGE SHEET 3			
				REVISION IN PROGRESS	DESIGN BY	J Blenkhorn		JUNE 2010		1:250	Project No. 104016	Com No.D 46	Drawing No. 46863	REV P0
					DRAWN BY	J Blenkhorn		18/03/11						
					DRAFTING CHECK	MAK		24/03/11						
					DESIGN CHECK	MAK		24/03/11						
				FINAL APPROVAL	MAK	24/03/2011		HEIGHT DATUM AHD						
PO					PRELIMINARY									




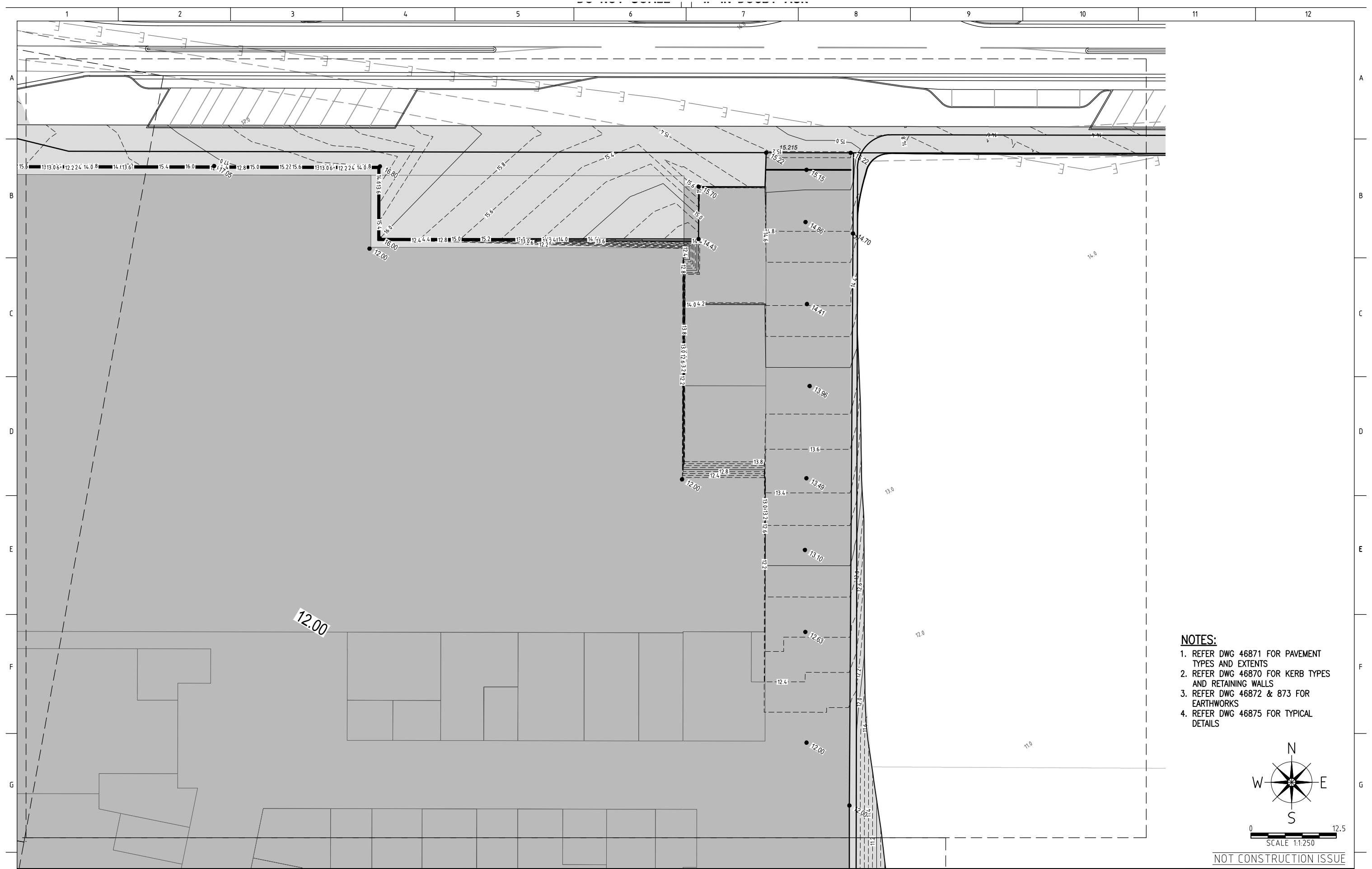



- NOTES:**
- 1. REFER DWG 46871 FOR PAVEMENT TYPES AND EXTENTS
  - 2. REFER DWG 46870 FOR KERB TYPES AND RETAINING WALLS
  - 3. REFER DWG 46872 & 873 FOR EARTHWORKS
  - 4. REFER DWG 46875 FOR TYPICAL DETAILS



NOT CONSTRUCTION ISSUE

REV				DATE	BY	APP.	DETAILS		DRAWING STATUS			MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)  1:250		  278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD		DRAWING TITLE CIVILWORKS ROADING AND DRAINAGE SHEET 4			
								DESIGN BY	J. Blenkhorn	JUNE 2010											
								DRAWN BY	J. Blenkhorn	18/03/11											
								DRAFTING CHECK	MAK	24/03/11											
								DESIGN CHECK	MAK	24/03/11											
								FINAL APPROVAL	MAK	24/03/2011											
PO								PRELIMINARY					HEIGHT DATUM AHD				Project No. 104016	Com No. 46	Drawing No. 46864	REV PO	

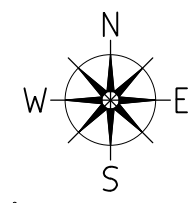


REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			<div><div>278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd</div></div>	<div>PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD</div>	DRAWING TITLE						
				DESIGN BY	J Blenkhorn	JUNE 2010	<div>MODIFICATION #3 ISSUE MARCH 2011</div>			<div>SCALE: (on A1 Original)  1:250  HEIGHT DATUM AHD</div>	<div>NOT FOR CONSTRUCTION</div>	<div>CIVILWORKS ROADING AND DRAINAGE SHEET 5</div>	<div>Project No. 104016</div>	<div>Com No. 46</div>	<div>Drawing No. 46865</div>	<div>REV P0</div>
				DRAWN BY	J Blenkhorn	18/03/11										
				DRAFTING CHECK	MAK	24/03/11										
				DESIGN CHECK	MAK	24/03/11										
				FINAL APPROVAL	MAK	24/03/2011										
P0				PRELIMINARY												





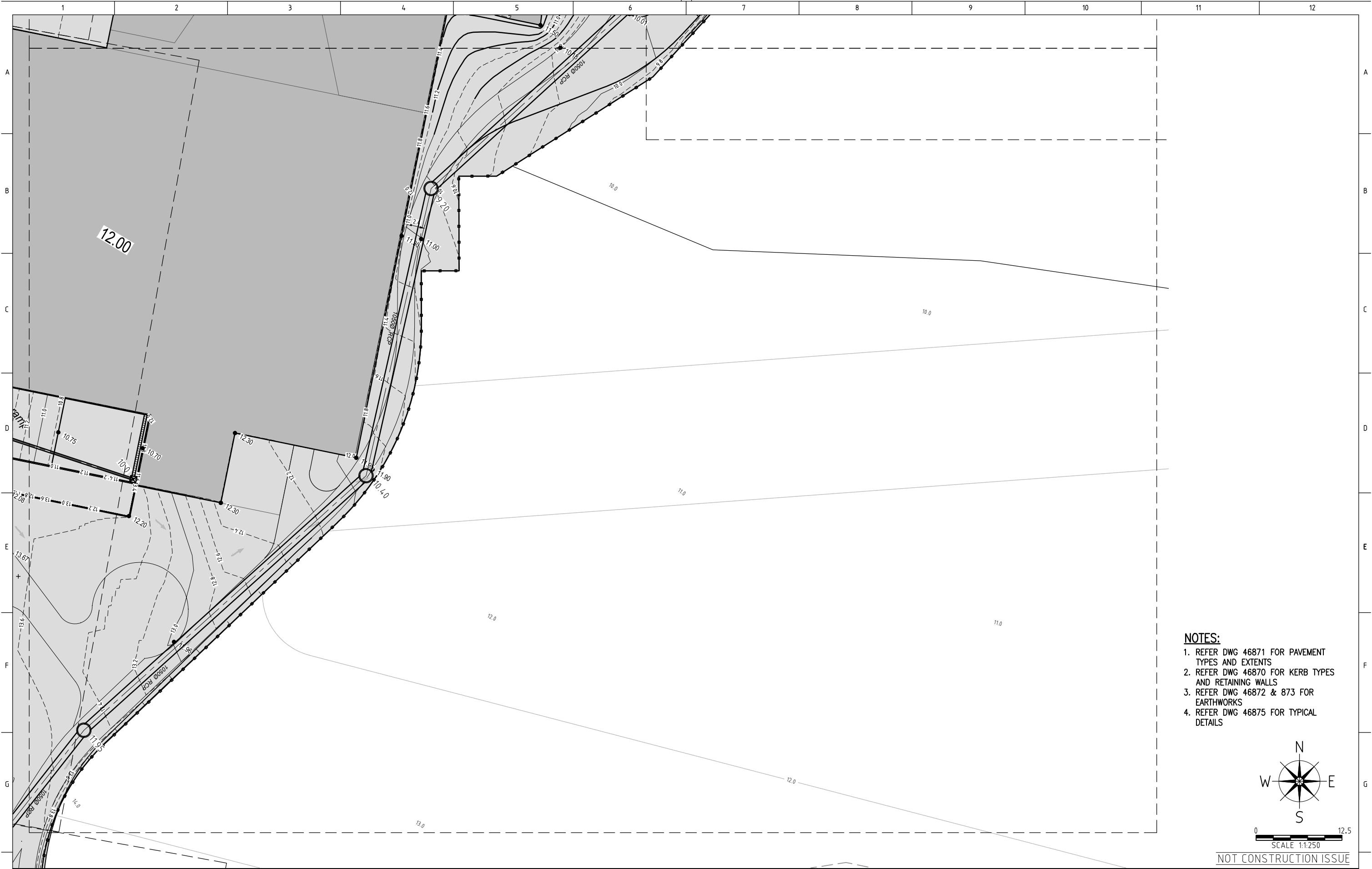


- NOTES:**
- 1. REFER DWG 46871 FOR PAVEMENT TYPES AND EXTENTS
  - 2. REFER DWG 46870 FOR KERB TYPES AND RETAINING WALLS
  - 3. REFER DWG 46872 & 873 FOR EARTHWORKS
  - 4. REFER DWG 46875 FOR TYPICAL DETAILS

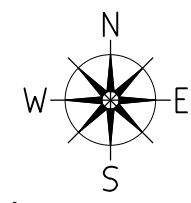


NOT CONSTRUCTION ISSUE

REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)	 278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	DRAWING TITLE			
					DESIGN BY	J. Blenkhorn	JUNE 2010		1:250				CIVILWORKS ROADING AND DRAINAGE SHEET 6		
					DRAWN BY	J. Blenkhorn	18/03/11								
					DRAFTING CHECK	MAK	24/03/11								
					DESIGN CHECK	MAK	24/03/11								
					FINAL APPROVAL	MAK	24/03/2011								
P0					PRELIMINARY				HEIGHT DATUM AHD			Project No. 104016	Com No. 46	Drawing No. 46866	REV P0





- NOTES:**
- 1. REFER DWG 46871 FOR PAVEMENT TYPES AND EXTENTS
  - 2. REFER DWG 46870 FOR KERB TYPES AND RETAINING WALLS
  - 3. REFER DWG 46872 & 873 FOR EARTHWORKS
  - 4. REFER DWG 46875 FOR TYPICAL DETAILS



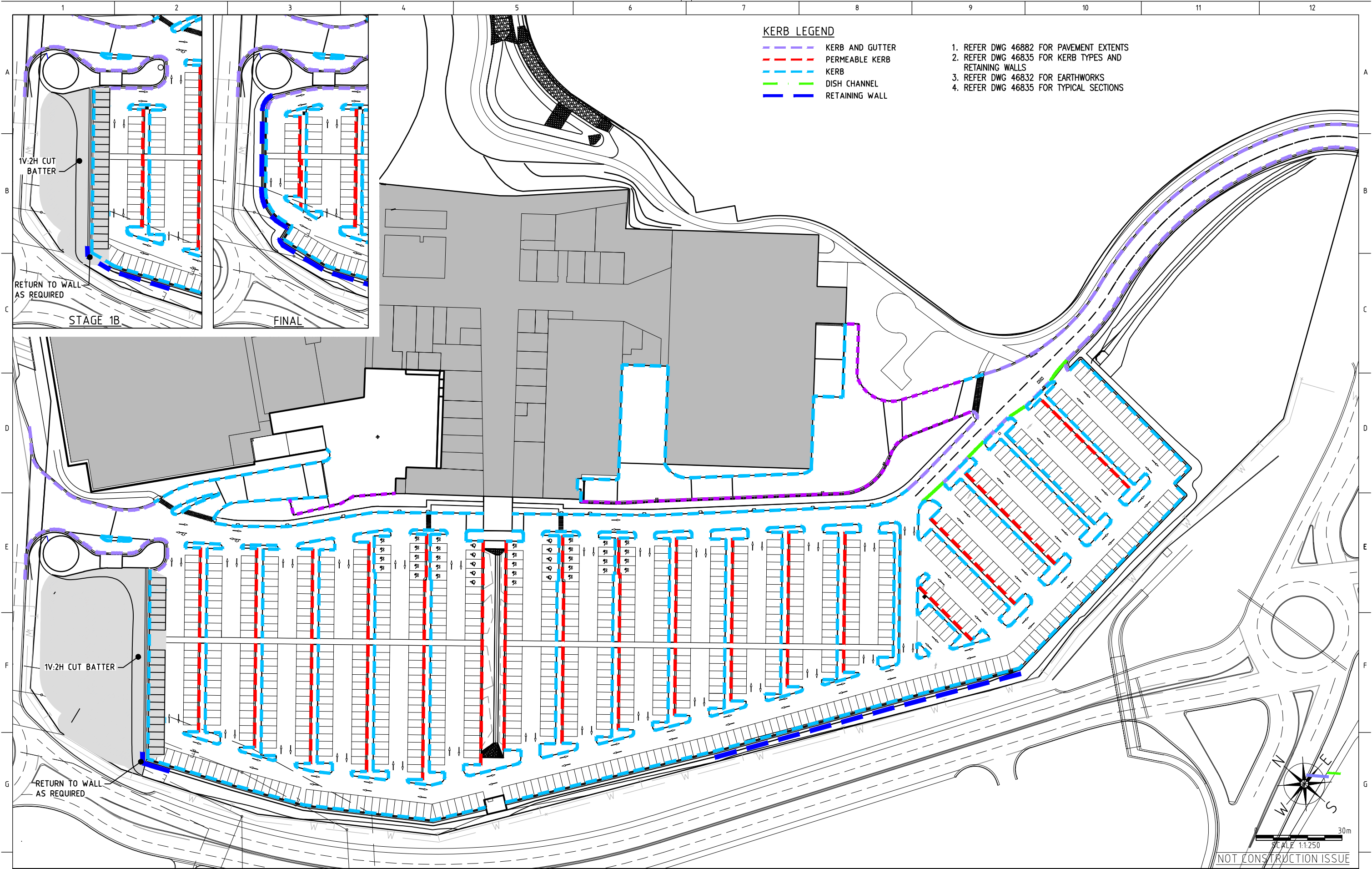
0 12.5  
SCALE 1:1250

NOT CONSTRUCTION ISSUE

REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			SCALE: (on A1 Original)			PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	DRAWING TITLE CIVILWORKS ROADING AND DRAINAGE SHEET 7											
					DESIGN BY	J. Blenkhorn	JUNE 2010					DRAWN BY	J. Blenkhorn	18/03/11	DRAFTING CHECK	MAK	24/03/11	DESIGN CHECK	MAK	24/03/11	FINAL APPROVAL	MAK	24/03/2011
REVISION IN PROGRESS					MODIFICATION #3 ISSUE MARCH 2011					1:250		278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd				Project No. 104016		Com No. 46		Drawing No. 46867		REV P0	
										HEIGHT DATUM AHD													
					PRELIMINARY																		
P0																							







KERB LEGEND

- KERB AND GUTTER
- PERMEABLE KERB
- KERB
- DISH CHANNEL
- RETAINING WALL

- 1. REFER DWG 46882 FOR PAVEMENT EXTENTS
- 2. REFER DWG 46835 FOR KERB TYPES AND RETAINING WALLS
- 3. REFER DWG 46832 FOR EARTHWORKS
- 4. REFER DWG 46835 FOR TYPICAL SECTIONS

REV	DATE	BY	APP.	DETAILS
H				REVISION IN PROGRESS

DRAWING STATUS		
DESIGN BY	J. Blenkhorn	1/03/11
DRAWN BY	J. Blenkhorn	1/03/11
DRAFTING CHECK	CJG	16/07/10
DESIGN CHECK	MAK	16/07/10
FINAL APPROVAL	MAK	16/07/10
PRELIMINARY		

MODIFICATION  
#3 ISSUE  
MARCH 2011

SCALE:  
(on A1 Original)  
1:500  
HEIGHT DATUM  
AHD

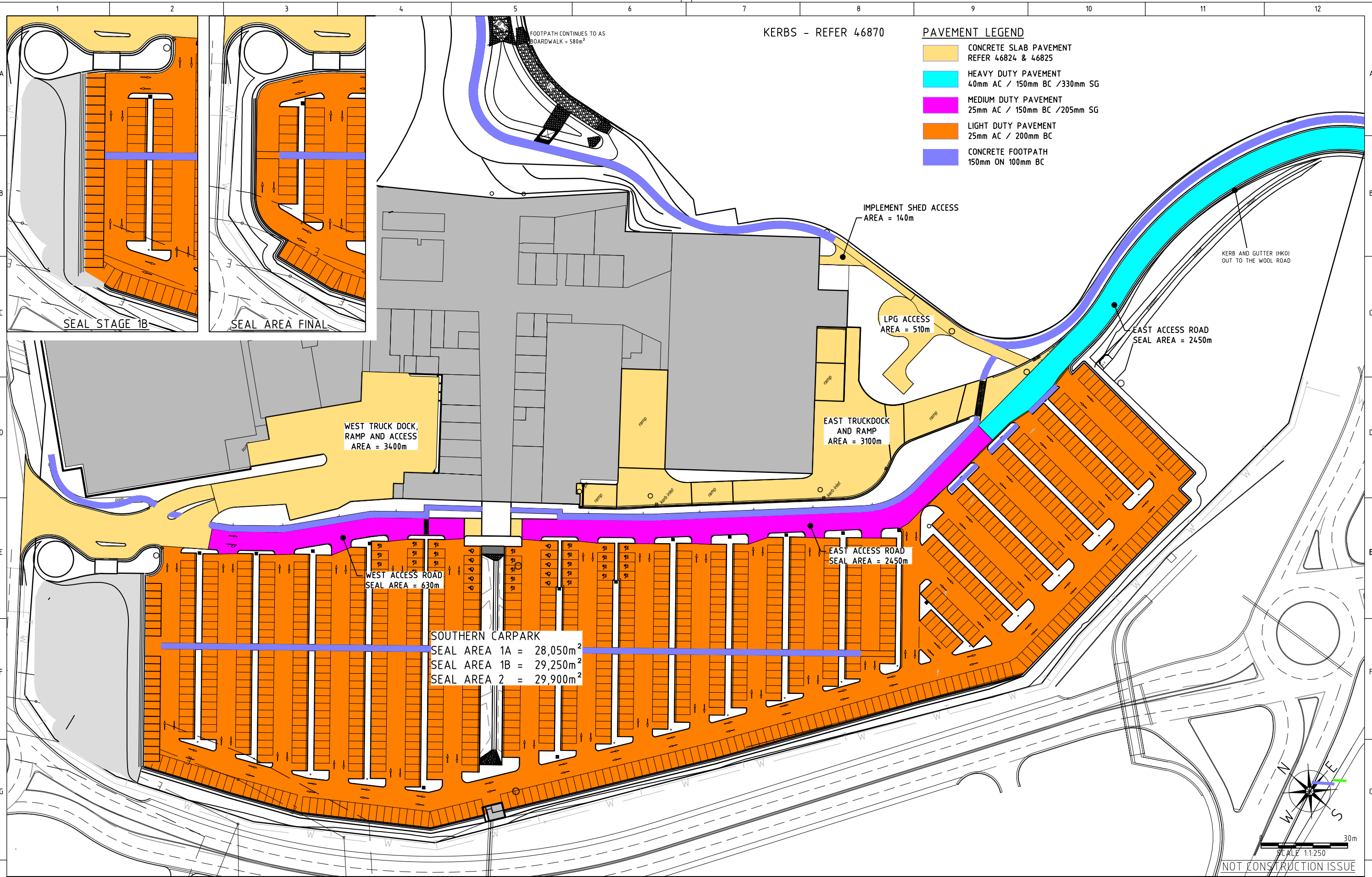




278 KEIRA STREET, WOLLONGONG, NSW 2500  
Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981  
This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd

PROJECT TITLE  
VINCENTIA DISTRICT CENTRE  
SHOPPING CENTRE PA  
VINCENTIA  
for  
FABCOT PTY LTD

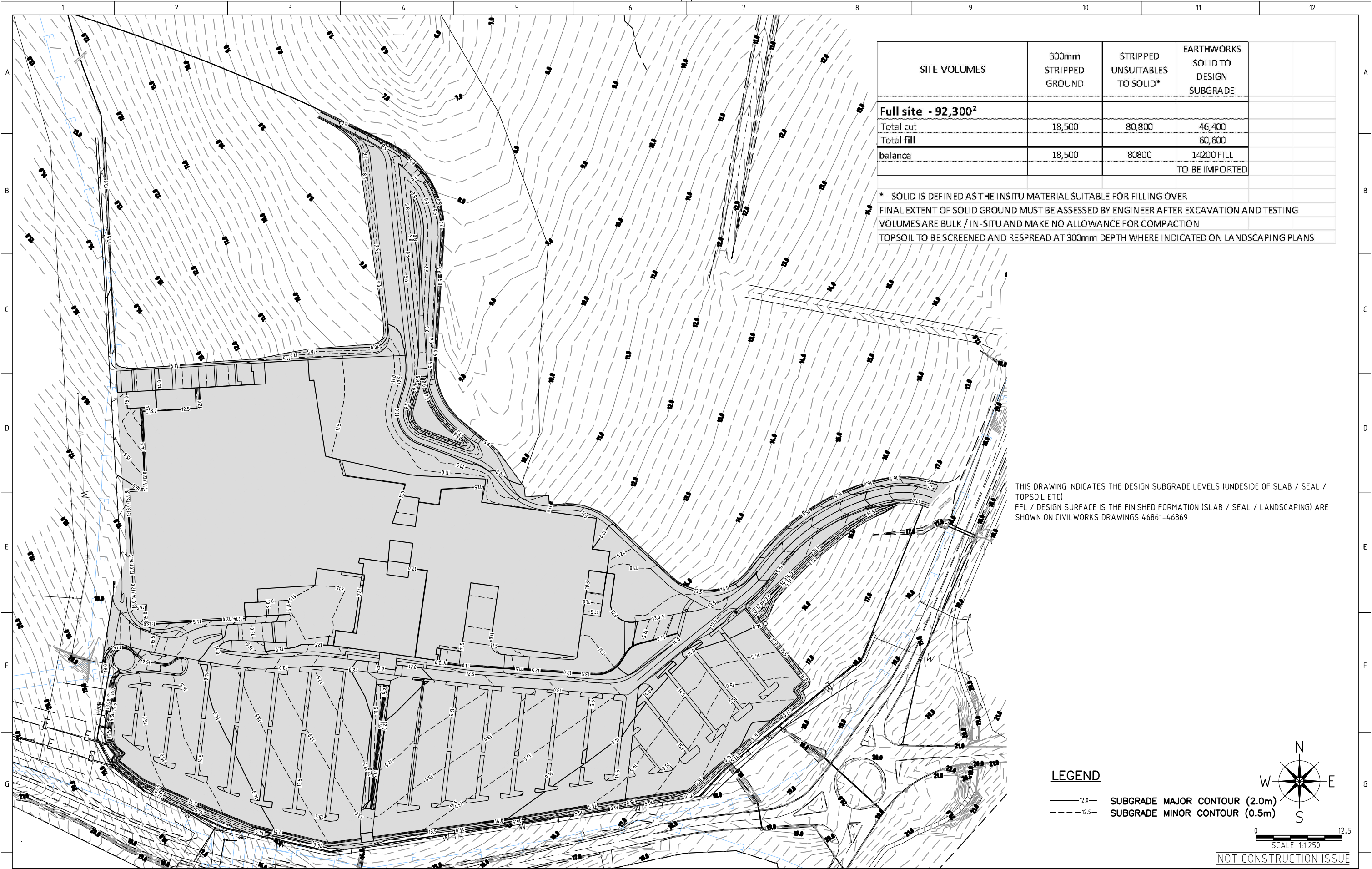
DRAWING TITLE			
CIVILWORKS KERBS AND RETAINING			
Project No.	Com No.	Drawing No.	REV
104016	46	46870	P0





REV	DATE	BY	APP.	DETAILS	DRAWING STATUS		SCALE:		PROJECT TITLE	DRAWING TITLE						
					DESIGN BY	J. Blenkhorn	(on A1 Original)			VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA <td colspan="4">CIVILWORKS PAVEMENT TYPES</td>	CIVILWORKS PAVEMENT TYPES					
					DRAWN BY	J. Blenkhorn	1:500		278 KEIRA STREET, WOLLONGONG, NSW 2500	for	FABCOT PTY LTD	Project No.	Com No.	Drawing No.	REV	
					DRAFTING CHECK	CJG										NOT FINAL STAGE
					DESIGN CHECK	MAK										
					FINAL APPROVAL	MAK										
REVISION IN PROGRESS					PRELIMINARY		MODIFICATION #3 ISSUE MARCH 2011		Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981							
							HEIGHT DATUM AHD		This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd				104016	46	46871	P0



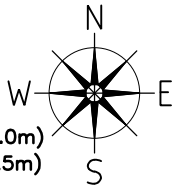


SITE VOLUMES	300mm STRIPPED GROUND	STRIPPED UNSUITABLES TO SOLID*	EARTHWORKS SOLID TO DESIGN SUBGRADE		
Full site - 92,300 <sup>2</sup>					
Total cut	18,500	80,800	46,400		
Total fill			60,600		
balance	18,500	80800	14200 FILL TO BE IMPORTED		
* - SOLID IS DEFINED AS THE INSITU MATERIAL SUITABLE FOR FILLING OVER					
FINAL EXTENT OF SOLID GROUND MUST BE ASSESSED BY ENGINEER AFTER EXCAVATION AND TESTING					
VOLUMES ARE BULK / IN-SITU AND MAKE NO ALLOWANCE FOR COMPACTION					
TOPSOIL TO BE SCREENED AND RESPREAD AT 300mm DEPTH WHERE INDICATED ON LANDSCAPING PLANS					

THIS DRAWING INDICATES THE DESIGN SUBGRADE LEVELS (UNDESIDE OF SLAB / SEAL / TOPSOIL ETC)  
FFL / DESIGN SURFACE IS THE FINISHED FORMATION (SLAB / SEAL / LANDSCAPING) ARE SHOWN ON CIVILWORKS DRAWINGS 46861-46869


LEGEND

- 12.0 — SUBGRADE MAJOR CONTOUR (2.0m)
- - - 12.5 - - SUBGRADE MINOR CONTOUR (0.5m)

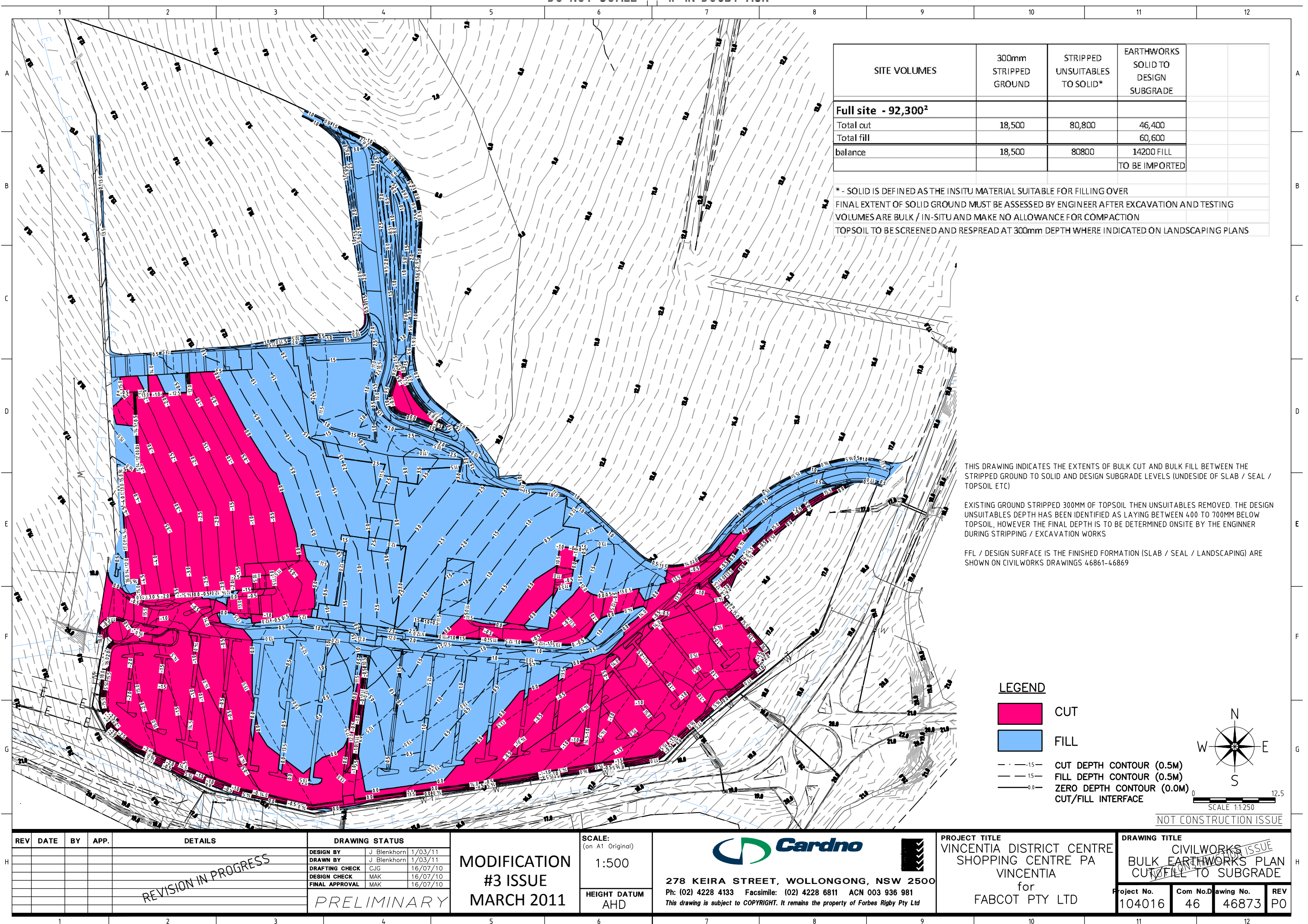


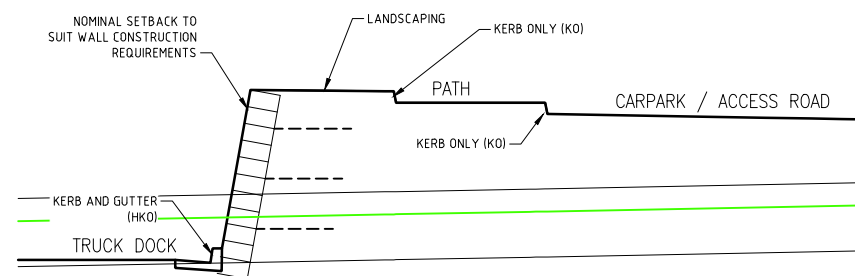
0 12.5  
SCALE 1:1250

NOT CONSTRUCTION ISSUE

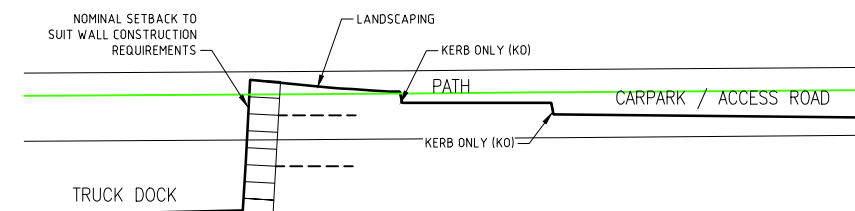
REV	DATE	BY	APP.	DETAILS	DRAWING STATUS		MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)  1:500	  278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd	PROJECT TITLE		DRAWING TITLE			
					DESIGN BY	J. Blenkhorn 1/03/11				VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA		CIVILWORKS PLAN			
					DRAWN BY	J. Blenkhorn 1/03/11				VINCENTIA		BULK EARTHWORKS PLAN			
					DRAFTING CHECK	CJG 16/07/10				for		SUBGRADE LEVELS			
					DESIGN CHECK	MAK 16/07/10				FABCOT PTY LTD		Project No.	Com No.	Drawing No.	REV
					FINAL APPROVAL	MAK 16/07/10		HEIGHT DATUM AHD				104016	46	46872	P0
REVISION IN PROGRESS					PRELIMINARY										



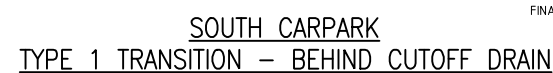






EASTERN TRUCKDOCK  
GEOGRID – SOIL REINFORCED  
HEIGHT VARIES 0.5M TO 3.6M



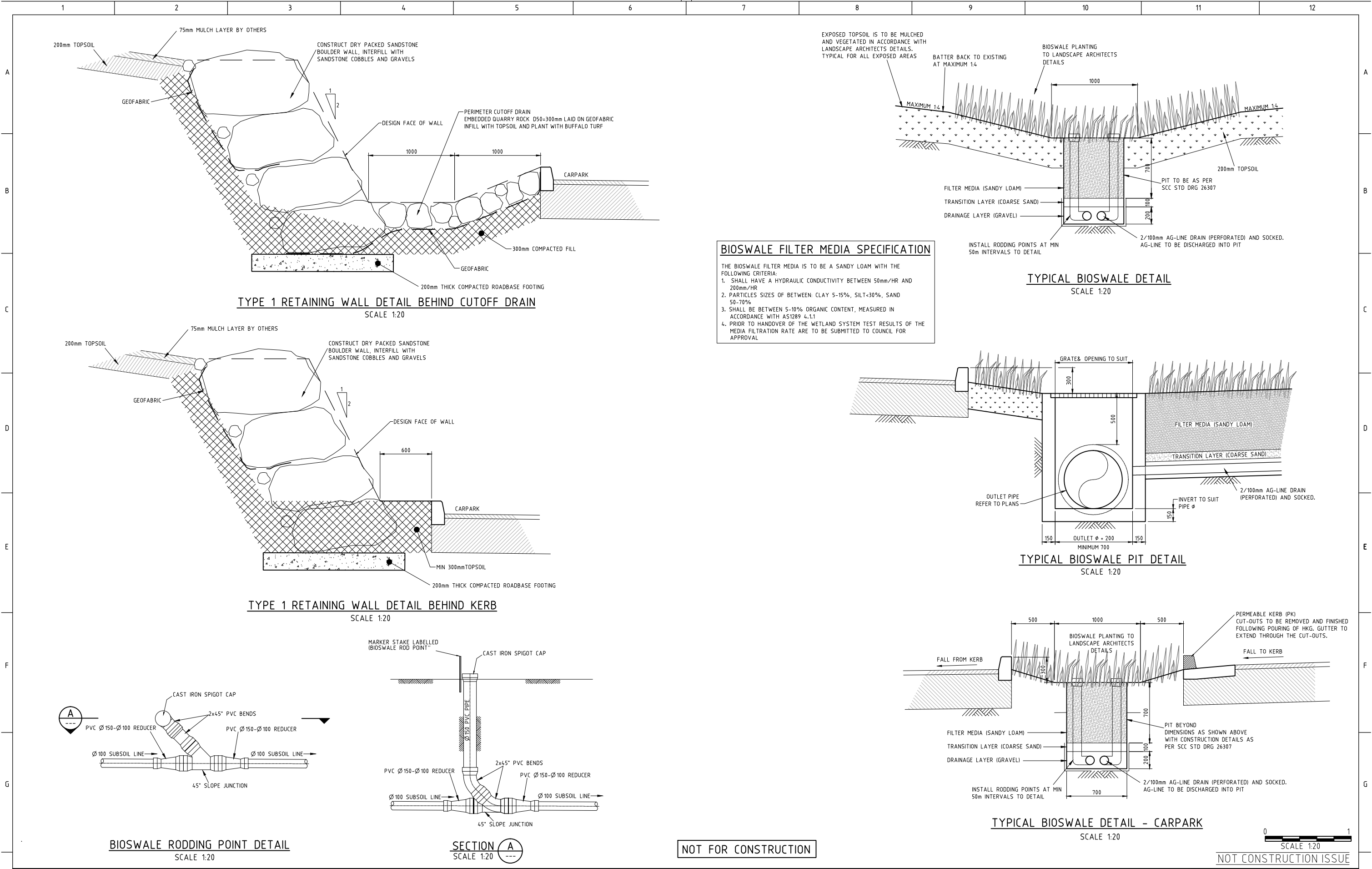
WESTERN TRUCKDOCK  
GEOGRID – SOIL REINFORCED  
HEIGHT VARIES 0.5M TO 1.5M



REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			<div><div>Cardno</div></div>	<div>PROJECT TITLE</div> <div>VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD</div>	DRAWING TITLE					
					DESIGN BY	J Blenkhorn	JUNE 2010			<div>CIVILWORKS ISSUE RETAINING WALLS NOT CANCELLED SECTIONS</div>	Project No. 104016	Com No.D 46	Drawing No. 46875	REV PO	
					DRAWN BY	J Blenkhorn	18/03/11								
					DRAFTING CHECK	MAK	24/03/11								
					DESIGN CHECK	MAK	24/03/11								
					FINAL APPROVAL	MAK	24/03/2011								
PO					PRELIMINARY			<div>278 KEIRA STREET, WOLLONGONG, NSW 2500</div> <div>Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981</div> <div>This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd</div>							
<div>REVISION IN PROGRESS</div>					<div>MODIFICATION #3 ISSUE MARCH 2011</div>			SCALE:		PROJECT TITLE		DRAWING TITLE			
								(on A1 Original)		VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA		CIVILWORKS ISSUE RETAINING WALLS NOT CANCELLED SECTIONS			
								1:250							
								HEIGHT DATUM AHD							

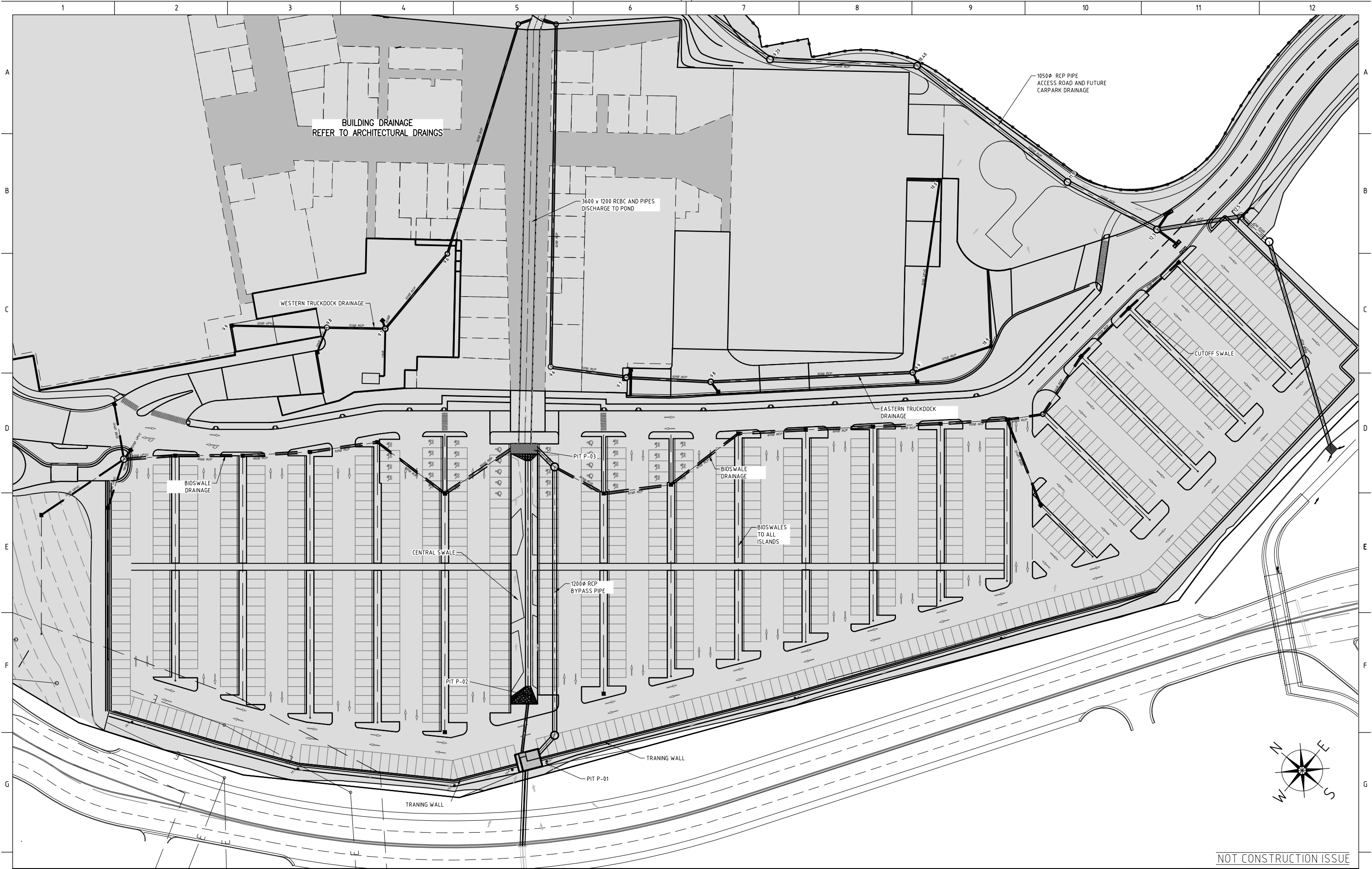





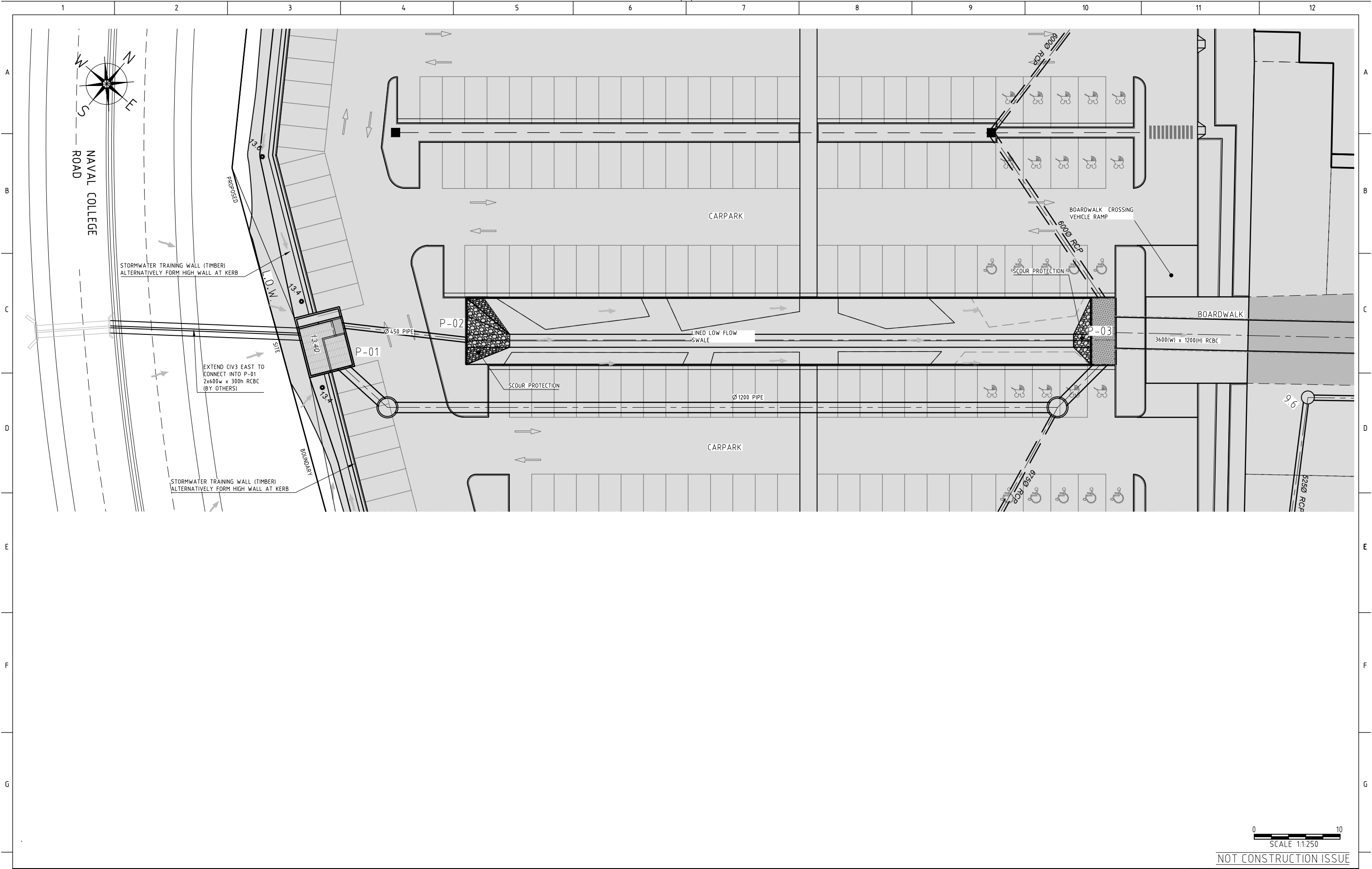




REV	DATE	BY	APP.	DETAILS	DRAWING STATUS		SCALE: (on A1 Original)	PROJECT TITLE	DRAWING TITLE			
					DESIGN BY	J. Blenkhorn			CIVILWORKS TYPICAL DETAILS SHEET 2 OF 2			
					DRAWN BY	J. Blenkhorn	1:250	VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	Project No.	Com No.	Drawing No.	REV
					DRAFTING CHECK		HEIGHT DATUM		104016	46	46878	P0
					DESIGN CHECK		AHD					
					FINAL APPROVAL							
					MODIFICATION #3 ISSUE MARCH 2011							
					PRELIMINARY							





REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)	  278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd	PROJECT TITLE	DRAWING TITLE				
					DESIGN BY	J. Blenkhorn	1/03/11		1:250		VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA	GENERAL ARRANGEMENT SOUTHERN CARPARK STORMWATER				
					DRAWN BY	J. Blenkhorn	1/03/11									
					DRAFTING CHECK											
					DESIGN CHECK											
					FINAL APPROVAL											
					PRELIMINARY				HEIGHT DATUM AHD			for FABCOT PTY LTD	Project No. 104016	Com No. 46	Drawing No. 46880	REV P0



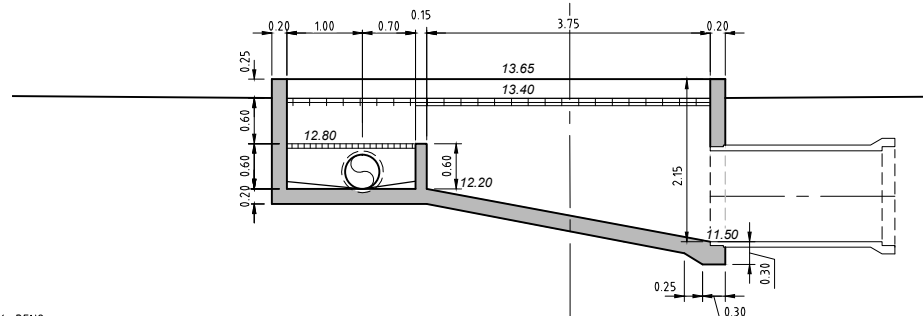
REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)	 	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	DRAWING TITLE CARPARK CULVERT INLET PIT P-01 TO P-03 PLAN & LONGSECTION			
					DESIGN BY	J. Blenkhorn	1/03/11		1:200			278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd			
					DRAWN BY	J. Blenkhorn	1/03/11								
					DRAFTING CHECK										
					DESIGN CHECK										
					FINAL APPROVAL				HEIGHT DATUM AHD			Project No.	Com No.	Drawing No.	REV
					PRELIMINARY				104016	46	46881	P0			











Technical drawing of a mechanical part with dimensions. The drawing shows a cross-section of a component with a central horizontal section and a sloped section on the right. Dimensions are provided in millimeters (mm).

Dimensions:

- Top horizontal dimensions: 0.20, 1.70, 0.15, 3.75, 0.20
- Left vertical dimensions: 2.25, 0.60, 0.20, 0.60
- Internal horizontal dimensions: 13.65, 13.40
- Internal vertical dimension: 12.80
- Bottom horizontal dimension: 12.20
- Bottom right dimension: 11.50



Technical drawing of a weir structure. The drawing shows a cross-section of a weir with a crest width of 13.65. The upstream side has a water level of 12.80 and a weir height of 0.10. The downstream side has a water level of 12.90 and a weir height of 0.60. The total width of the structure is 17.0, with 0.20 on each side. The drawing includes a dashed line indicating the downstream slope.

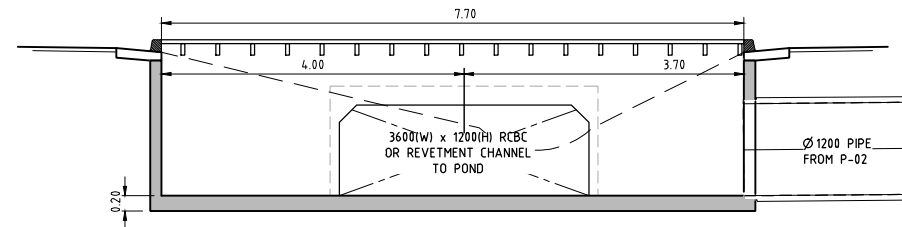
P-01 SECTION 1:250



P-02 SECTION A2  
SCALE 1:50



REV	DATE	BY	APP.	DETAILS	DRAWING STATUS		MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)	 	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	DRAWING TITLE CARPARK CULVERT INLET PIT P-01 TO P-03 SECTIONS AND DETAILS					
					DESIGN BY	J. Blenkhorn		1/03/11			1:50	278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd	Project No. 104016	Com No. 46	Drawing No. 46884	REV PO
					DRAWN BY	J. Blenkhorn		1/03/11								
					DRAFTING CHECK	CJG		16/07/10								
					DESIGN CHECK	MAK		16/07/10								
					FINAL APPROVAL	MAK		16/07/10			HEIGHT DATUM AHD					
					PRELIMINARY											



NOTE: THE 3600 (W) X 1200 (H) RCBC SHOWN ON THESE DRAWINGS IS ONE OF TWO OPTIONS FOR CONVEYING STORMWATER TO THE POND. REFER TO DRAWING 46883 FOR DETAILS OF OPTION 2 - BOARDWALK REVETMENT CHANNEL.

The diagram illustrates a cross-section of a pond structure. On the left, a 'BOARDWALK' is shown. Below it, a 'Ø 1200 PIPE' is indicated with a 'MIN. 600mm COVER'. The ground level is marked as 'RL 11.95' and the invert level as 'IL 10.35'. To the right of the pipe, a 'BOARDWALK CROSSING' is shown. Below the crossing, a '3600(W) x 1200(H) RCBC OR REVETMENT CHANNEL TO POND' is depicted.

CARPARK WITH PERMEABLE KERB

BOARDWALK ABOVE - WIDTH VARIES

SWALE SLOPE TO SUIT

SWALE SLOPE MAX 1V:2H  
FINAL SLOPE DETERMINED BY 1.0M  
MAXIMUM HEIGHT BELOW BOARDWALK

LOW FLOW CHANNEL

7.70

4.20

1.50

1.0 MAX.

2.00

0.30

SECTION 1:250



REV	DATE	BY	APP.	DETAILS	DRAWING STATUS		
					DESIGN BY		
					DRAWN BY		
					DRAFTING CHECK	CJG	16/07/10
					DESIGN CHECK	MAK	16/07/10
					FINAL APPROVAL	MAK	16/07/10

MODIFICATION  
#3 ISSUE  
MARCH 2011

**SCALE:**  
(on A1 Original)

1:50

HEIGHT DATUM  
AHD



278 KEIRA STREET, WOLLONGONG, NSW 2500

Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981

This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd

PROJECT TITLE  
VINCENTIA DISTRICT CENTRE  
SHOPPING CENTRE PA  
VINCENTIA  
for  
FABCOT PTY LTD

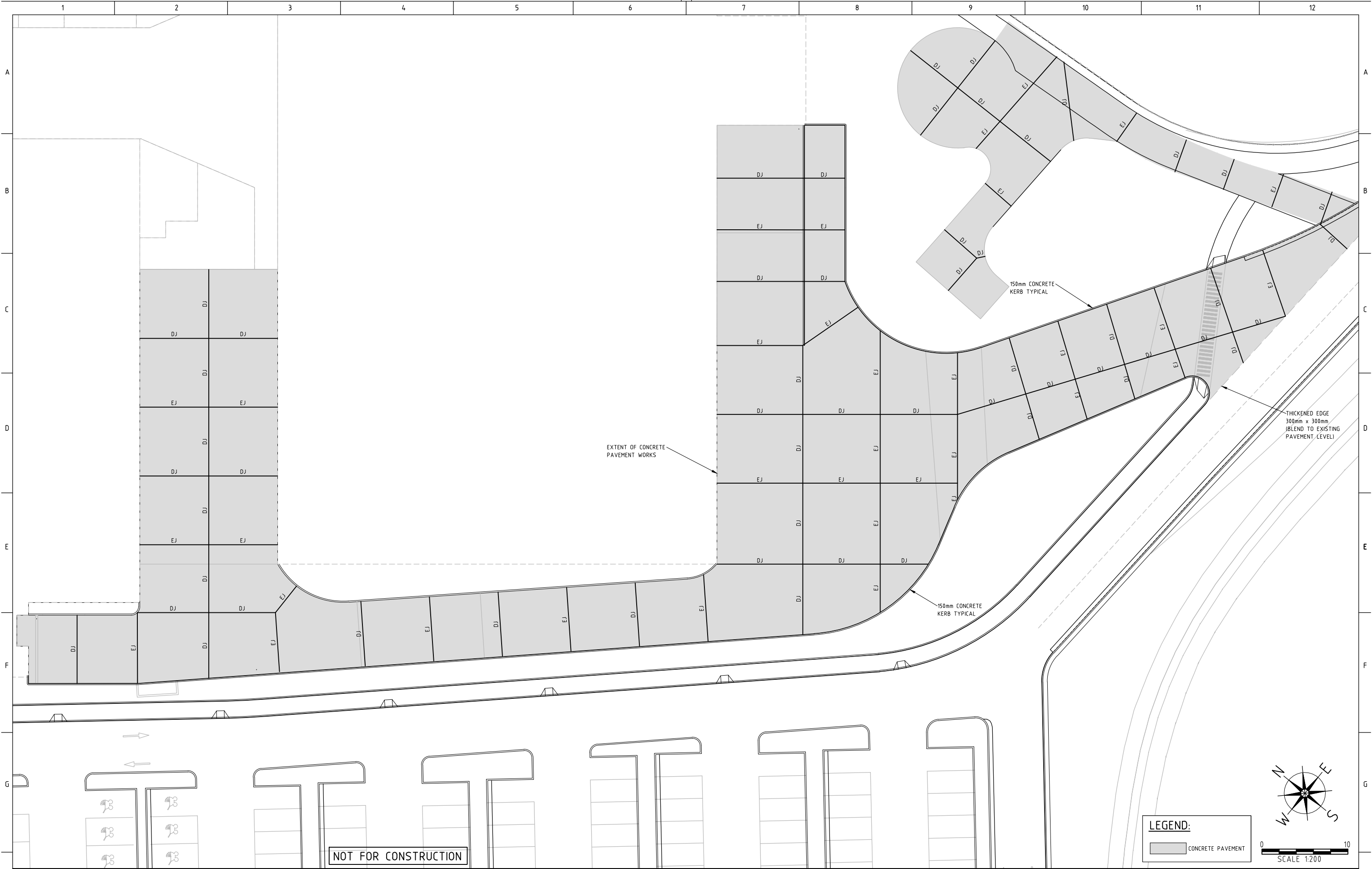
**DRAWING TITLE**  
CARPARK CULVERT  
PIT P-03  
SECTIONS AND DETAILS

Project No.	Com No.	Drawing No.	REVISION
104016	46	46885	PC





REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			SCALE: (on A1 Original)  1:200	HEIGHT DATUM AHD	<div>278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 <i>This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd</i></div>	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	DRAWING TITLE CONCRETE PAVEMENT LAYOUT PLAN SHEET 1 OF 2			
					DESIGN BY	CSH	14/07/10					Project No.	Com No.	Drawing No.	REV
					DRAWN BY	CJG	14/07/10					104016	46	46887	P0
					DRAFTING CHECK	PJS	16/07/10								
					DESIGN CHECK	MAK	16/07/10								
					FINAL APPROVAL	MAK	16/07/10								
					PRELIMINARY										
NOT FOR CONSTRUCTION					MODIFICATION #3 ISSUE MARCH 2011										



REV	DATE	BY	APP.	DETAILS


DRAWING STATUS		
DESIGN BY	CSH	14/07/10
DRAWN BY	CJG	14/07/10
DRAFTING CHECK	PJS	16/07/10
DESIGN CHECK	MAK	16/07/10
FINAL APPROVAL	MAK	16/07/10


NOT FOR CONSTRUCTION

PRELIMINARY

MODIFICATION  
#3 ISSUE  
MARCH 2011

SCALE:  
(on A1 Original)  
1:200  
  
HEIGHT DATUM  
AHD

  
278 KEIRA STREET, WOLLONGONG, NSW 2500  
Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981  
This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd



PROJECT TITLE  
VINCENTIA DISTRICT CENTRE  
SHOPPING CENTRE PA  
VINCENTIA  
for  
FABCOT PTY LTD

DRAWING TITLE  
CONCRETE PAVEMENT  
LAYOUT PLAN  
SHEET 2 OF 2  
  
Project No. 104016 Com No. 46 Drawing No. 46888 REV P0



LOADING

L1. STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED ASSUMING A DESIGN TRAFFIC LOADING OF 5x10 TISA OVER A 20 YEAR DESIGN LIFE. REFER REPORT ON GEOTECHNICAL INVESTIGATION BY DOUGLAS PARTNERS PROPOSED VINCENTIA MARKET PLACE PROJECT 48846 JULY 2010.

CONCRETE

C1. EXECUTE ALL CONCRETE WORK IN ACCORDANCE WITH A.S. 3600 AND THE STANDARDS REFERENCED THEREIN UNLESS OTHERWISE VARIED BY THE CONTRACT DOCUMENTS.

C2. FORMWORK SHALL BE DESIGNED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS OF A.S. 3600 AND A.S. 3610. THE RESPONSIBILITY FOR THE ADEQUACY OF FORMWORK SHALL REST ENTIRELY WITH THE BUILDER.

C3. REINFORCEMENT SHALL BE :  
GRADE 500N IN ACCORDANCE WITH AS/NZS 4671.  
GRADE 500 WELDED FABRIC IN ACCORDANCE WITH AS/NZS 4671.

C4. ALL REINFORCEMENT SHALL BE SUPPORTED AND WIRED TOGETHER TO PREVENT DISPLACEMENT DURING CONSTRUCTION , BEYOND THE TOLERANCES SPECIFIED IN A.S. 3600.

C5. REINFORCEMENT SHALL NOT BE HEATED OR WELDED ON SITE WITHOUT THE PROJECT ENGINEERS PRIOR APPROVAL.

C6. MINIMUM CONCRETE COVER TO REINFORCEMENT SHALL BE:  
40mm TOP, 50mm SIDE & BOTTOM

C7. DO NOT EMBED ITEMS WITHIN THE REINFORCEMENT COVER, CAST IN ITEMS OR CHASES UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE PROJECT ENGINEER.

C8. REINFORCEMENT NOTATION. ( CIA STANDARD )  
(NO. OFF)IBAR TYPEIBAR DIA.) - (SHAPE) - ( SPACING)(LOCATION)

TYPE/GRADE:	SHAPE CODES			
L - GRADE 500F WIRE MESH	S			
R - GRADE 230R ROUND BAR.	L		T	HT
S - GRADE 230S DEFORMED BAR	H			
N - GRADE 500 DEFORMED BAR.	V		SH	XT
	U			
LOCATION:	J			
T - TOP				
B - BOTTOM	RC		SC	CT
H - HORIZONTAL				
V - VERTICAL	LL			
EW - EACH WAY			RT	LH
EF - EACH FACE	CC			
NF - NEAR FACE				
FF - FAR FACE	NS	AS	DRAWN	

C9. REINFORCEMENT SPLICE & COG LENGTHS.  
MINIMUM REINFORCEMENT LAPS/SPLICE LENGTHS (L<sub>1</sub>) UNLESS NOTED OTHERWISE

	SLABS/BEAMS	COLUMNS/WALLS
N12	500mm	400mm
N16	660mm	500mm
N20	700mm	600mm

MINIMUM REINFORCEMENT COG LENGTHS (L<sub>2</sub>) UNLESS NOTED OTHERWISE

N12	300mm
N16	300mm
N20	350mm

C10. DETAILS OF ALL CONCRETE MIXES TO BE PROVIDED FOR ACCEPTANCE PRIOR TO COMMENCEMENT OF CONSTRUCTION. THIS TO INCLUDE DETAILS OF QUANTITY & TYPE OF CEMENT, AGGREGATE & ADMIXTURES.

C11. THE CONTRACTOR SHALL SEEK & OBTAIN ACCEPTANCE OF METHODS FOR PLACING, FINISHING AND CURING CONCRETE INCLUDING THE FOLLOWING:  
- READY MIXED CONCRETE SUPPLIER  
- HANDLING, PLACING, COMPACTION AND FINISHING METHODS AND EQUIPMENT  
- TEMPERATURE CONTROL METHODS  
- CURING AND PROTECTION METHODS

C12. READY MIXED CONCRETE SUPPLY SHALL BE IN ACCORDANCE WITH AS 1379 BY THE BATCH PRODUCTION PROCESS.  
DO NOT ADD WATER AT SITE WITHOUT THE PRIOR APPROVAL OF THE ENGINEER

C13. CONSOLIDATE ALL CONCRETE WITH HIGH SPEED IMMERSION VIBRATORS. DO NOT USE VIBRATORS TO MOVE CONCRETE ACROSS FORMS. TENDERERS SHALL ALLOW TO HAVE A STANDBY MEANS OF PLACING CONCRETE IN THE EVENT OF A CONCRETE PUMP BREAKDOWN DURING THE MAIN POUR.

C14. CONSTRUCTION JOINTS SHALL BE LOCATED AS SHOWN ON DRAWINGS.

C15. ALL CONCRETE SHALL BE S32 GRADE UNLESS NOTED OTHERWISE - MAX SLUMP = 60mm (PUMPING PERMITTED IF PLASTICISERS USED - MAX SLUMP = 80mm)

C16. TESTING AND ASSESSMENT OF CONCRETE AND CONCRETE MATERIALS SHALL BE CARRIED OUT BY AN ORGANISATION REGISTERED WITH THE NATIONAL ASSOCIATION OF TESTING AUTHORITIES AUSTRALIA (NATA) TO PREFORM THE SPECIFIED TESTING.  
  
TEST RECORDS: FOR EACH REQUIRED TEST MAINTAIN THE RECORDS AND REPORTS OF TEST RESULTS REQUIRED BY A.S. 1012.

C17. WHERE THE ENGINEERS ARE ENGAGED TO INSPECT REINFORCEMENT AND/OR SUPERVISE A CONCRETE POUR, A MINIMUM OF 24 HOURS NOTICE SHALL BE GIVEN AND ALL PREPARATORY WORK SHALL HAVE BEEN COMPLETED.

20x20x400 LG GALV SQ DOWELS @ 450 CRS INTO 'DANLEY DOWEL MASTER' COVER ONE END POSITION WIDER DIMENSION HORIZONTAL

REFER TO SEALANT DETAIL

10 ABELFLEX WITH PULL OUT STRIP

200 200

200

200

EXPANSION JOINT (EJ)

SCALE 1:20

20x20x400 LG GALV SQ DOWELS @ 450 CRS INTO 'DANLEY DOWEL MASTER' CRADLE & COVER

TERMINATE REINFORCEMENT 70mm CLEAR OF JOINT

GROUND CRACK INDUCER

200 200

200

200

DOWELLED JOINT (DJ)

SCALE 1:20

CONCRETE  
200mm THICK CONCRETE SLAB WITH SL92 TOP AND BOTTOM 40mm COVER  
S32 GRADE 60mm MAX SLUMP

BASE COURSE  
125mm THICK DGB40 COMPACTED TO 95% MMD0

STABILISED SUBGRADE  
CBR 7% PROOF ROLL SUBGRADE TO 100% SMDD

NOTE:  
PAVEMENT CONFIGURATION SUBJECT TO GEOTECHNICAL TESTING

TYP PAVEMENT DETAIL

SCALE 1:10

20 RAD TYP

150

25

SL 92 FABRIC T&B TYP UND

200

200

1 N12 HORIZ

N12 L - 400

N12 T&B PERIMETER

TYP UND

200

TYP PERIMETER KERB DETAIL

SCALE 1:20

WEBFORGE CLASS B GALV. TRENCH GRATE & FRAME ASS'Y OR APPROVED EQUAL

150

300

150

N12 L - 200

N12 S - 200

N12 LL - 200

4 N 12 S CENTRAL

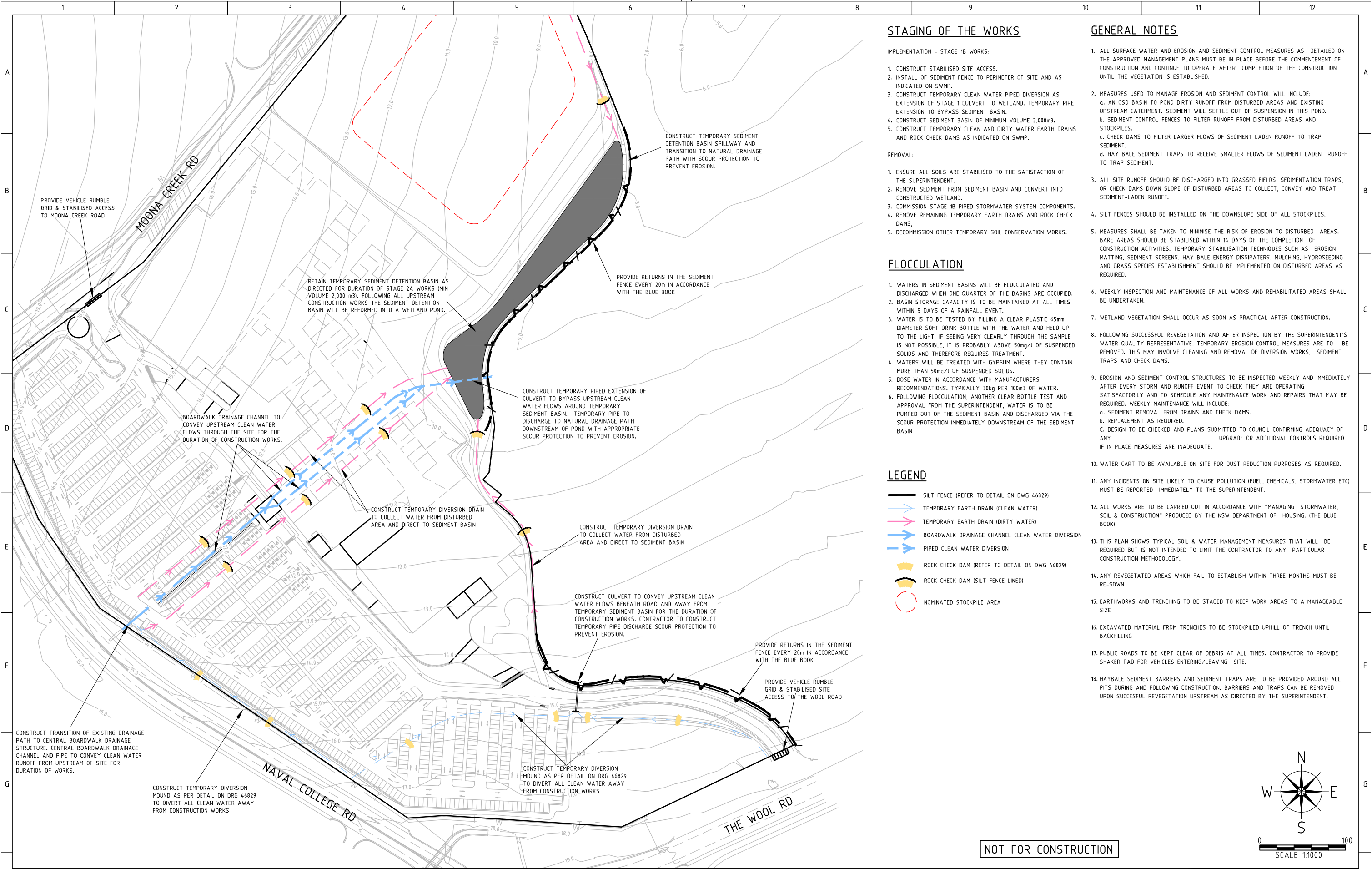
TYP PIT IN PAVEMENT DETAIL

SCALE 1:20

NOT FOR CONSTRUCTION

0 1  
SCALE 1:20

REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)  AS NOTED	<div><div><div>Cardno</div></div><div>278 KEIRA STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 <i>This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd</i></div></div>	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	DRAWING TITLE CONCRETE PAVEMENT NOTES AND DETAILS PLAN				
					DESIGN BY	CSH	14/07/10					HEIGHT DATUM AHD	Project No. 104016	Com No. 46	Drawing No. 46889	REV P0
					DRAWN BY	CJG	14/07/10									
					DRAFTING CHECK	PJS	16/07/10									
					DESIGN CHECK	MAK	16/07/10									
					FINAL APPROVAL	MAK	16/07/10									
					PRELIMINARY											



STAGING OF THE WORKS

- IMPLEMENTATION - STAGE 1B WORKS:
1. CONSTRUCT STABILISED SITE ACCESS.
  2. INSTALL OF SEDIMENT FENCE TO PERIMETER OF SITE AND AS INDICATED ON SWMP.
  3. CONSTRUCT TEMPORARY CLEAN WATER PIPED DIVERSION AS EXTENSION OF STAGE 1 CULVERT TO WETLAND. TEMPORARY PIPE EXTENSION TO BYPASS SEDIMENT BASIN.
  4. CONSTRUCT SEDIMENT BASIN OF MINIMUM VOLUME 2,000m3.
  5. CONSTRUCT TEMPORARY CLEAN AND DIRTY WATER EARTH DRAINS AND ROCK CHECK DAMS AS INDICATED ON SWMP.

- REMOVAL:
1. ENSURE ALL SOILS ARE STABILISED TO THE SATISFACTION OF THE SUPERINTENDENT.
  2. REMOVE SEDIMENT FROM SEDIMENT BASIN AND CONVERT INTO CONSTRUCTED WETLAND.
  3. COMMISSION STAGE 1B PIPED STORMWATER SYSTEM COMPONENTS.
  4. REMOVE REMAINING TEMPORARY EARTH DRAINS AND ROCK CHECK DAMS.
  5. DECOMMISSION OTHER TEMPORARY SOIL CONSERVATION WORKS.

FLOCCULATION

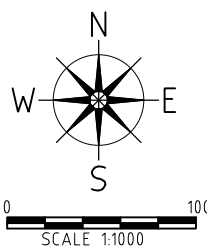
1. WATERS IN SEDIMENT BASINS WILL BE FLOCCULATED AND DISCHARGED WHEN ONE QUARTER OF THE BASINS ARE OCCUPIED.
2. BASIN STORAGE CAPACITY IS TO BE MAINTAINED AT ALL TIMES WITHIN 5 DAYS OF A RAINFALL EVENT.
3. WATER IS TO BE TESTED BY FILLING A CLEAR PLASTIC 65mm DIAMETER SOFT DRINK BOTTLE WITH THE WATER AND HELD UP TO THE LIGHT. IF SEEING VERY CLEARLY THROUGH THE SAMPLE IS NOT POSSIBLE, IT IS PROBABLY ABOVE 50mg/l OF SUSPENDED SOLIDS AND THEREFORE REQUIRES TREATMENT.
4. WATERS WILL BE TREATED WITH GYPSUM WHERE THEY CONTAIN MORE THAN 50mg/l OF SUSPENDED SOLIDS.
5. DOSE WATER IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. TYPICALLY 30kg PER 100m3 OF WATER.
6. FOLLOWING FLOCCULATION, ANOTHER CLEAR BOTTLE TEST AND APPROVAL FROM THE SUPERINTENDENT, WATER IS TO BE PUMPED OUT OF THE SEDIMENT BASIN AND DISCHARGED VIA THE SCOUR PROTECTION IMMEDIATELY DOWNSTREAM OF THE SEDIMENT BASIN

LEGEND


- SILT FENCE (REFER TO DETAIL ON DWG 46829)
- TEMPORARY EARTH DRAIN (CLEAN WATER)
- TEMPORARY EARTH DRAIN (DIRTY WATER)
- BOARDWALK DRAINAGE CHANNEL CLEAN WATER DIVERSION
- PIPED CLEAN WATER DIVERSION
- ROCK CHECK DAM (REFER TO DETAIL ON DWG 46829)
- ROCK CHECK DAM (SILT FENCE LINED)
- NOMINATED STOCKPILE AREA

GENERAL NOTES

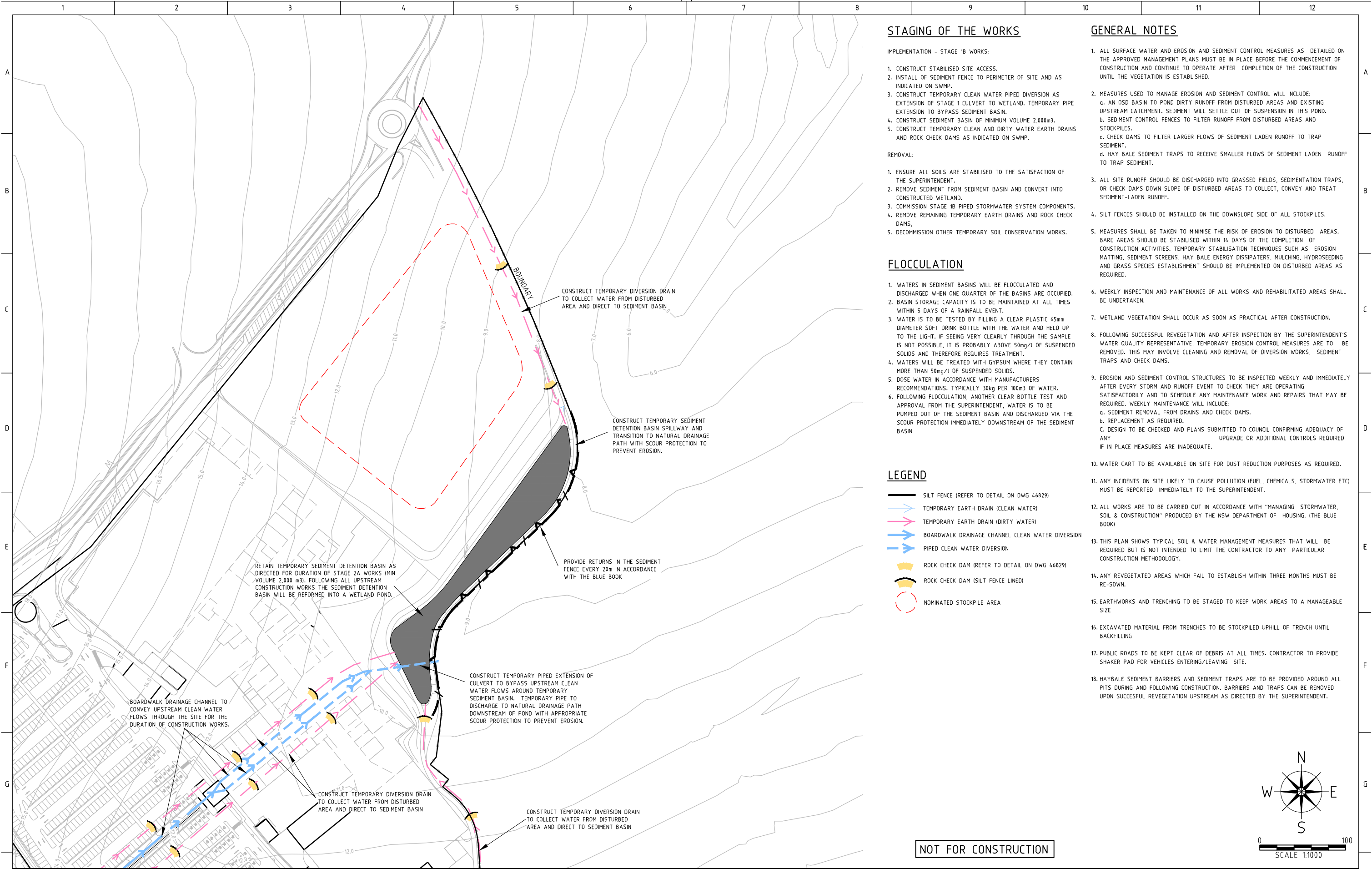
1. ALL SURFACE WATER AND EROSION AND SEDIMENT CONTROL MEASURES AS DETAILED ON THE APPROVED MANAGEMENT PLANS MUST BE IN PLACE BEFORE THE COMMENCEMENT OF CONSTRUCTION AND CONTINUE TO OPERATE AFTER COMPLETION OF THE CONSTRUCTION UNTIL THE VEGETATION IS ESTABLISHED.
2. MEASURES USED TO MANAGE EROSION AND SEDIMENT CONTROL WILL INCLUDE:
  - a. AN OSD BASIN TO POND DIRTY RUNOFF FROM DISTURBED AREAS AND EXISTING UPSTREAM CATCHMENT. SEDIMENT WILL SETTLE OUT OF SUSPENSION IN THIS POND.
  - b. SEDIMENT CONTROL FENCES TO FILTER RUNOFF FROM DISTURBED AREAS AND STOCKPILES.
  - c. CHECK DAMS TO FILTER LARGER FLOWS OF SEDIMENT LADEN RUNOFF TO TRAP SEDIMENT.
  - d. HAY BALE SEDIMENT TRAPS TO RECEIVE SMALLER FLOWS OF SEDIMENT LADEN RUNOFF TO TRAP SEDIMENT.
3. ALL SITE RUNOFF SHOULD BE DISCHARGED INTO GRASSED FIELDS, SEDIMENTATION TRAPS, OR CHECK DAMS DOWN SLOPE OF DISTURBED AREAS TO COLLECT, CONVEY AND TREAT SEDIMENT-LADEN RUNOFF.
4. SILT FENCES SHOULD BE INSTALLED ON THE DOWNSLOPE SIDE OF ALL STOCKPILES.
5. MEASURES SHALL BE TAKEN TO MINIMISE THE RISK OF EROSION TO DISTURBED AREAS. BARE AREAS SHOULD BE STABILISED WITHIN 14 DAYS OF THE COMPLETION OF CONSTRUCTION ACTIVITIES. TEMPORARY STABILISATION TECHNIQUES SUCH AS EROSION MATTING, SEDIMENT SCREENS, HAY BALE ENERGY DISSIPATORS, MULCHING, HYDROSEEDING AND GRASS SPECIES ESTABLISHMENT SHOULD BE IMPLEMENTED ON DISTURBED AREAS AS REQUIRED.
6. WEEKLY INSPECTION AND MAINTENANCE OF ALL WORKS AND REHABILITATED AREAS SHALL BE UNDERTAKEN.
7. WETLAND VEGETATION SHALL OCCUR AS SOON AS PRACTICAL AFTER CONSTRUCTION.
8. FOLLOWING SUCCESSFUL REVEGETATION AND AFTER INSPECTION BY THE SUPERINTENDENT'S WATER QUALITY REPRESENTATIVE, TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED. THIS MAY INVOLVE CLEANING AND REMOVAL OF DIVERSION WORKS, SEDIMENT TRAPS AND CHECK DAMS.
9. EROSION AND SEDIMENT CONTROL STRUCTURES TO BE INSPECTED WEEKLY AND IMMEDIATELY AFTER EVERY STORM AND RUNOFF EVENT TO CHECK THEY ARE OPERATING SATISFACTORILY AND TO SCHEDULE ANY MAINTENANCE WORK AND REPAIRS THAT MAY BE REQUIRED. WEEKLY MAINTENANCE WILL INCLUDE:
  - a. SEDIMENT REMOVAL FROM DRAINS AND CHECK DAMS.
  - b. REPLACEMENT AS REQUIRED.
  - c. DESIGN TO BE CHECKED AND PLANS SUBMITTED TO COUNCIL CONFIRMING ADEQUACY OF ANY UPGRADE OR ADDITIONAL CONTROLS REQUIRED IF IN PLACE MEASURES ARE INADEQUATE.
10. WATER CART TO BE AVAILABLE ON SITE FOR DUST REDUCTION PURPOSES AS REQUIRED.
11. ANY INCIDENTS ON SITE LIKELY TO CAUSE POLLUTION (FUEL, CHEMICALS, STORMWATER ETC) MUST BE REPORTED IMMEDIATELY TO THE SUPERINTENDENT.
12. ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH "MANAGING STORMWATER, SOIL & CONSTRUCTION" PRODUCED BY THE NSW DEPARTMENT OF HOUSING. (THE BLUE BOOK)
13. THIS PLAN SHOWS TYPICAL SOIL & WATER MANAGEMENT MEASURES THAT WILL BE REQUIRED BUT IS NOT INTENDED TO LIMIT THE CONTRACTOR TO ANY PARTICULAR CONSTRUCTION METHODOLOGY.
14. ANY REVEGETATED AREAS WHICH FAIL TO ESTABLISH WITHIN THREE MONTHS MUST BE RE-SOWN.
15. EARTHWORKS AND TRENCHING TO BE STAGED TO KEEP WORK AREAS TO A MANAGEABLE SIZE
16. EXCAVATED MATERIAL FROM TRENCHES TO BE STOCKPILED UPHILL OF TRENCH UNTIL BACKFILLING
17. PUBLIC ROADS TO BE KEPT CLEAR OF DEBRIS AT ALL TIMES. CONTRACTOR TO PROVIDE SHAKER PAD FOR VEHICLES ENTERING/LEAVING SITE.
18. HAYBALE SEDIMENT BARRIERS AND SEDIMENT TRAPS ARE TO BE PROVIDED AROUND ALL PITS DURING AND FOLLOWING CONSTRUCTION. BARRIERS AND TRAPS CAN BE REMOVED UPON SUCCESFUL REVEGETATION UPSTREAM AS DIRECTED BY THE SUPERINTENDENT.



NOT FOR CONSTRUCTION

REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)  1:1000	  LEVEL 1, 47 BURELLI STREET, WOLLONGONG, NSW 2500 Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	DRAWING TITLE SOIL AND WATER MANAGEMENT PLAN SHEET 1 OF 2			
					DESIGN BY	MAK	16/07/10								
					DRAWN BY	AJM	16/07/10								
					DRAFTING CHECK	CJG	16/07/10								
					DESIGN CHECK	MAK	16/07/10								
					FINAL APPROVAL	MAK	16/07/10								
					PRELIMINARY										
												Project No.	Com No.	Drawing No.	REV
												104016	46	46890	P0





STAGING OF THE WORKS

- IMPLEMENTATION - STAGE 1B WORKS:
1. CONSTRUCT STABILISED SITE ACCESS.
  2. INSTALL OF SEDIMENT FENCE TO PERIMETER OF SITE AND AS INDICATED ON SWMP.
  3. CONSTRUCT TEMPORARY CLEAN WATER PIPED DIVERSION AS EXTENSION OF STAGE 1 CULVERT TO WETLAND. TEMPORARY PIPE EXTENSION TO BYPASS SEDIMENT BASIN.
  4. CONSTRUCT SEDIMENT BASIN OF MINIMUM VOLUME 2,000m3.
  5. CONSTRUCT TEMPORARY CLEAN AND DIRTY WATER EARTH DRAINS AND ROCK CHECK DAMS AS INDICATED ON SWMP.
- REMOVAL:
1. ENSURE ALL SOILS ARE STABILISED TO THE SATISFACTION OF THE SUPERINTENDENT.
  2. REMOVE SEDIMENT FROM SEDIMENT BASIN AND CONVERT INTO CONSTRUCTED WETLAND.
  3. COMMISSION STAGE 1B PIPED STORMWATER SYSTEM COMPONENTS.
  4. REMOVE REMAINING TEMPORARY EARTH DRAINS AND ROCK CHECK DAMS.
  5. DECOMMISSION OTHER TEMPORARY SOIL CONSERVATION WORKS.

FLOCCULATION

1. WATERS IN SEDIMENT BASINS WILL BE FLOCCULATED AND DISCHARGED WHEN ONE QUARTER OF THE BASINS ARE OCCUPIED.
2. BASIN STORAGE CAPACITY IS TO BE MAINTAINED AT ALL TIMES WITHIN 5 DAYS OF A RAINFALL EVENT.
3. WATER IS TO BE TESTED BY FILLING A CLEAR PLASTIC 65mm DIAMETER SOFT DRINK BOTTLE WITH THE WATER AND HELD UP TO THE LIGHT. IF SEEING VERY CLEARLY THROUGH THE SAMPLE IS NOT POSSIBLE, IT IS PROBABLY ABOVE 50mg/l OF SUSPENDED SOLIDS AND THEREFORE REQUIRES TREATMENT.
4. WATERS WILL BE TREATED WITH GYPSUM WHERE THEY CONTAIN MORE THAN 50mg/l OF SUSPENDED SOLIDS.
5. DOSE WATER IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. TYPICALLY 30kg PER 100m3 OF WATER.
6. FOLLOWING FLOCCULATION, ANOTHER CLEAR BOTTLE TEST AND APPROVAL FROM THE SUPERINTENDENT, WATER IS TO BE PUMPED OUT OF THE SEDIMENT BASIN AND DISCHARGED VIA THE SCOUR PROTECTION IMMEDIATELY DOWNSTREAM OF THE SEDIMENT BASIN

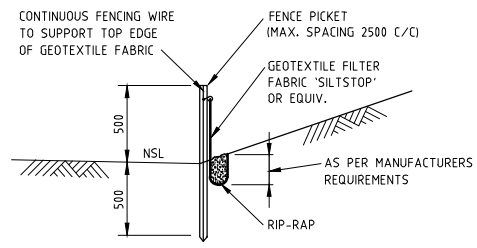
LEGEND

- SILT FENCE (REFER TO DETAIL ON DWG 46829)
- TEMPORARY EARTH DRAIN (CLEAN WATER)
- TEMPORARY EARTH DRAIN (DIRTY WATER)
- BOARDWALK DRAINAGE CHANNEL CLEAN WATER DIVERSION
- PIPED CLEAN WATER DIVERSION
- ROCK CHECK DAM (REFER TO DETAIL ON DWG 46829)
- ROCK CHECK DAM (SILT FENCE LINED)
- NOMINATED STOCKPILE AREA

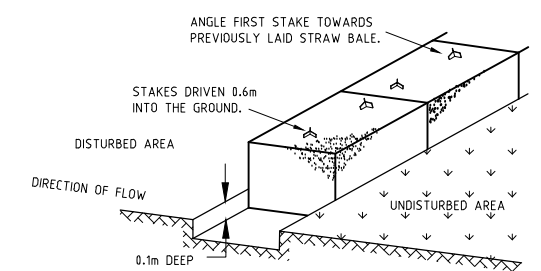
GENERAL NOTES

1. ALL SURFACE WATER AND EROSION AND SEDIMENT CONTROL MEASURES AS DETAILED ON THE APPROVED MANAGEMENT PLANS MUST BE IN PLACE BEFORE THE COMMENCEMENT OF CONSTRUCTION AND CONTINUE TO OPERATE AFTER COMPLETION OF THE CONSTRUCTION UNTIL THE VEGETATION IS ESTABLISHED.
2. MEASURES USED TO MANAGE EROSION AND SEDIMENT CONTROL WILL INCLUDE:
  - a. AN OSD BASIN TO POND DIRTY RUNOFF FROM DISTURBED AREAS AND EXISTING UPSTREAM CATCHMENT. SEDIMENT WILL SETTLE OUT OF SUSPENSION IN THIS POND.
  - b. SEDIMENT CONTROL FENCES TO FILTER RUNOFF FROM DISTURBED AREAS AND STOCKPILES.
  - c. CHECK DAMS TO FILTER LARGER FLOWS OF SEDIMENT LADEN RUNOFF TO TRAP SEDIMENT.
  - d. HAY BALE SEDIMENT TRAPS TO RECEIVE SMALLER FLOWS OF SEDIMENT LADEN RUNOFF TO TRAP SEDIMENT.
3. ALL SITE RUNOFF SHOULD BE DISCHARGED INTO GRASSED FIELDS, SEDIMENTATION TRAPS, OR CHECK DAMS DOWN SLOPE OF DISTURBED AREAS TO COLLECT, CONVEY AND TREAT SEDIMENT-LADEN RUNOFF.
4. SILT FENCES SHOULD BE INSTALLED ON THE DOWNSLOPE SIDE OF ALL STOCKPILES.
5. MEASURES SHALL BE TAKEN TO MINIMISE THE RISK OF EROSION TO DISTURBED AREAS. BARE AREAS SHOULD BE STABILISED WITHIN 14 DAYS OF THE COMPLETION OF CONSTRUCTION ACTIVITIES. TEMPORARY STABILISATION TECHNIQUES SUCH AS EROSION MATTING, SEDIMENT SCREENS, HAY BALE ENERGY DISSIPATORS, MULCHING, HYDROSEEDING AND GRASS SPECIES ESTABLISHMENT SHOULD BE IMPLEMENTED ON DISTURBED AREAS AS REQUIRED.
6. WEEKLY INSPECTION AND MAINTENANCE OF ALL WORKS AND REHABILITATED AREAS SHALL BE UNDERTAKEN.
7. WETLAND VEGETATION SHALL OCCUR AS SOON AS PRACTICAL AFTER CONSTRUCTION.
8. FOLLOWING SUCCESSFUL REVEGETATION AND AFTER INSPECTION BY THE SUPERINTENDENT'S WATER QUALITY REPRESENTATIVE, TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED. THIS MAY INVOLVE CLEANING AND REMOVAL OF DIVERSION WORKS, SEDIMENT TRAPS AND CHECK DAMS.
9. EROSION AND SEDIMENT CONTROL STRUCTURES TO BE INSPECTED WEEKLY AND IMMEDIATELY AFTER EVERY STORM AND RUNOFF EVENT TO CHECK THEY ARE OPERATING SATISFACTORILY AND TO SCHEDULE ANY MAINTENANCE WORK AND REPAIRS THAT MAY BE REQUIRED. WEEKLY MAINTENANCE WILL INCLUDE:
  - a. SEDIMENT REMOVAL FROM DRAINS AND CHECK DAMS.
  - b. REPLACEMENT AS REQUIRED.
  - c. DESIGN TO BE CHECKED AND PLANS SUBMITTED TO COUNCIL CONFIRMING ADEQUACY OF ANY UPGRADE OR ADDITIONAL CONTROLS REQUIRED IF IN PLACE MEASURES ARE INADEQUATE.
10. WATER CART TO BE AVAILABLE ON SITE FOR DUST REDUCTION PURPOSES AS REQUIRED.
11. ANY INCIDENTS ON SITE LIKELY TO CAUSE POLLUTION (FUEL, CHEMICALS, STORMWATER ETC) MUST BE REPORTED IMMEDIATELY TO THE SUPERINTENDENT.
12. ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH "MANAGING STORMWATER, SOIL & CONSTRUCTION" PRODUCED BY THE NSW DEPARTMENT OF HOUSING. (THE BLUE BOOK)
13. THIS PLAN SHOWS TYPICAL SOIL & WATER MANAGEMENT MEASURES THAT WILL BE REQUIRED BUT IS NOT INTENDED TO LIMIT THE CONTRACTOR TO ANY PARTICULAR CONSTRUCTION METHODOLOGY.
14. ANY REVEGETATED AREAS WHICH FAIL TO ESTABLISH WITHIN THREE MONTHS MUST BE RE-SOWN.
15. EARTHWORKS AND TRENCHING TO BE STAGED TO KEEP WORK AREAS TO A MANAGEABLE SIZE
16. EXCAVATED MATERIAL FROM TRENCHES TO BE STOCKPILED UPHILL OF TRENCH UNTIL BACKFILLING
17. PUBLIC ROADS TO BE KEPT CLEAR OF DEBRIS AT ALL TIMES. CONTRACTOR TO PROVIDE SHAKER PAD FOR VEHICLES ENTERING/LEAVING SITE.
18. HAYBALE SEDIMENT BARRIERS AND SEDIMENT TRAPS ARE TO BE PROVIDED AROUND ALL PITS DURING AND FOLLOWING CONSTRUCTION. BARRIERS AND TRAPS CAN BE REMOVED UPON SUCCESSFUL REVEGETATION UPSTREAM AS DIRECTED BY THE SUPERINTENDENT.

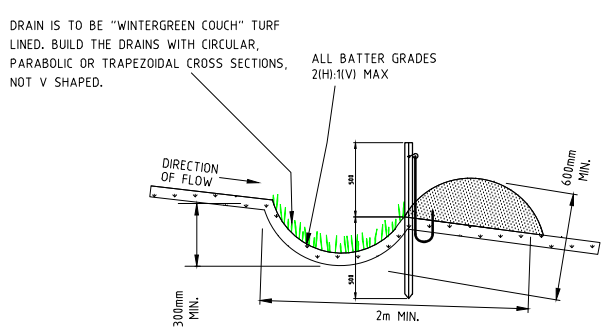
REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			SCALE: (on A1 Original)	HEIGHT DATUM AHD	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD	DRAWING TITLE SOIL AND WATER MANAGEMENT PLAN SHEET 2 OF 2			
					DESIGN BY	MAK	16/07/10				Project No.	Com No.	Drawing No.	REV
					DRAWN BY	AJM	16/07/10	1:1000			104016	46	46891	P0
					DRAFTING CHECK	CJG	16/07/10							
					DESIGN CHECK	MAK	16/07/10							
					FINAL APPROVAL	MAK	16/07/10							
					PRELIMINARY									
					MODIFICATION #3 ISSUE MARCH 2011									



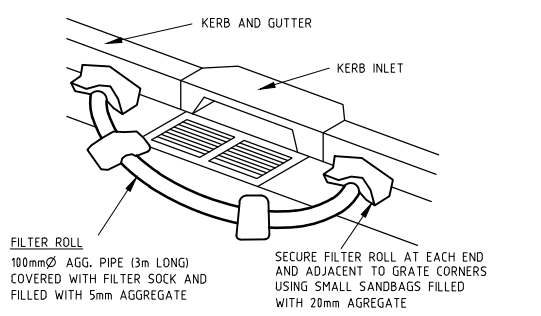
**SEDIMENT CONTROL FENCE**  
N.T.S.



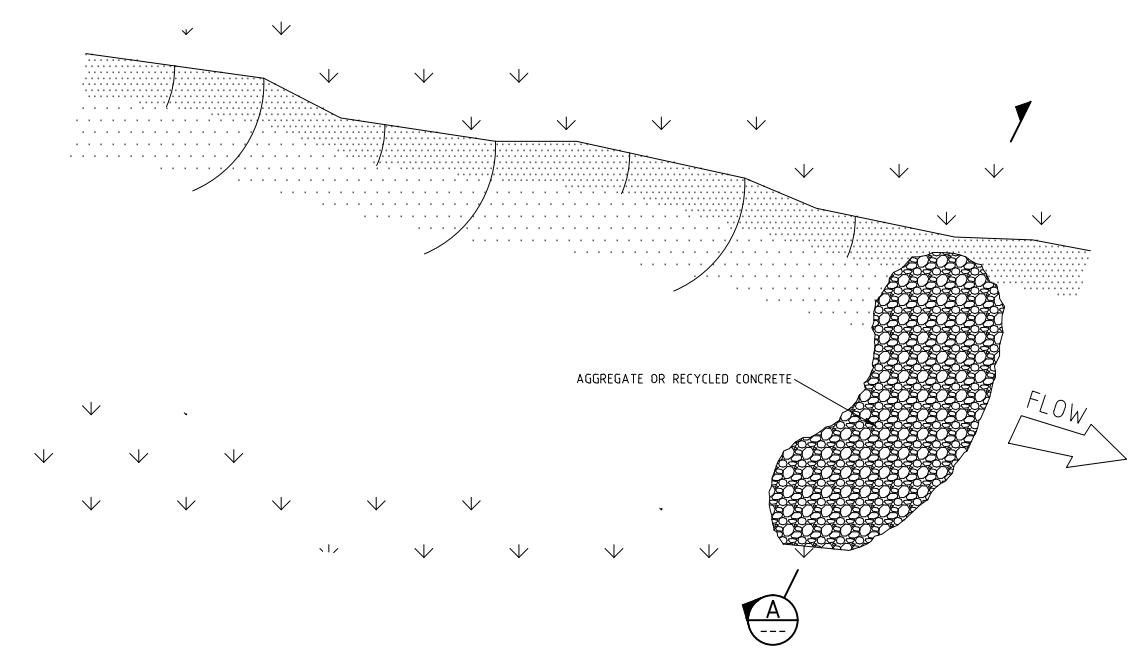
**HAYBALE SEDIMENT BARRIER**  
AROUND ALL PITS NOT ADJACENT TO KERB  
N.T.S.



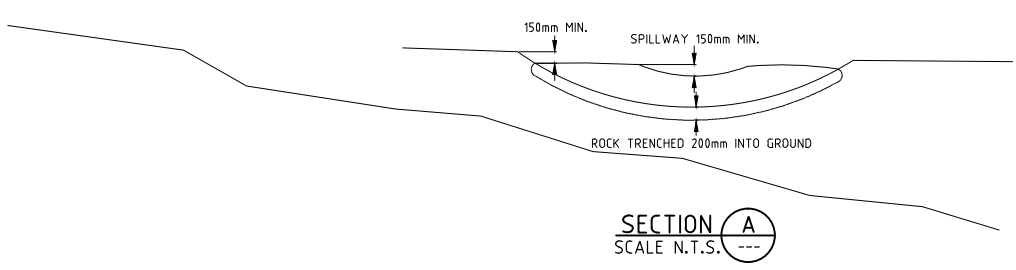
**TEMPORARY DIVERSION BANK**  
N.T.S.



**SEDIMENT TRAP AROUND ALL PITS**  
ADJACENT TO KERB AND GUTTER  
N.T.S.




**TYPICAL ROCK CHECK DAM DETAIL**  
N.T.S.

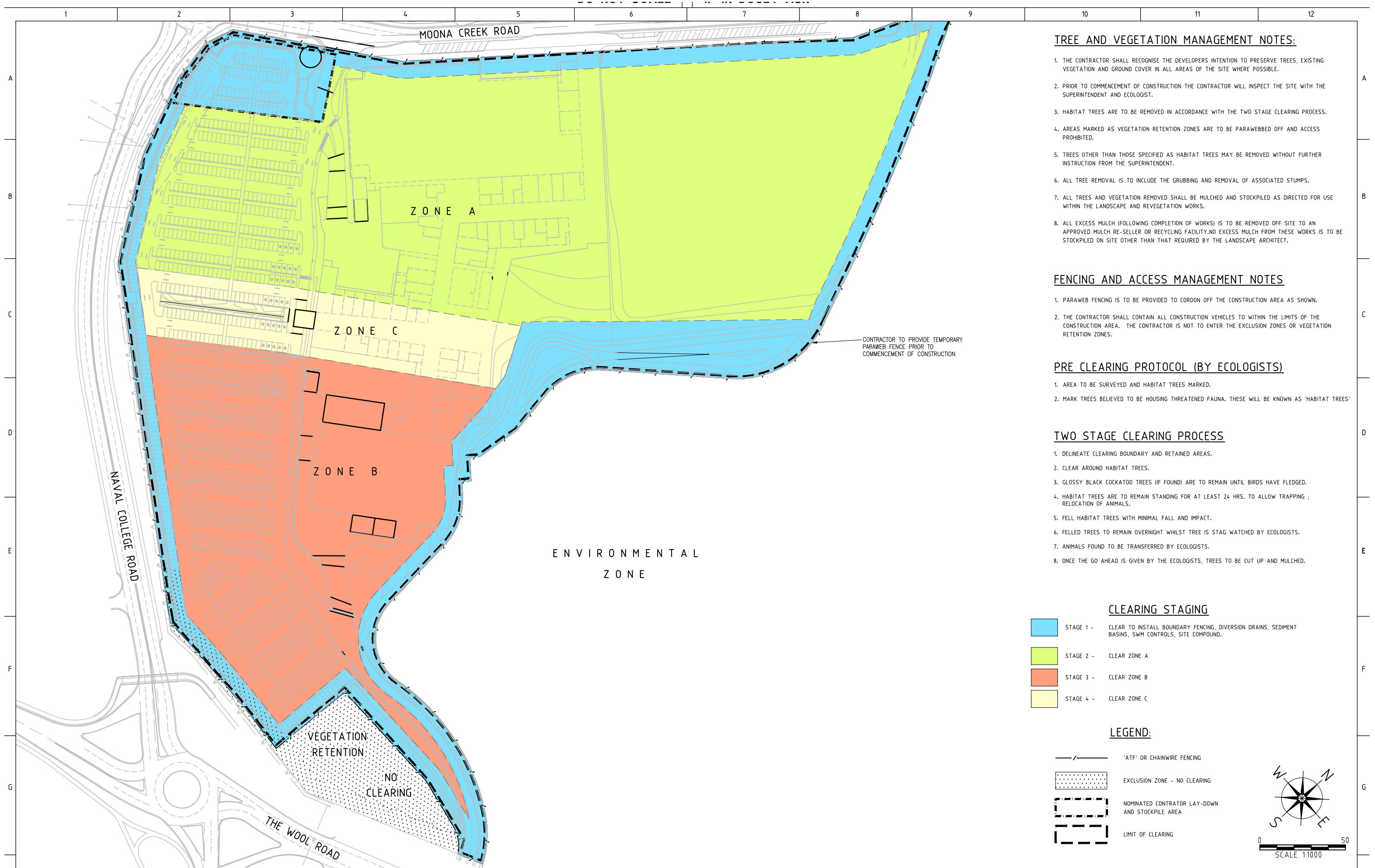


**SECTION A-A**  
SCALE N.T.S.

NOT FOR CONSTRUCTION

REV	DATE	BY	APP.	DETAILS	DRAWING STATUS			MODIFICATION #3 ISSUE MARCH 2011	SCALE: (on A1 Original)  N.T.S.	 <b>LEVEL 1, BURELLI STREET, WOLLONGONG, NSW 2500</b> Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981 <i>This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd</i>	PROJECT TITLE VINCENTIA DISTRICT CENTRE SHOPPING CENTRE PA VINCENTIA for FABCOT PTY LTD		DRAWING TITLE SOIL AND WATER MANAGEMENT DETAILS	
					DESIGN BY	MAK	16/07/10							
					DRAWN BY	AJM	16/07/10							
					DRAFTING CHECK	CJG	16/07/10							
					DESIGN CHECK	MAK	16/07/10							
					FINAL APPROVAL	MAK	16/07/10							
					<b>PRELIMINARY</b>				HEIGHT DATUM AHD				Project No.	Com No.
													Drawing No.	REV
													104016	46
													46892	P0





REV	DATE	BY	APP.	DETAILS	DRAWING STATUS		
					DESIGN BY	AJM	13/07/10
					DRAWN BY	AJM	13/07/10
					DRAFTING CHECK	CJG	16/07/10
					DESIGN CHECK	MAK	16/07/10
					FINAL APPROVAL	MAK	16/07/10
					<b>PRELIMINARY</b>		

MODIFICATION  
#3 ISSUE  
MARCH 2011

**SCALE:**  
(on A1 Original)

1:1000

HEIGHT DATUM  
AHD



**LEVEL 1, 47 BURELLI STREET, WOLLONGONG, NSW 2500**  
Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981  
*This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd*

**PROJECT TITLE**  
VINCENTIA DISTRICT CENTRE  
SHOPPING CENTRE PA  
VINCENTIA  
for  
FABCOT PTY LTD

**DRAWING TITLE**  
CLEARING  
WORKS

Project No.	Com No.	Drawing No.	REV
104016	46	46893	P0





- STAGE 1 WORKS:**
1. CORDON OFF PREVIOUSLY REHABILITATED AREA AND EXISTING SURROUNDING VEGETATION.
  2. SCARIFY EXISTING CLAY SCAR AREA.
  3. SPREAD TOPSOIL WON FROM MARKETPLACE SITE OVER SCARIFIED AREA TO A DEPTH OF 200-300mm.
  4. UPON COMPLETION, STOCKPILE TOPSOIL SUFFICIENT FOR FUTURE STAGE 2 WORKS. PROVIDE SEDIMENT FENCES AROUND STOCKPILES AND REVEGETATE.
  5. UPON COMPLETION, ENSURE EXISTING POST & WIRE FENCING IS REINSTATED TO PROHIBIT ACCESS TO REHABILITATED AREA.

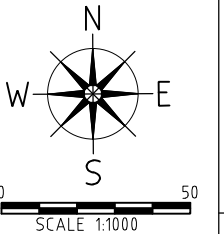
- STAGE 2 WORKS:**
6. CORDON OFF EXTREMITIES OF ROAD RESERVE DISTURBED AREA. CONSTRUCTION VEHICLES ARE NOT TO ENTER EXISTING VEGETATED AREAS.
  7. MILL EXISTING BITUMEN SEAL AND REMOVE OFF SITE TO AN APPROVED WASTE DISPOSAL STATION.
  8. TYNE UP REMAINING PAVEMENT CONSTRUCTION AND GRADE LEVEL FOR TOPSOILING.
  9. SPREAD STOCKPILED TOPSOIL TO A DEPTH OF 200-300mm AND ENSURE EDGES ARE TRANSITIONED TO EXISTING NATURAL SURFACE LEVEL. OVERLAND FLOW IS NOT TO BE ALTERED BY THE REVEGETATION.
  10. REMOVE EXISTING DRAINAGE CULVERTS AND REINSTATE BACK TO NATURAL SURFACE LEVEL.

- SOIL & WATER MANAGEMENT:**
11. SEDIMENT FENCE TO BE PROVIDED ALONG THE BOTTOM SIDE OF ALL PLACED TOPSOIL.
  12. SEDIMENT FENCE TO BE PROVIDED AROUND THE TOPSOIL STOCKPILES.

**NOTE:** CONSTRUCTION VEHICLES OR PERSONNEL ARE NOT TO ENTER THE ENVIRONMENTAL EXCLUSION ZONES.

**LEGEND:**

- REHABILITATED AREA (COMPLETED IN 2010 BY OTHERS)
- SCAR REHABILITATION AREA (REMAINDER-STAGE 1 WORKS) (3,250m2)
- EXISTING BBLC ACCESS ROAD (STAGE 2 WORKS) (3,650m2)
- TOPSOIL STOCKPILE AREAS



REV	DATE	BY	APP.	DETAILS	DRAWING STATUS		
					DESIGN BY	AJM	04/02/11
					DRAWN BY	AJM	04/02/11
					DRAFTING CHECK	CJG	08/02/11
					DESIGN CHECK	MAK	08/02/11
					FINAL APPROVAL	MAK	08/02/11
					<b>PRELIMINARY</b>		

**MODIFICATION  
#3 ISSUE  
MARCH 2011**

**SCALE:**  
(on A1 Original)  
**1:1000**

**HEIGHT DATUM  
AHD**



**LEVEL 1, 47 BURELLI STREET, WOLLONGONG, NSW 2500**  
Ph: (02) 4228 4133 Facsimile: (02) 4228 6811 ACN 003 936 981  
*This drawing is subject to COPYRIGHT. It remains the property of Forbes Rigby Pty Ltd*

**PROJECT TITLE**  
VINCENTIA DISTRICT CENTRE  
SHOPPING CENTRE PA  
VINCENTIA  
for  
FABCOT PTY LTD

**DRAWING TITLE**  
SCAR AREA  
REHABILITATION PLAN

<b>Project No.</b> 104016	<b>Com No.</b> 46	<b>Drawing No.</b> 46894	<b>REV</b> P0
------------------------------	----------------------	-----------------------------	------------------