



BCA Certifiers Australia Pty Ltd
Capital Centre Unit 3 2-6 Shea St
Phillip ACT 2606
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Email: mail@bcacertifiers.com.au

building approvals, certification and compliance

CONSTRUCTION CERTIFICATE

CERTIFICATE NO: CC140503-5

Date of Certificate: 17 December 2014

Description of the Proposed development: **Sludge Dewatering Plant**
Associated with Water Recycling Plant

Classification under the *Building Code of Australia*: 8

APPLICANT

Name: Mr S Merange
Address: John Holland Pty Ltd
Project Manager, Specialist Engineering
Googong WRP
PO Box 812 Queanbeyan NSW 2620

PROPERTY (The Land)

Address: Lot 4 Googong Dam Road GOOGONG
Lot/Sec/DP: lot 4 DP 1179941

DEVELOPMENT CONSENT

Development Consent Number: MP 08-0236
Date of Consent: 24/11/2011 modified 09/07/14
Consent authority: NSW Planning & Environment Director of
Infrastructure Projects as a delegate for the Minister
for Planning

CERTIFYING AUTHORITY

Name: Annette Owen

Signature: 

Accreditation No: **BPB 1771**

Accred: Building Professionals Board

CERTIFICATION

Annette Owen of BCA Certifiers Australia Pty Ltd certifies

That work completed in accordance with the documentation accompanying the application for this certificate (with such modifications, if any, verified by me as may be shown on that documentation) will comply with the requirements of the *Environmental Planning & Assessment Regulation 2000* as referred to in s.81A(5) of the *Environmental Planning & Assessment Act 1979*.

The documents listed below accompanied the application for this certificate.
Note: The certificate is to be endorsed upon all relevant plans and specifications.

ATTACHMENTS

(Tick as appropriate)

- Schedule of Approved Plans and Specifications
- The conditions of the certificate
- Fire Safety Schedule

SCHEDULE OF APPROVED PLANS AND SPECIFICATIONS

	Prepared By
Architectural Plans	Site Plan MWH ref no: 83500349-01-001G102 dated 11/08/14
Structural Plans	MWH ref no: 83502156-01-001-G500 B501 1502 B503 B504A 505 1 506AS500 1501 1502 1503 1505 1 511 1 514 C516 C 517 C dated 08/12/14 & 09/12/1411/12/14

FIRE SAFETY SCHEDULE

CLAUSE 168 EP & A REG. 2000

DA No.:	MP08-0236	CC No.:	CC140503-4	
Lot:	4	Section:		Deposited Plan: 1179941
Address:	Googong Water Recycling Plant lot 4 Googong Dam Rd Googong Sludge Dewatering plant			
Applicant's Name:	Mr S Merange John Holland Pty Ltd			
Applicant's Address:	Googong WRP PO Box 812 Queanbeyan NSW 2620			

REQUIRED FIRE SAFETY MEASURES (PROPOSED)

CRITICAL FIRE SAFETY MEASURE (Y/N)

INTERVAL FOR SUPPLEMENTARY FIRE SAFETY STATEMENTS

MINIMUM STANDARD OF PERFORMANCE

Statutory

BCA 2014/Referenced Standards

Exit signs

N

12 months

BCA E4.5, E4.6, E4.8 & AS2293.1-2005

Portable fire extinguishers

N

12 months

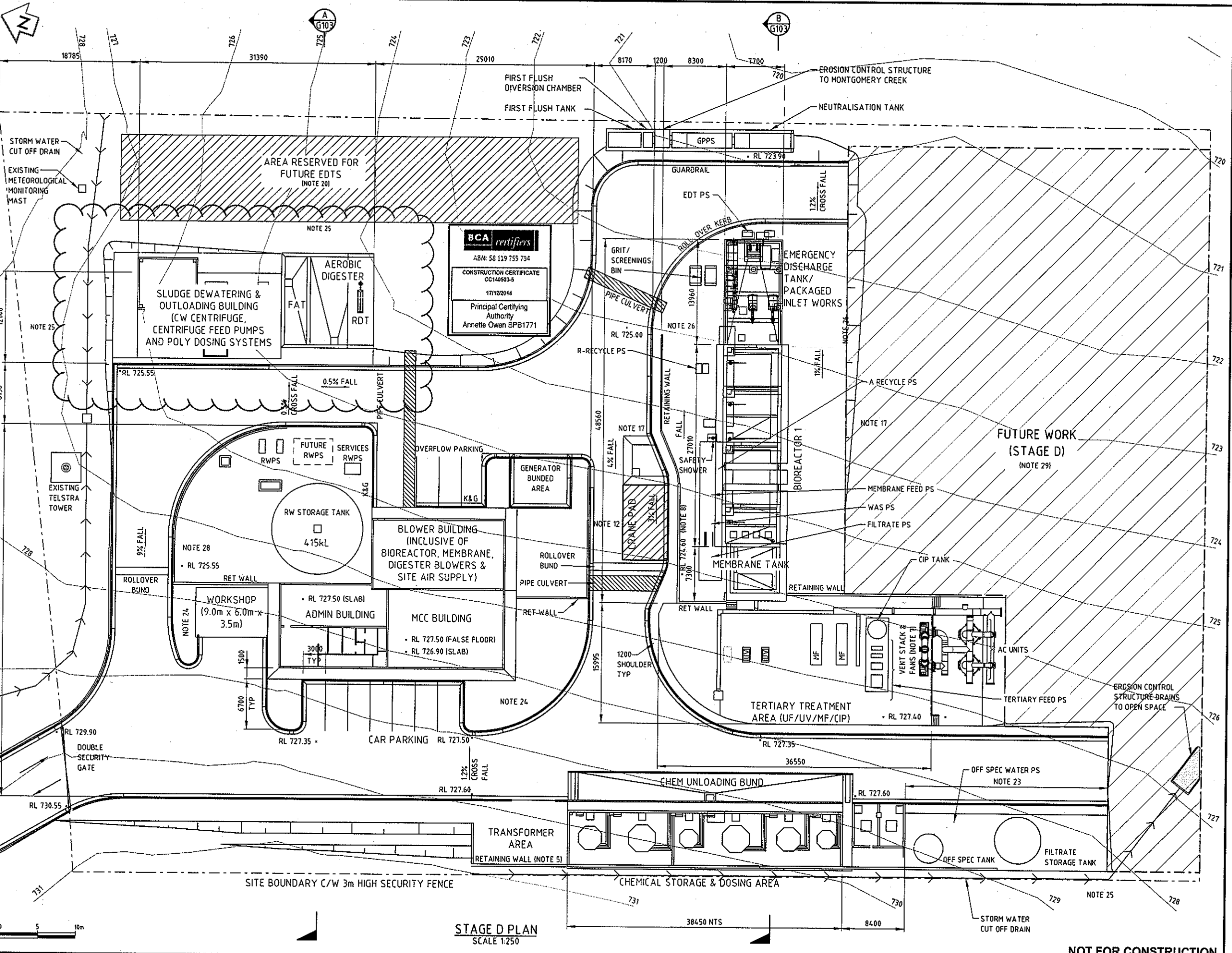
BCA E1.6 & AS2444-2001

Other

EXISTING FIRE SAFETY MEASURES

NOTES

1. REFER TO 8350034-01-001-G003 FOR CRITICAL YARD PIPING.
2. CONTOURS SHOWN ARE FOR EXISTING GROUND LEVELS.
3. DIMENSIONS ARE INDICATIVE ONLY
4. NOT USED
5. RETAINING WALL TO VARY IN HEIGHT TO MATCH EXISTING GROUND LEVEL
6. NOT USED
7. LOCATION AND HEIGHT OF VENT STACK TO BE CONFIRMED
8. GL GOVERNED BY PERMEATE PUMP AND MEMBRANE RECIRC PUMP SUCTION HYDRAULICS
9. ALL LEVELS ARE INDICATIVE ONLY
10. AREA & LOCATION LIGHTING TO BE ORIENTATED AWAY FROM SURROUNDING DEVELOPMENT & LOCATED AS CLOSE TO GROUND AS POSSIBLE TO MINIMISE LIGHT POLLUTION.
11. NOT ALL AREA PROCESS UNITS HAVE BEEN SHOWN FOR CLARITY. REFER TO REFERENCE GENERAL ARRANGEMENT DRAWINGS.
12. REFER DRG 8350034-01-001-G003.
13. CRANE PADS DESIGNED FOR TADANO GT-550E 55 TON CAPACITY HYDRAULIC TRUCK CRANE.
14. ALL ROADS ARE SEALED AT STAGE AB C/W STANDARD KERB & GUTTER WITH DRAINAGE TO STORMWATER SYSTEM. AUSTRALIAN TURNING CIRCLE BASED ON S ARTICULATED 19M SEMITRAILER CB3
15. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWINGS: 8350034-01-001-G102 & G103 AND 8350034-9-01-001-G001 TO G017
16. NOT USED
17. MEMBRANE CASSETTE LAYDOWN AREA WATER RETAINING CONCRETE SLAB DRAINS TO FIRST FLUSH
18. NOT USED
19. NOT USED
20. WASTEWATER MODELLING OF ULTIMATE DEVELOPMENT INDICATE A POTENTIAL NEED FOR A TOTAL OF 2800KL OF STORAGE.
21. NOT USED.
22. EXPOSED FACE TO BE STABILISED BEHIND SHOTCRETE
23. PROVIDE LAYBACK KERB
24. LANDSCAPE WITH NATIVE SHRUBBERY
25. LANDSCAPE AS LAWN
26. PROVIDE BUNDED CONCRETE SLAB DRAINING TO FIRST FLUSH TANK
27. NOT USED
28. FINISH OFF WITH CRUSHED AGGREGATE OVER COMPACTED ROADBASE
29. ALL TEMPORARY BATTERS CREATED AS PART OF STAGE AB WORKS SHALL BE STABILISED WITH STABILISATION MEASURES WITH A DESIGN LIFE OF 20 YEARS
30. FOR SITE SECURITY AND CCTV REQUIREMENTS REFER TO SPECIFICATION.
31. ACCESS TO ALL ELEVATED STRUCTURES SHALL BE RESTRICTED BY LOCKABLE SWING GATE COMPLETE WITH SIGNAGE
32. 1200x600x1200H SERVICE MAIN PROTECTION KIOSK (LV SIDE)
33. SECURITY LIGHTING TO BE PROVIDED AT AGREED LOCATIONS COMPLETE WITH INFRA RED DETECTION.
34. FOR PERSONNEL ACCESS GATES REFER DRAWING 8350034-01-001-C002



STAGE D PLAN
SCALE 1:250

ORIGINAL SIZE A1

DO NOT SCALE - IF IN DOUBT, ASK



REV	DESCRIPTION	DATE
0A	ISSUED FOR DETAILED DESIGN REPORT	
0	ISSUED FOR TENDER	
C	DRAFT ISSUE FOR TENDER	
B	DRAFT ISSUE FOR TENDER	
A	ISSUED FOR REVIEW	

REV	CHK	APP	DATE	DESCRIPTION
	AG	SC	11.08.14	SURVEYED
	TS	RV	17.02.15	DESIGNED
	PS	CS	14.02.13	DRAWN
	PS	PC	30.09.13	CAD REVIEW
	PS	PC	12.08.13	DESIGN CHECK
	PS	PC	12.08.13	DESIGN REVIEW
	PS	PC	12.08.13	APPROVED
	PS	PC	12.08.13	PROF REGISTRATION

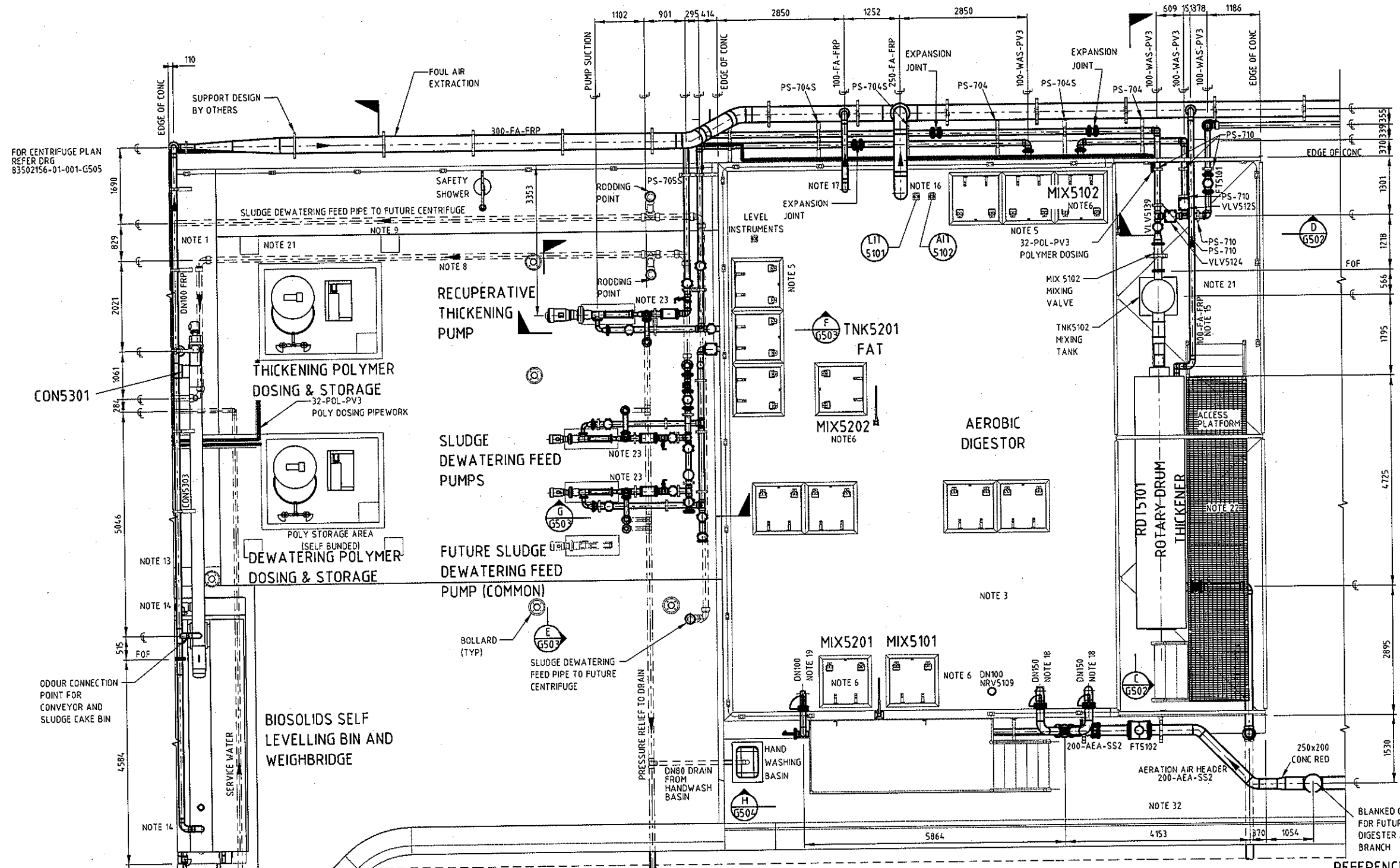
MWH

GOOGONG

WATER RECYCLING PLANT
GOOGONG TOWNSHIP
STAGE AB LAYOUT PLAN

NOT FOR CONSTRUCTION	
FOR TENDER	
Date Stamp	11.08.14
Scales	AS SHOWN
Drawing No	83500349-01-001-G102
Rev	0A

BCA certifiers
 ABN: 53 119 755 734
 CONSTRUCTION CERTIFICATE
 CC140503-5
 17/12/2014
 Principal Certifying
 Authority
 Annette Owen BPB1771



ORIGINAL SIZE A1
 200 mm
 DO NOT SCALE - IF IN DOUBT, ASK

PLAN
 SCALE 1:50

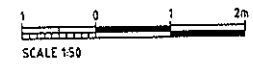
NOTES

1. ACCESS DOOR.
2. ROLLER SHUTTER DOOR FOR CENTRIFUGE REMOVAL.
3. FLAT TRAFFICABLE COVER BY OTHERS.
4. ALL ABOVE GROUND UPVC PIPEWORK SHALL BE PAINTED WITH A SUITABLE PRODUCT FOR UV PROTECTION.
5. SUMP ACCESS HATCHES.
6. SUBMERSIBLE MIXER ACCESS HATCHES.
7. ALL ACCESS HATCHES TO BE "McBERNS" TYPE OR EQUIVALENT.
8. CENTRIFUGE FEED STAGE AB.
9. CENTRIFUGE FEED TO FUTURE CENTRIFUGE.
10. CENTRATE DISCHARGE TO GPPS. (GRAVITY).
11. FLOOR DRAIN/SUMP.
12. DN100 FOUL AIR EXTRACTION FROM HORIZONTAL CONVEYOR.
13. DN100 FOUL AIR EXTRACTION FROM INCLINED CONVEYOR.
14. FLEXIBLE CONNECTION FOR AIR EXTRACTION INTO CAKE BIN.
15. FOUL AIR EXTRACTION FROM RDT.
16. FOUL AIR EXTRACTION FROM AEROBIC DIGESTER.
17. FOUL AIR EXTRACTION FROM FAT TANK.
18. AERATION AIR TO AEROBIC DIGESTER.
19. AERATION AIR TO FAT TANK.
20. FUTURE PLANT.
21. ROOF OMITTED FOR CLARITY.
22. ACCESS PLATFORM REQUIRED FOR MAINTENANCE OF RDT DRUM AND BEARINGS. RDT COVER TO BE HINGED FROM THE AEROBIC DIGESTER SIDE OF UNIT.
23. DETAILS AND CONNECTIONS OF PRV SHOWN INDICATIVELY.
24. DETAILS OF CONVEYOR & MOTOR TO BE CONFIRMED BY VENDOR.
25. POLYMER DOSING INTO MIXING VALVE.
26. BLANK FLANGE FITTED TO FUTURE PUMP SUCTION.
27. FLAT TRAFFICABLE GRP COVER OVER FAT AND AEROBIC DIGESTER.
28. RECUPERATIVE THICKENING SUCTION FROM AEROBIC DIGESTER.
29. RECUPERATIVE THICKENING SUCTION FROM FAT.
30. CENTRATE AND SLUDGE CAKE OUTLETS TO BE CONNECTED WITH FLEXIBLE COUPLINGS JOINTS TO PROTECT PIPEWORK FROM MACHINE VIBRATION.
31. ALL EXPANSION JOINTS SHALL BE RATED TO PN10 MINIMUM AND BE SUPPLIED COMPLETE WITH CONTROL RODS.
32. AERATION PIPEWORK AND SUPPORTS BY OTHERS.
33. ABOVE GROUND POLYMER DOSING PIPEWORK SHALL BE LAGGED.
34. MAX HEIGHT OF CHAIN BLOCK IN ACCORDANCE WITH VENDOR DRAWINGS.

REFERENCE DRAWINGS:

- 83502156-01-001-G001 COVER SHEET & DRAWING INDEX
- 83502156-01-001-G501 TO 503 SLUDGE DEWATERING SECTIONS
- 83502156-01-001-P151 TO 152 P&IDS
- 83502156-01-001-G010 YARD PIPING
- CENS201 - CENTRIFUGE UNIT
- CON5301 - HORIZONTAL CONVEYOR (SLUDGE CAGE)
- CON5303 - INCLINED CONVEYOR (SLUDGE CAGE)
- RDT5101 - ROTARY DRUM THICKENER
- TNK5102 - FLOCCULATION TANK

NOT FOR CONSTRUCTION



REV	DESCRIPTION	DATE	BY	CHK	APP
B	IFC FOR REVIEW	09.12.14	AK	RV	SC
A	ISSUED FOR 30% REVIEW	20.10.2014	HS	RV	SC
	REVISIONS		DRN	CHK	APP

STATUS	DATE	BY
SURVEYED		
DESIGNED		
DRAWN	17.10.14	Pandurang Desai
CAD REVIEW	20.10.14	Terry Sowden
DESIGN CHECK	20.10.14	Ran Viridi
DESIGN REVIEW	20.10.14	Ran Viridi
APPROVED	11.12.14	Stephen Chapman

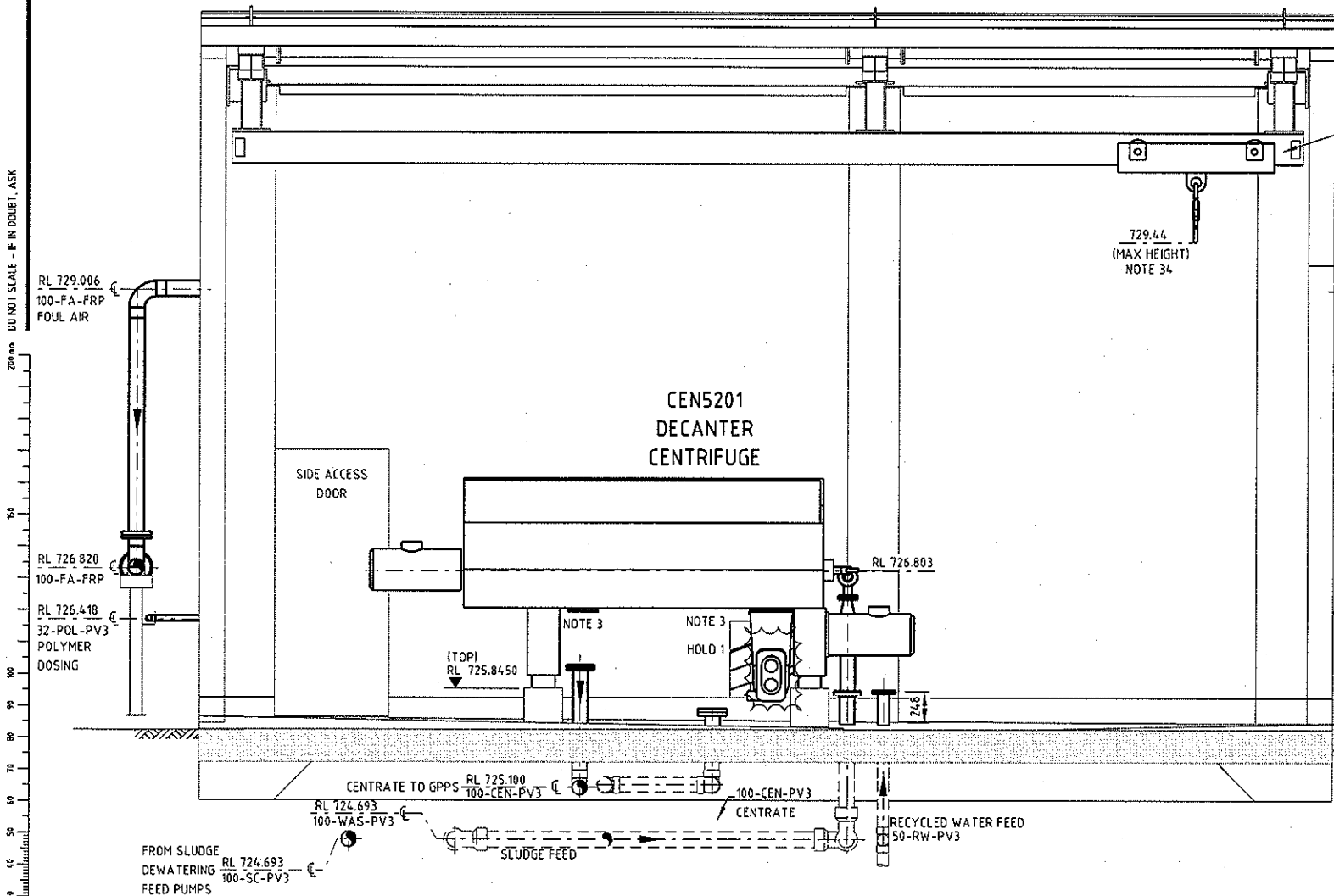
MWH **GOOGONG**

GOOGONG WATER RECYCLING PLANT STAGE AB
SLUDGE DEWATERING AREA - GENERAL ARRANGEMENT
PLAN

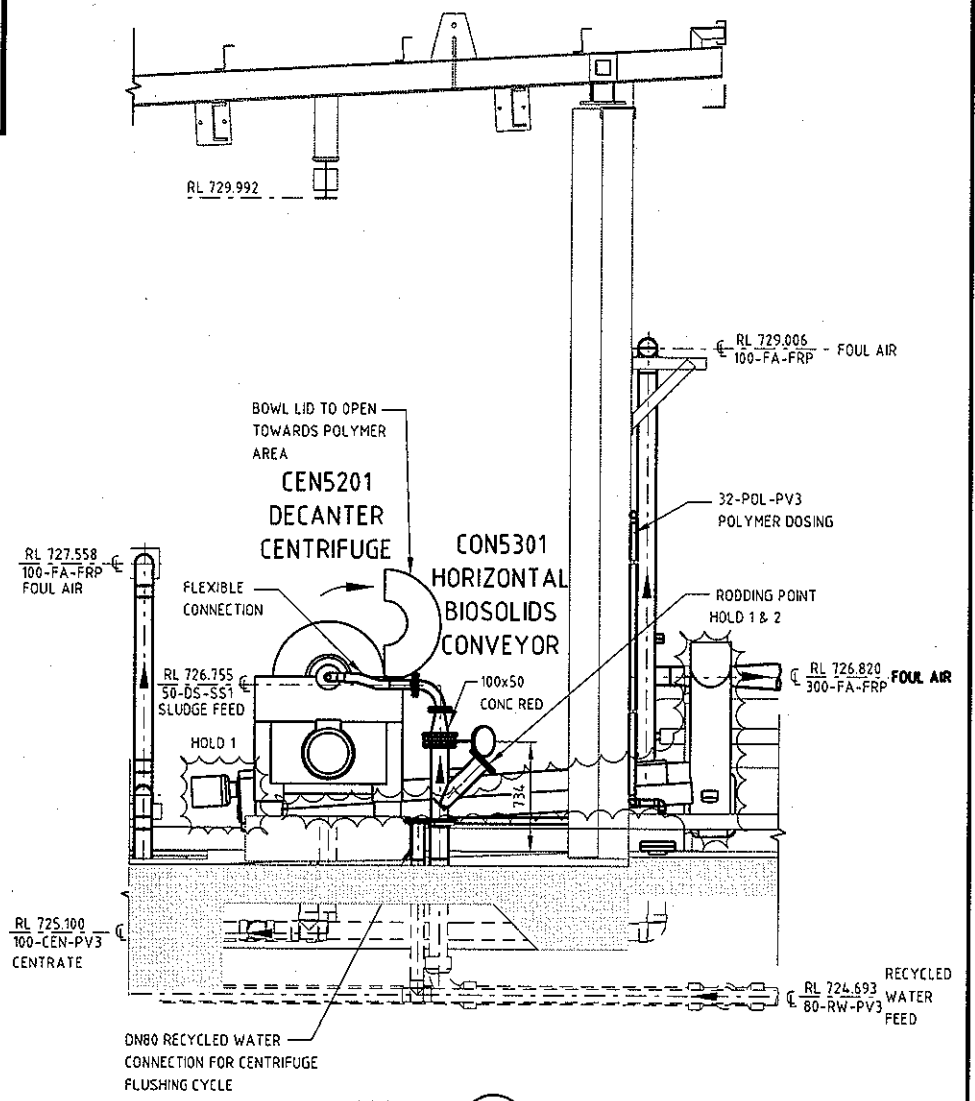
Status Stamp	FOR REVIEW
Date Stamp	08.12.14
Scale	1:50
Drawing No.	83502156-01-001-G500
Rev.	B

BCA certifiers
 ABN: 58 119 755 734
 CONSTRUCTION CERTIFICATE
 CC140503-5
 17/12/2014
 Principal Certifying
 Authority
 Annette Owen BPB1771

DO NOT SCALE - IF IN DOUBT, ASK

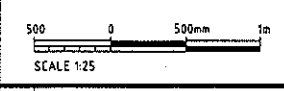


SECTION A
 SCALE 1:25
 G505



SECTION B
 SCALE 1:25
 G505

ORIGINAL SIZE A1



- HOLDS**
1. MOTOR/GEAR BOX LOCATION TO BE CONFIRMED BY VENDOR.
 2. CONVEYOR DETAILS, CHUTE AND CONNECTION DETAILS TO BE CONFIRMED BY VENDOR.
 3. CENTRIFUGE OUTLET CONNECTIONS TO FLEXIBLE CONNECTIONS.

- NOTES:**
1. FOR NOTES REFER DRG 83502156-01-001-G500.

REV	DESCRIPTION	HS	RV	SC	DATE
1	APPROVED FOR CONSTRUCTION				11.12.14
	REVISIONS	CHK	APP		

SURVEYED	DESIGNED	DRAWN	CAD REVIEW	DESIGN CHECK	APPROVED	DATE
	Pandurang Desai	Terry Sowden	Ran Virei	Stephen Chapman	Stephen Chapman	11.12.14



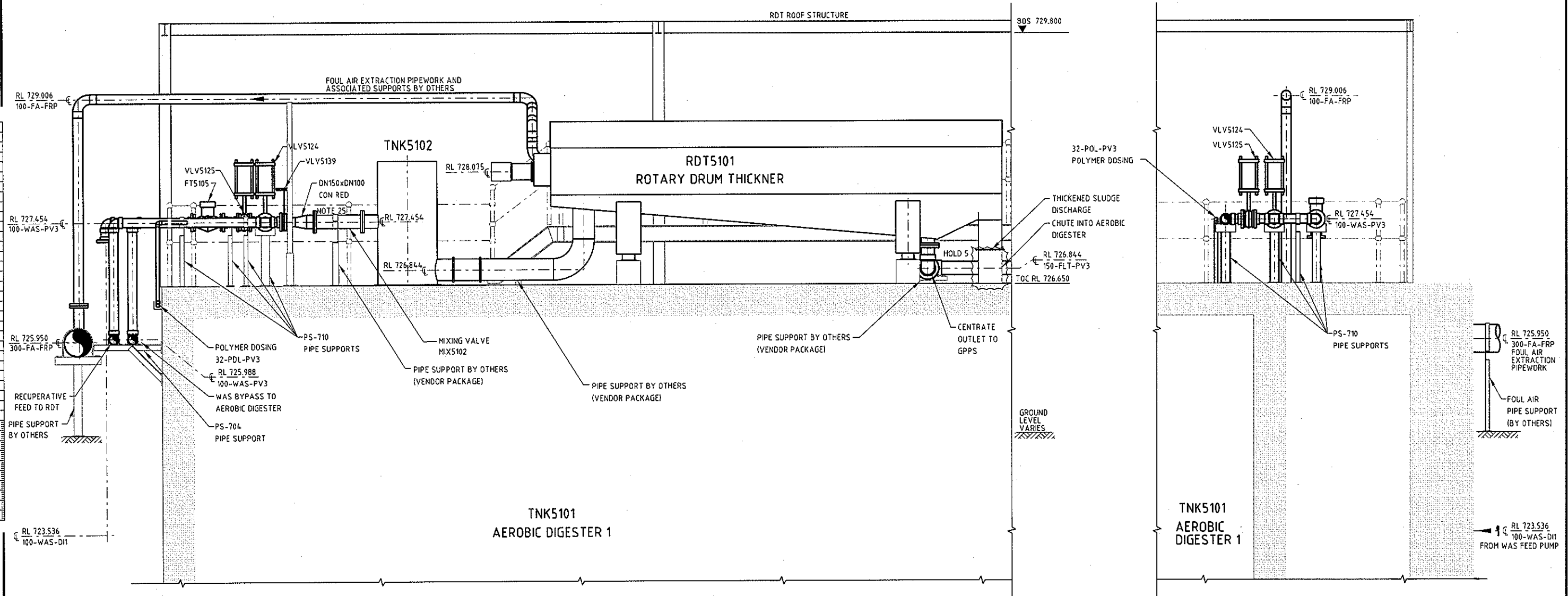
GOOGONG WATER RECYCLING PLANT STAGE AB
 SLUDGE DEWATERING AREA - GENERAL ARRANGEMENT
 SECTIONS SHEET 1

Status Stamp	FOR CONSTRUCTION
Date Stamp	11.12.14
Scale	1:25
Drawing No.	83502156-01-001-G501
Rev.	1

ORIGINAL SIZE A1

DO NOT SCALE - IF IN DOUBT, ASK

SCALE 1:25



SECTION C
SCALE 1:25
G500

SECTION D
SCALE 1:25
G500

- NOTES:**
- FOR NOTES REFER DRG 83502156-01-001-G500
- HOLDS:**
- CONNECTION FROM RDT TO AEROBIC DIGESTER TBC BY VENDOR.

NOT FOR CONSTRUCTION



REV	DESCRIPTION	AK	RV	SC	DATE
B	IFC FOR REVIEW				09.12.14
A	ISSUED FOR 50% REVIEW	HS	RV	SC	20.10.2014
REV	REVISIONS	DRN	CHK	APP	DATE

Client

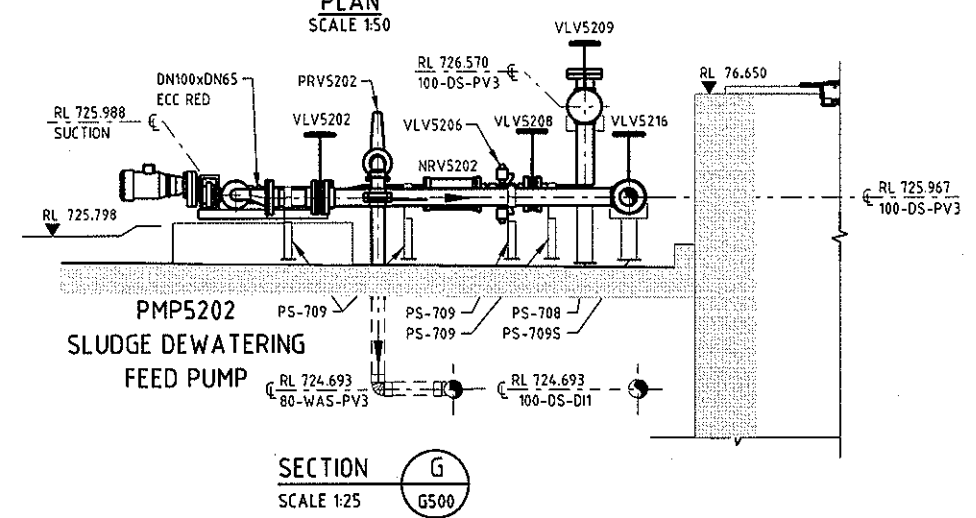
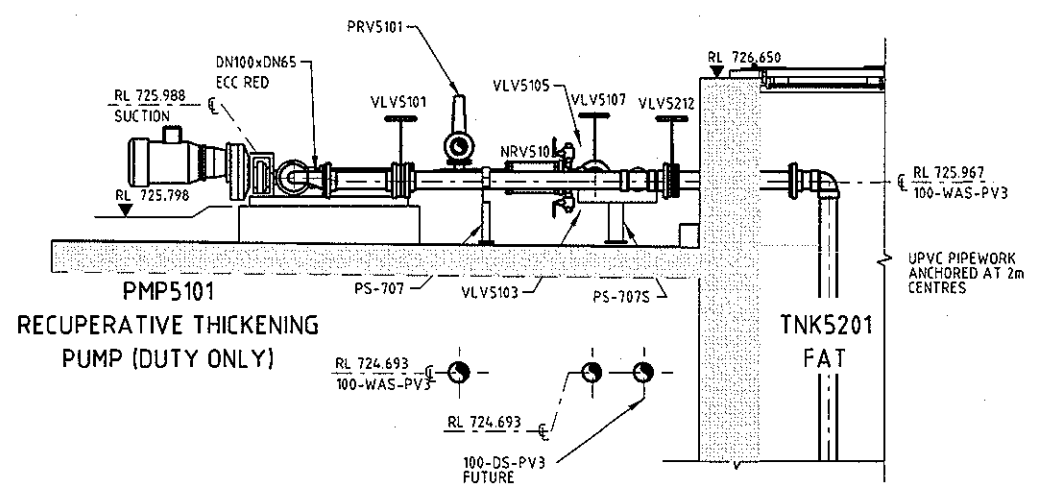
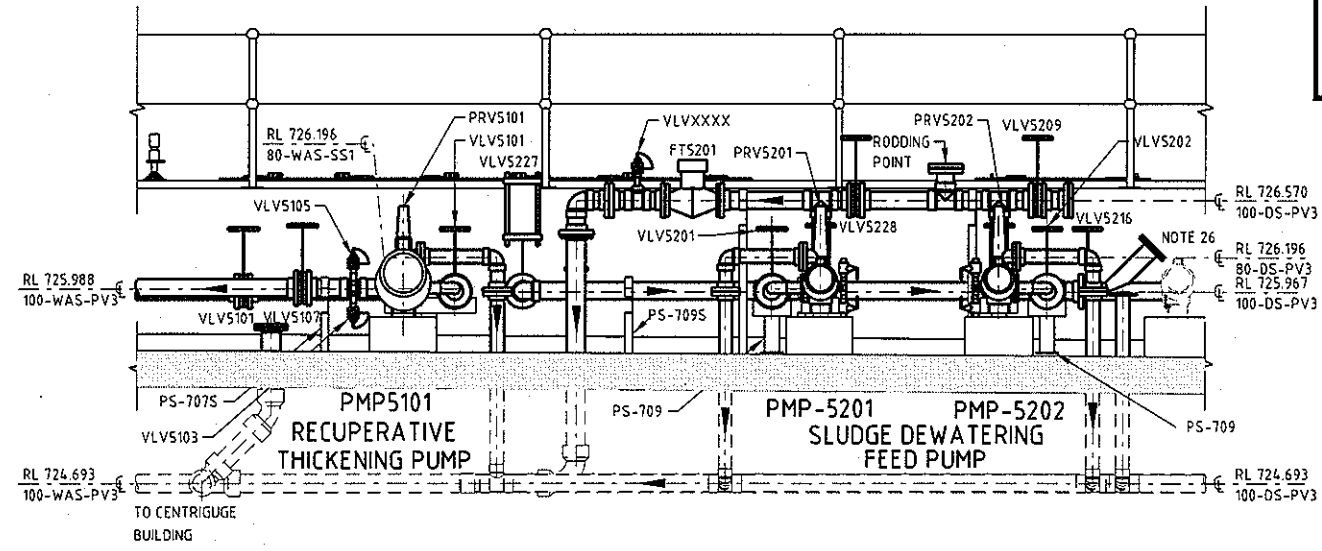
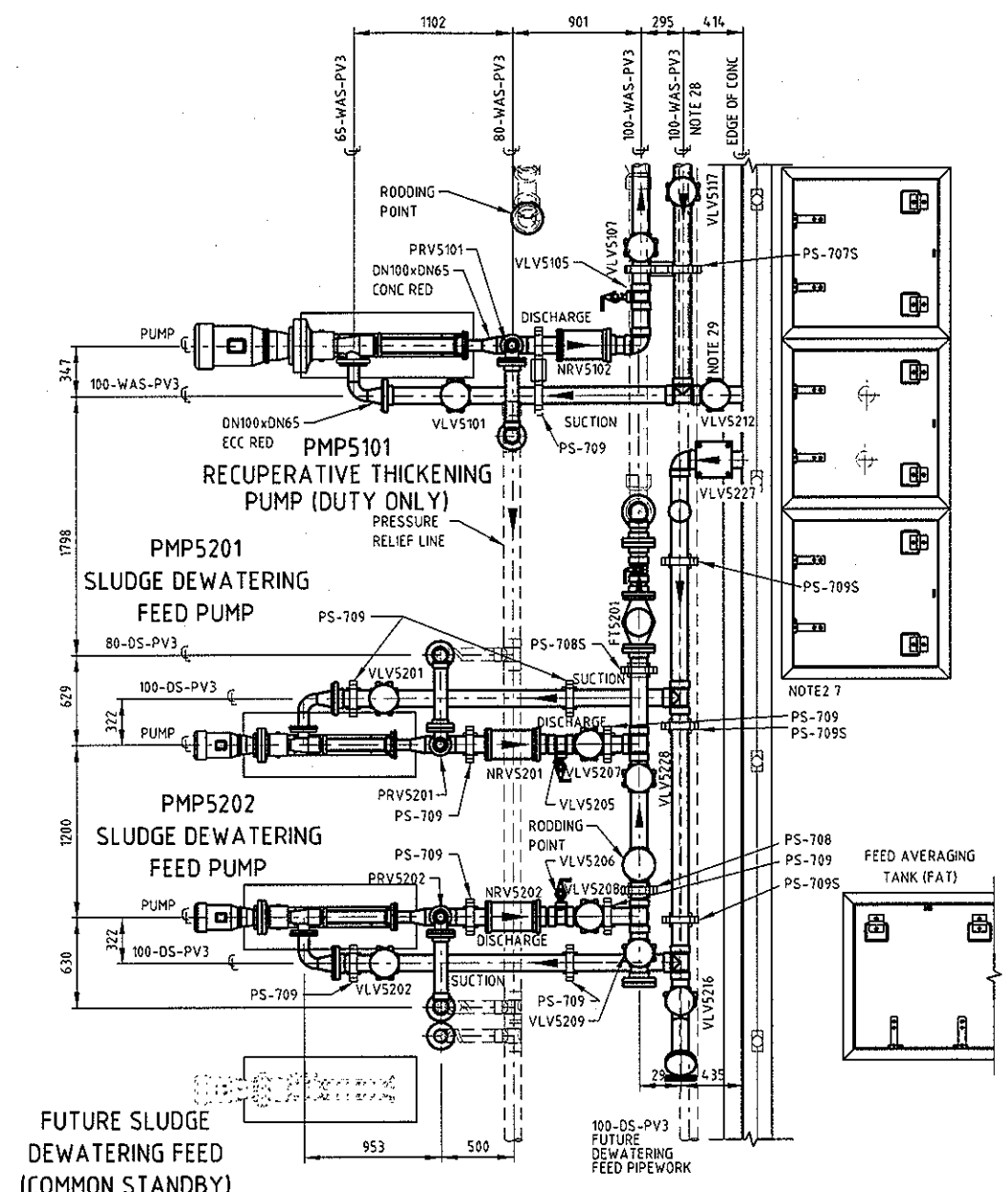
GOOGONG WATER RECYCLING PLANT STAGE AB

SLUDGE DEWATERING AREA - GENERAL ARRANGEMENT
SECTIONS SHEET 2

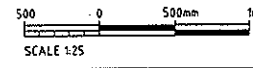
Date Stamp	09.12.14
Scale	1:25
Drawing No.	83502156-01-001-G502
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



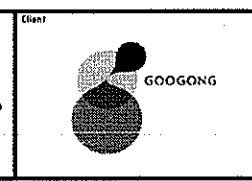
NOTES:
1. FOR NOTES REFER DRG 83502156-01-001-G500.



NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY	CHK	APP
B	IFC FOR REVIEW	09.12.2014	PTO	RV	SC
A	ISSUED FOR 30% REVIEW	20.10.2014	HS	RV	SC
REV	REVISIONS	DATE	DRN	CHK	APP

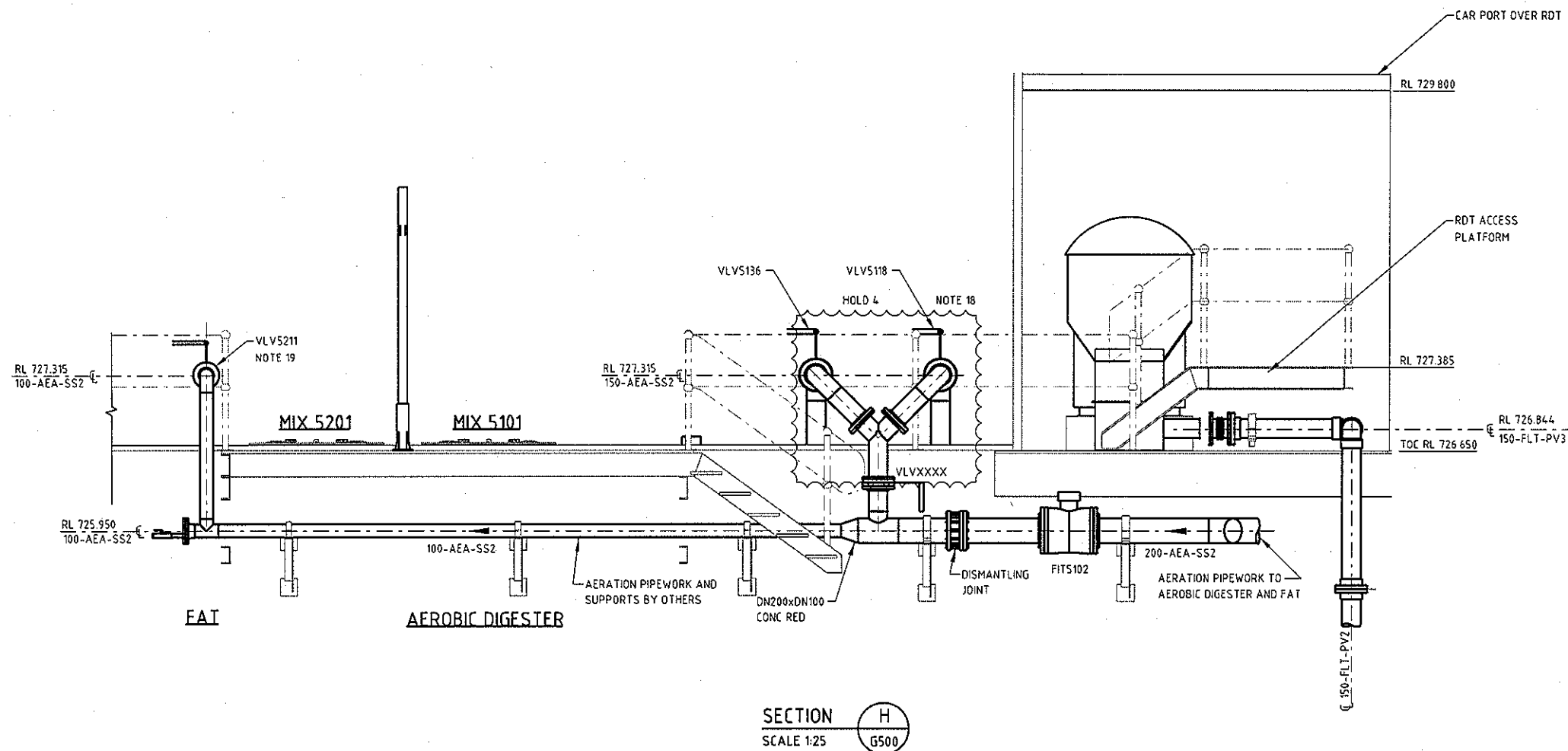
SURVEYED		
DESIGNED		
DRAWN	Pandurang Desai	16.10.14
CAD REVIEW	Terry Sowden	20.10.14
DESIGN CHECK	Ran Virdi	20.10.14
DESIGN REVIEW	Ran Virdi	20.10.14
APPROVED	Stephen Chapman	11.12.14



GOOGONG WATER RECYCLING PLANT STAGE AB

SLUDGE DEWATERING AREA - GENERAL ARRANGEMENT
SECTIONS SHEET 3

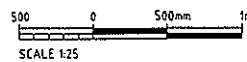
Status Stamp	FOR REVIEW
Date Stamp	09.12.14
Scale	AS SHOWN
Drawing No.	83502156-01-001-G503
Rev	B



SECTION H
SCALE 1:25

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



HOLDS:

- 4. AEROBIC DIGESTER AERATION PIPEWORK AND VALVE ARRANGEMENT BY OTHERS.

NOTES:

- 1. FOR NOTES REFER DRG B3502156-01-001-G500.

NOT FOR CONSTRUCTION

REV	DATE	BY	CHK	APP	DATE	PROF REGISTRATION:
A	09.12.2014	PTD				
IFC FOR REVIEW						
REVISIONS						

GOOGONG WATER RECYCLING PLANT STAGE AB
 SLUDGE DEWATERING AREA - GENERAL ARRANGEMENT
 SECTIONS SHEET 4

Status Stamp	FOR APPROVAL
Date Stamp	08.12.14
Scale	AS SHOWN
Drawing No.	83502156-01-001-G504
Rev.	A



BCA certifies

ABN: 58 119 755 734

CONSTRUCTION CERTIFICATE
CC140503-5

17/12/2014

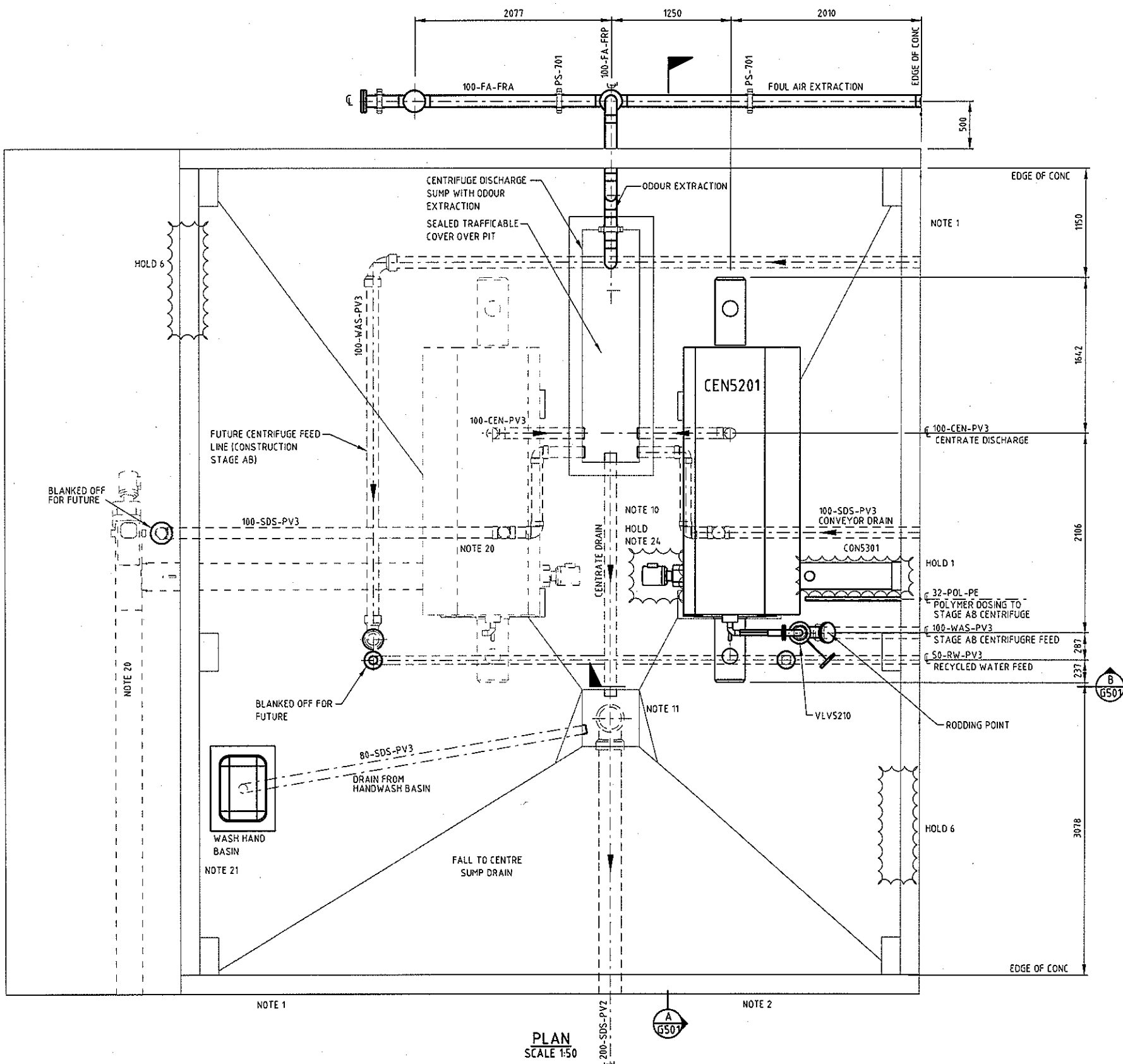
Principal Certifying
Authority
Annette Owen BPB1771

ORIGINAL SIZE A1

DO NOT SCALE - IF IN DOUBT, ASK

200 mm

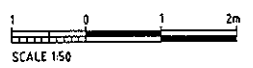
150



PLAN
SCALE 1:50

NOTES

- 1. FOR NOTES REFER DRG 83502156-01-001-G500 & G501.
- HOLDS:**
- 6. LOCATION AND SIZE OF VENTILATION LOUVERS TO BE CONFIRMED - PENDING VENDOR INFORMATION.

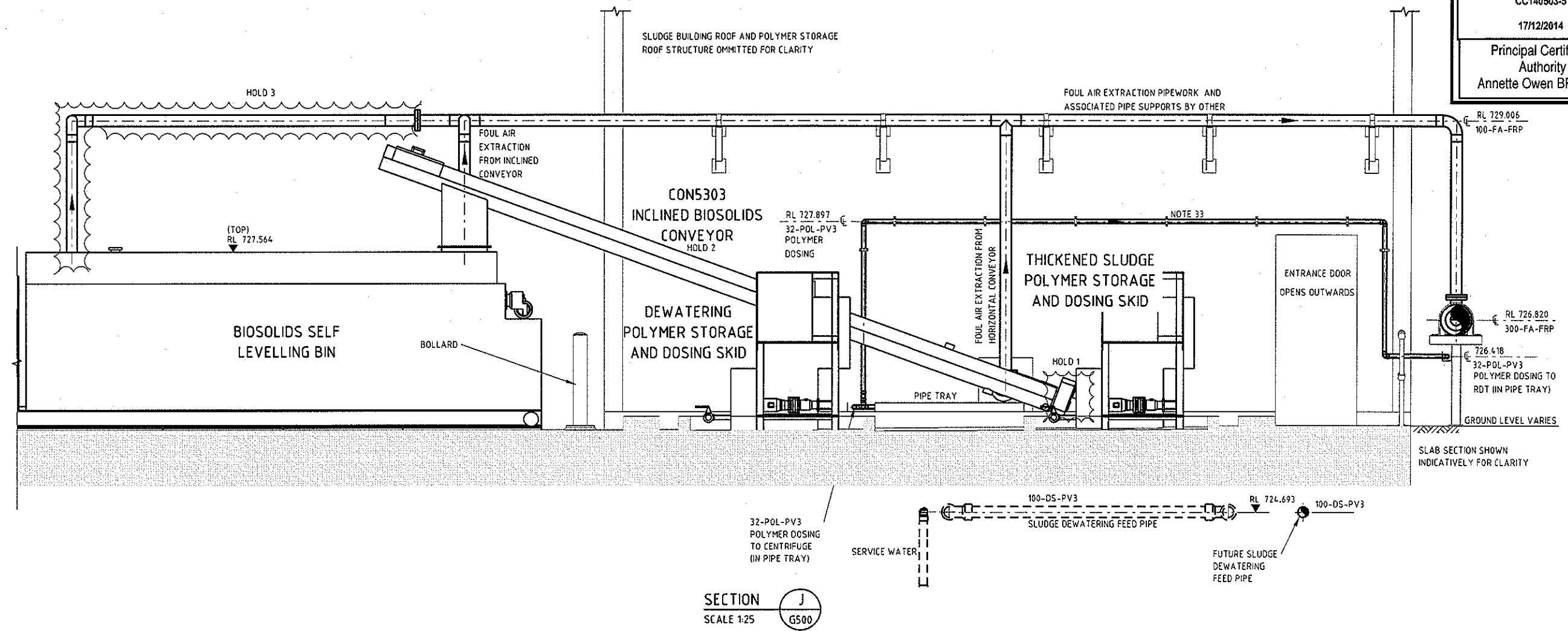


REV	DESCRIPTION	AK	RV	SC	DATE	PROF REGISTRATION
1	APPROVED FOR CONSTRUCTION	AK	RV	SC	11.12.2014	
	DESIGNED					
	DRAWN					
	CAD REVIEW					
	DESIGN CHECK					
	DESIGN REVIEW					
	APPROVED					

GOOGONG WATER RECYCLING PLANT STAGE AB

SLUDGE DEWATERING AREA - GENERAL ARRANGEMENT PLAN

Status Stamp	FOR CONSTRUCTION
Date Stamp	11.12.14
Scale	AS SHOWN
Drawing No.	83502156-01-001-G505
Rev.	1



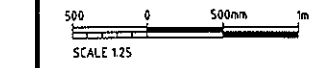
SECTION J
SCALE 1:25

- HOLDS**
1. MOTOR/GEAR BOX LOCATION TO BE CONFIRMED BY VENDOR.
 2. CONVEYOR DETAILS, CHUTE, CONNECTION DETAILS AND SUPPORTS TO BE CONFIRMED BY VENDOR.
 3. ODOUR EXTRACTION PIPEWORK BY OTHERS.

- NOTES:**
1. FOR NOTES REFER DRG 83502156-01-001-G106.



NOT FOR CONSTRUCTION

ORIGINAL SIZE A1



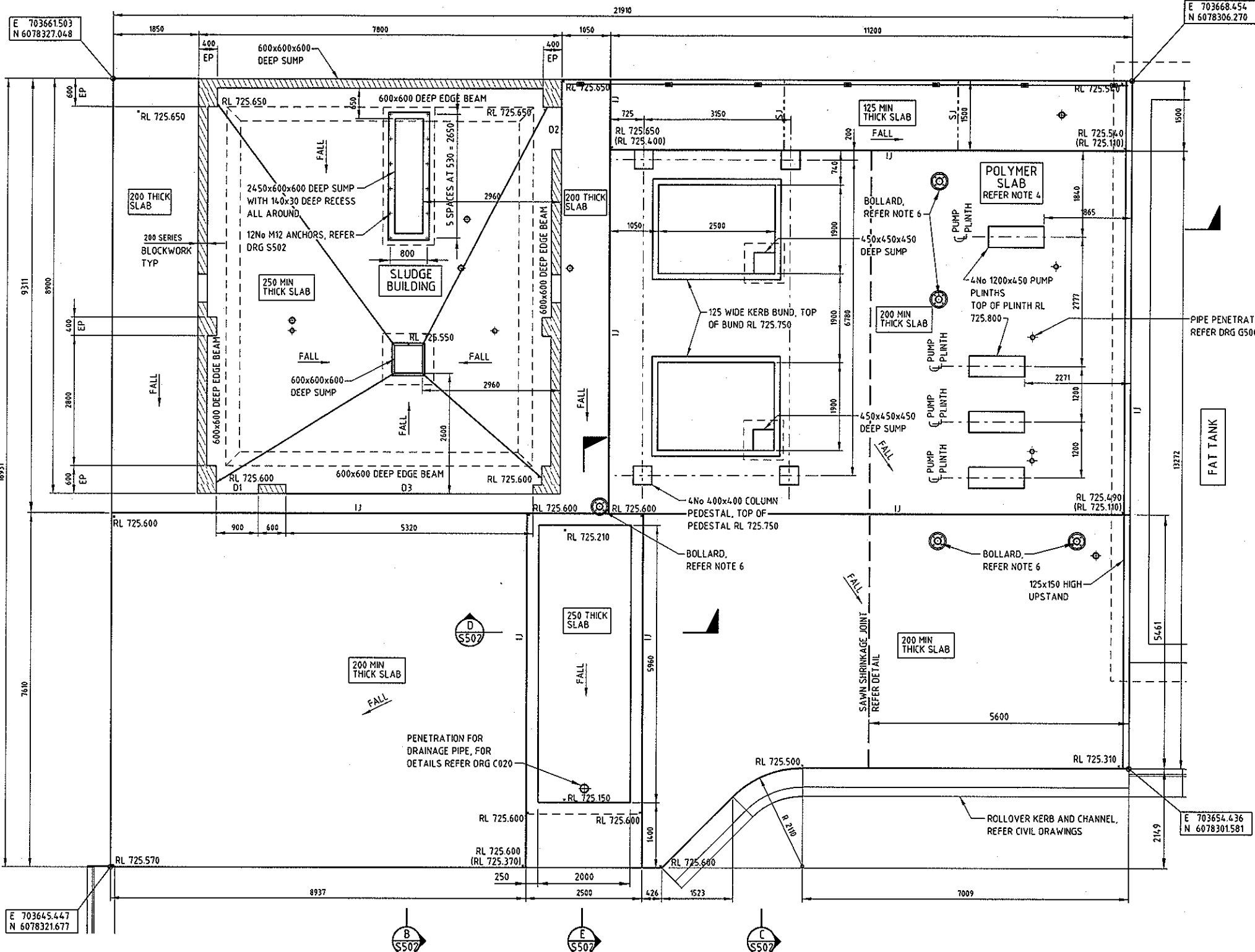
REV	DATE	BY	CHK	APP	DATE	PROF REGISTRATION
A	09.12.14	AK	RV	SC	09.12.14	
		DRN	CHK	APP	DATE	

NO.	DESCRIPTION	DATE

Client:  

GOOGONG WATER RECYCLING PLANT STAGE AB
SLUDGE DEWATERING AREA - GENERAL ARRANGEMENT
SECTIONS SHEET 5

Status Stamp	
FOR REVIEW	
Date Stamp	08.12.14
Scale	AS SHOWN
Drawing No.	83502156-01-001-G506
Rev.	A



NOTES

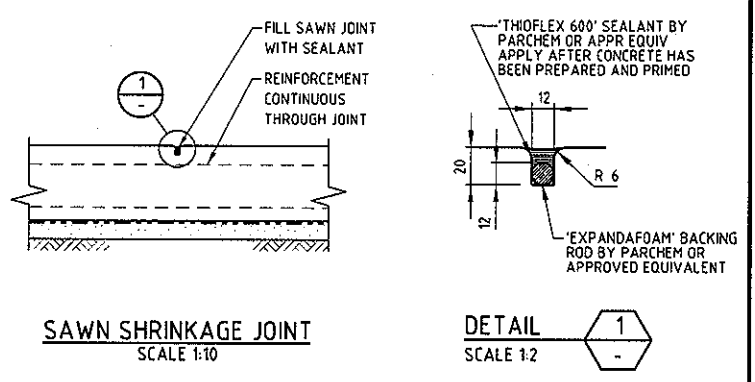
- FOR GENERAL NOTES REFER DRG 1
- MINIMUM ALLOWABLE SAFE BEAR
- IJ DENOTES ISOLATION JOINT, REF
- POLYMER SLAB SURFACE TO BE TREATED WITH ANTI-SLIP COATING
- GRADE OF CONCRETE - N32
- BOLLARDS TO BE INDUSTRIAL LEDA OR APPROVED EQUIVALENT

BCA certifiers
 ABN: 58 119 755 734
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 17/12/2014
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CONCRETE COVER

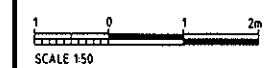
MEMBER	TOP	BOTTOM	THICKNESS
SLAB	40	50	81
PLINTHS	40	40	81

- REFERENCE DRAWINGS**
- C020 YARD PIPING PLAN
 - C012 ROAD AND DRAINAGE LAYOUT PLAN
 - G500 SLUDGE DEWATERING AREA - GA PLAN



EP - DENOTES ENGAGED PIER
 REDUCED LEVELS FOR THE UNDERSIDE OF SLAB ARE SHOWN WITHIN BRACKETS.
 WHEN NOT SHOWN, USE THICKNESS OF SLAB AS SHOWN ON DRAWING.

ORIGINAL SIZE A1



REV	DESCRIPTION	SBC	JW	SC	11.12.14
1	APPROVED FOR CONSTRUCTION				
	REVISIONS	DRN	CHK	APP	DATE

SURVEYED	DESIGNED	DRAWN	CAD REVIEW	DESIGN CHECK	DESIGN REVIEW	APPROVED	PROF REGISTRATION
	Amogh Deshpande	Steve Coyle	Alan Gilbert	Amogh Deshpande	Jaya Weerasinghe	Stephen Chapman	



GOOGONG WATER RECYCLING PLANT STAGE AB

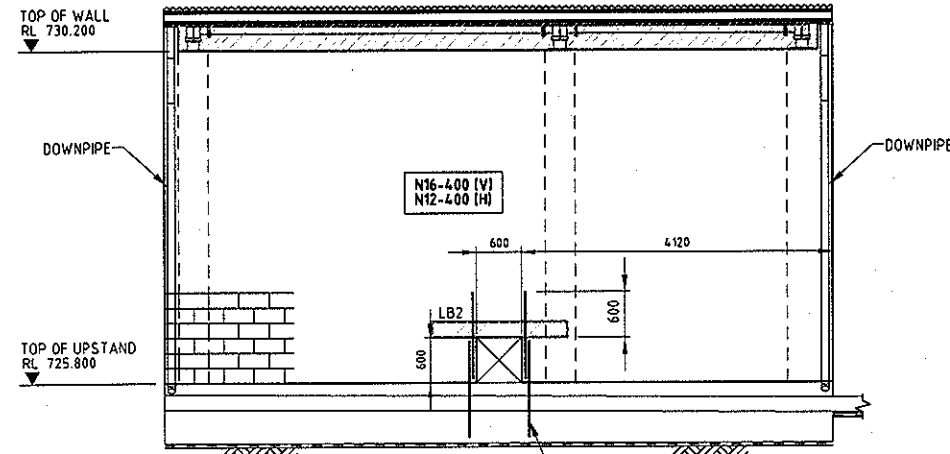
SLUDGE DEWATERING BUILDING PLANS

Status Stamp
FOR CONSTRUCTION
Date Stamp 11.12.14
Scales AS SHOWN
Drawing No 83502156-01-001-S500
Rev 1

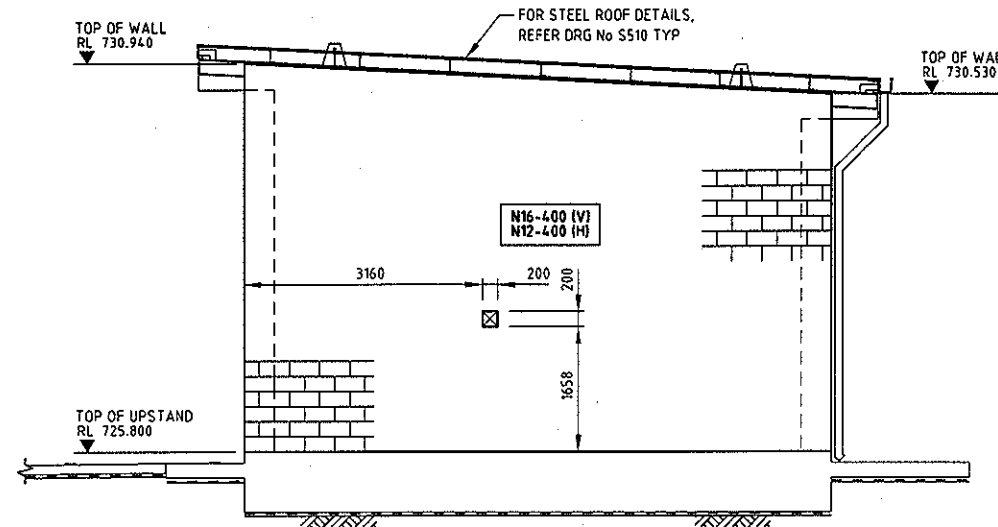
NOTES

1. FOR GENERAL NOTES REFER DRG 83501256-01-001-G003 & G004.
2. FIRE RESISTANT DOORSETS SHALL CONFORM TO AS/NZS 1905.1-2005 "COMPONENTS FOR THE PROTECTION OF OPENINGS IN FIRE-RESISTANT WALLS, FIRE-RESISTANT DOORSETS."
3. BLOCKWORK TO BE 200 SERIES TO AS 4455.
4. ALL BLOCKWORK CORES TO BE FULLY GROUTED.
5. BOND BEAM KNOCKOUT BLOCKS TO BE USED FOR HORIZONTAL BOND BEAMS.
6. PROVIDE DOOR LOCKS TO CLIENT REQUIREMENTS.
7. LB DENOTES LINTEL BEAM, REFER DRG No 503
8. MASONRY WALL TIES TO BE INSTALLED IN ACCORDANCE WITH THE GENERAL PROJECT SPECIFICATIONS.
9. THE PENETRATIONS OR GAPS TO THE EXTERIOR OF THE BUILDING NOT NOMINATED ON THE DRAWINGS SHALL BE SEALED WITH A NON-CORROSIVE MESH WITH A APERTURE SIZE OF 2mm OR LESS IN ACCORDANCE WITH AS1680.2.4.

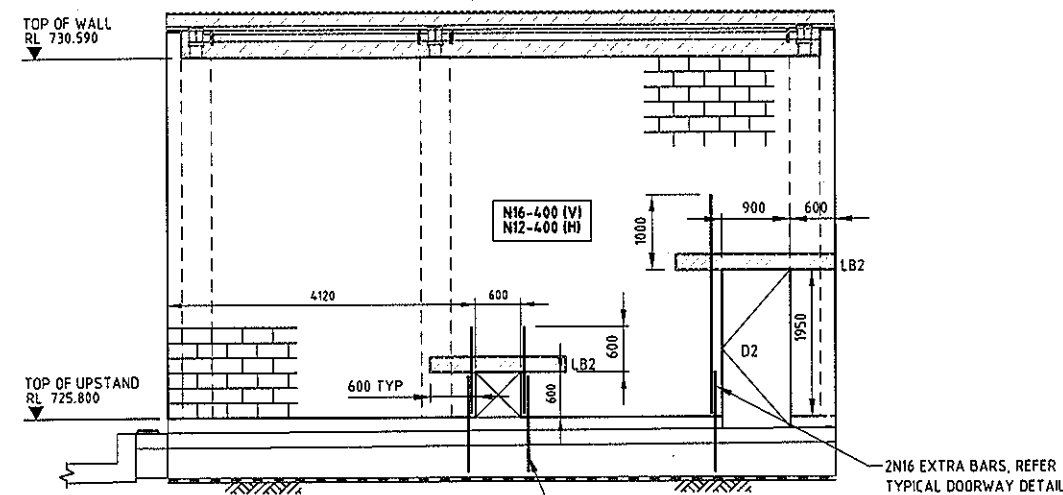
BCA certifiers
 ABN: 58 119 755 734
CONSTRUCTION CERTIFICATE
 CC140503-5
 17/12/2014
 Principal Certifying Authority
 Annette Owen BPB1771



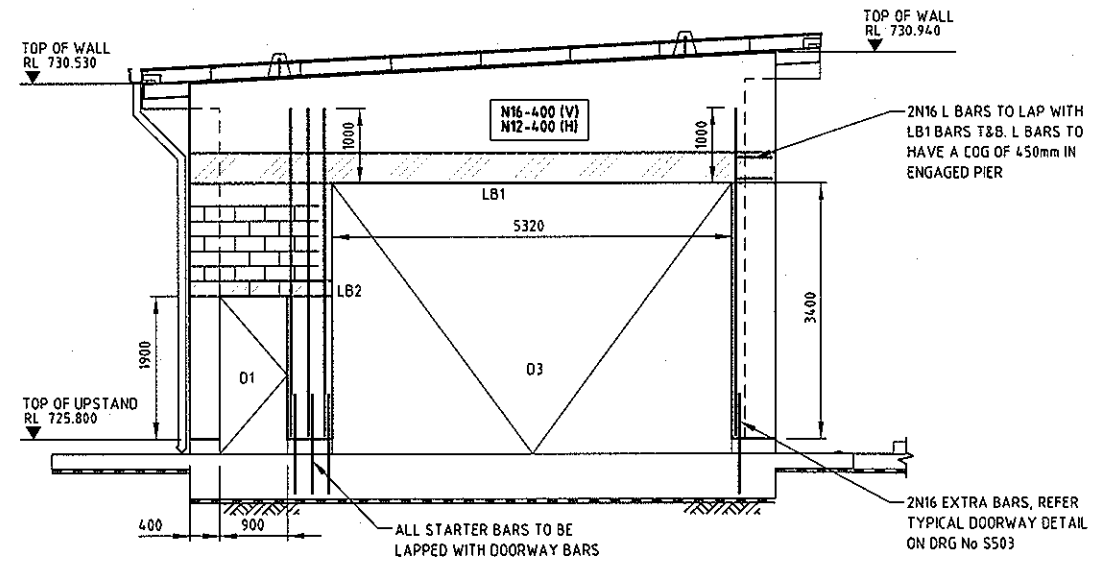
NORTH ELEVATION
SCALE 1:50



EAST ELEVATION
SCALE 1:50



SOUTH ELEVATION
SCALE 1:50



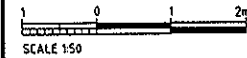
WEST ELEVATION
SCALE 1:50

DOOR SCHEDULE

MARK	CLEAR OPENING WIDTH x HEIGHT	SPECIFICATION
O1, D2	900 x 2100	DOORS SHALL BE 40mm THICK, PLY LINED SOLID CORE DOORS OF WEATHERPROOF QUALITY
O3	5320x 3600	AUSTRAL MONSOON 2 HOUR FIRE RATED GALVANISED STEEL ROLLER SHUTTER OR APPROVED EQUIVALENT TO SUIT CLEAR OPENING DIMENSIONS C/W ELECTRIC OPERATION. ROLLER SHUTTER TO BE TESTED AND INSTALLED TO AS1530 PART 4.

COLOUR SCHEME

ELEMENT	SPECIFICATION
ROOFING	COLORBOND COLOUR "JASPER"
GUTTERS AND DOWNPIPES	COLORBOND COLOUR "LOFT"
BARGE CAPPING	COLORBOND COLOUR "LOFT"
EXTERNAL BLOCKWORK	COLORBOND COLOUR "ARAVA"



REV	DESCRIPTION	SBC	JW	SC	DATE
1	APPROVED FOR CONSTRUCTION				11.12.14

ROLE	NAME	DATE
SURVEYED		
DESIGNED	Anogh Deshpande	29.09.14
DRAWN	Steve Coyle	29.09.14
CAD REVIEW	Alan Gilbert	11.12.14
DESIGN CHECK	Anogh Deshpande	11.12.14
DESIGN REVIEW	Jaya Weerasinghe	11.12.14
APPROVED	Stephen Chapman	11.12.14

Client: **MWH** **GOOGONG**

GOOGONG WATER RECYCLING PLANT STAGE AB
SLUDGE DEWATERING BUILDING WALL ELEVATIONS

Status Stamp
FOR CONSTRUCTION
 Date Stamp: 11.12.14
 Scale: AS SHOWN
 Drawing No: 83502156-01-001-S501
 Rev: 1

ORIGINAL SIZE A1
 300 mm
 250
 200
 150
 100
 50
 0

NOTES

- FOR GENERAL NOTES REFER DRG S500.
- SOIL AND ROCK PROFILES SHOWN ARE INDICATIVE ONLY AND ARE INTERPOLATED FROM A LIMITED NUMBER OF BORELOG AND TEST PIT DATA IN GEOTECHNICAL REPORTS REFERENCED ON DRG No 83500349-01-001-C002.
- CHEQUER PLATE COVER DESIGNED FOR A 3kPa PEDESTRIAN LIVE LOAD.

LEGEND

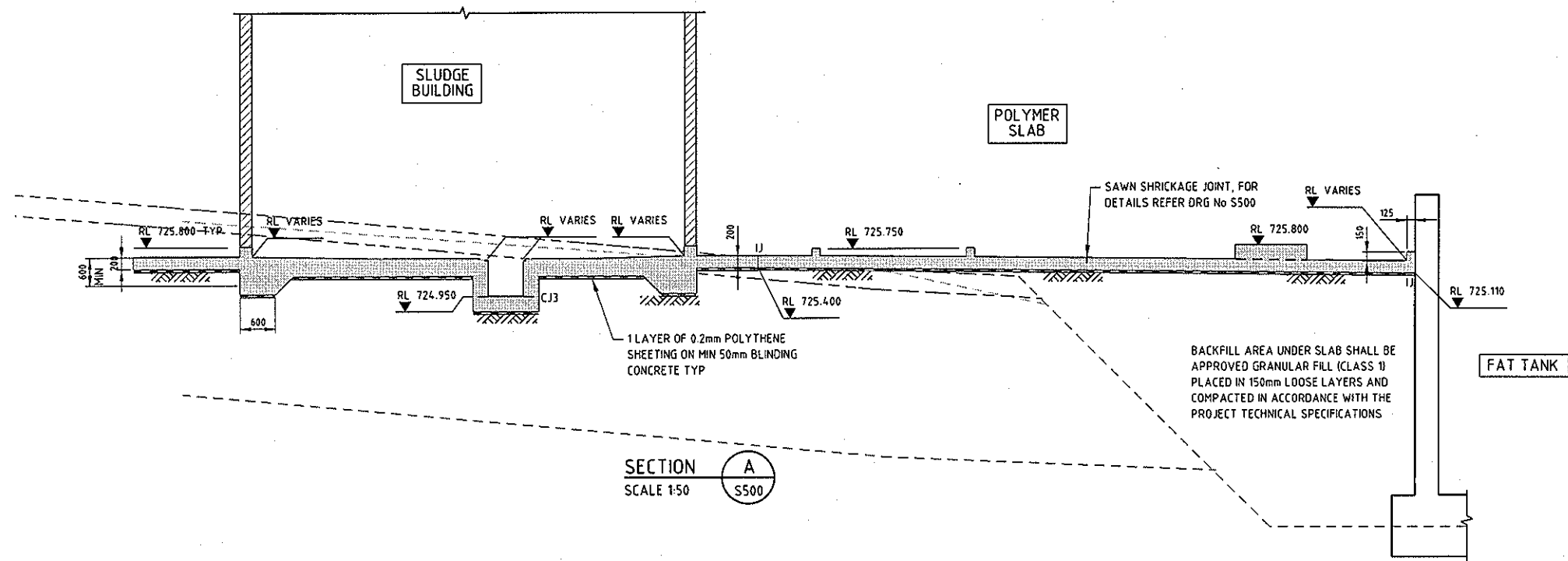
- TOPSOIL/SLOPEWASH
- RESIDUAL SOIL
- EW/HW & HW ROCK
- MW/SW & LESS WEATHERED ROCK

BCA certifiers
 ABN: 58 119 755 754
CONSTRUCTION CERTIFICATE
 CC140503-5
 17/12/2014
 Principal Certifying
 Authority
 Annette Owen BPB1771

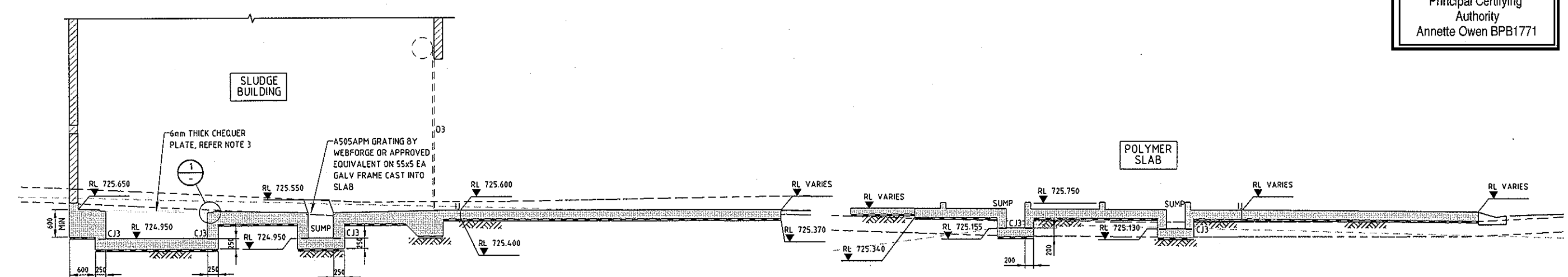
DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
75
50
25
0

ORIGINAL SIZE A1

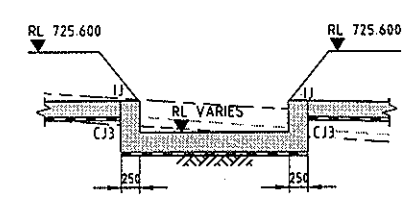


SECTION A
SCALE 1:50
S500

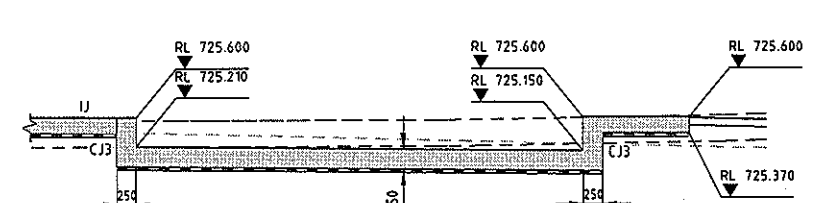


SECTION B
SCALE 1:50
S500

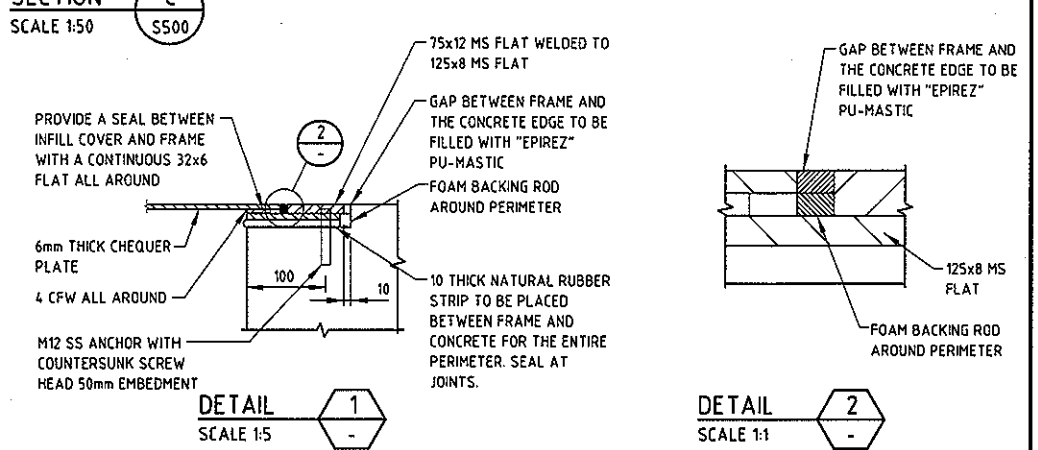
SECTION C
SCALE 1:50
S500



SECTION D
SCALE 1:50
S500



SECTION E
SCALE 1:50
S500



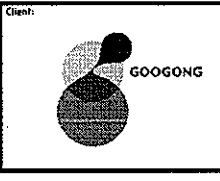
DETAIL 1
SCALE 1:5

DETAIL 2
SCALE 1:1



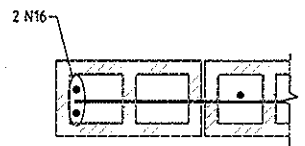
REV	APPROVED FOR CONSTRUCTION	SBC	JW	SC	11.12.14
REV	REVISIONS	ORN	CHK	APP	DATE
1	APPROVED FOR CONSTRUCTION				11.12.14

DESIGNED	Amogh Deshpande	22.09.14
DRAWN	Steve Coyle	22.09.14
CAD REVIEW	Alan Gilbert	11.12.14
DESIGN CHECK	Amogh Deshpande	11.12.14
DESIGN REVIEW	Jaya Weerasinghe	11.12.14
APPROVED	Stephen Chapman	11.12.14

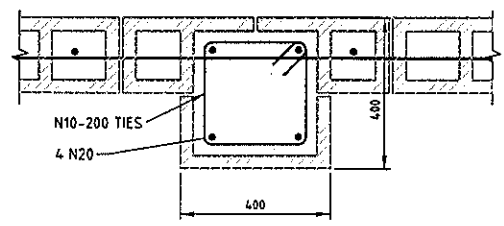


GOOGONG WATER RECYCLING PLANT STAGE AB
SLUDGE DEWATERING BUILDING BUILDING SECTIONS

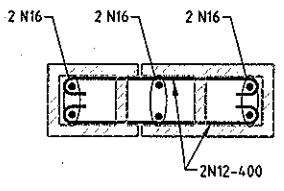
Status Stamp	FOR CONSTRUCTION
Date Stamp	11.12.14
Scale	AS SHOWN
Drawing No	83502156-01-001-S502
Rev	1



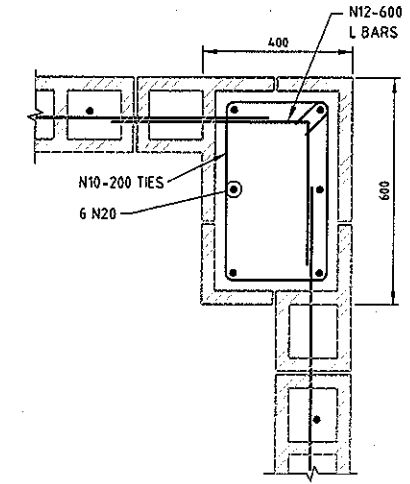
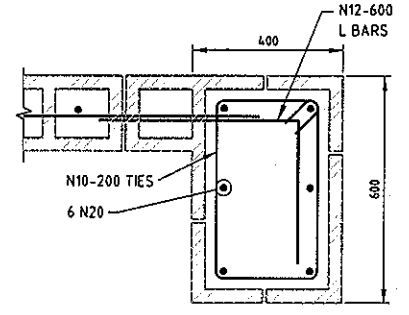
TYPICAL DOORWAY DETAIL
SCALE 1:10



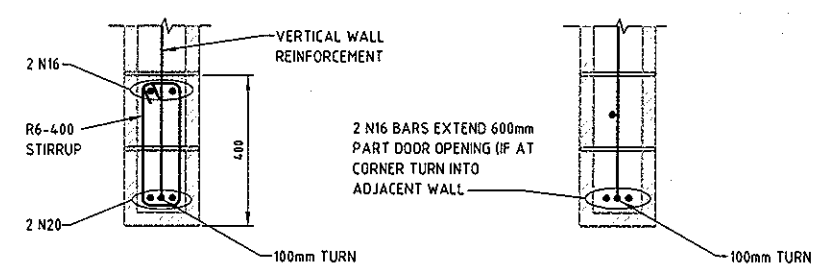
TYPICAL CENTRE ENGAGED PIER DETAIL
SCALE 1:10



TYPICAL SINGLE SKIN COLUMN DETAIL
SCALE 1:10

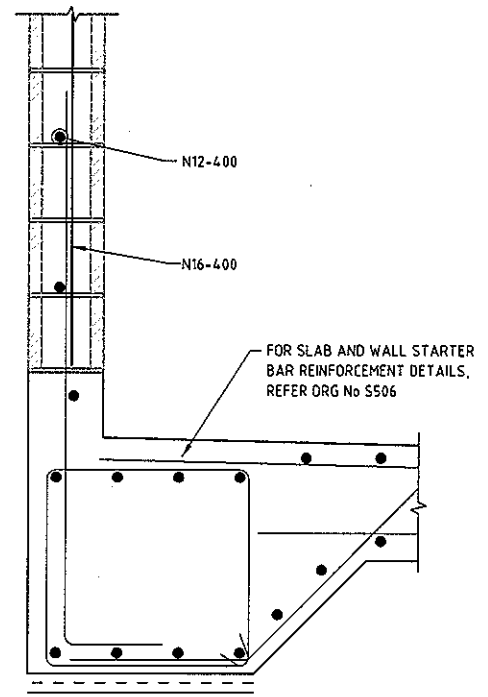


TYPICAL CORNER ENGAGED PIER DETAILS
SCALE 1:10



LINTEL BEAM LB1 DETAIL
SCALE 1:10

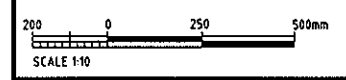
LINTEL BEAM LB2 DETAIL
SCALE 1:10



TYPICAL BLOCK WALL DETAIL
SCALE 1:10

ORIGINAL SIZE A1

DO NOT SCALE - IF IN DOUBT, ASK



REV	DESCRIPTION	BY	CHK	APP	DATE
1	APPROVED FOR CONSTRUCTION	SBC	JW	SC	11.12.14
	REVISIONS	DRN	CHK	APP	DATE

STATUS	NAME	DATE
SURVEYED		
DESIGNED	Amogh Deshpande	30.09.14
DRAWN	Steve Coyle	30.09.14
CAD REVIEW	Alan Gilbert	11.12.14
DESIGN CHECK	Amogh Deshpande	11.12.14
DESIGN REVIEW	Jaya Weerasinghe	11.12.14
APPROVED	Stephen Chapman	11.12.14



Client: **GOOGONG**

GOOGONG WATER RECYCLING PLANT STAGE AB

SLUDGE DEWATERING BUILDING BUILDING DETAILS

Status Stamp	FOR CONSTRUCTION
Date Stamp	11.12.14
Scales	AS SHOWN
Drawing No	83502156-01-001-S503
Rev	1

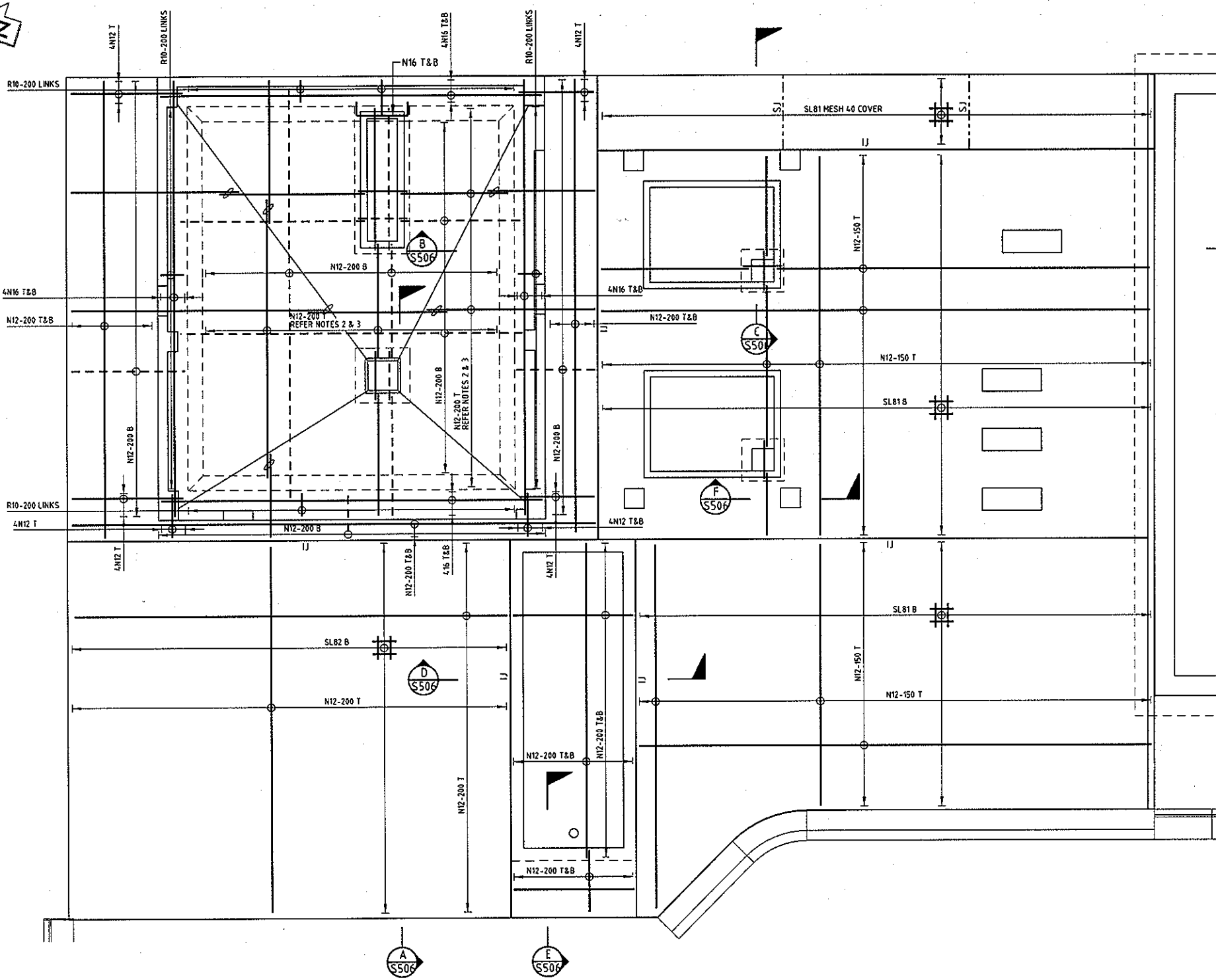
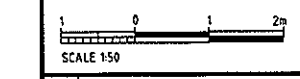


NOTES

- 1. FOR GENERAL NOTES REFER DRG 83501256-01-001-G003
- 2. TOP LAYER REINFORCEMENT TO BE BENT TO SUIT SLOPES IN THE SLUDGE BUILDING.
- 3. BAR LENGTHS VARY AS PER CONCRETE SLOPE.

BCA certifiers
 ABN: 53 119 755 734
CONSTRUCTION CERTIFICATE
 CC140503-5
 17/12/2014
 Principal Certifying
 Authority
 Annette Owen BPB1771

ORIGINAL SIZE A1
DO NOT SCALE - IF IN DOUBT, ASK



PLAN
SCALE 1:50

REV	DESCRIPTION	SBC	JW	SC	DATE
1	APPROVED FOR CONSTRUCTION	DRN	CHK	APP	11.12.14

SURVEYED	DESIGNED	DRAWN	CAD REVIEW	DESIGN CHECK	DESIGN REVIEW	APPROVED
	Amogh Deshpande	Steve Coyle	Alan Gilbert	Amogh Deshpande	Jaya Weerasinghe	Stephen Chapman

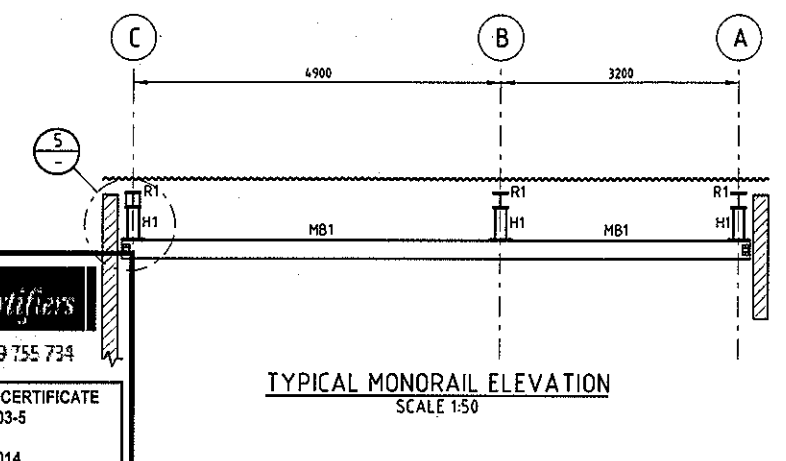
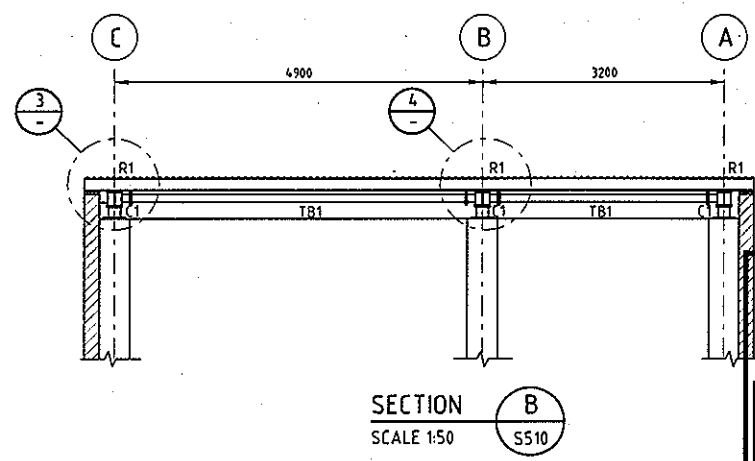
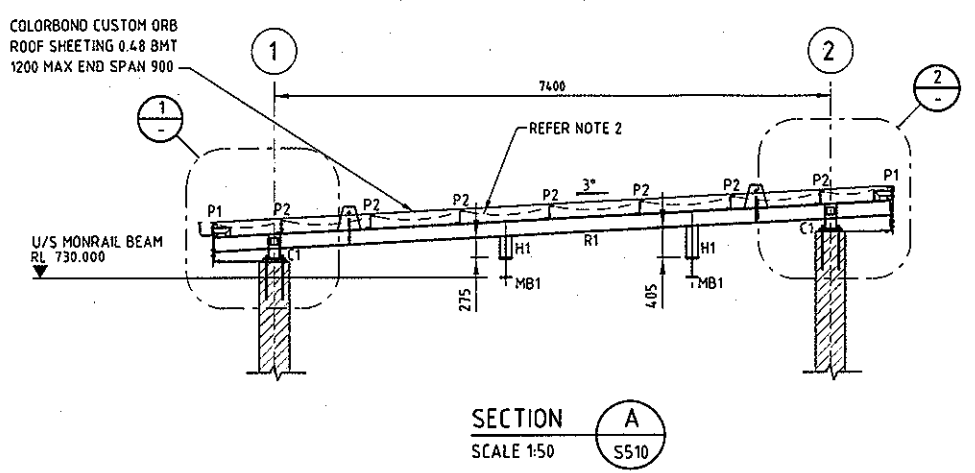


GOOGONG WATER RECYCLING PLANT STAGE AB

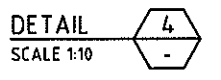
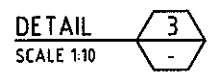
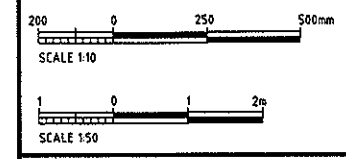
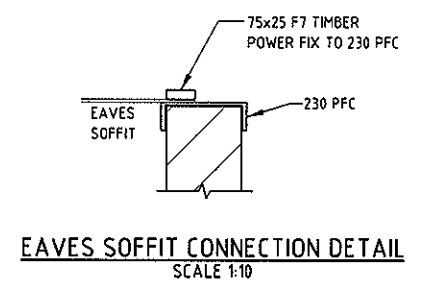
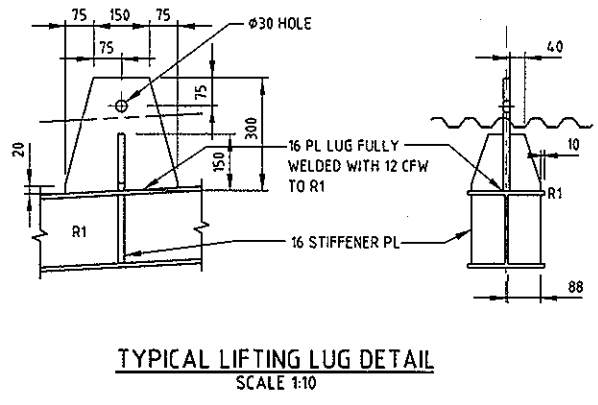
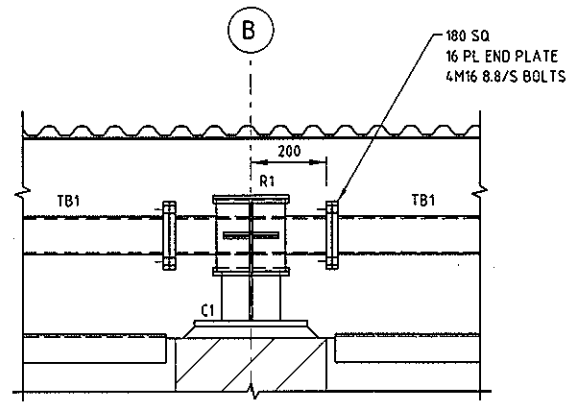
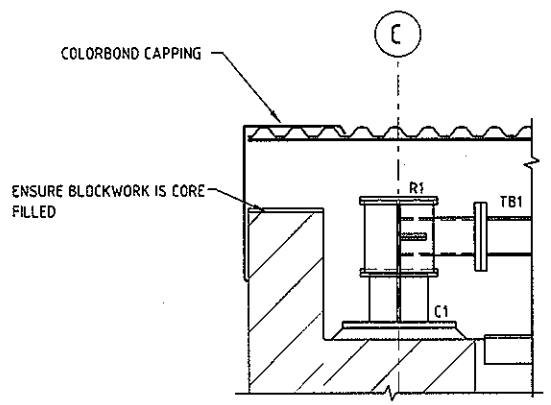
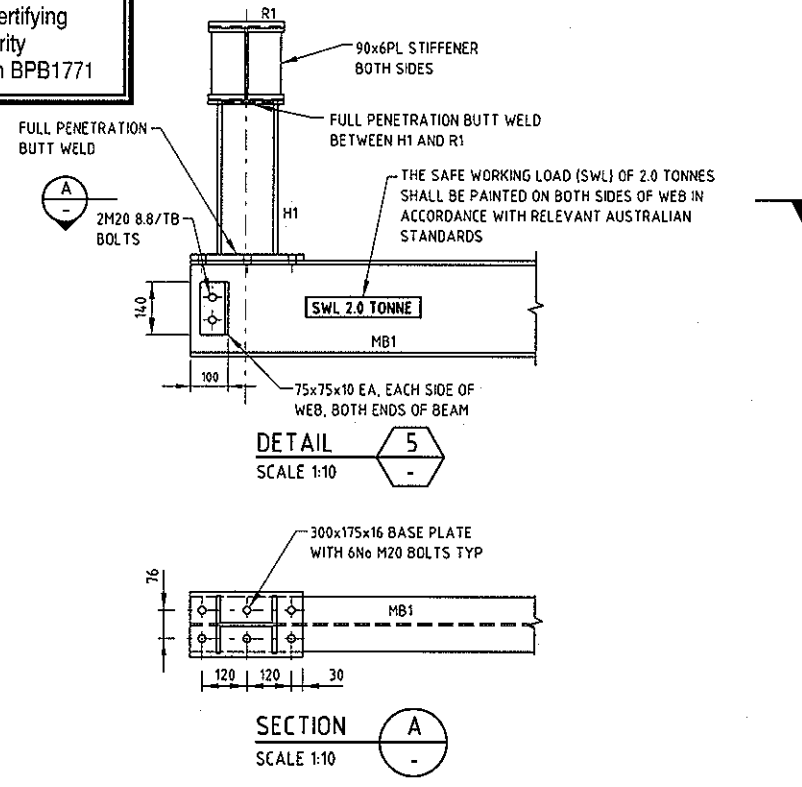
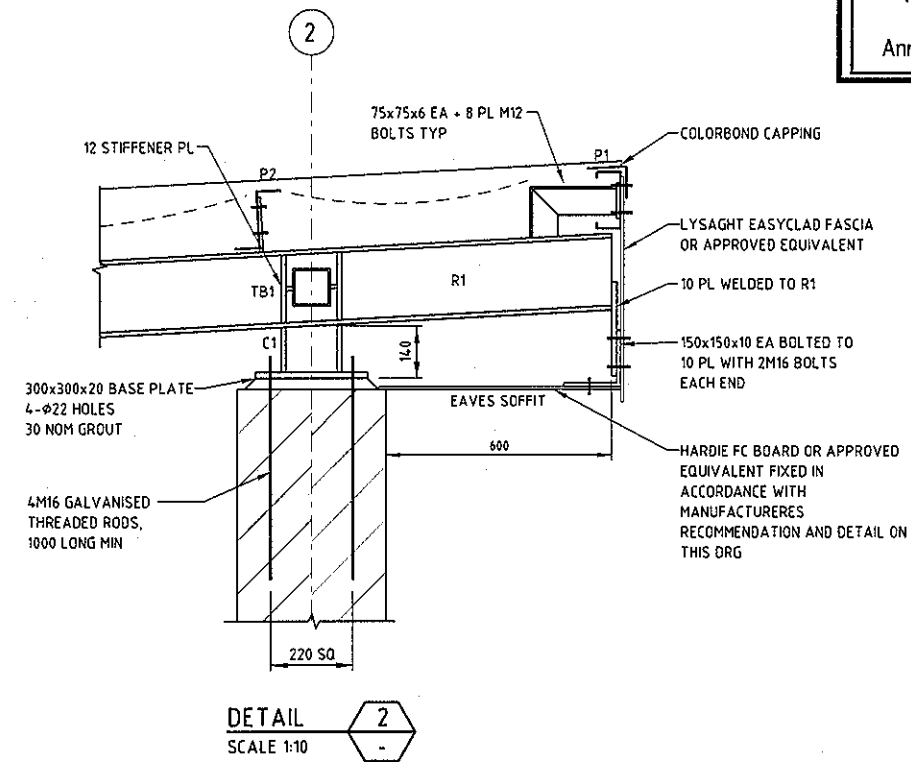
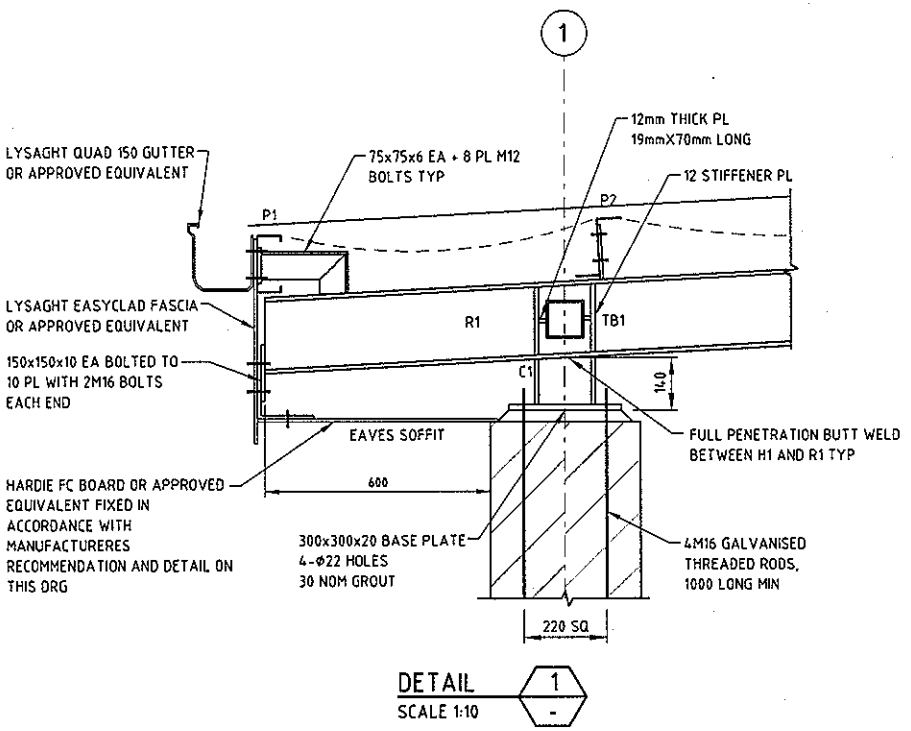
**SLUDGE DEWATERING BUILDING
REINFORCEMENT - PLAN**

Status Stamp	FOR CONSTRUCTION
Date Stamp	11.12.14
Scale	AS SHOWN
Drawing No	83502156-01-001-S505
Rev	1

DO NOT SCALE - IF IN DOUBT, ASK



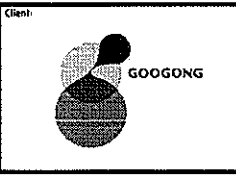
BCA certifiers
 66N: 58 119 755 734
 CONSTRUCTION CERTIFICATE
 CC140503-5
 17/12/2014
 Principal Certifying
 Authority
 Annette Owen BPB1771



- NOTES**
- NO. OFF AND LOCATION OF LIFTING LUGS TO BE CONFIRMED DURING CONSTRUCTION WITH LIFTING CONTRACTOR.
 - 50mm SEMI RIGID ACOUSTIC INSULATION ON TOP OF DOUBLE SIDED PERFORATED FOIL SUPPORTED BY SAFETY MESH. INSTALLATION AS PER AS4200.2 AND AS4389 AND TO MANUFACTURER'S DETAIL.

REV	DESCRIPTION	SBC	JW	SC	DATE
1	APPROVED FOR CONSTRUCTION				11.12.14
	REVISIONS	ORN	CHK	APP	DATE

SURVEYED	DESIGNED	DRAWN	CAD REVIEW	DESIGN CHECK	DESIGN REVIEW	APPROVED
	Amogh Deshpande	Steve Coyle	Alan Gilbert	Amogh Deshpande	Jaya Weerasinghe	Stephen Chapman



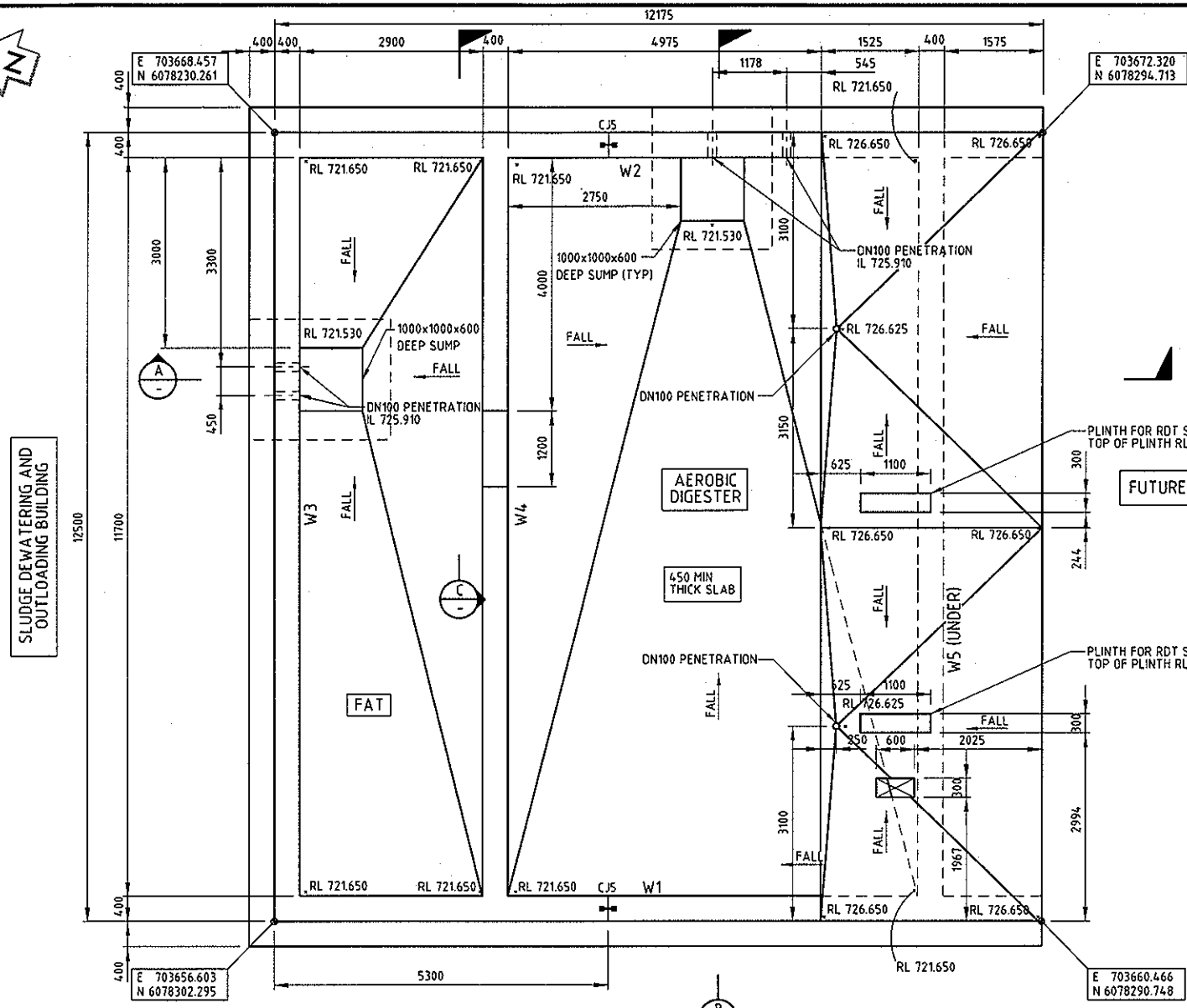
Client: **GOOGONG WATER RECYCLING PLANT STAGE AB**

SLUDGE DEWATERING BUILDING
STEELWORK - SECTIONS AND DETAILS

FOR CONSTRUCTION	
Date Stamp	11.12.14
Scale	AS SHOWN
Drawing No	83502156-01-001-S511
Rev	1



ORIGINAL SIZE A1
DO NOT SCALE - IF IN DOUBT, ASK



BCA certifiers
 ABN: 58 119 755 734
CONSTRUCTION CERTIFICATE
 CC140503-5
 17/12/2014
 Principal Certifying Authority
 Annette Owen BPB1771

DESIGN LOADING TABLE

STRUCTURE	COMPONENT	LOAD COMBINATION ADOPTED FOR DESIGN
AEROBIC DIGESTER / FAT TANK	BASE SLAB	SELF WEIGHT + UPLIFT PRESSURE
	EXTERNAL WALLS W1, W2 & W3	EXTERNAL SOIL PRESSURE + EXTERNAL WATER PRESSURE (NO WATER INSIDE) + EXTERNAL SOIL PRESSURE + 20kPa VEHICULAR SURCHARGE LOADING (SHORT TERM)
	INTERNAL WALLS W4 & W5	WATER PRESSURE ON ONE FACE
	RDY SLAB	SLAB SELF WEIGHT + RDY WET WEIGHT - 3.1T + 5kPa LIVE LOAD

NOTES

- FOR GENERAL NOTES REFER DRG 83501256-01-001-G003 AND G004
- SOIL AND ROCK PROFILES SHOWN ARE INDICATIVE ONLY AND ARE INTERPOLATED FROM A LIMITED NUMBER OF BORELOG AND TEST PIT DATA IN GEOTECHNICAL REPORTS REFERENCED ON DRG No 83500349-01-001-C002. TENDERER SHALL BE RESPONSIBLE FOR ESTIMATING QUANTITIES BASED ON ALL INFORMATION AVAILABLE
- GRADE OF CONCRETE S4.0
- FOR JOINT DETAILS REFER TO DRG. S003
- FOR PIPE PENETRATION DETAILS REFER DRG. S001
- SAFE BEARING CAPACITY AT FORMATION LEVEL (AS PER GEOTECHNICAL REPORT) = 2500kPa.

LEGEND

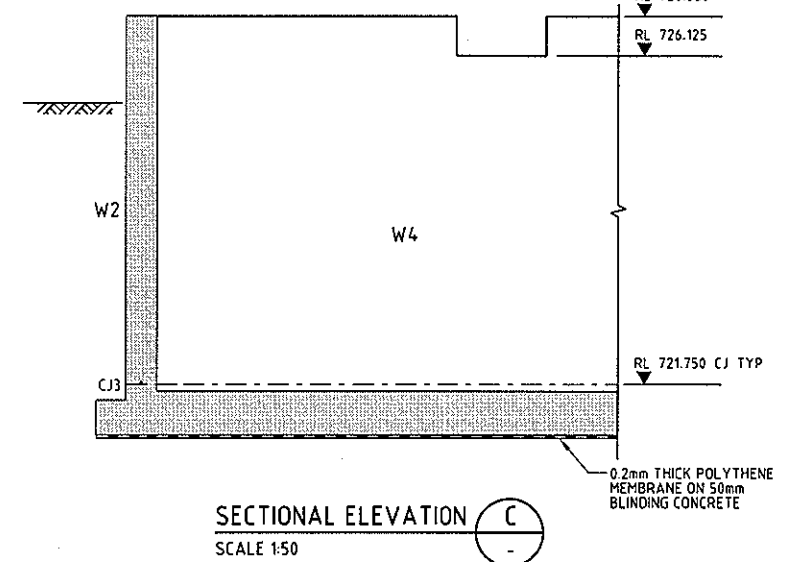
- TOPSOIL/SLOPEWASH
- RESIDUAL SOIL
- EW/HW & HW ROCK
- MW/SW & LESS WEATHERED ROCK

CONCRETE COVER TO REINFORCEMENT

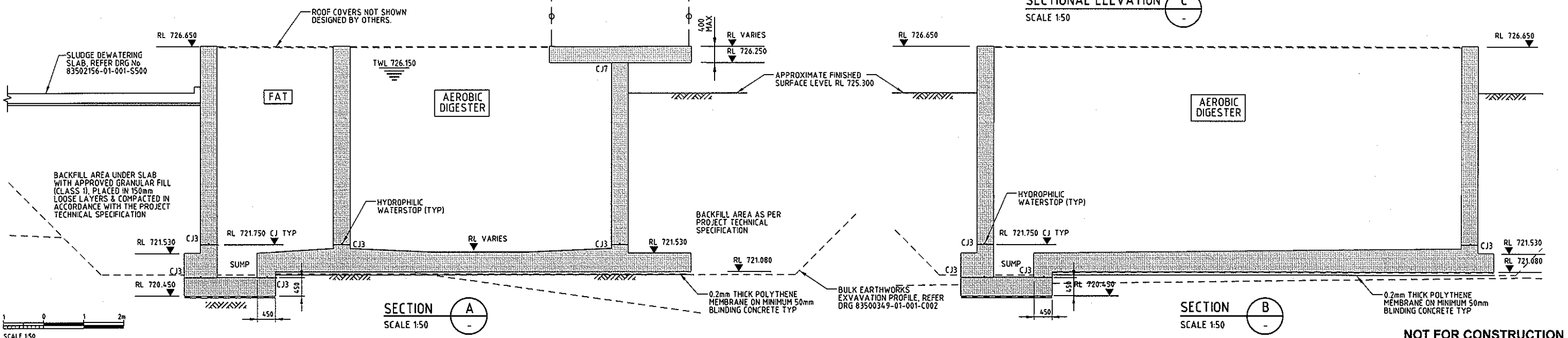
CHAMBER	MEMBER	TOP	BOTTOM	SIDE	EXPOSURE	CLASSIFICATION
AEROBIC DIGESTER & FAT TANK	ROOF	50	75	-	-	B1/D
	WALLS W4/W5	-	-	75	75	D
	WALLS W1/W2/W3	-	-	50	75	B1/D
	BASE	75	50	-	-	D/B1

REFERENCE DRAWINGS

- G500 SLUDGE DEWATERING AREA GA PLAN
- S003 JOINT DETAILS
- S519 STEELWORK DETAILS



SECTIONAL ELEVATION C
SCALE 1:50



SECTION A
SCALE 1:50

SECTION B
SCALE 1:50

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	DRN	CHK	APP
C	IFC FOR REVIEW	11.12.14	SC	AD	SC
B	ISSUED FOR 90% REVIEW	10.10.14	SC	AD	SC
A	ISSUED FOR 90% REVIEW	19.09.14	SC	AD	SC

REV	DESCRIPTION	DATE	DRN	CHK	APP
C	IFC FOR REVIEW	11.12.14	SC	AD	SC
B	ISSUED FOR 90% REVIEW	10.10.14	SC	AD	SC
A	ISSUED FOR 90% REVIEW	19.09.14	SC	AD	SC

MWH

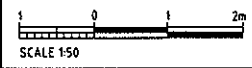
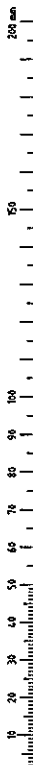
GOOGONG

GOOGONG WATER RECYCLING PLANT STAGE AB
FAT & AEROBIC TANK 1
PLAN AND SECTIONS

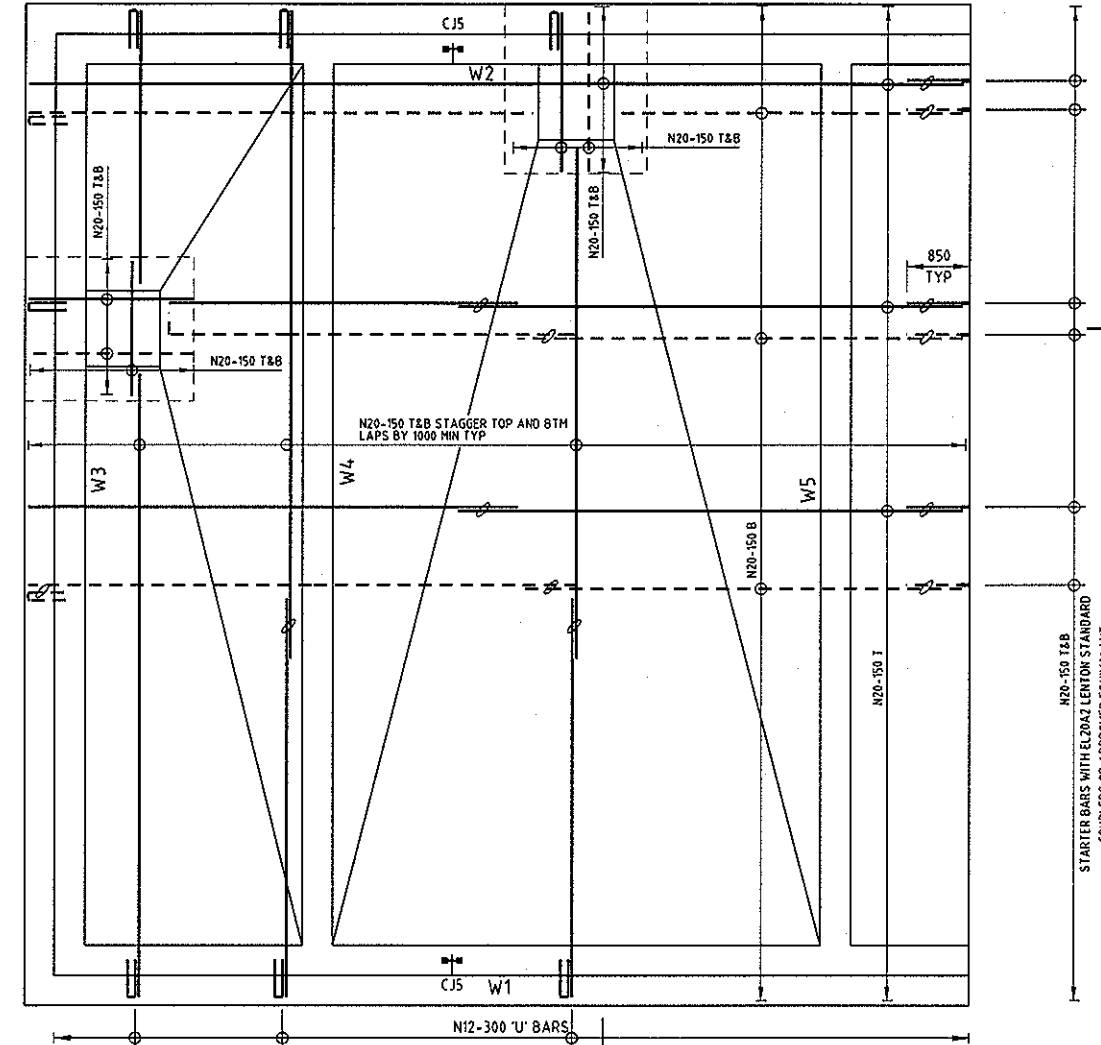
FOR REVIEW
 Date Stamp: 11.12.14
 Drawing No: 83502156-01-001-S514
 Rev: C

ORIGINAL SIZE A1

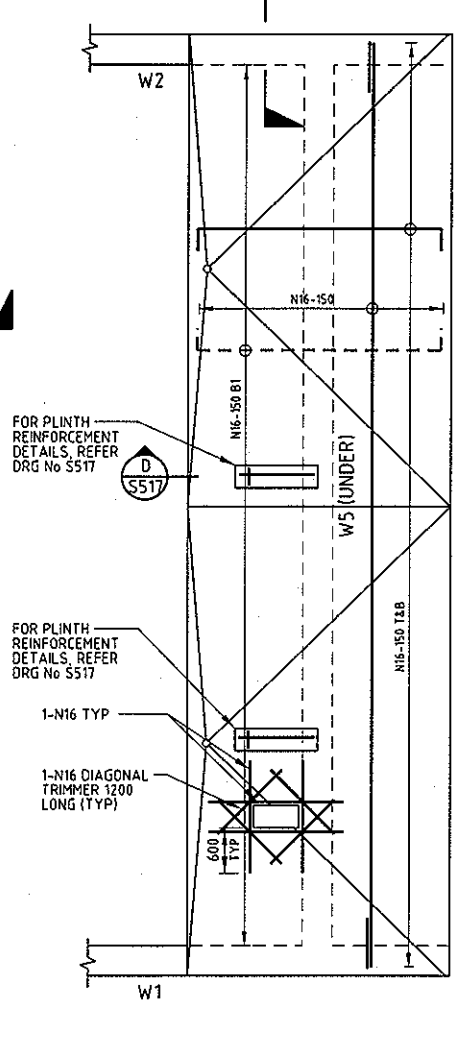
DO NOT SCALE - P.P. IN DOUBT, ASK



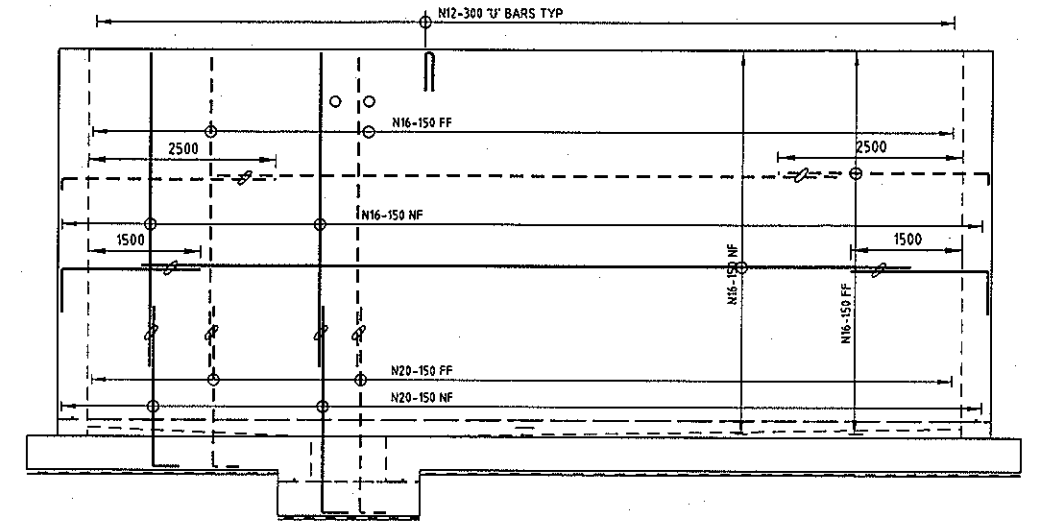
REV	DESCRIPTION	DATE
C	IFC FOR REVIEW	11.12.14
B	ISSUED FOR 90% REVIEW	10.10.14
A	ISSUED FOR 90% REVIEW	19.09.14



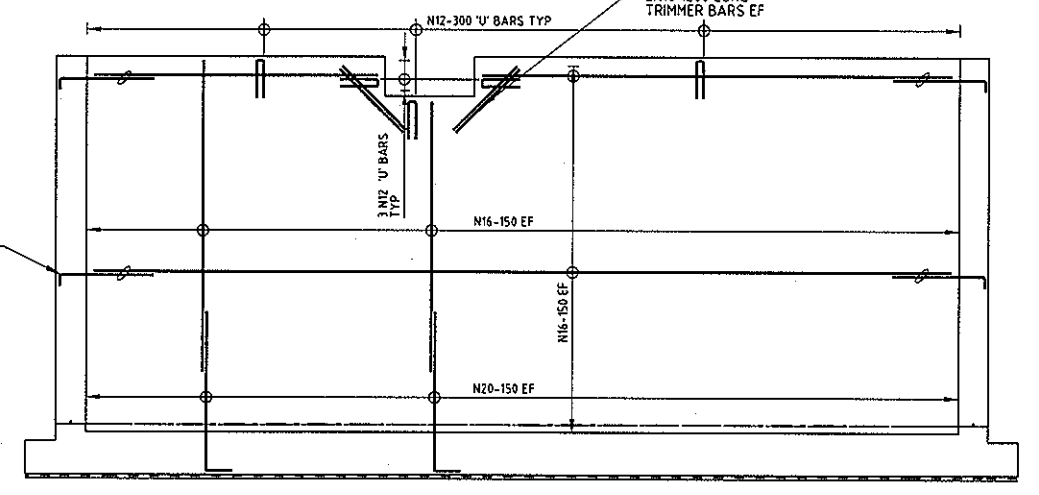
BASE SLAB PLAN
SCALE 1:50



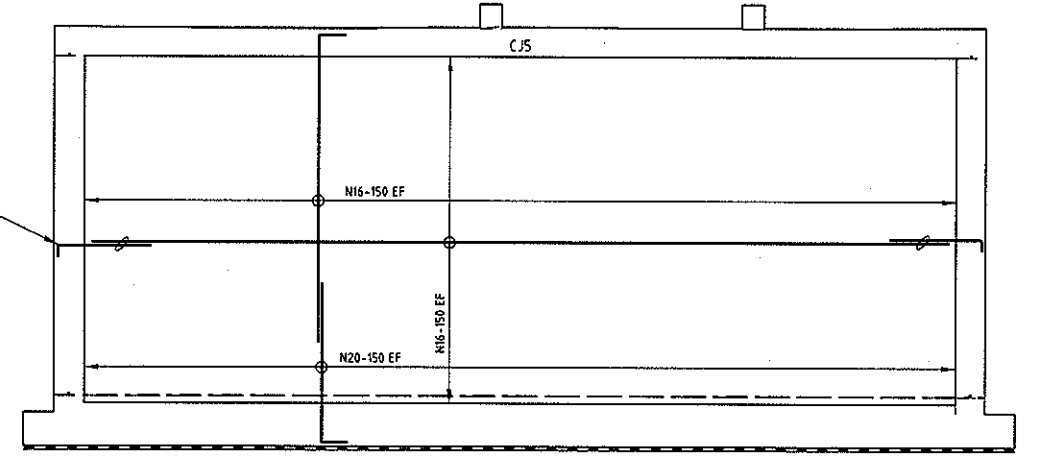
PLAN AT RL 726.650
SCALE 1:50



WALL ELEVATION W3
SCALE 1:50



WALL ELEVATION W4
SCALE 1:50



WALL ELEVATION W5
SCALE 1:50

BCA certifiers

ABN: 58 119 755 734

CONSTRUCTION CERTIFICATE
CC140503-5

17/12/2014

Principal Certifying
Authority
Annette Owen BPB1771

- NOTES**
- FOR NOTES, REFER DRG No 83502156-01-001-S514
 - ALL WALL CORNER DETAILS SHALL BE TYPE C1, REFER DRG No 83502156-01-001-S001
 - ALL TEE CORNER DETAILS SHALL BE TYPE T1, REFER DRG No 83502156-01-001-S001

NOT FOR CONSTRUCTION

SURVEYED	DESIGNED	DRAWN	CAD REVIEW	DESIGN CHECK	DESIGN REVIEW	APPROVED	PROF REGISTRATION
	Amogh Deshpande	Steve Coyle	Alan Gilbert	Amogh Deshpande	Jaya Weerasinghe	Stephen Chapman	



GOOGONG WATER RECYCLING PLANT STAGE AB

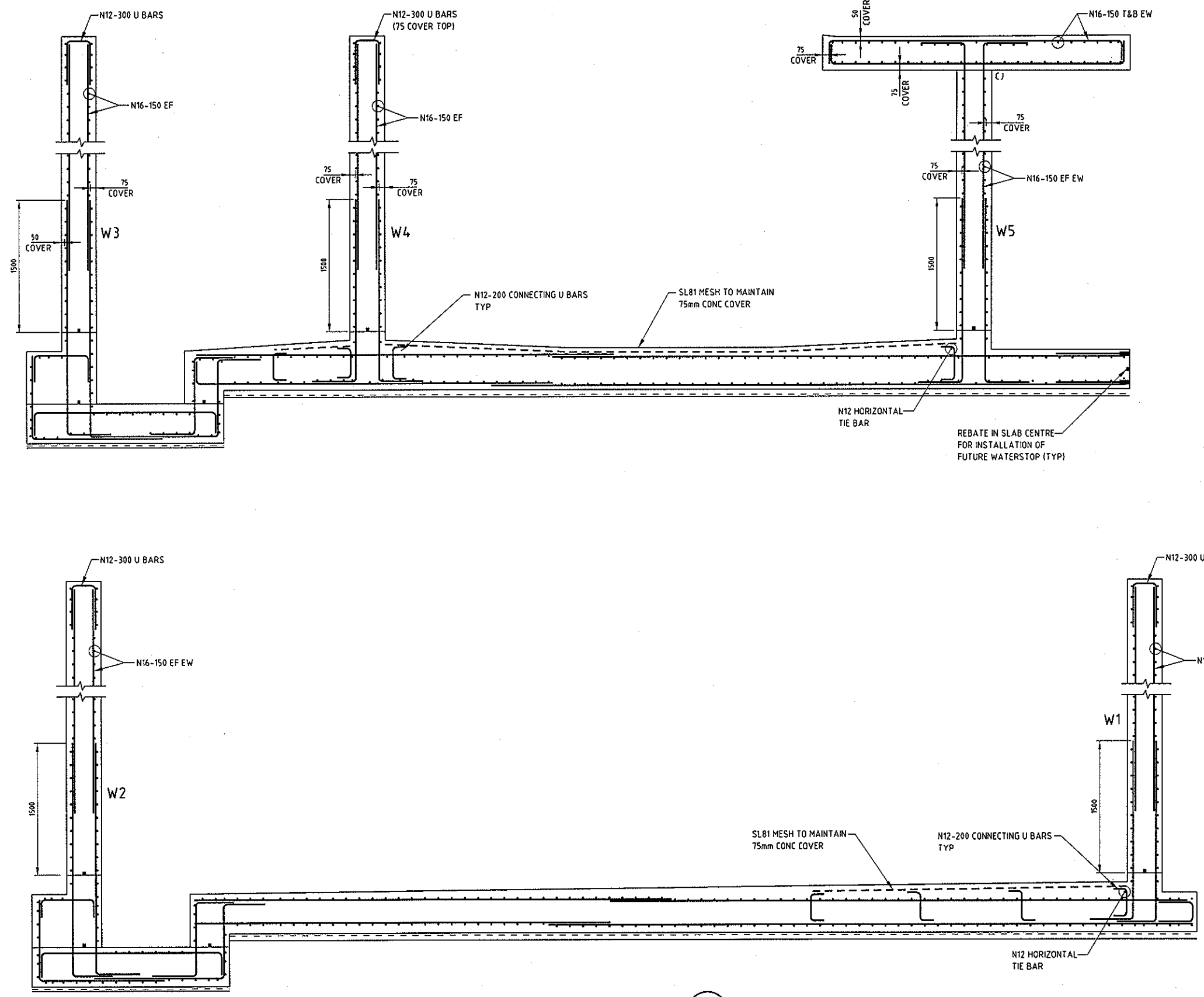
FAT & AEROBIC TANK 1

REINFORCEMENT DETAILS - SHEET 1

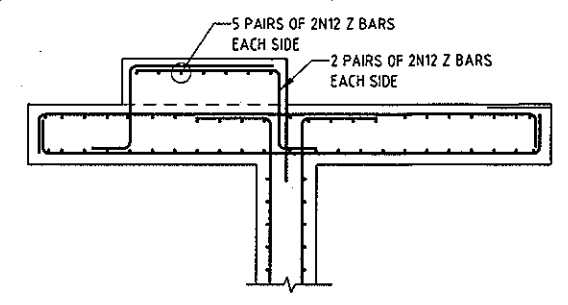
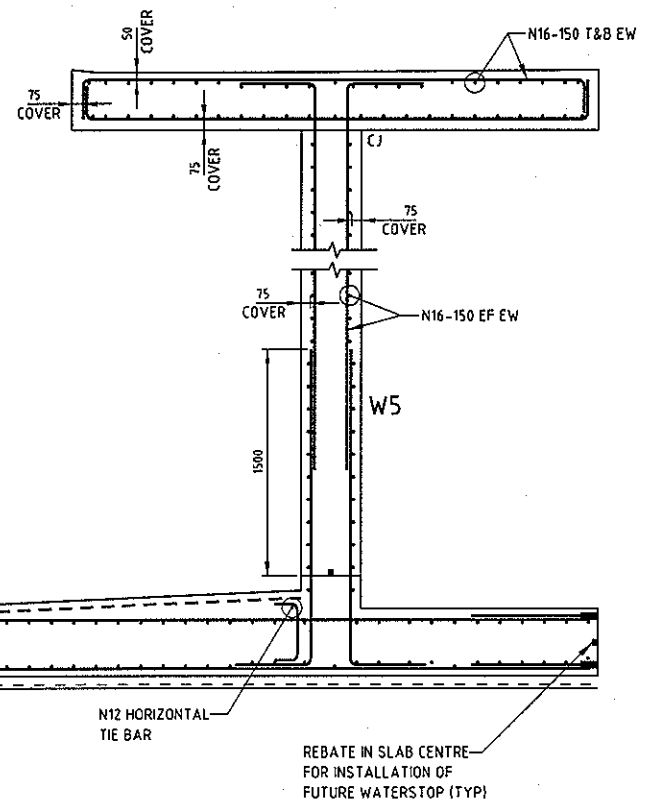
Status Stamp	FOR REVIEW
Date Stamp	11.12.14
Scales	AS SHOWN
Drawing No	83502156-01-001-S516

ORIGINAL SIZE A1

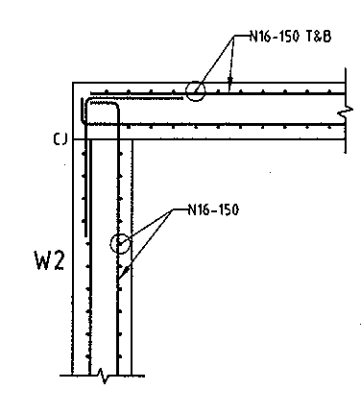
500 0 500mm 1m
SCALE 1:25



SECTION B
SCALE 1:25 S516



SECTION D
SCALE 1:25 S516



SECTION C
SCALE 1:25 S516

ALL REINFORCEMENT TO BE N20-150 EW EF UNO

NOTES
1. FOR NOTES, REFER DRG No 83502156-01-001-S516

NOT FOR CONSTRUCTION

Status Stamp	FOR REVIEW
Date Stamp	11.12.14
Scale	AS SHOWN
Drawing No	83502156-01-001-S517
Rev	C

BCA certifiers
 ABN: 58 119 755 734
 CONSTRUCTION CERTIFICATE
 CC140503-5
 17/12/2014
 Principal Certifying
 Authority
 Annette Owen BPB1771

REV	DESCRIPTION	DRN	CHK	APP	DATE	PROF REGISTRATION
C	IFC FOR REVIEW	SC	AD	SC	11.12.14	
B	ISSUED FOR 90% REVIEW	SC	AD	SC	19.09.14	
A	ISSUED FOR 90% REVIEW	SC	AD	SC	19.09.14	

DESIGNED	DATE
Amogh Deshpande	15.09.14
Steve Coyle	15.09.14
Alan Gilbert	19.09.14
Amogh Deshpande	19.09.14
Jaya Weerasinghe	19.09.14
Stephen Chapman	11.12.14

Client: **MWH** **GOOGONG**

GOOGONG WATER RECYCLING PLANT STAGE AB
 FAT & AEROBIC TANK 1
 REINFORCEMENT DETAILS - SHEET 2