

**MALCOLM DOUGLAS
CONSULTANTS PTY. LTD.**

Civil & Structural Engineers
Planning & Project Managers
A.C.N. 010 767 058

Suite 7, Level 1
445 Upper Edward Street,
Spring Hill Q 4000
Tel: (07) 3832 5844
Fax: (07) 3221 2932
Email: mdcon@bigpond.net.au

18 February , 2008

Principal Engineer
Operations Division, Environmental Protection Agency
PO BOX 15155
City East QLD 4002
Australia

Dear Sir

Submission of Certified Design Drawings - CopperCo Lady Annie Operations

On behalf of CopperCo Lady Annie Operations Limited, we enclose certified design drawings for the construction of hazardous dams on the Lady Annie Expansion mining leases as follows:

Drawing No.	Title
1574-C-0501	Leach Pads 1-9 Civil - Setout
1574-C-0502	Leach Pads 1-9 Civil - Sections and Details
1574-C-0503	Stormwater Pond Civil - Setout & Sections
1574-C-0504	Leach Pads 126-21 Civil - Setout
1574-C-0505	Leach Pads 16-21 Civil Sections& Details
1574-C-0506	Stormwater Pond No. 2 Civil Setout & Sections
1574-C-0507	20-20-24-PD-301,302,303,ILS,PLS,SWP3-Civil-Arrangement
1574-C-0509	Overland Channel-Civil-Layout &Details
1574-C-0103	Mt.,Kelly Process & Storm Ponds-Stage 3 Reporting Levels
1574-C-0510	Mt.Kelly Process & Storm Ponds-Stage 2 Reporting Levels

In my capacity as a Registered Professional Engineer Queensland, I certify that the designs shown in the drawings are consistent with relevant hazardous dam conditions in Environmental Authority MIN100401006 and have been designed to appropriate engineering standards.

Yours faithfully
Malcolm Douglas Consultants Pty. Ltd.

s.49 - Signature

W.R.Whitaker
Director
RPEQ 1094

DIRECTORS:

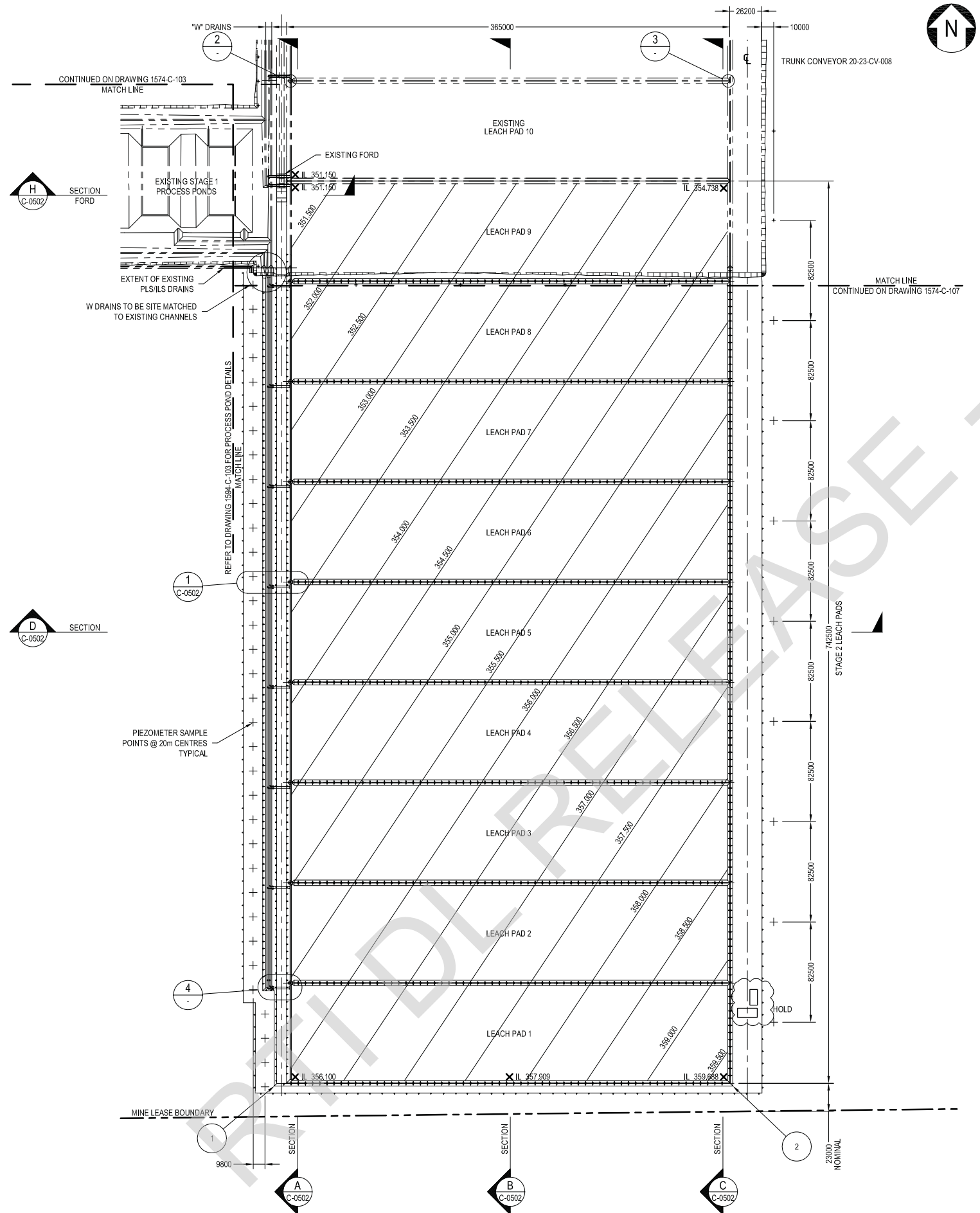
WAYNE WHITAKER B.E., M.I.E.Aust., R.P.E.Q.

13-137

DANIEL TONINO B.E., M.I.E.Aust., R.P.E.Q.

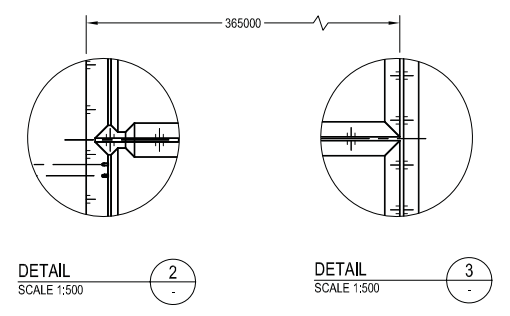
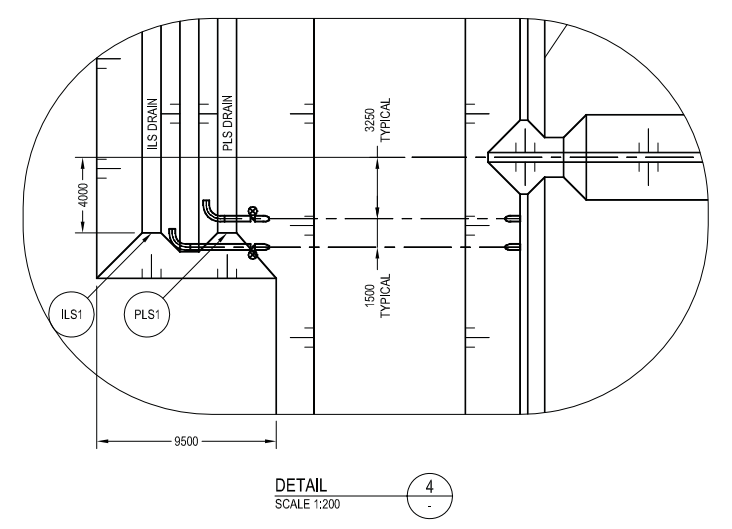
CONSULTANT:

File E Documents
MALCOLM DOUGLAS M.I.E.Aust., R.P.E., C.Eng., M.I.St.E., P.Eng., L.G.Eng.

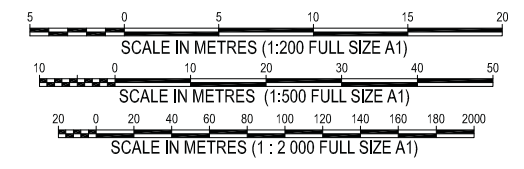


- NOTES:
1. GRADE 1V:2H U.N.O.
 2. GROUND LINE SHOWN AS --- TYPICAL
 3. SURFACE AFTER STRIPPING SHOWN AS --- TYPICAL
 4. TYPICAL FALL ACROSS PADS IS 1:150 FROM PAD 1 TO PAD 9.
 5. TYPICAL FALL ALONG THE LENGTH OF EACH PAD IS 1:100.
 6. NORTHERN SETOUT CO-ORDINATES ARE SETOUT POINTS ON EXISTING LEACH PAD 10 REFER TO DRAWING 1574-C-107.

SETOUT CO-ORDINATES TO AGD84		
POINT	EASTING	NORTHING
1	302 056.600	7 796 642.150
2	302 434.100	7 796 642.150
ILS1	302 050.000	7 796 722.900
PLS1	302 054.000	7 796 722.900



FOR CONSTRUCTION



intech
ENGINEERS

95 Brunswick Street, Fortitude Valley, Brisbane QLD, 4006
ABN 58 011 070 625 13413766 0006, FAX 61 7 3696 0004
Email intech@intechengineers.com.au, www.intechengineers.com.au

DIMENSIONS IN MILLIMETERS
DO NOT SCALE

REV	REVISION DETAILS	DATE	BY	CHKD	APPD	DWNG NO	REFERENCE DRAWING TITLE	SCALE	1:2000	CLIENT
A	FOR COMMENT	13/11/07	DMC			1574-G-0500	GENERAL ARRANGEMENT	DRAWN	DMC	29/01/08
B	FOR APPROVAL	13/11/07	DMC			1574-G-0502	LEACHPADS 1 TO 9 - SECTIONS AND DETAILS	CHKD	DJB	18/02/08
C	FOR INFORMATION	28/11/07	DMC	DJB	DJB	1574-C-103	EARTHWORKS AND MT KELLY STORMWATER PONDS	DESIGN	WW	18/02/08
T1	ISSUE FOR TENDER	4/12/07	DMC	DJB	RE	1574-C-107	MT KELLY LEACH PAD SETOUT PLAN	APPROVED - INTECH	DATE	
0	APPROVED FOR CONSTRUCTION	05/02/08	MAM	DJB / WW	RRE			APPROVED - CLIENT	DATE	
								R.R. ELLIS	18/02/08	

File E Documents



DWG TITLE
**LADY ANNIE EXPANSION PROJECT - STAGE 2
MT KELLY SITE - HEAP LEACH
LEACHPADS 1 TO 9
CIVIL - SETOUT**

FILE NAME
725CA0503RevESWP2 18-10-07

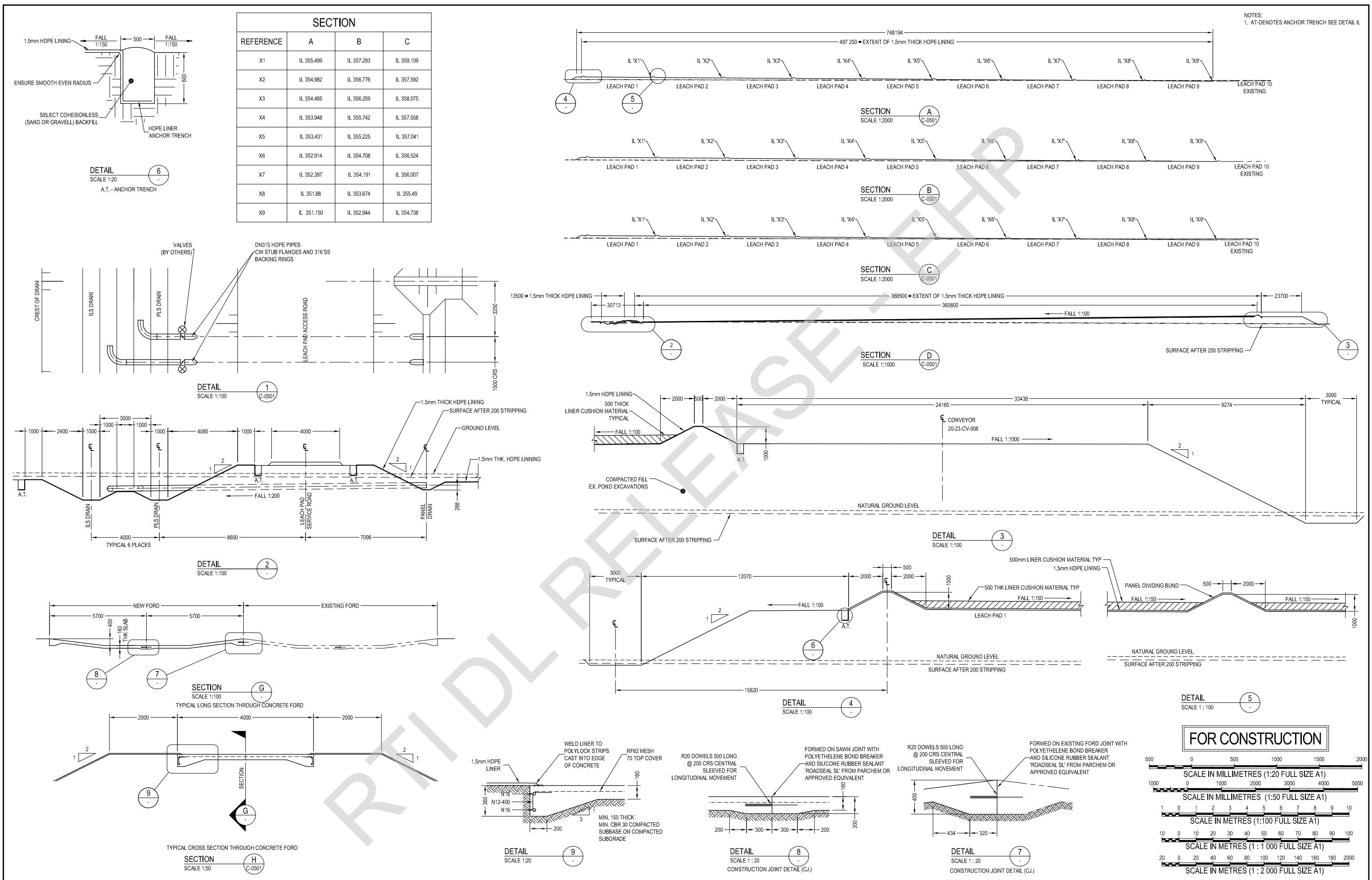
PROJECT
0725

DWG NO
1574-C-0501

Page 2 of 27

REV
0

SHEET
A1



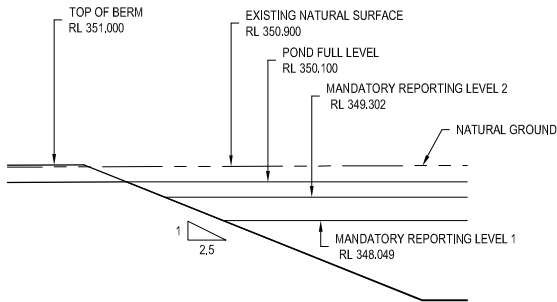
SETOUT CO-ORDINATES TO AGD84		
POINT	EASTING	NORTHING
1	301 738.800	7 797 383.800
2	301 467.200	7 797 382.700
3	301 735.000	7 797 184.600
4	301 468.300	7 797 187.200

STAGE 1 & 2 HYDROLOGY PARAMETERS

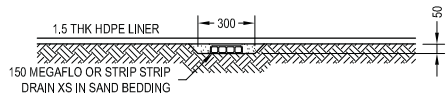
• TOTAL CONTRIBUTING CATCHMENT AREA	6999 975 m²
• REQUIRED PROCESS WATER STOTAGE VOLUME	43 200 m³
• 100 YEAR 2 MONTH WET SEASON RUNOFF TOTAL STORAGE VOLUME	576 710 m³
• REQUIRED TOTAL STORAGE VOLUME	619 910 m³
• AVAILABLE PROCESS POND STORAGE VOLUME	44 850 m³
• AVAILABLE ALL PONDS FULL STORAGE VOLUME (TO STORMWATER POND OVERFLOW SPILL WAY LEVEL RL 350.10)	623 856 m³

MANDATORY REPORTING LEVEL 1 VOLUME	RL 348.038 m
• 100 YEAR 72 HOUR STORM VOLUME	237 382 m³

MANDATORY REPORTING LEVEL 2 VOLUME	RL 349.141 m
• 10 YEAR 24 HOUR STORM VOLUME	105 001 m³

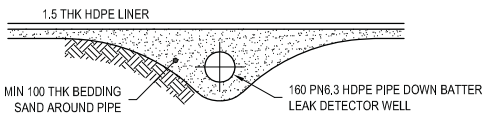


SECTION
SCALE 1:200



SECTION
SCALE 1:20

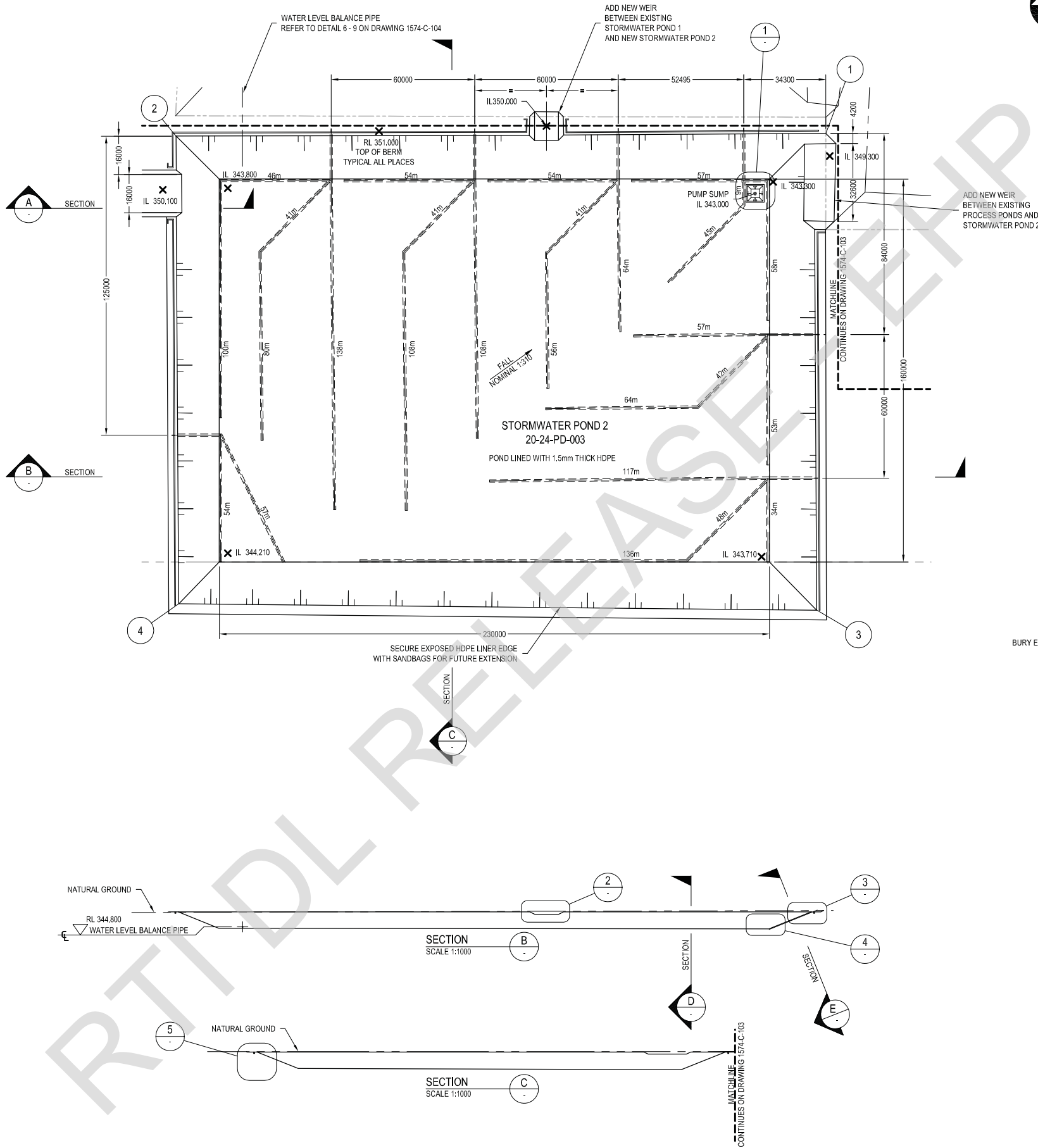
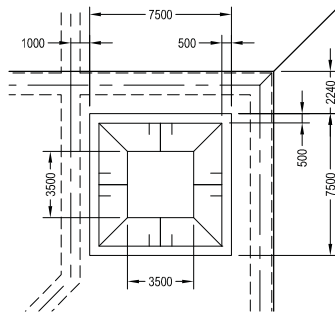
UNDER LINER
LEAK DETECTION TRENCH



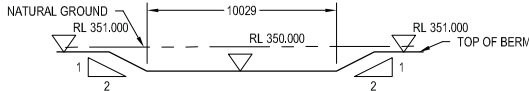
SECTION
SCALE 1:20

DOWN BATTER
LEAK DETECTOR WELL

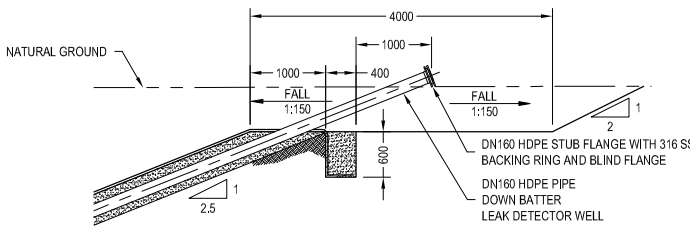
- NOTES:
1. GRADE 1V: 2.5H ON PONDS AND 1V: 2H ON WIERS UNO.
 2. FOR DETAILED REQUIREMENTS COVERING EARTHWORKS, ROADWORKS & DRAINAGE, REFER TO 725-SP-0041.
 3. FOR DETAILED REQUIREMENTS COVERING GEO-TECH LINING, REFER TO 725-SP-0042.



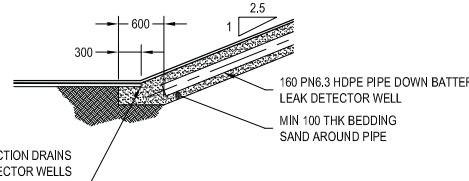
DETAIL
SCALE 1:200



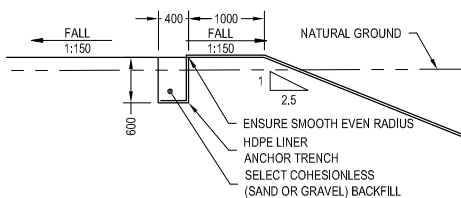
DETAIL
SCALE 1:200



DETAIL
SCALE 1:50

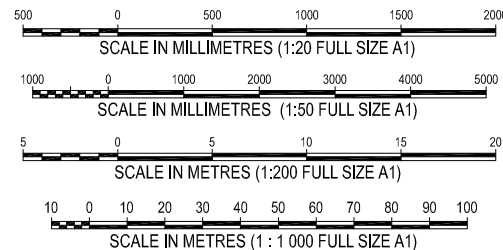


DETAIL
SCALE 1:50

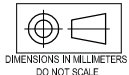


DETAIL
SCALE 1:50

FOR CONSTRUCTION



95 Brunswick Street, Fortitude Valley, Brisbane QLD, 4006
ABN 58 011 070 625 134 13766 0006, FAX 61 7 3666 0004
Email: intech@intechengineers.com.au, www.intechengineers.com.au



REV	REVISION DETAILS	DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE	SCALE	1:1000	CLIENT
E	NUMBER CHANGED FROM 725-CA-0024 TO 1574-C-0503	08/10/07	MAM			1574-C-0500	SITE LAYOUT	DRAWN	MAM	29/01/08
T1	FOR TENDER	19/12/07	MAM	DJB		1574-C-103	MT KELLY PROCESS AND STORMWATER PONDS SETOUT PLAN	CHKD	DJB	18/02/08
T2	ISSUED FOR TENDER	29/01/08	DMC	DJB		1574-C-104	MT KELLY PROCESS AND STORMWATER PONDS CROSS SECTIONS	DESIGN	VW	18/02/08
0	APPROVED FOR CONSTRUCTION	18/02/08	MAM	DJB/VW	RRE			APPROVED - INTECH	DATE	
								D.J. BYRNE	18/02/08	
								APPROVED - CLIENT	DATE	
								R.R. ELLIS	18/02/08	

File E Documents

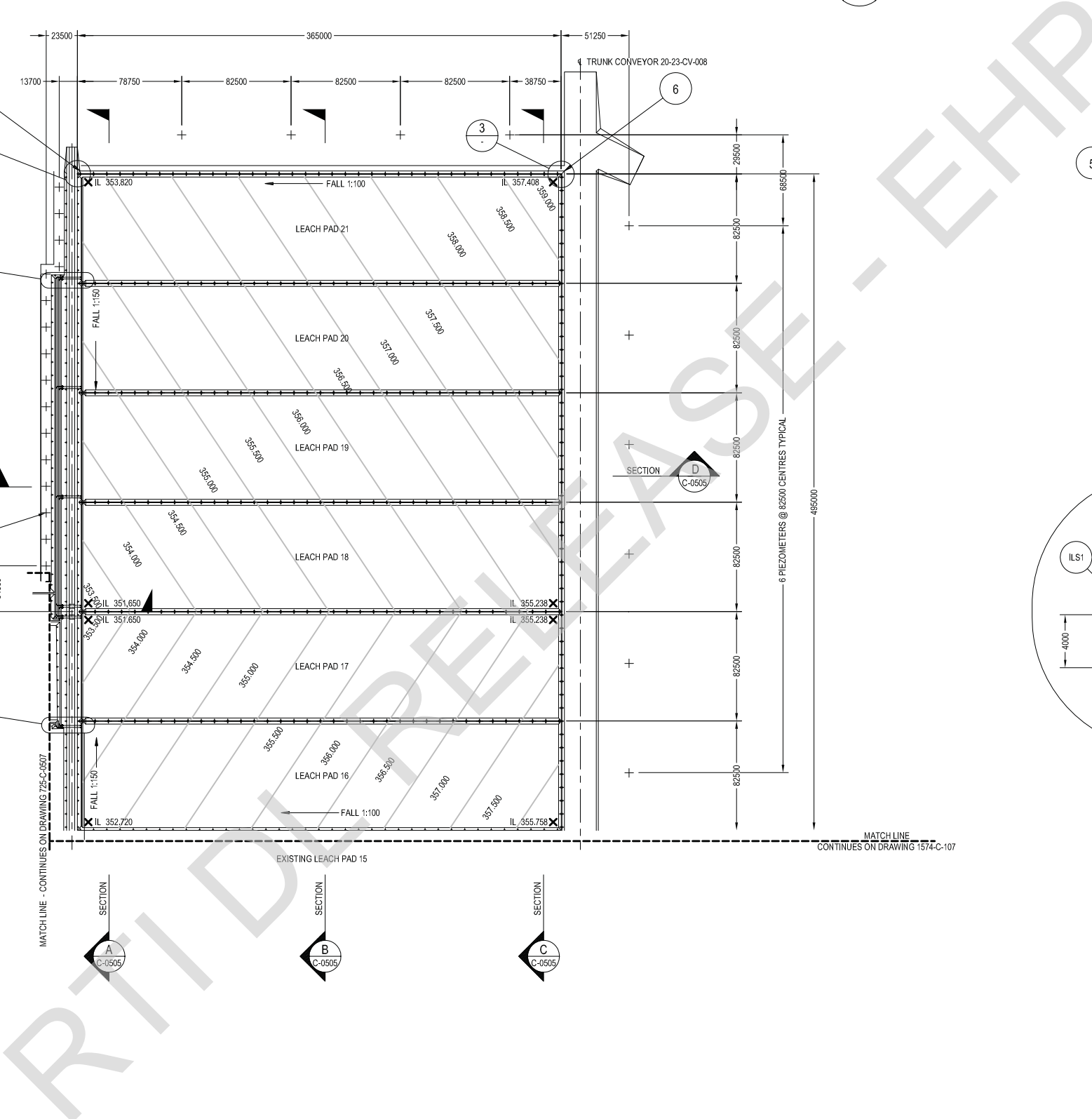


DWG TITLE
LADY ANNIE EXPANSION PROJECT - STAGE 2
MT KELLY PLANT SITE - HEAP LEACH AREA
20-24-PD-003 STORMWATER POND 2
CIVIL - SETOUT AND SECTIONS

FILE NAME	PROJECT	DWG NO	Page 4 of 27	REV	SHEET
1574c0503 Rev0	0725	1574-C-0503		0	A1

\\Intech-sbs\intech current projects\725 CopperCo Expansion Eng\3 Drawings\33 Our Drawings\CI725c0504 Rev0.dwg, 19/02/2008 2:26:12 PM

POINT	EASTING	NORTHING
5	302 068.600	7 798 398.540
6	302 434.100	7 798 398.540
ILS1	302 050.000	7 798 317.790
PLS1	302 054.000	7 798 317.790



The image displays three horizontal graphical scales used for architectural drawing, each with a corresponding label below it:

- Top Scale:** Labeled "SCALE IN METRES (1:200 FULL SIZE A1)". It has a total length of 20 units. Major markings are at 0, 5, 10, 15, and 20. Minor markings are at 1-unit intervals.
- Middle Scale:** Labeled "SCALE IN METRES (1:500 FULL SIZE A1)". It has a total length of 50 units. Major markings are at 0, 10, 20, 30, 40, and 50. Minor markings are at 1-unit intervals.
- Bottom Scale:** Labeled "SCALE IN METRES (1:2 000 FULL SIZE A1)". It has a total length of 2000 units. Major markings are at 0, 200, 400, 600, 800, 1000, 1200, 1400, 1600, 1800, and 2000. Minor markings are at 100-unit intervals.



DIMENSIONS IN MILLIMETERS
DO NOT SCALE

REV	REVISION DETAILS	DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE	SCALE	1:2000
A	FOR COMMENT	01/11/07	DMC			1574-C-0500	SITE LAYOUT	DRAWN	DMC
T2	ISSUED FOR TENDER	31/01/08	MAM	DJB		1574-C-0505	LEACHPADS 16 TO 21 - SECTIONS AND DETAILS	CHKD	DJB
0	APPROVED FOR CONSTRUCTION	18/02/08	MAM	DJB / WW	RRE	1574-C-107	EARTHWORKS - MT KELLY LEACHPAD SETOUT PLAN	DESIGN	WW
						1574-C-0507	20-24-PD-301, 302, 303- ILS, PLS SWP3 CIVIL ARRANGEMENT	APPROVED - INTECH	DATE
								D.J. BYRNE	18/02/08
								APPROVED - CLIENT	DATE
								R.R. ELLIS	18/02/08



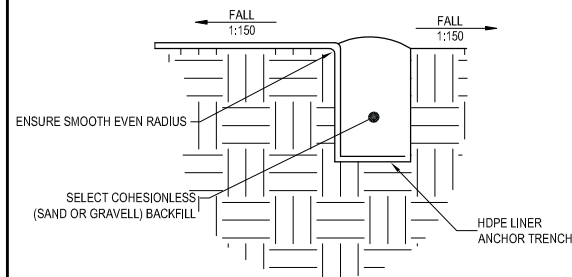
FILE NAME
725c0504 Rev0

PROJECT	DWG NO
0725	1574-C-0504

Page 5 of 27

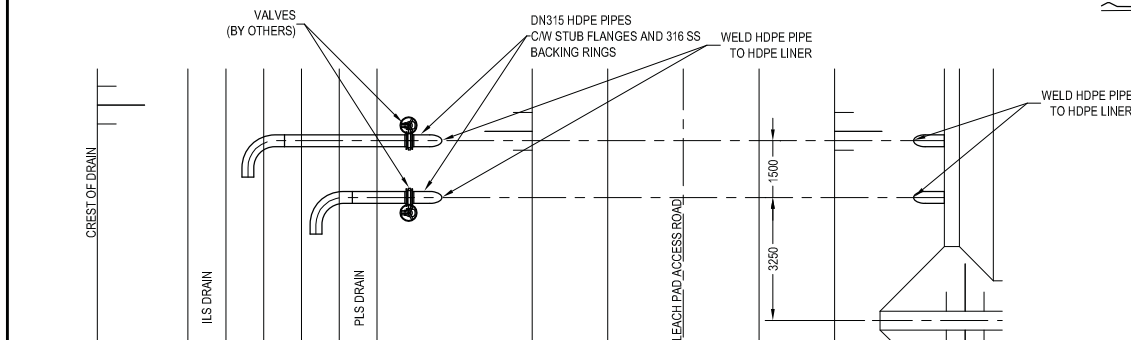
REV	SHEET
0	A1

NOTES:
1. AT - DENOTES ANCHOR TRENCH SEE DETAIL 4

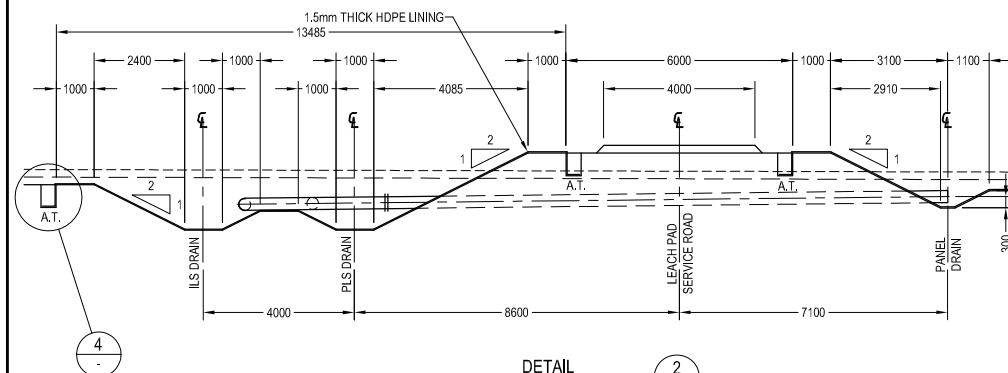


DETAIL
SCALE 1:20
A.T. - ANCHOR TRENCH

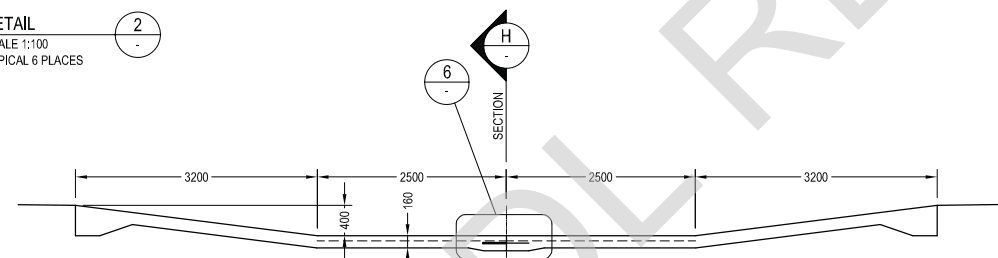
SECTION			
REFERENCE	A	B	C
X16	IL 352,200	IL 353,994	IL 355,788
X17	IL 351,650	IL 353,444	IL 355,238
X18	IL 351,650	IL 353,444	IL 355,238
X19	IL 352,200	IL 353,994	IL 355,788
X20	IL 352,750	IL 354,544	IL 356,338
X21	IL 353,300	IL 355,094	IL 356,888
X22	IL 353,820	IL 355,614	IL 357,408



DETAIL 1
SCALE 1:100
TYPICAL 6 PLACES
C-0504

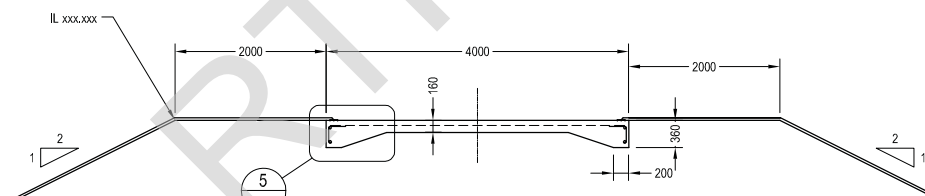


DETAIL
SCALE 1:100
TYPICAL 6 PLACES



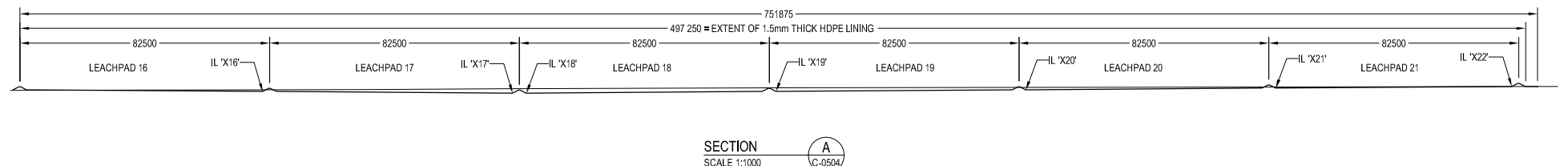
SECTION G
SCALE 1:50 C-0504

TYPICAL LONG SECTION THROUGH CONCRETE FORD

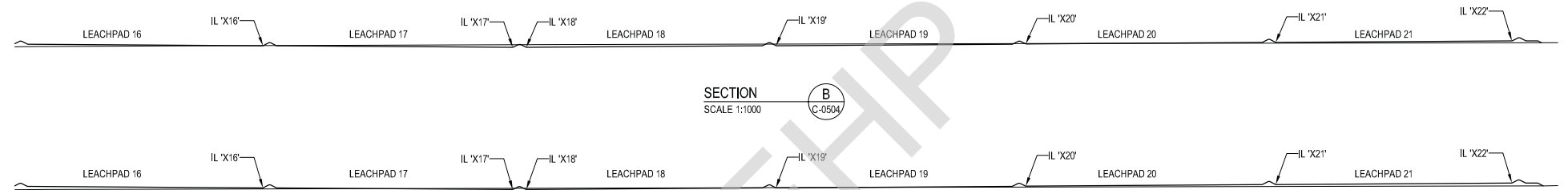


SECTION _____ H
SCALE 1:50

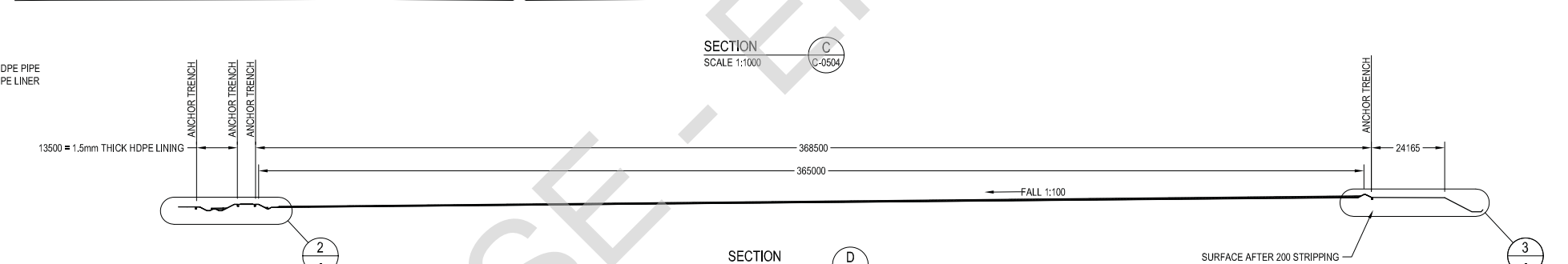
TYPICAL CROSS SECTION THROUGH CONCRETE FORD



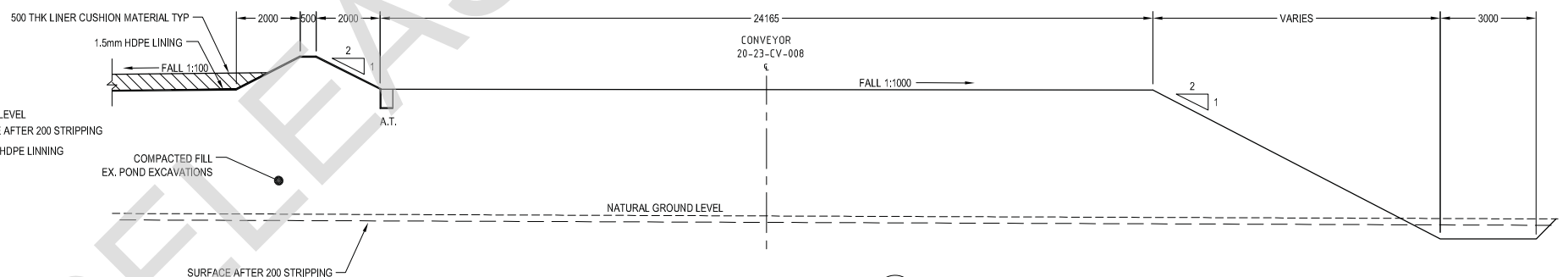
SECTION _____ A
SCALE 1:1000 C-050



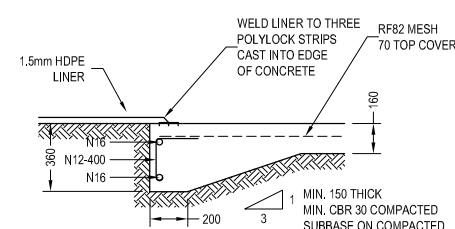
SECTION B
SCALE 1:1000 C-050



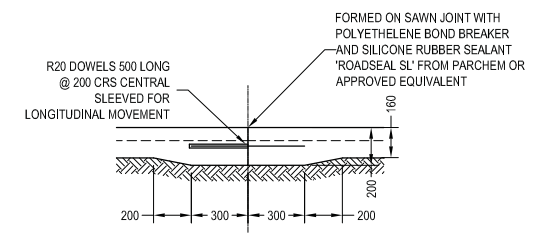
SECTION D
SCALE 1:1000 C-050



DETAIL 3
SCALE 1:100

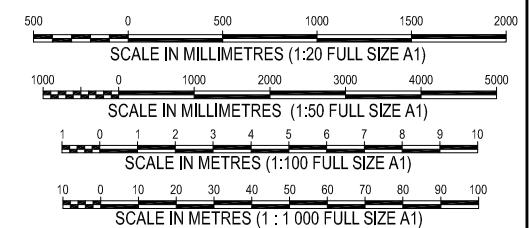


DETAIL 5
SCALE 1:20



DETAIL 6
SCALE 1:20
CONSTRUCTION JOINT DETAIL (C.J.)

FOR CONSTRUCTION



95 Brunswick Street, Fortitude Valley, Brisbane QLD, 4006
 ABN 58 011 070 625, 13-6133666 0006, FAX 61 7 3666 0004
 Email intech@intechengineers.com.au, www.intechengineers.com.au

[illegible]

File E Documents

SCALE		1:2000
DRAWN	DMC	29/01/08
CHKD	DJB	18/02/08
DESIGN	WW	18/02/08
APPROVED - INTECH		DATE
D.J. BYRNE		18/02/08
APPROVED - CLIENT		DATE
R.R. ELIUS		18/02/08

	CLIENT
--	--------



DWG TITLE
LADY ANNIE EXPANSION PROJECT - STAGE 3
MT KELLY SITE - HEAP LEACH
LEACH PADS 16 TO 21
CIVIL - SECTIONS AND DETAILS

FILE NAME
725c0504 Rev0

PROJECT	0725
---------	------

DWG NO	1574-C-0505
--------	-------------

Page 6 of 27

REV	SHEET
0	A1

STAGES 1, 2 & 3 HYDROLOGY PARAMETERS

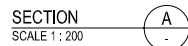
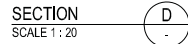
- TOTAL CONTRIBUTING CATCHMENT AREA
- REQUIRED PROCESS WATER STORAGE VOLUME
- 100 YEAR 2 MONTH WET SEASON RUNOFF TOTAL STORAGE VOLUME
- REQUIRED TOTAL STORAGE VOLUME
- AVAILABLE PROCESS POND STORAGE VOLUME
- AVAILABLE ALL PONDS FULL STORAGE VOLUME (TO STORMWATER POND OVERFLOW SPILL WAY LEVEL RL 350.10)

MANDATORY REPORTING LEVEL 1 VOLUME

- 100 YEAR 72 HOUR STORM VOLUME

MANDATORY REPORTING LEVEL 2 VOLUME

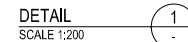
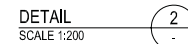
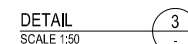
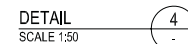
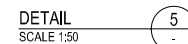
- 10 YEAR 24 HOUR STORM VOLUME



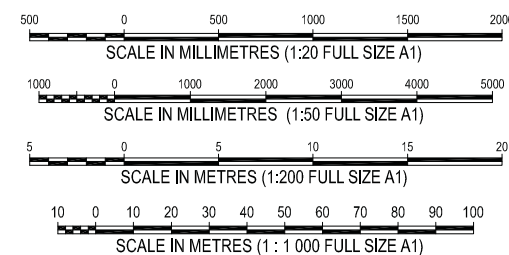
UNDER LINER
LEAK DETECTION TRENCH



DOWN BATTER
LEAK DETECTOR WELL

[illegible]

FOR CONSTRUCTION



THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE INTELLECTUAL PROPERTY OF INTECH ENGINEERS PTY LTD. AND IS FURNISHED FOR THE SOLE USE OF THE RECIPIENT. ACCEPTANCE OF THE SAME CONSTITUTES AN AGREEMENT THAT IT WILL NOT BE PUBLISHED, REPRODUCED, TRANSMITTED OR GIVEN TO ANY OTHER PARTY WITHOUT OUR PERMISSION. INFRINGEMENT OF THE ABOVE MAY ATTRACT CLAIMS FOR COMPENSATION.

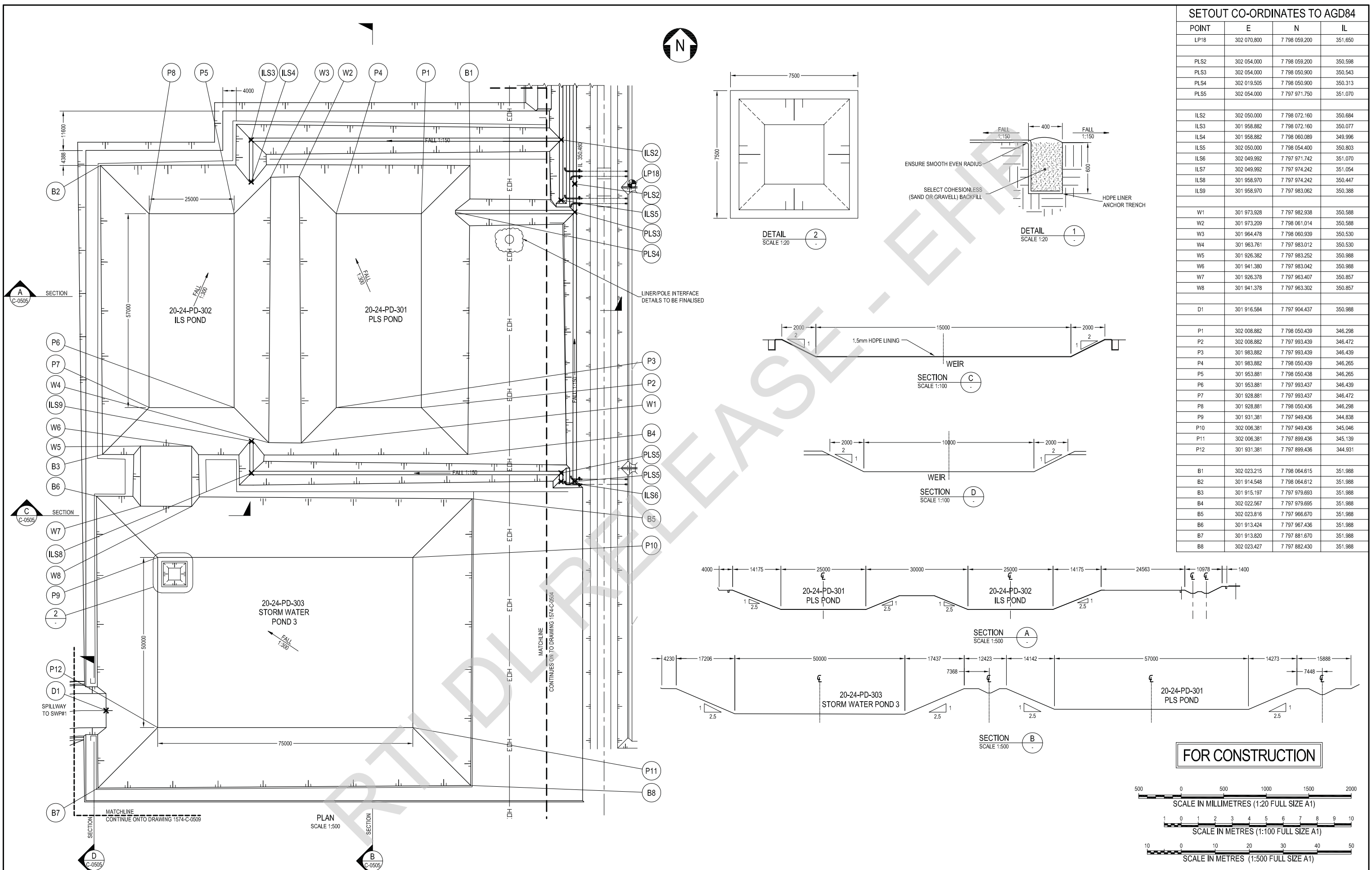


DIMENSIONS IN MILLIMETERS
DO NOT SCALE

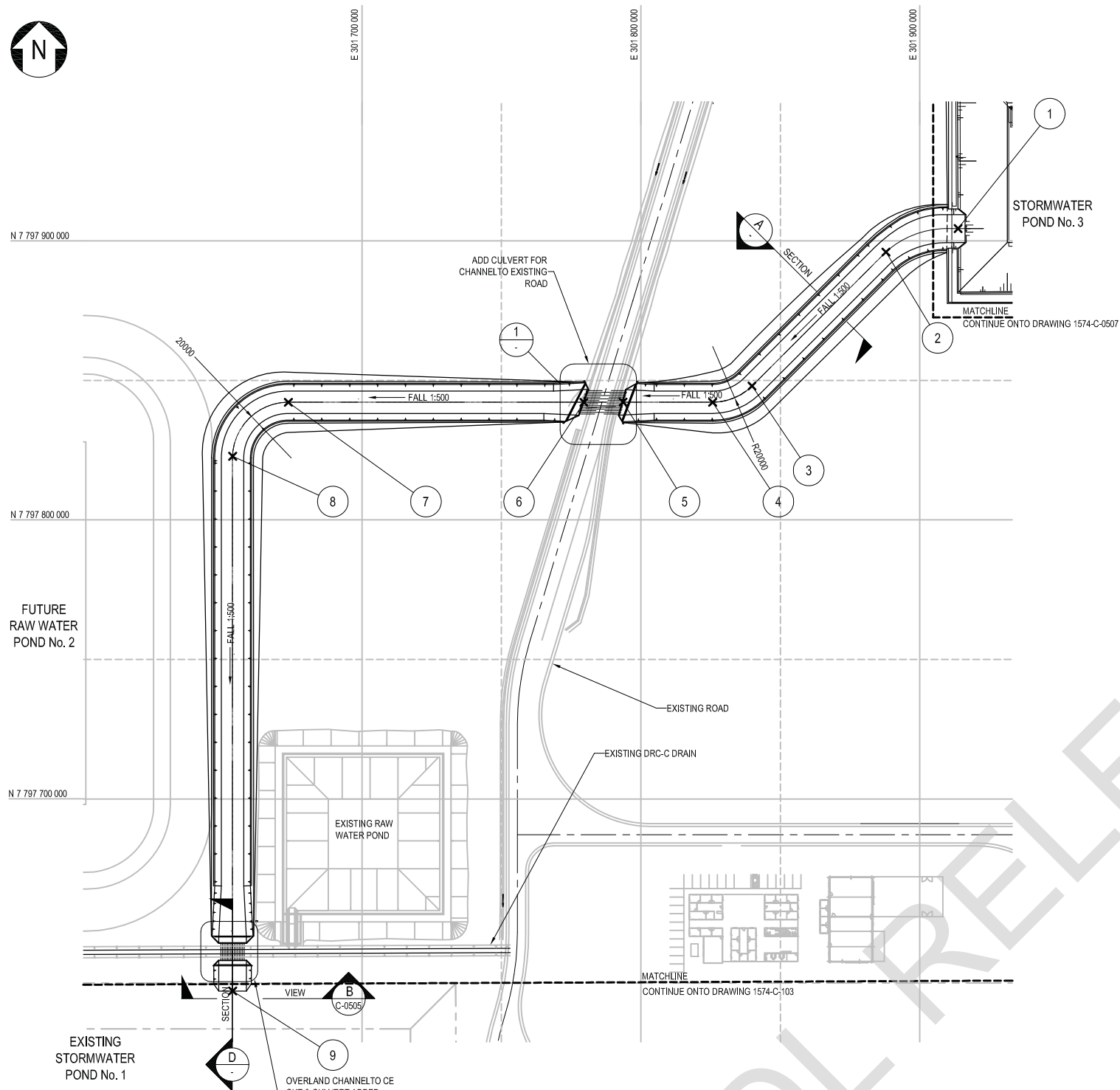
REV	REVISION DETAILS	DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE	SCALE	1:1000
A	ISSUED FOR INFORMATION		MAM			1574-C-0500	SITE LAYOUT	DRAWN	MAM 20/01/08
T2	ISSUED FOR TENDER	29/01/08	DMC	DJB		1574-C-0503	20-24-PD-003 STORMWATER POND 2 CIVIL SETOUT & SECTIONS	CHKD	DJB 18/02/08
0	APPROVED FOR CONSTRUCTION	18/02/08	MAM	DJB / WW	RRE	1574-C-103	MT KELLY PROCESS AND STORMWATER PONDS SETOUT PLAN	DESIGN	WW 18/02/08
						1574-C-104	MT KELLY PROCESS AND STORMWATER PONDS CROSS SECTIONS	APPROVED - INTECH	DATE
								D.J. BYRNE	18/02/08
								APPROVED - CLIENT	DATE
							File E Documents		
								R.F. ELIS	18/02/08



DWG TITLE LADY ANNIE EXPANSION PROJECT - STAGE 3 MT KELLY PLANT SITE - HEAP LEACH AREA 20-24-PD-003 STORMWATER POND 2B CIVIL - SETOUT AND SECTIONS				
FILE NAME	PROJECT	DWG NO	REV	SHEET
725c0503 Rev0.DWG	0725	1574-C-0506	0	A1



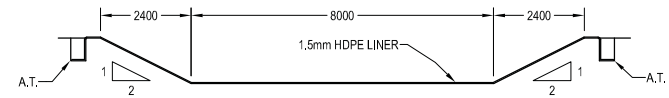
SETOUT CO-ORDINATES TO AGD84			
POINT	E	N	IL
LP18	302 070.800	7 798 059.200	351.650
PLS2	302 054.000	7 798 059.200	350.598
PLS3	302 054.000	7 798 050.900	350.543
PLS4	302 019.505	7 798 050.900	350.313
PLS5	302 054.000	7 797 971.750	351.070
ILS2	302 050.000	7 798 072.160	350.684
ILS3	301 958.882	7 798 072.160	350.077
ILS4	301 958.882	7 798 060.089	349.996
ILS5	302 050.000	7 798 054.400	350.803
ILS6	302 049.992	7 797 971.742	351.070
ILS7	302 049.992	7 797 974.242	351.054
ILS8	301 958.970	7 797 974.242	350.447
ILS9	301 958.970	7 797 983.062	350.388
W1	301 973.928	7 797 982.938	350.588
W2	301 973.209	7 798 061.014	350.588
W3	301 964.478	7 798 060.939	350.530
W4	301 963.761	7 797 983.012	350.530
W5	301 926.382	7 797 983.252	350.988
W6	301 941.380	7 797 983.042	350.988
W7	301 926.378	7 797 963.407	350.857
W8	301 941.378	7 797 963.302	350.857
D1	301 916.584	7 797 904.437	350.988
P1	302 008.882	7 798 050.439	346.298
P2	302 008.882	7 797 993.439	346.472
P3	301 983.882	7 797 993.439	346.439
P4	301 983.882	7 798 050.439	346.265
P5	301 953.881	7 798 050.438	346.265
P6	301 953.881	7 797 993.437	346.439
P7	301 928.881	7 797 993.437	346.472
P8	301 928.881	7 798 050.436	346.298
P9	301 931.381	7 797 949.436	344.838
P10	302 006.381	7 797 949.436	345.046
P11	302 006.381	7 797 899.436	345.139
P12	301 931.381	7 797 899.436	344.931
B1	302 023.215	7 798 064.615	351.988
B2	301 914.548	7 798 064.612	351.988
B3	301 915.197	7 797 979.693	351.988
B4	302 022.567	7 797 979.695	351.988
B5	302 023.816	7 797 966.670	351.988
B6	301 913.424	7 797 967.436	351.988
B7	301 913.820	7 797 881.670	351.988
B8	302 023.427	7 797 882.430	351.988



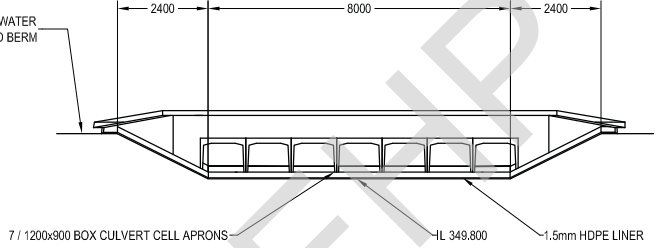
OVERLAND CHANNEL LAYOUT
SCALE 1:1000

NOTES:

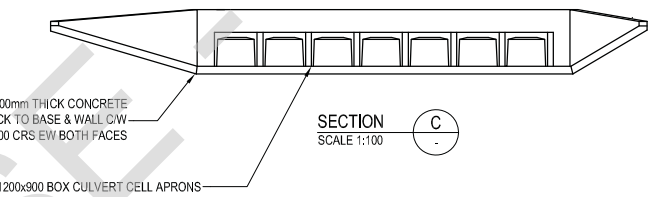
1. EARTHWORKS TO BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATION 725-SP-0041
2. FOR HDPE LINING TO BE COMPLETED IN ACCORDANCE WITH SPECIFICATION 725-SP-0042
3. CONCRETE WORKS TO BE COMPLETED IN ACCORDANCE WITH SPECIFICATION 725-SP-0043 AND AS3600



SECTION A
SCALE 1:100
TYPICAL

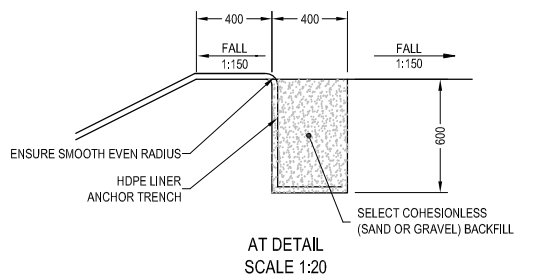


VIEW B
SCALE 1:100

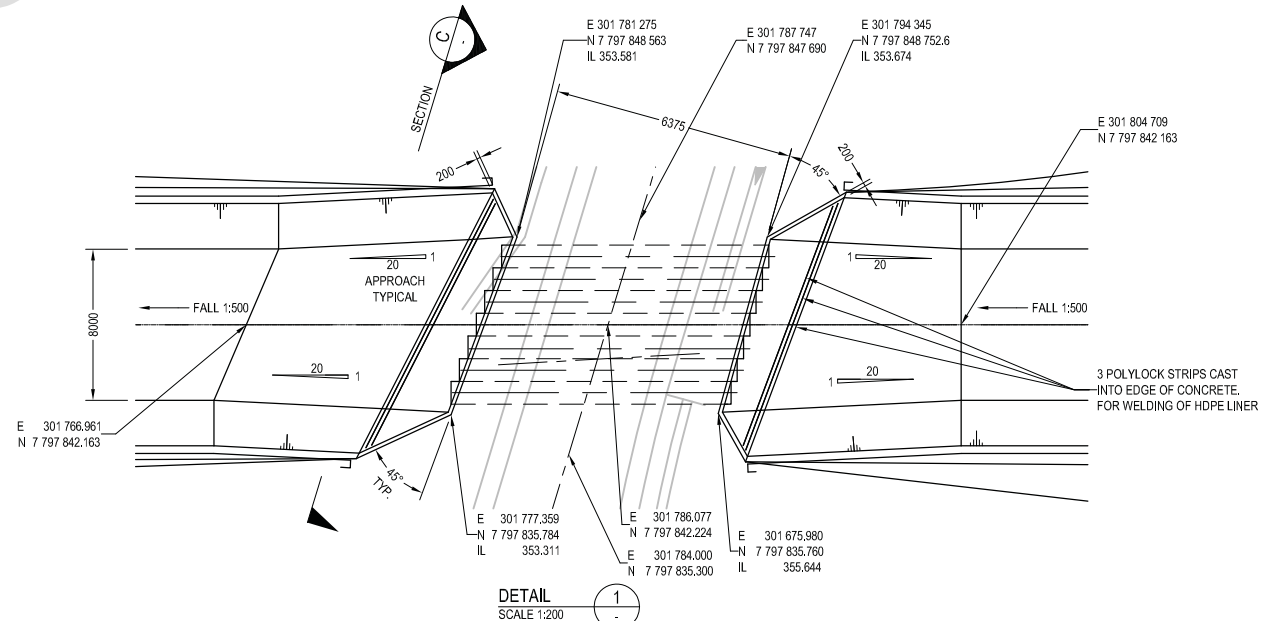


SECTION C
SCALE 1:100

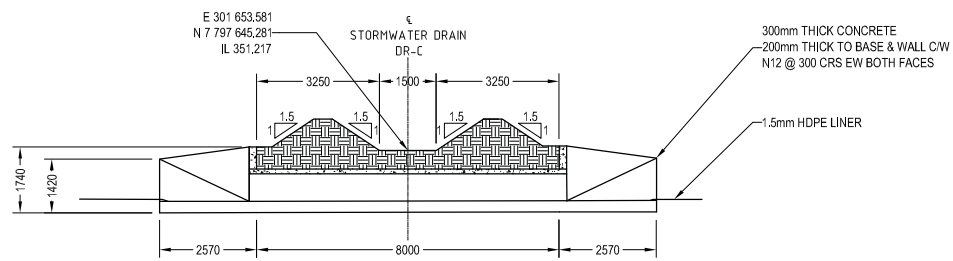
SETOUT CO-ORDINATES TO AGD84				
OVERLAND CHANNEL	PT	E	N	IL
	1	301 916.584	7 797 940.436	350.890
	2	301 887.871	7 797 896.052	350.715
	3	301 839.839	7 797 848.021	350.579
	4	301 827.224	7 797 842.221	350.548
	5	301 793.201	7 797 842.136	350.700
	6	301 779.545	7 797 842.163	350.650
	7	301 673.581	7 797 842.163	350.200
	8	301 653.581	7 797 822.201	350.183
	9	301 653.581	7 797 631.151	349.800



AT DETAIL
SCALE 1:20

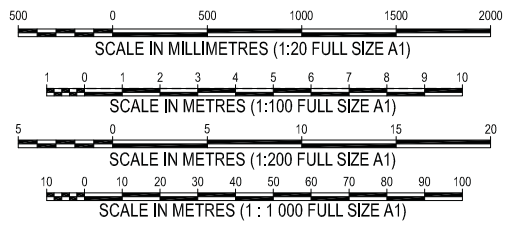


DETAIL SCALE 1:200

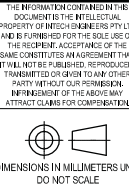


SECTION D
SCALE 1:100

FOR CONSTRUCTION



95 Brunswick Street, Fortitude Valley, Brisbane QLD 4006
ABN 58 011 070 625 13-13766 0006, FAX 61 7 3686 0004
Email intech@intechengineers.com.au, www.intechengineers.com.au

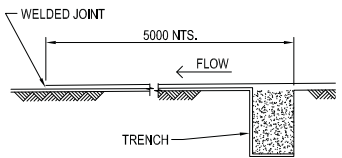


REV	REVISION DETAILS	DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE	SCALE	AS NOTED	CLIENT
T2	ISSUED FOR TENDER	29/01/08	DMC	DJB		1574-C-0500	PROCESSING FACILITY - GENERAL ARRANGEMENT	DRAWN	DMC	14/02/08
0	APPROVED FOR CONSTRUCTION	18/02/08	DMC	DJB / WW	RRE	1574-C-0507	MT KELLY PLANT SITE-20-24-PD-301,302,303-ILS.PLS.SWP3	CHKD	DJB	18/02/08
						1574-C-0103	20-24-PD-003 STORMWATER POND 2 CIVIL SETOUT & SECTIONS	DESIGN	WW	18/02/08
						1574-C-0170	ROADWORKS - TO PROCESS PLANT PROCESS PLANT SECTIONS	APPROVED - INTECH		DATE
						1574-C-0169	ROADWORKS - PROCESS PLANT PLAN SHEET	D.J. BYRNE		18/02/08
								APPROVED - CLIENT		DATE
								R.R.ELLIS		18/02/08

File E Documents



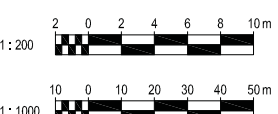
DWG TITLE				
LADY ANNIE EXPANSION PROJECT - STAGE 3 MT KELLY PLANT SITE - HEAP LEACH OVERLAND CHANNEL CIVIL - LAYOUT AND DETAILS				
FILE NAME	PROJECT	DWG NO	Page 9 of 27	REV SHEET
710C0509 Rev0.dwg	0725	725-C-0509	0	A1



TYPICAL SECTION THROUGH
LINER ANCHOR CUT-OFF TRENCH
SCALE : NTS.

**APPROVED FOR
CONSTRUCTION**

NOTES

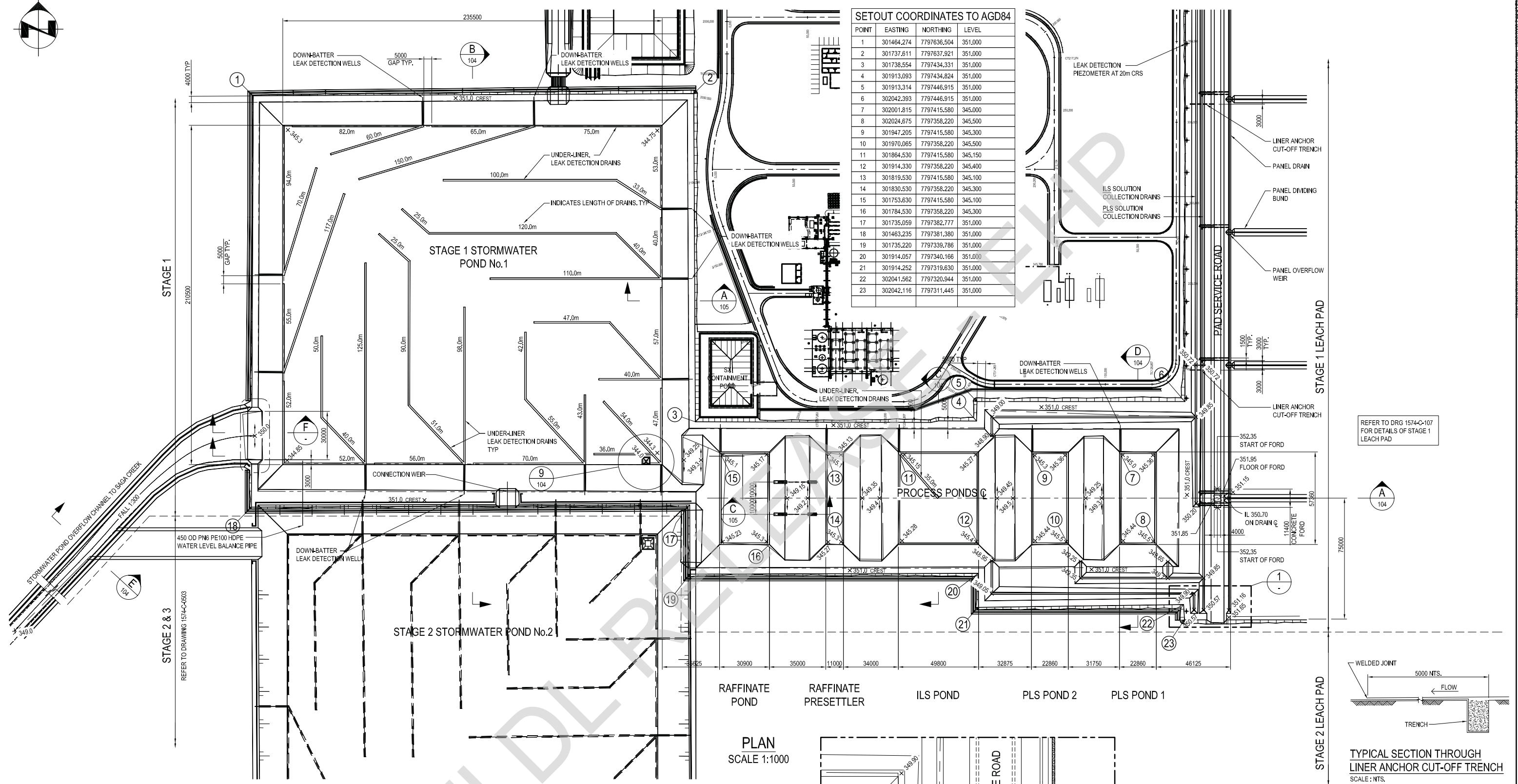


STD DETAIL DRAWINGS APPLY

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



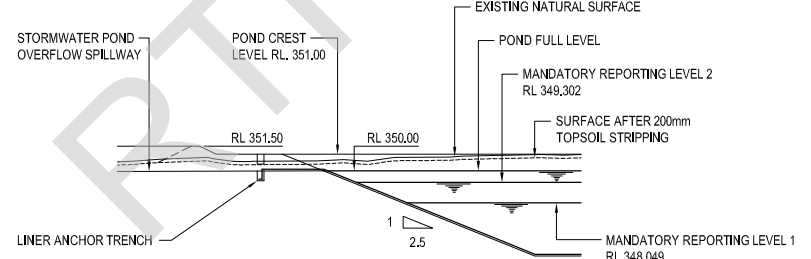
CLIENT	COPPERCO LTD	SCALE	AS SHOWN	SIZES
		ALL DIMENSIONS IN MILLIMETRES		B1
TITLE	LADY ANNIE COPPER PROJECT EARTHWORKS - MT KELLY PROCESS AND STORMWATER POND STAGE 3 REPORTING LEVELS	REV No	<div style="display: flex; justify-content: space-between;"> 123456789101112 </div>	
		DRAWING NO	1574-C-103	



SETOUT COORDINATES TO AGD84			
POINT	EASTING	NORTHING	LEVEL
1	301464.274	7797636.504	351.000
2	301737.611	7797637.921	351.000
3	301738.554	7797434.331	351.000
4	301913.093	7797434.824	351.000
5	301913.314	7797446.915	351.000
6	302042.393	7797446.915	351.000
7	302001.815	7797415.580	345.000
8	302024.675	7797358.220	345.500
9	301947.205	7797415.580	345.300
10	301970.065	7797358.220	345.500
11	301864.530	7797415.580	345.150
12	301914.330	7797358.220	345.400
13	301819.530	7797415.580	345.100
14	301830.530	7797358.220	345.300
15	301753.630	7797415.580	345.100
16	301784.530	7797358.220	345.300
17	301735.059	7797382.777	351.000
18	301463.235	7797381.380	351.000
19	301735.220	7797339.786	351.000
20	301914.057	7797340.166	351.000
21	301914.252	7797319.630	351.000
22	302041.562	7797320.944	351.000
23	302042.116	7797311.445	351.000

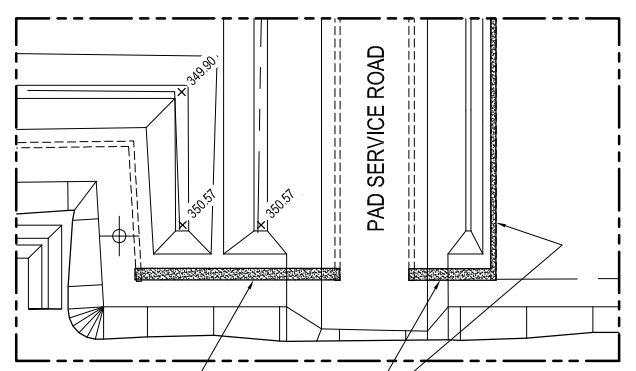
STAGE 1 & 2 HYDROLOGY PARAMETERS

• TOTAL CONTRIBUTING CATCHMENT AREA	6999 975 m ²
• REQUIRED PROCESS WATER STORAGE VOLUME	43 200 m ³
• 100 YEAR 2 MONTH WET SEASON RUNOFF TOTAL STORAGE VOLUME	576 710 m ³
• REQUIRED TOTAL STORAGE VOLUME	619 910 m ³
• AVAILABLE PROCESS POND STORAGE VOLUME	44 850 m ³
• AVAILABLE ALL PONDS FULL STORAGE VOLUME (TO STORMWATER POND OVERFLOW SPILL WAY LEVEL RL 350.10)	623 856 m ³
MANDATORY REPORTING LEVEL 1 VOLUME	RL 348.038 m
• 100 YEAR 72 HOUR STORM VOLUME	237 382 m ³
MANDATORY REPORTING LEVEL 2 VOLUME	RL 349.141 m
• 10 YEAR 24 HOUR STORM VOLUME	105 901 m ³



STAGE 1 & 2 HYDROLOGY PARAMETERS DETAIL
SCALE 1:200

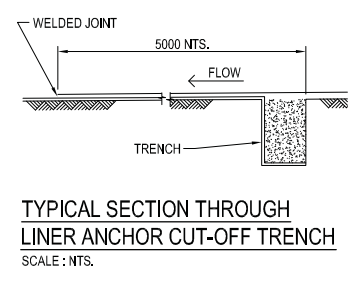
PLAN
SCALE 1:1000



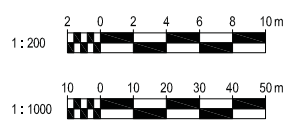
DETAIL 1
NTS

APPROVED FOR
CONSTRUCTION

NOTES



TYPICAL SECTION THROUGH
LINER ANCHOR CUT-OFF TRENCH
SCALE: NTS.



DRAWING No.	REFERENCE DRAWING TITLE	DRAWING No.	REFERENCE DRAWING TITLE	No	BY	DATE	REVISION DETAILS	CHKD	APPR	No	BY	DATE	REVISION DETAILS	CHKD	APPR	PROJ APPR	RRE	19/02/08
1574-C-103	26-34-PD-003 STORMWATER POND 2																	
1574-C-107	EARTHWORKS - MT KELLY LEACH PAD SETOUT PLAN																	
1574-C-108	EARTHWORKS - MT KELLY POND LINER DETAILS																	
1574-C-104	EARTHWORKS - MT KELLY POND CROSS SECTIONS																	

File E Documents

DRAWN	DP	07/06/08
CHECKED	D.J. BYRNE	19/02/08
DESIGNED	W. WHITAKER	19/02/08
DES. APPR		
PROJ APPR	RRE	19/02/08



CLIENT	COPPERCO LTD	SCALE	AS SHOWN	SIZE	B1
TITLE	LADY ANNIE COPPER PROJECT	ALL DIMENSIONS IN MILLIMETRES			
	EARTHWORKS - MT KELLY PROCESS AND STORMWATER PONDS	REV	0		
	STAGE 2 REPORTING LEVELS	NO			
		1574-C-0510			

**MALCOLM DOUGLAS
CONSULTANTS PTY. LTD.**

Civil & Structural Engineers
Planning & Project Managers
A.C.N. 010 767 058

Suite 7, Level 1
445 Upper Edward Street,
Spring Hill Q 4000
Tel: (07) 3832 5844
Fax: (07) 3221 2932
Email: mdcon@bigpond.net.au

18 February , 2008

Principal Engineer
Operations Division, Environmental Protection Agency
PO BOX 15155
City East QLD 4002
Australia

Dear Sir

Submission of Certified Design Drawings - CopperCo Lady Annie Operations

On behalf of CopperCo Lady Annie Operations Limited, we enclose certified design drawings for the construction of hazardous dams on the Lady Annie Expansion mining leases as follows:

Drawing No.	Title
1574-C-0501	Leach Pads 1-9 Civil - Setout
1574-C-0502	Leach Pads 1-9 Civil – Sections and Details
1574-C-0503	Stormwater Pond Civil – Setout & Sections
1574-C-0504	Leach Pads 126-21 Civil - Setout
1574-C-0505	Leach Pads 16-21 Civil Sections& Details
1574-C-0506	Stormwater Pond No. 2 Civil Setout & Sections
1574-C-0507	20-20-24-PD-301,302,303,ILS,PLS,SWP3-Civil-Arrangement
1574-C-0509	Overland Channel-Civil-Layout &Details
1574-C-0103	Mt.,Kelly Process & Storm Ponds-Stage 3 Reporting Levels
1574-C-0510	Mt.Kelly Process & Storm Ponds-Stage 2 Reporting Levels

In my capacity as a Registered Professional Engineer Queensland, I certify that the designs shown in the drawings are consistent with relevant hazardous dam conditions in Environmental Authority MIN100401006 and have been designed to appropriate engineering standards.

Yours faithfully
Malcolm Douglas Consultants Pty. Ltd.

s.49 - Signature

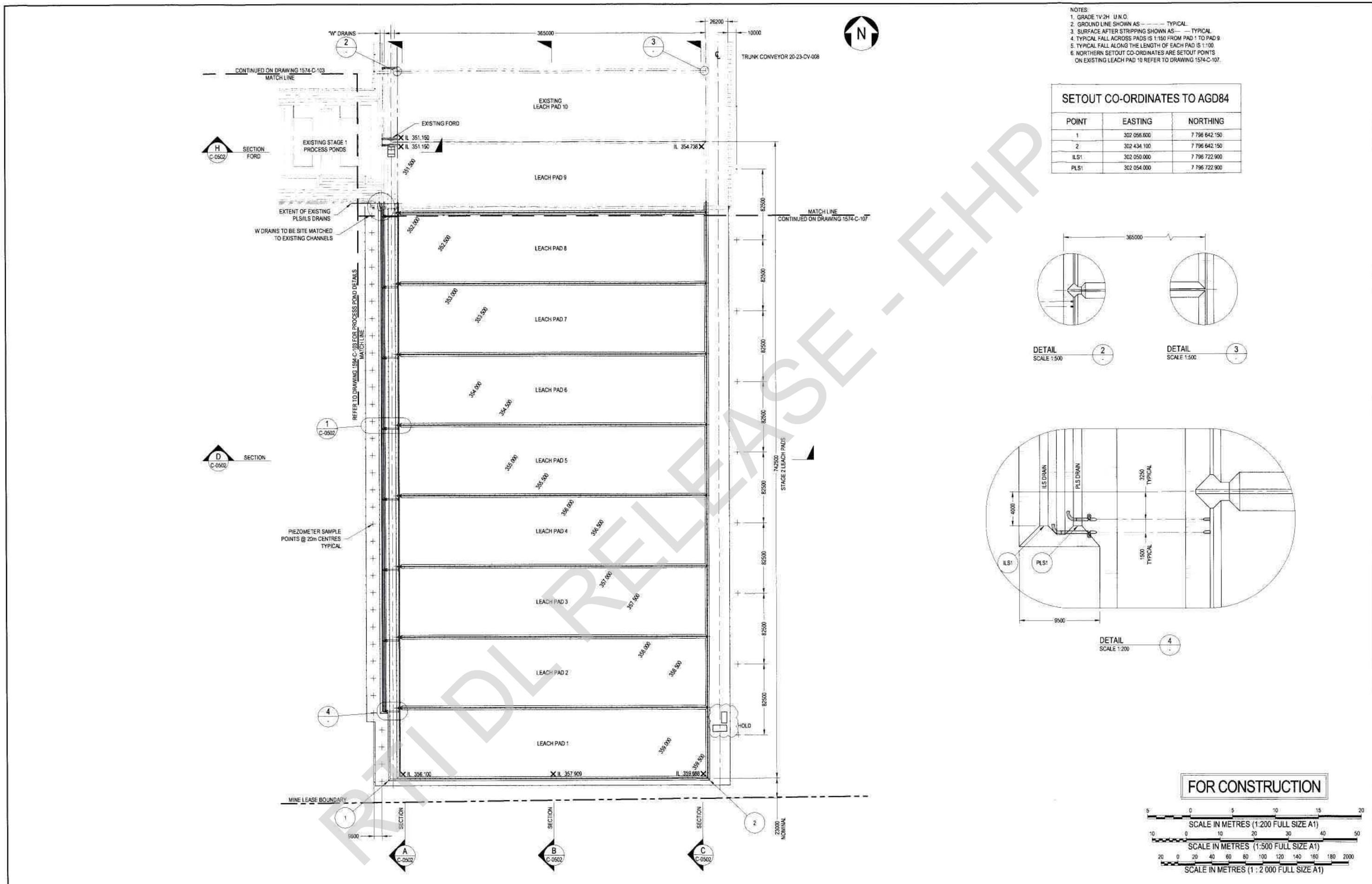
W.R. Whitaker
Director
RPEQ 1094

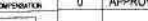
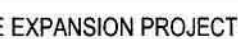
DIRECTORS:

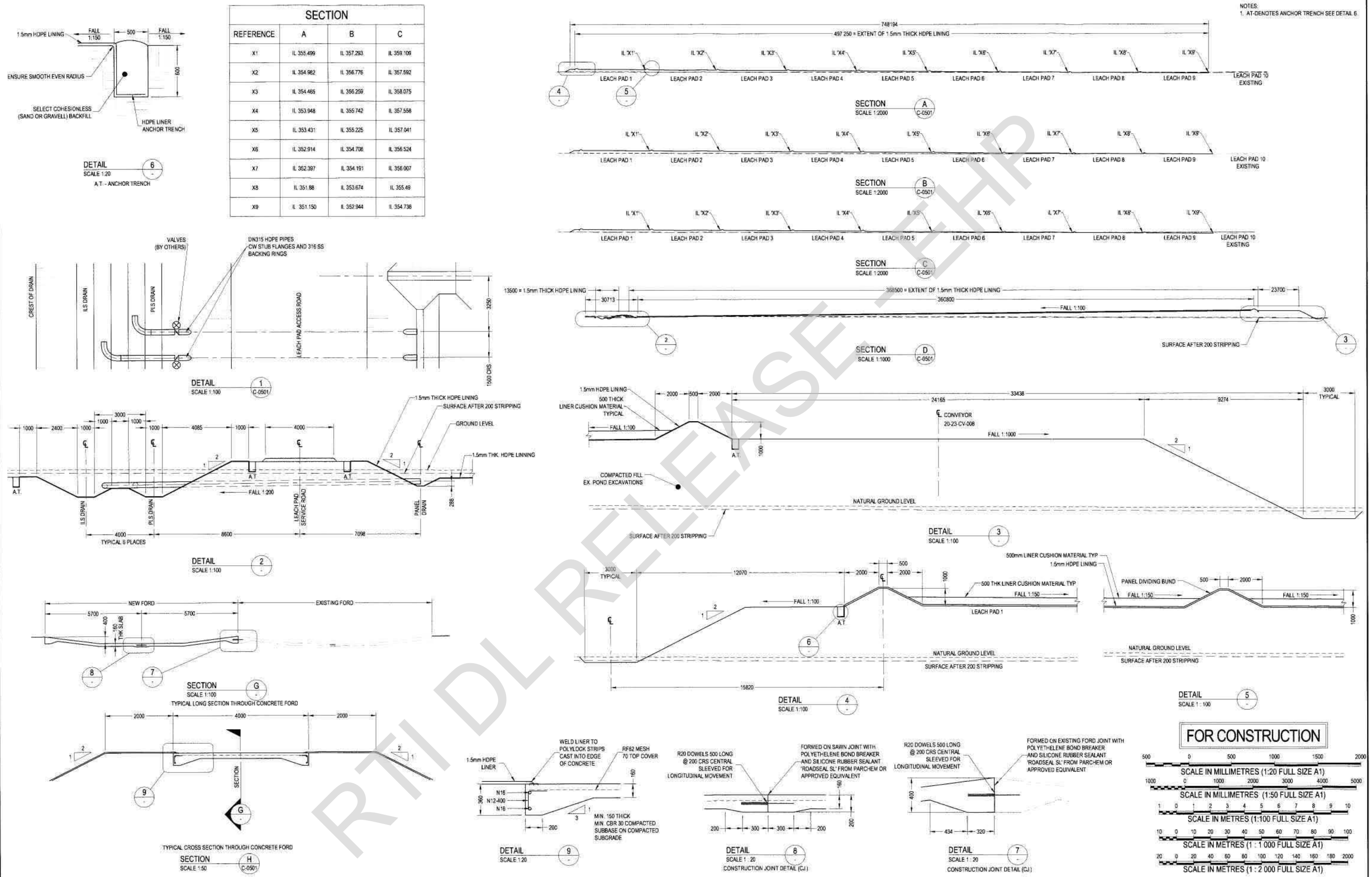
WAYNE WHITAKER B.E., M.I.E.Aust., R.P.E.Q.

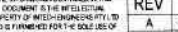
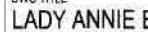
CONSULTANT:

MALCOLM DOUGLAS M.I.E.Aust., R.P.E., C.Eng., M.I.St.E., P.Eng., L.G.Eng.



 95 Brunswick Street, Fortitude Valley, Brisbane QLD, 4006 ABN 58 011 070 625, TEL 61 7 3668 0006, FAX 61 7 3666 0004 Email intech@intechengineers.com.au, www.intechengineers.com.au	<p>THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE INTELLECTUAL PROPERTY OF INTECH ENGINEERS PTY LTD AND IS PROVIDED FOR THE SOLE USE OF THE RECIPIENT. ACCEPTANCE OF THIS DOCUMENT CONSTITUTES AN AGREEMENT THAT IT WILL NOT BE REPRODUCED, COPIED, TRANSMITTED OR GIVEN TO ANY OTHER PARTY WITHOUT THE WRITTEN PERMISSION OF THE ADOPTING AUTHORITY CLAIMING FOR CONFIDENTIALITY.</p>  <p>DIMENSIONS IN MILLIMETERS DO NOT SCALE</p>	REV	REVISION DETAILS				DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE	SCALE	1:2000		CLIENT	DWG TITLE LADY ANNIE EXPANSION PROJECT - STAGE 2 MT KELLY SITE - HEAP LEACH LEACHPADS 1 TO 9 CIVIL - SETOUT	FILE NAME 725CA0503RevESWP2 18-10-07	PROJECT 0725	DWG NO 1574-C-0501	REV 0	SHEET A1			
		A	FOR COMMENT					13/11/07	DMC				1574-G-0900	GENERAL ARRANGEMENT									DRAWN	DMC	29/01/08
		B	FOR APPROVAL					13/11/07	DMC				1574-C-0502	LEACHPADS 1 TO 9 - SECTIONS AND DETAILS									CHKD	DJB	19/03/08
		C	FOR INFORMATION					28/11/07	DMC	DJB	DJB		1574-C-103	EARTHWORKS AND MT KELLY STORMWATER PONDS									DESIGN	WW	18/02/08
		T1	ISSUE FOR TENDER					4/12/07	DMC	DJB	RE		1574-C-107	MT KELLY LEACH PAD SETOUT PLAN									APPROVED - INTECH		DATE
0	APPROVED FOR CONSTRUCTION					05/02/08	MAM	DJB / WW	RRE					D.J. BYRNE	18/02/08										
														APPROVED - CLIENT	DATE										
														R.R. ELLIS	18/02/08										



 95 Brunswick Street, Fortitude Valley, Brisbane QLD, 4006 ABN 58 011 070 625, TEL 61 7 3666 0006, FAX 61 7 3666 0004 Email: intech@intechengineers.com.au, www.intechengineers.com.au	 DIMENSIONS IN MILLIMETERS DO NOT SCALE	THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE REFLECTED PROPERTY OF INTECH ENGINEERS PTY LTD AND IS PROVIDED FOR THE SOLE USE OF THE RECIPIENT. ACCEPTANCE OF THE SAME CONSTITUTES AN AGREEMENT THAT THE INFORMATION WILL BE KEPT CONFIDENTIAL AND NOT BE REPRODUCED, TRANSMITTED, EITHER ORALLY OR IN WRITING, WITHOUT THE WRITTEN PERMISSION OF INTECH ENGINEERS PTY LTD. A SIGNATURE OF THE RECIPIENT WILL BE REQUIRED FOR ANY SUCH REPRODUCTION OR TRANSMISSION.	REV	REVISION DETAILS					DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE		SCALE	1:2500		CLIENT	DWG TITLE LADY ANNIE EXPANSION PROJECT - STAGE 2 MT KELLY PLANT SITE - HEAP LEACH LEACHPADS 1 TO 9 CIVIL - SECTIONS AND DETAILS	FILE NAME 725c0502 Rev0	PROJECT 0725	DWG NO 1574-C-0502	REV 0	SHEET A1	
		A	FOR COMMENT					13/09/07	DMC				1574-C-0500	SITE LAYOUT		DRAWN	DMC									29/01/08
		B	FOR APPROVAL					1/11/07	DMC				1574-C-0501	LEACHPADS 1 TO 9 - SETOUT		CHKD	DJB									18/02/08
		C	PRELIMINARY FOR COMMENT					28/11/07	DMC	DJB	DJB				DESIGN	WW	18/02/08									
		T	ISSUE FOR TENDER					4/12/07	DMC	DJB					APPROVED - INTECH	DATE										
		D	APPROVED FOR CONSTRUCTION					06/02/08	MAM	DJB / WW	RRE				D.J. BYRNE	18/02/08										
															APPROVED - CLIENT	DATE										
															R.R. ELLIS	18/02/08										

13-137

File F Documents

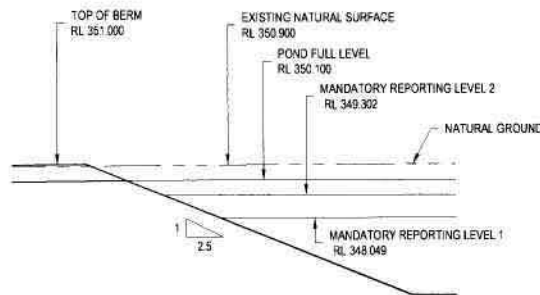
Page 14 of 27

SETOUT CO-ORDINATES TO AGD84

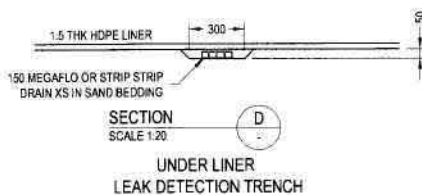
POINT	EASTING	NORTHING
1	301 738.800	7 797 383.800
2	301 467.200	7 797 382.700
3	301 735.000	7 797 184.600
4	301 468.300	7 797 187.200

STAGE 1 & 2 HYDROLOGY PARAMETERS

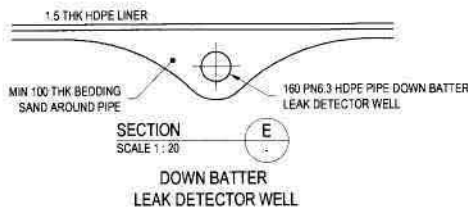
TOTAL CONTRIBUTING CATCHMENT AREA	6999 975 m ²
REQUIRED PROCESS WATER STORAGE VOLUME	43 200 m ³
100 YEAR 2 MONTH WET SEASON RUNOFF TOTAL STORAGE VOLUME	576 710 m ³
REQUIRED TOTAL STORAGE VOLUME	619 910 m ³
AVAILABLE PROCESS POND STORAGE VOLUME	44 850 m ³
AVAILABLE ALL PONDS FULL STORAGE VOLUME (TO STORMWATER POND OVERFLOW SPILL WAY LEVEL RL 350.10)	623 856 m ³
MANDATORY REPORTING LEVEL 1 VOLUME	RL 348.038 m
100 YEAR 72 HOUR STORM VOLUME	237 382 m ³
MANDATORY REPORTING LEVEL 2 VOLUME	RL 349.141 m
10 YEAR 24 HOUR STORM VOLUME	105 001 m ³



SECTION A SCALE 1:200

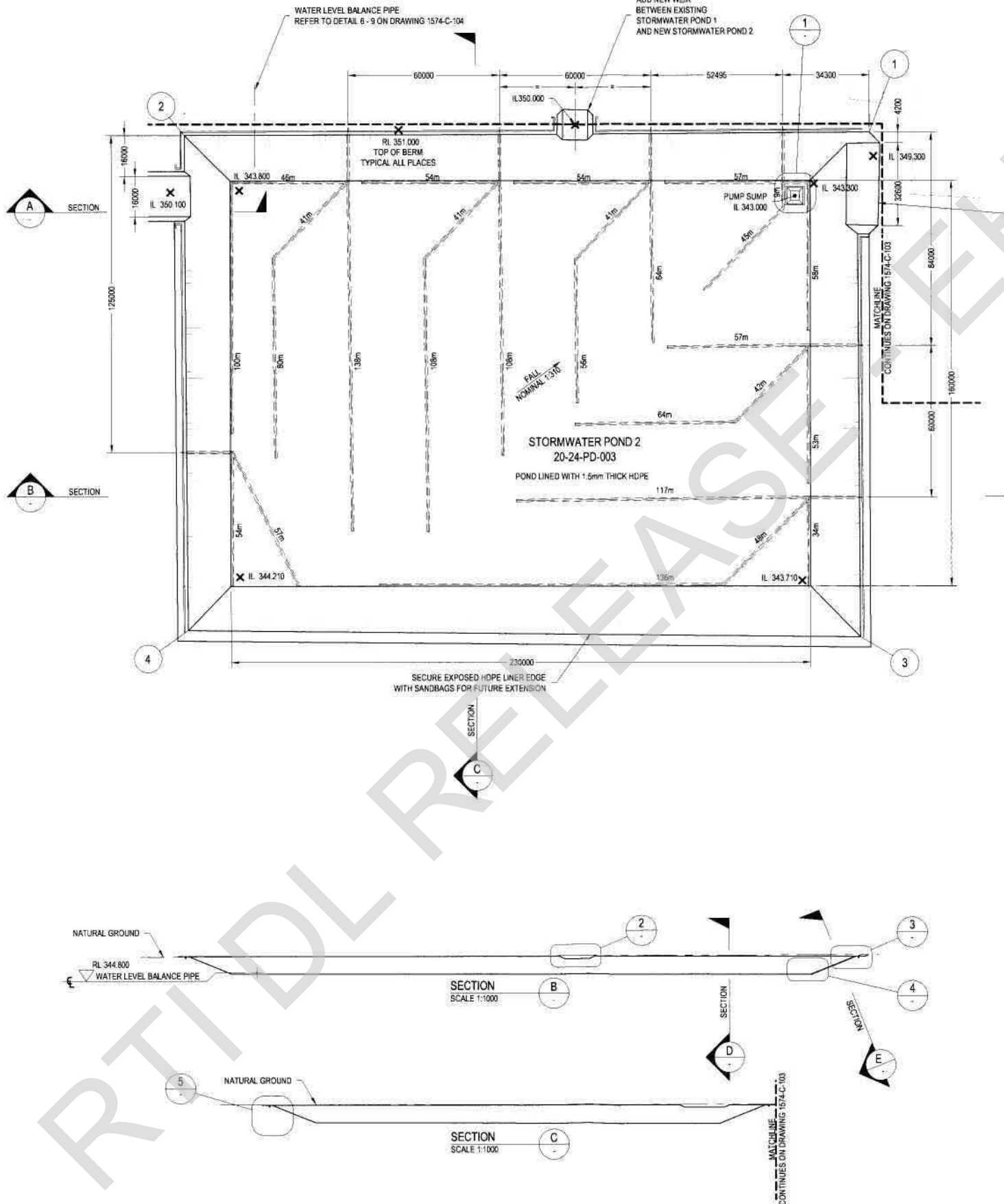
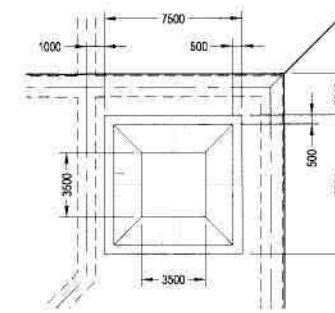


SECTION D SCALE 1:20

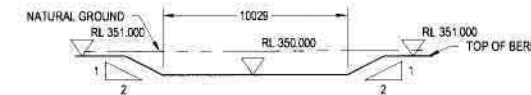


SECTION E SCALE 1:20

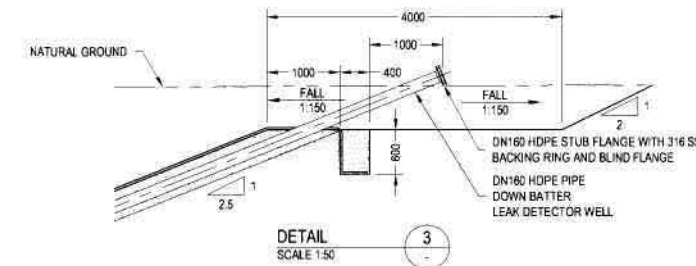
- NOTES
- GRADE 1V : 2.5H ON PONDS AND 1V : 2H ON WEIRS UNO.
 - FOR DETAILED REQUIREMENTS COVERING EARTHWORKS, ROADWORKS & DRAINAGE REFER TO 725-SP-0041.
 - FOR DETAILED REQUIREMENTS COVERING GEO TECH LINING, REFER TO 725-SP-0042.



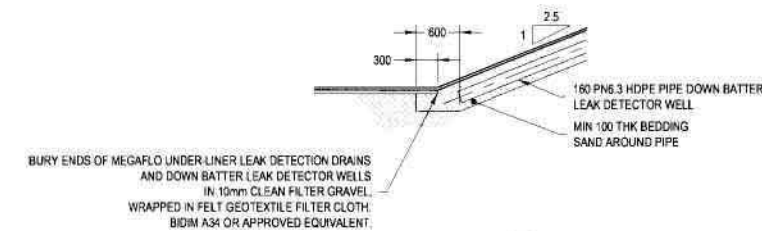
DETAIL 1 SCALE 1:200



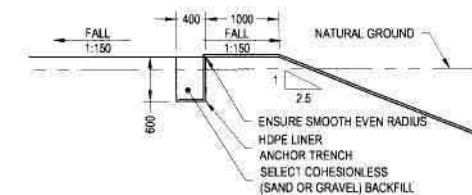
DETAIL 2 SCALE 1:200



DETAIL 3 SCALE 1:50

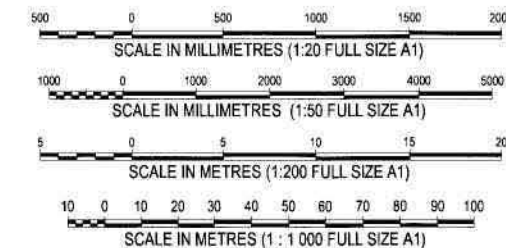


DETAIL 4 SCALE 1:50

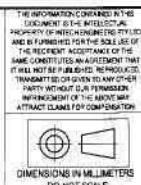


DETAIL 5 SCALE 1:50

FOR CONSTRUCTION



95 Brunswick Street, Fortitude Valley, Brisbane QLD, 4006.
ABN 58 011 070 625. TEL 61 7 3666 0006. FAX 61 7 3666 0004.
Email: info@intechengineers.com.au, www.intechengineers.com.au



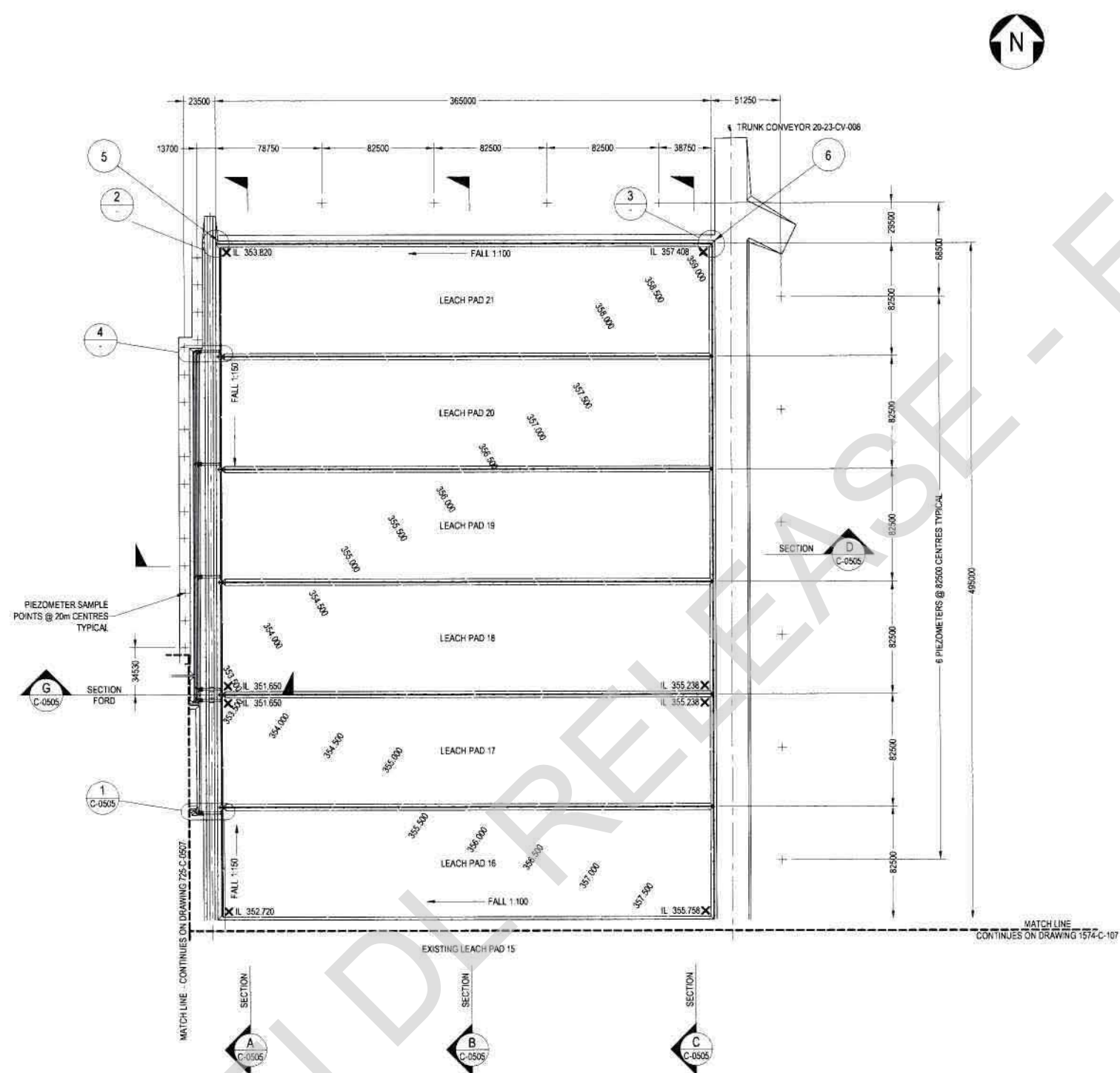
REV	REVISION DETAILS	DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE
E	NUMBER CHANGED FROM 725-CA-0024 TO 1574-C-0503	08/10/07	MAM			1574-C-0500	SITE LAYOUT
T1	FOR TENDER	19/12/07	MAM	DJB		1574-C-103	MT KELLY PROCESS AND STORMWATER PONDS SETOUT PLAN
T2	ISSUED FOR TENDER	29/01/08	DMC	DJB		1574-C-104	MT KELLY PROCESS AND STORMWATER PONDS CROSS SECTIONS
0	APPROVED FOR CONSTRUCTION	18/02/08	MAM	DJB/WW	RRE		

SCALE	1:1000
DRAWN	MAM
CHKD	DJB
DESIGN	WW
APPROVED - INTECH	DATE
D.J. BYRNE	18/02/08
APPROVED - CLIENT	DATE
R.R. ELLIS	18/02/08



DWG TITLE
LADY ANNIE EXPANSION PROJECT - STAGE 2
MT KELLY PLANT SITE - HEAP LEACH AREA
20-24-PD-003 STORMWATER POND 2
CIVIL - SETOUT AND SECTIONS

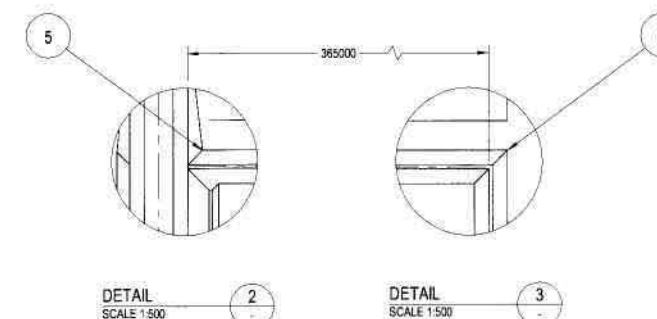
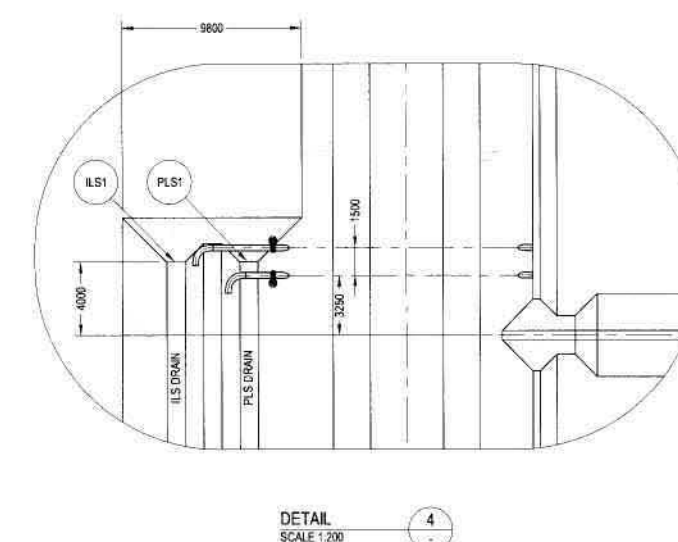
FILE NAME	PROJECT	DWG NO	REV	SHEET
1574c0503 Rev0	0725	1574-C-0503	0	A1



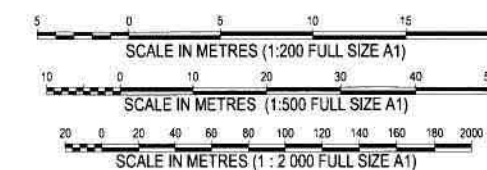
- NOTES
1. GRADE 1V/2H U.N.O.
 2. GROUND LINE SHOWN AS ——— TYPICAL
 3. SURFACE AFTER STRIPPING SHOWN AS ——— TYPICAL
 4. TYPICAL FALL ACROSS PADS IS 1:150 FROM PAD 1 TO PAD 9.
 5. TYPICAL FALL ALONG THE LENGTH OF EACH PAD IS 1:100
 6. SOUTHERN SETOUT CO-ORDINATES ARE SETOUT ON EXISTING LEACH PAD 15 REFER TO DRAWING 1574-C-107.

SETOUT CO-ORDINATES TO AGD84

POINT	EASTING	NORTHING
5	302 068 600	7 798 398 540
6	302 434 100	7 798 398 540
ILS1	302 050 000	7 798 317 790
PLS1	302 054 000	7 798 317 790



FOR CONSTRUCTION



95 Brunswick Street, Fortitude Valley, Brisbane QLD, 4006
 ABN 56 011 070 625, TEL 61 7 3666 0000, FAX 61 7 3666 0004
 Email: intech@intechengineers.com.au, www.intechengineers.com.au



REV	REVISION DETAILS	DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE
A	FOR COMMENT	01/11/07	DMC			1574-C-0500	SITE LAYOUT
T2	ISSUED FOR TENDER	31/01/08	MAM	DJB		1574-C-0505	LEACHPADS 16 TO 21 - SECTIONS AND DETAILS
0	APPROVED FOR CONSTRUCTION	18/02/08	MAM	DJB / WW	RRE	1574-C-107	EARTHWORKS - MT KELLY LEACHPAD SETOUT PLAN
						1574-C-0507	20-24-PD 301, 302, 303 - ILS, PLS SWP3 CIVIL ARRANGEMENT

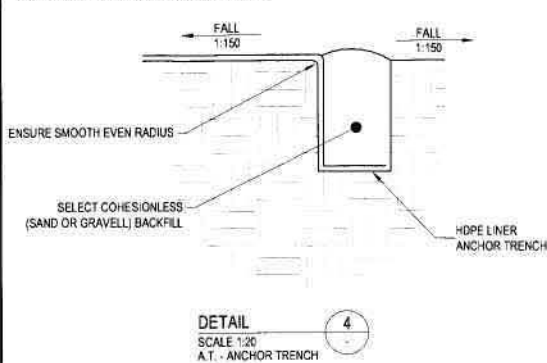
SCALE	1:2000	CLIENT
DRAWN	DMC	28/01/08
CHKD	DJB	18/02/08
DESIGN	WW	18/02/08
APPROVED - INTECH	DATE	
D.J. BYRNE	18/02/08	
APPROVED - CLIENT	DATE	
R.R. ELLIS	18/02/08	



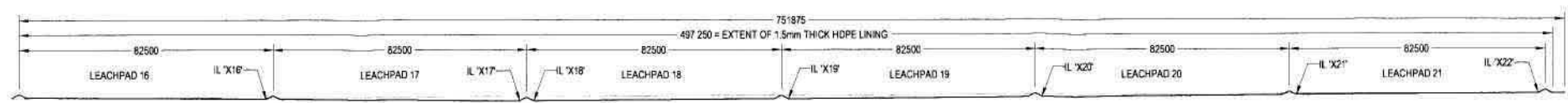
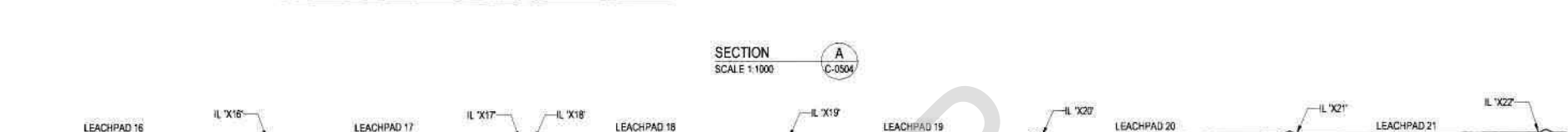
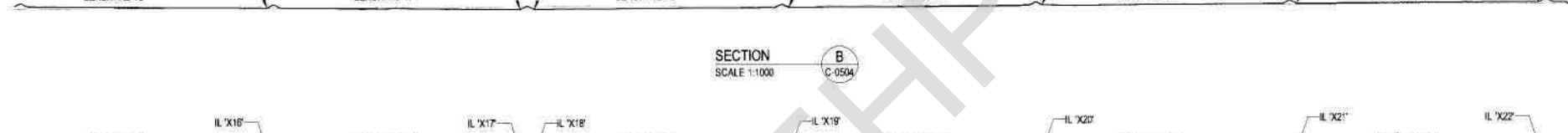
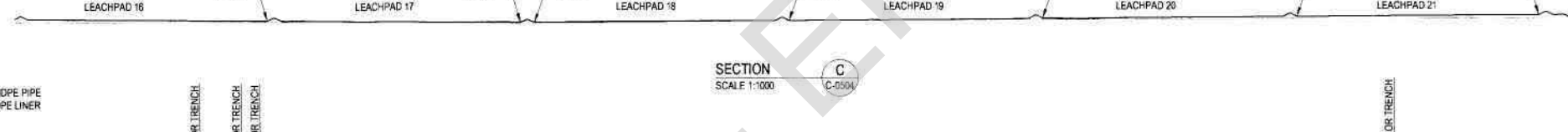
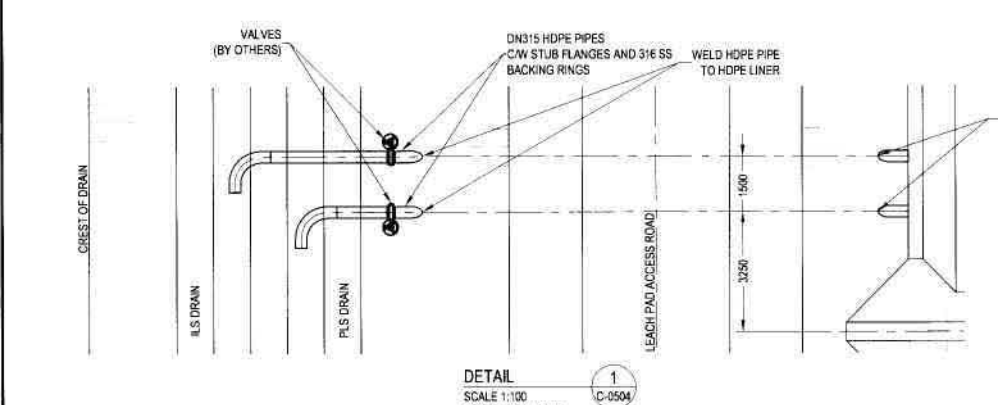
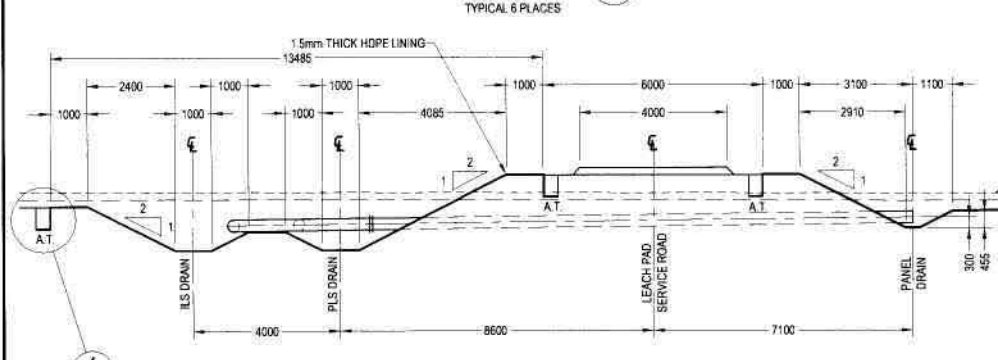
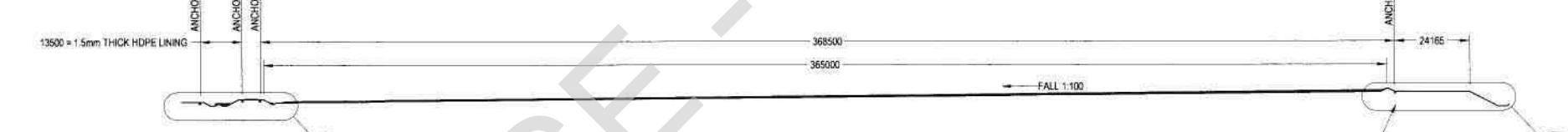
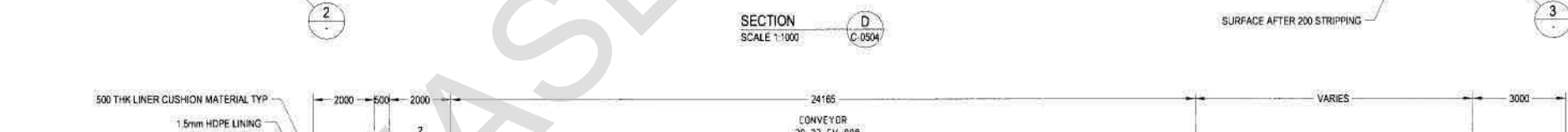
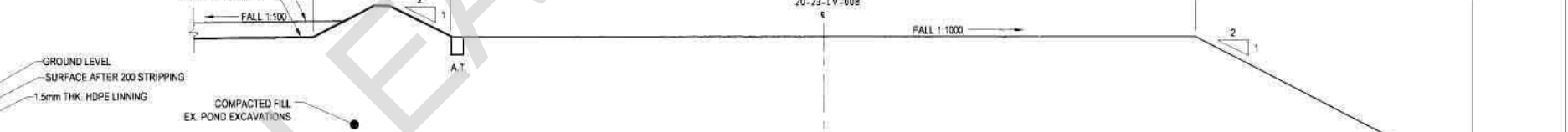
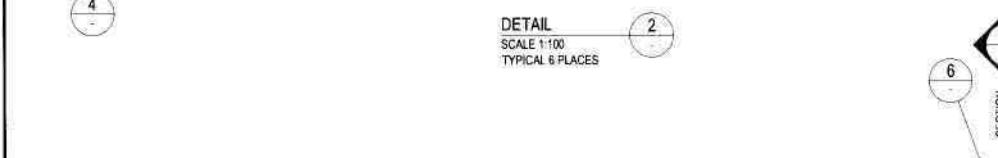
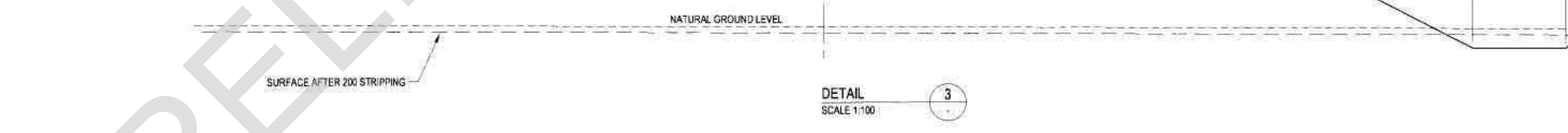
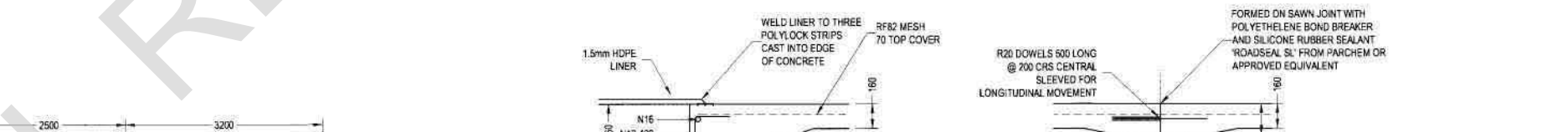
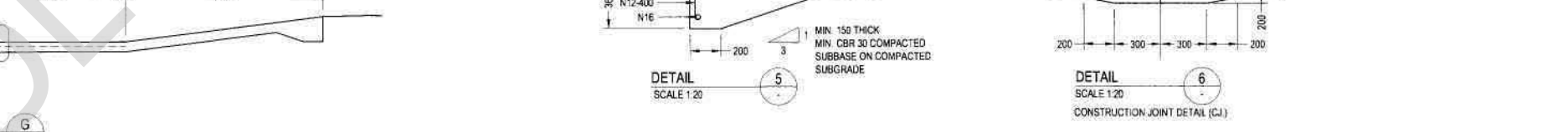
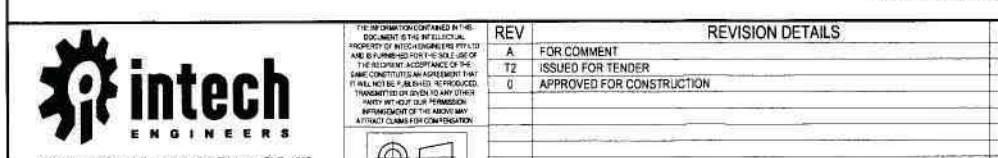
DWG TITLE
 LADY ANNIE EXPANSION PROJECT - STAGE 3
 MT KELLY PLANT SITE - HEAP LEACH AREA
 LEACH PADS 16 TO 21
 CIVIL - SETOUT

FILE NAME	PROJECT	DWG NO	REV	SHEET
725c0504 Rev0	0725	1574-C-0504	0	A1

NOTES
1. AT - DENOTES ANCHOR TRENCH SEE DETAIL 4.



SECTION			
REFERENCE	A	B	C
X16	IL 352.200	IL 353.994	IL 355.788
X17	IL 351.650	IL 353.444	IL 355.238
X18	IL 351.650	IL 353.444	IL 355.238
X19	IL 352.200	IL 353.994	IL 355.788
X20	IL 352.750	IL 354.544	IL 356.338
X21	IL 353.300	IL 355.094	IL 356.888
X22	IL 353.820	IL 355.614	IL 357.408



<p>95 Brunswick Street, Fortitude Valley, Brisbane QLD 4006 ABN 58 011 070 625, TEL 61 7 3666 0006, FAX 61 7 3666 0004 Email: intech@intechengineers.com.au, www.intechengineers.com.au</p>		<p>THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF INTECH ENGINEERS PTY LTD AND IS LOANED TO YOU FOR THE USE OF THE PROJECT ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF INTECH ENGINEERS PTY LTD.</p>		<p>13-137</p>		<p>File E Documents</p>		<p>Page 17 of 27</p>		<p>19/02/2008 2:24:45 PM</p>	
---	--	---	--	---------------	--	-------------------------	--	----------------------	--	------------------------------	--

intech
ENGINEERS

95 Brunswick Street, Fortitude Valley, Brisbane QLD 4006
ABN 58 011 070 625, TEL 61 7 3666 0006, FAX 61 7 3666 0004
Email: intech@intechengineers.com.au, www.intechengineers.com.au



REV	REVISION DETAILS	DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE	SCALE	CLIENT
A	FOR COMMENT	1/11/07	DMC			1574-C-0500	SITE LAYOUT	1:2000	
T2	ISSUED FOR TENDER	31/01/08	MAM	DJB		1574-C-0504	LEACHPADS 16 TO 21 - SETOUT		
0	APPROVED FOR CONSTRUCTION	04/02/08	MAM	DJB / WW	RRE				

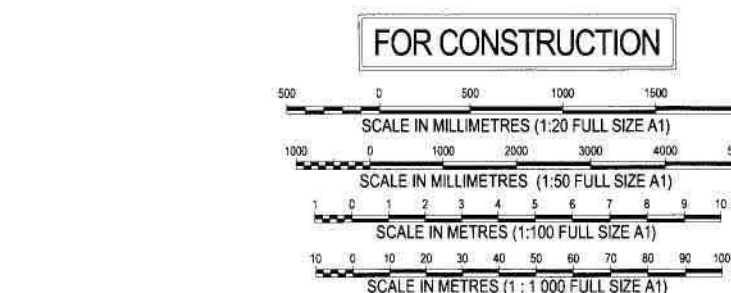
SCALE	CLIENT
DRAWN: DMC	29/01/08
CHKD: DJB	18/02/08
DESIGN: WW	18/02/08
APPROVED - INTECH: DATE	
D.J. BYRNE	18/02/08
APPROVED - CLIENT: DATE	
R.R. ELLIS	18/02/08

DWG TITLE	PROJECT	DWG NO	REV	SHEET
LADY ANNIE EXPANSION PROJECT - STAGE 3 MT KELLY SITE - HEAP LEACH LEACH PADS 16 TO 21 CIVIL - SECTIONS AND DETAILS	0725	1574-C-0505	0	A1

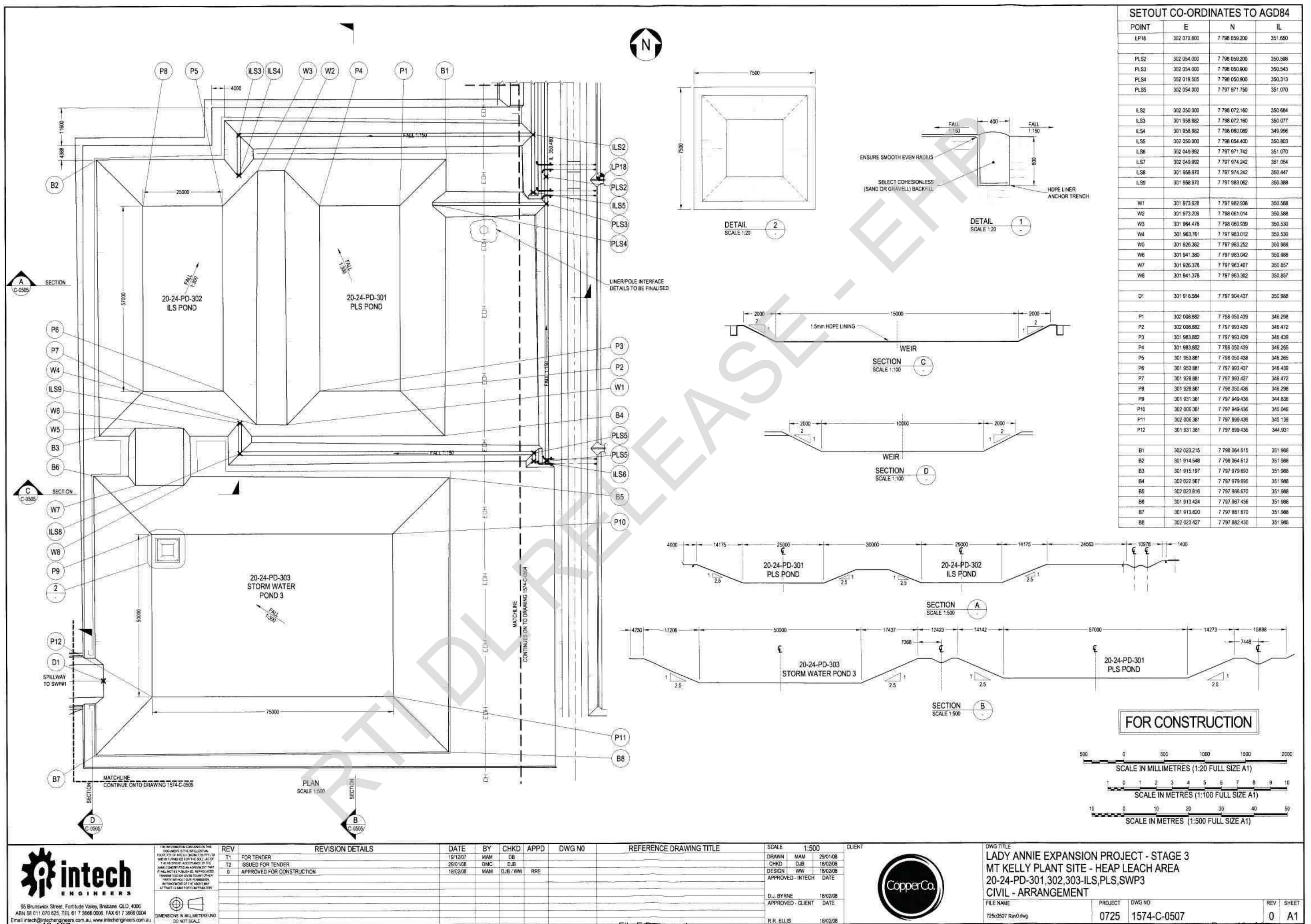
FILE NAME	PROJECT	DWG NO	REV	SHEET
725c0504 Rev0	0725	1574-C-0505	0	A1

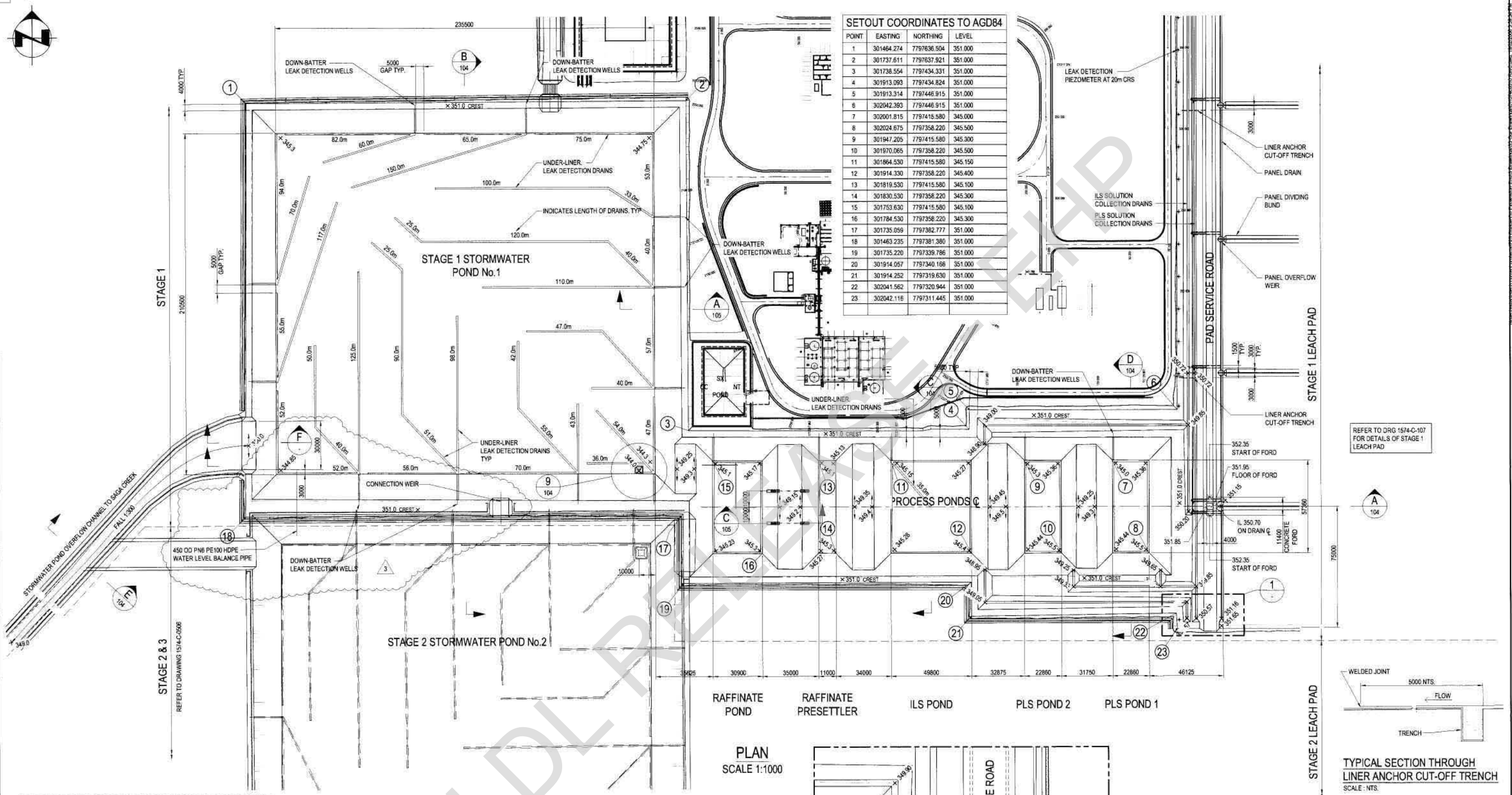


SCALE	CLIENT
DRAWN: DMC	29/01/08
CHKD: DJB	18/02/08
DESIGN: WW	18/02/08
APPROVED - INTECH: DATE	
D.J. BYRNE	18/02/08
APPROVED - CLIENT: DATE	
R.R. ELLIS	18/02/08



Page 18 of 27





STAGE 1, 2 & 3 HYDROLOGY PARAMETERS

TOTAL CONTRIBUTING CATCHMENT AREA	945 969 m ²
REQUIRED PROCESS WATER STORAGE VOLUME	61 213 m ³
100 YEAR 2 MONTH WET SEASON RUNOFF TOTAL STORAGE VOLUME	776 394 m ³
REQUIRED TOTAL STORAGE VOLUME	946 597 m ³
AVAILABLE PROCESS POND STORAGE VOLUME	68 322 m ³
AVAILABLE ALL PONDS FULL STORAGE VOLUME (TO STORMWATER POND OVERFLOW SPILL WAY LEVEL RL 350.10)	850 467 m ³

MANDATORY REPORTING LEVEL 1 VOLUME	RL 347.727 m
100 YEAR 72 HOUR STORM VOLUME	320 889 m ³
MANDATORY REPORTING LEVEL 2 VOLUME	RL 348.077 m
10 YEAR 24 HOUR STORM VOLUME	141 930 m ³

STAGE 1 & 2 HYDROLOGY PARAMETERS DETAIL
SCALE 1:200

DETAIL 1
NTS

APPROVED FOR
CONSTRUCTION

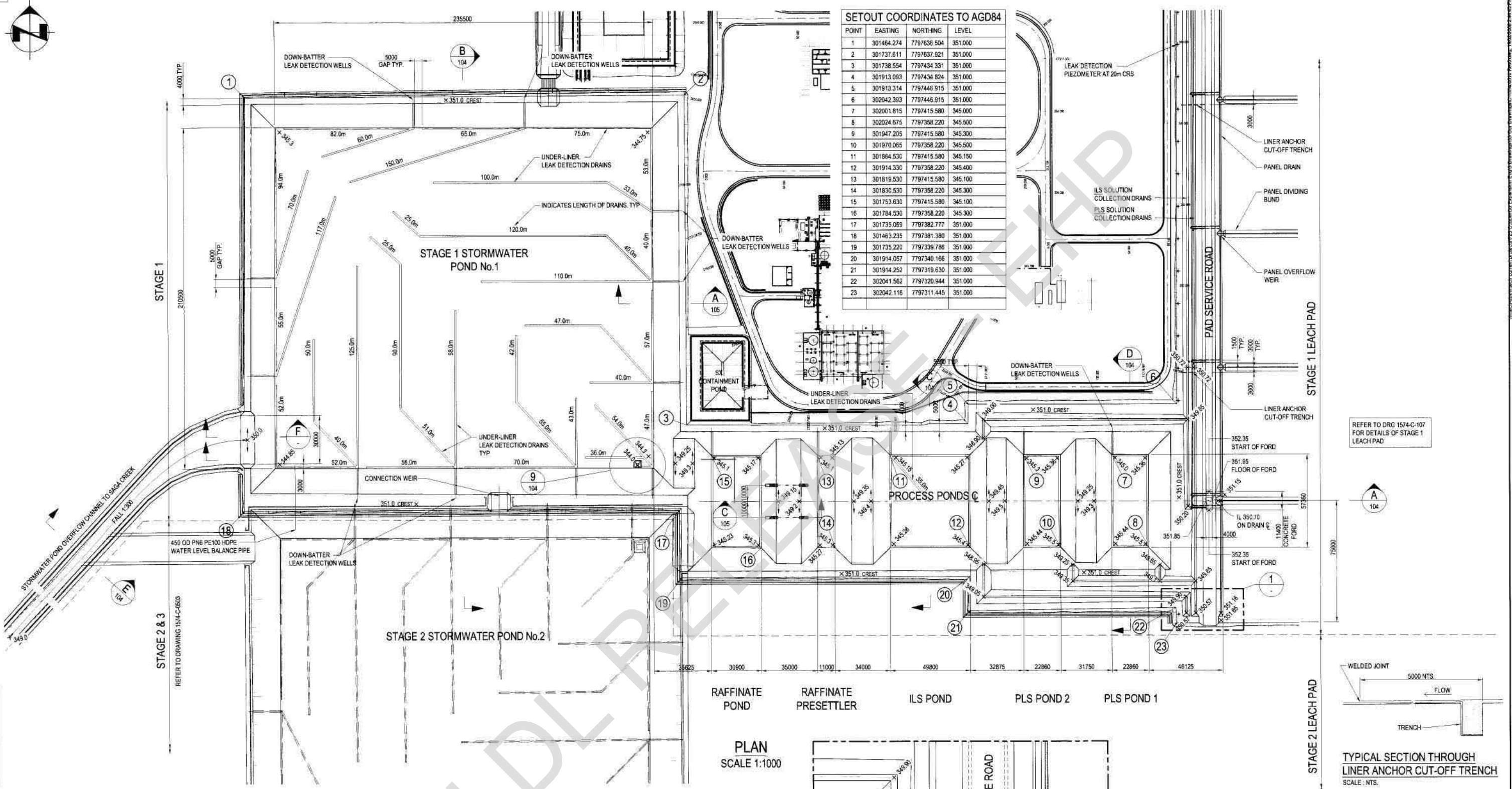
NOTES

STD DETAIL DRAWINGS APPLY

DRAWING No.	REFERENCE DRAWING TITLE	DRAWING No.	REFERENCE DRAWING TITLE	No	BY	DATE	REVISION DETAILS	CHKD	APPR	No	BY	DATE	File E Documents	CHKD	APPR	PROJ APPR	R.R. ELLIS	19/02/09
1574-C-008	25.54-PS-003 STORMWATER POND 2B	3	N/A	16/02/09			GENERAL REVISIONS AS NOTED	DOB: W/A	R/R									
1574-C-107	EARTHWORKS - MT KELLY LEACHPAD DETAIL PLAN	2	V/A	16/03/07			GENERAL REVISIONS AS NOTED	CLM	SM									
1574-C-108	EARTHWORKS - MT KELLY POND LINER DETAILS	1	V/A	18/12/05			GENERAL REVISIONS AS NOTED	MAG	P/W									
1574-C-109	EARTHWORKS - MT KELLY POND CROSS SECTIONS	0	0/A	20/03/06			ISSUED FOR CONSTRUCTION	JRM	R/R									
1574-C-104	EARTHWORKS - MT KELLY POND CROSS SECTIONS	11	0/P	26/07/06			ISSUED FOR TENDER		R/R									

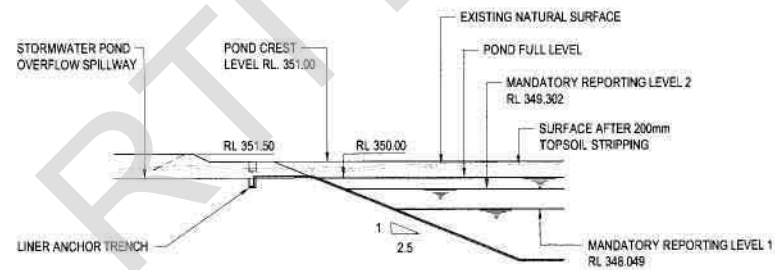
CLIENT	COPPERCO LTD	SCALE	AS SHOWN	SIZE	B1
TITLE	LADY ANNIE COPPER PROJECT	ALL DIMENSIONS IN MILLIMETRES			
REV No.	1	2	3		
DRAWING No.	1574-C-107				
EARTHWORKS - MT KELLY PROCESS AND STORMWATER PONDS					
STAGE 3 REPORTING LEVELS					

Page 2 of 12



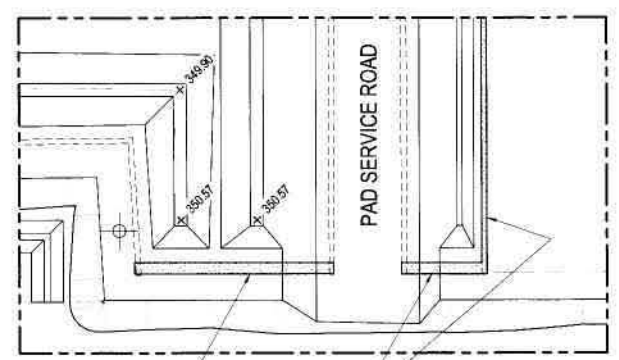
STAGE 1 & 2 HYDROLOGY PARAMETERS

• TOTAL CONTRIBUTING CATCHMENT AREA	6999 975 m²
• REQUIRED PROCESS WATER STORAGE VOLUME	43 200 m³
• 100 YEAR 2 MONTH WET SEASON RUNOFF TOTAL STORAGE VOLUME	576 710 m³
• REQUIRED TOTAL STORAGE VOLUME	619 910 m³
• AVAILABLE PROCESS POND STORAGE VOLUME	44 850 m³
• AVAILABLE ALL PONDS FULL STORAGE VOLUME (TO STORMWATER POND OVERFLOW SPILL WAY LEVEL RL 350.10)	823 656 m³
MANDATORY REPORTING LEVEL 1 VOLUME	RL 348 636 m
• 100 YEAR 72 HOUR STORM VOLUME	237 382 m³
MANDATORY REPORTING LEVEL 2 VOLUME	RL 349 141 m
• 10 YEAR 24 HOUR STORM VOLUME	105 001 m³



STAGE 1 & 2 HYDROLOGY PARAMETERS DETAIL
SCALE 1:200

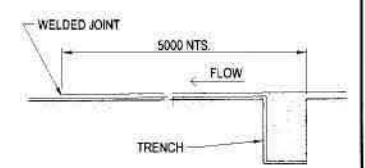
PLAN
SCALE 1:1000



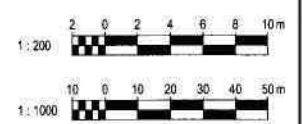
DETAIL 1
NTS

APPROVED FOR
CONSTRUCTION

NOTES



TYPICAL SECTION THROUGH
LINER ANCHOR CUT-OFF TRENCH
SCALE: NTS



DRAWING No.	REFERENCE DRAWING TITLE	DRAWING No.	REFERENCE DRAWING TITLE	No	BY	DATE	REVISION DETAILS	CHKD	APPR	No	BY	DATE
1574-C-107	26-24-PO-003 STORMWATER POND 2											
1574-C-107	EARTHWORKS - MT KELLY LEACH PAD SETOUT PLAN											
1574-C-109	EARTHWORKS - MT KELLY POND LINER DETAILS											
1574-C-104	EARTHWORKS - MT KELLY POND CROSS SECTIONS											



CLIENT	COPPERCO LTD	SCALE	AS SHOWN	SIZE	B1
TITLE	LADY ANNIE COPPER PROJECT	ALL DIMENSIONS IN MILLIMETRES			
	EARTHWORKS - MT KELLY PROCESS AND STORMWATER PONDS	REV No			
	STAGE 2 REPORTING LEVELS	DRAWING No			
		Page	1574-C-107	2	0510

October 28, 2008

Mr. Peter Gleeson
Principal Engineer
Operations Division
Environmental Protection Agency
PO Box 15155
CITY EAST QLD 4002

Dear Sir

**Certification of Completion Of Stage 2 of Hazardous Dam Construction
Copperco Limited, Lady Annie Project, Mount Kelly, Queensland**

I, Wayne R. Whitaker, being a Registered Professional Engineer of Queensland, being experienced in the design and construction of ponds and drainage systems including associated drains and overflow spillways for the containment of hazardous solutions certify the following :

- (a) I was the Design Engineer responsible for the design of the Stage 2 Heap Leach Pads 1-9 and the Stage 2 Stormwater Ponds (2 and 2B).
- (b) The construction of Stormwater Pond 2B and Leach Pads 3-9 has been in accordance has with the design drawings. As constructed information has been recorded on the following drawings :
 - Intech Engineers 1574-C-0501 (Rev 2)
 - 1574-C-0502 (Rev 2)
 - 1574-C-0506 (Rev2)
 - 1574-C- 0510 (Rev1)

Yours faithfully

s.49 - Signature

W.R. Whitaker
RPEQ No.1094
Director
Malcolm Douglas Consultants Pty.Ltd.

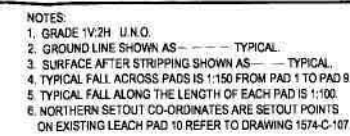
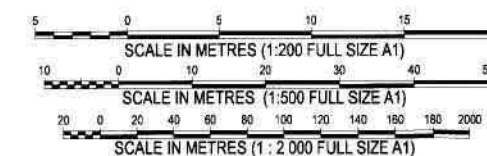
DIRECTORS:

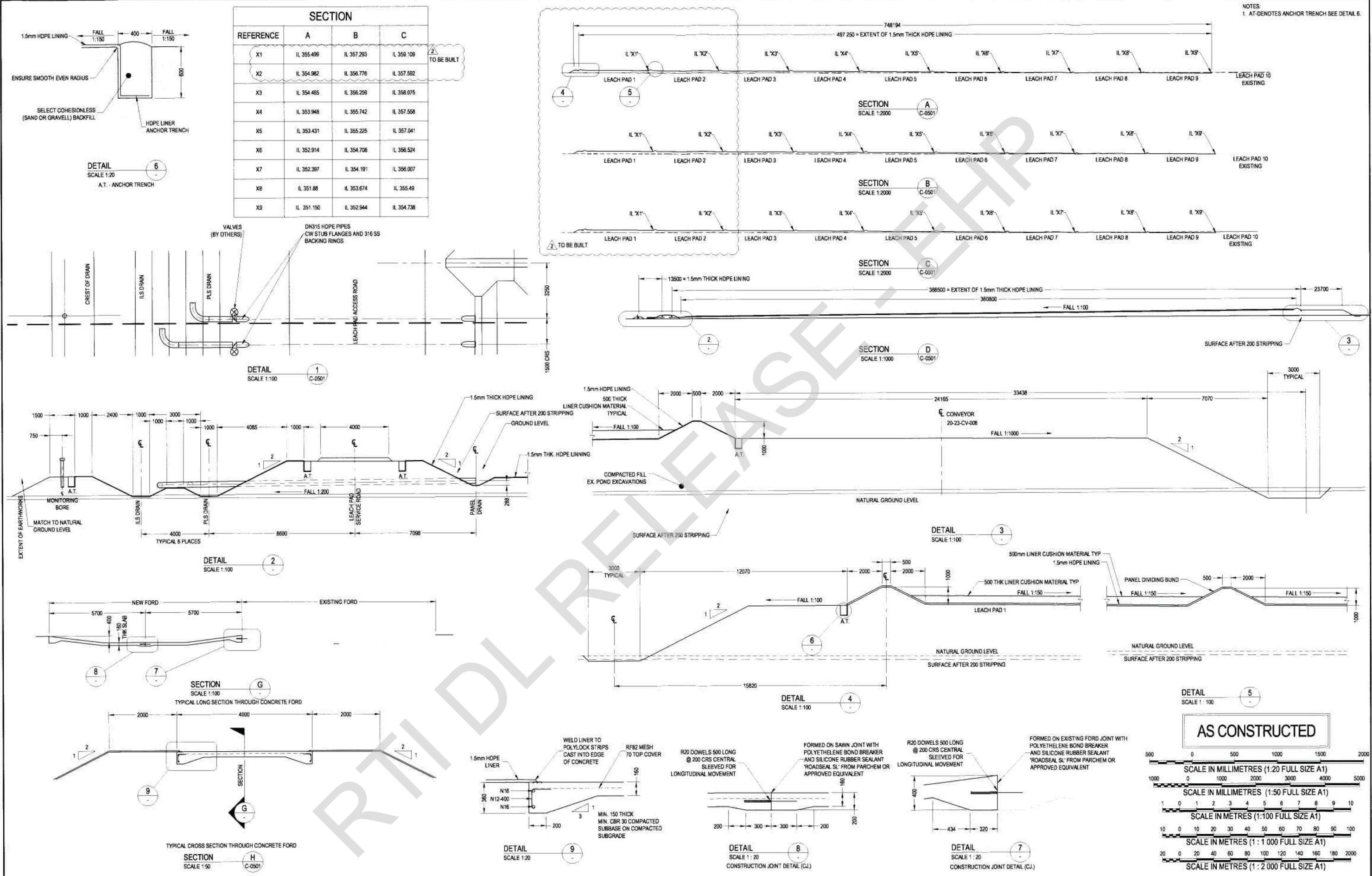
WAYNE WHITAKER B.E., M.I.E.Aust., R.P.E.Q.

DANIEL TONINO B.E., M.I.E.Aust., R.P.E.Q.

CONSULTANT:

MALCOLM DOUGLAS M.I.E.Aust., R.P.E., C.Eng., M.I.St.E., P.Eng., L.G.Eng.





 <div>95 Brunswick Street, Fortitude Valley, Brisbane QLD, 4006 ABN 58 011 070 625, TEL 61 7 3666 0006, FAX 61 7 3666 0004 Email: intech@intechengineers.com.au, www.intechengineers.com.au</div>	<div>THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE INTELLECTUAL PROPERTY OF INTECH ENGINEERS PTY LTD AND IS LOANED TO YOU FOR THE SOLE USE OF THE PROJECT. IT IS NOT TO BE REPRODUCED, COPIED, EITHER WHOLLY OR IN PART, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF INTECH ENGINEERS PTY LTD.</div> <div>INTENT: TO BE USED FOR CONSTRUCTION</div> <div> DIMENSIONS IN MILLIMETERS DO NOT SCALE</div>	REV	REVISION DETAILS				DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE		SCALE	1:2500		CLIENT	DWG TITLE LADY ANNIE EXPANSION PROJECT - STAGE 2 MT KELLY PLANT SITE - HEAP LEACH LEACHPADS 1 TO 9 CIVIL - SECTIONS AND DETAILS							
		A	FOR COMMENT				13/09/07	DMC				1574-C-0500	SITE LAYOUT		DRAWN				DMC	29/01/08	PROJECT 0725	DWG NO 1574-C-0502	REV 2	SHEET A1	
		B	FOR APPROVAL				1/11/07	DMC					LEACHPADS 1 TO 9 - SETOUT		CHKD										
		C	PRELIMINARY FOR COMMENT				26/11/07	DMC	DJB		DJB				DESIGN										
		T1	ISSUE FOR TENDER				4/12/07	DMC							APPROVED - INTECH				DATE						
		0	APPROVED FOR CONSTRUCTION				06/02/08	MAM							APPROVED - CLIENT				DATE						
		1	DISTANCE TO MONITORING BORE ADDED TO DETAIL 2				19/05/08	DMC																	
		2	AS CONSTRUCTED. LP 1 & 2 YET TO BE CONSTRUCTED				31/10/08	MAM	DJB/WW	RRE															
File E Documents																									

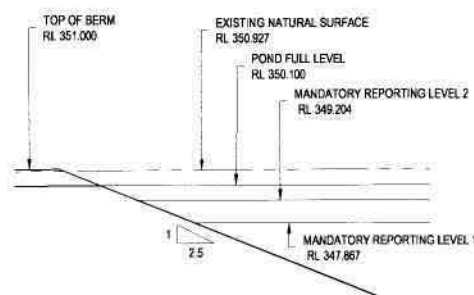
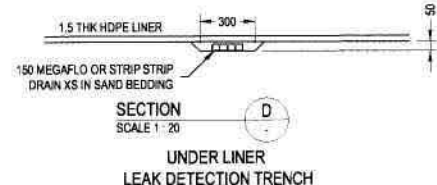
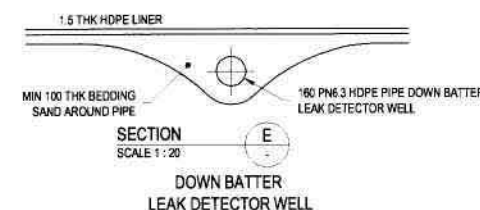
Page 25 of 27

SETOUT CO-ORDINATES TO AGD84

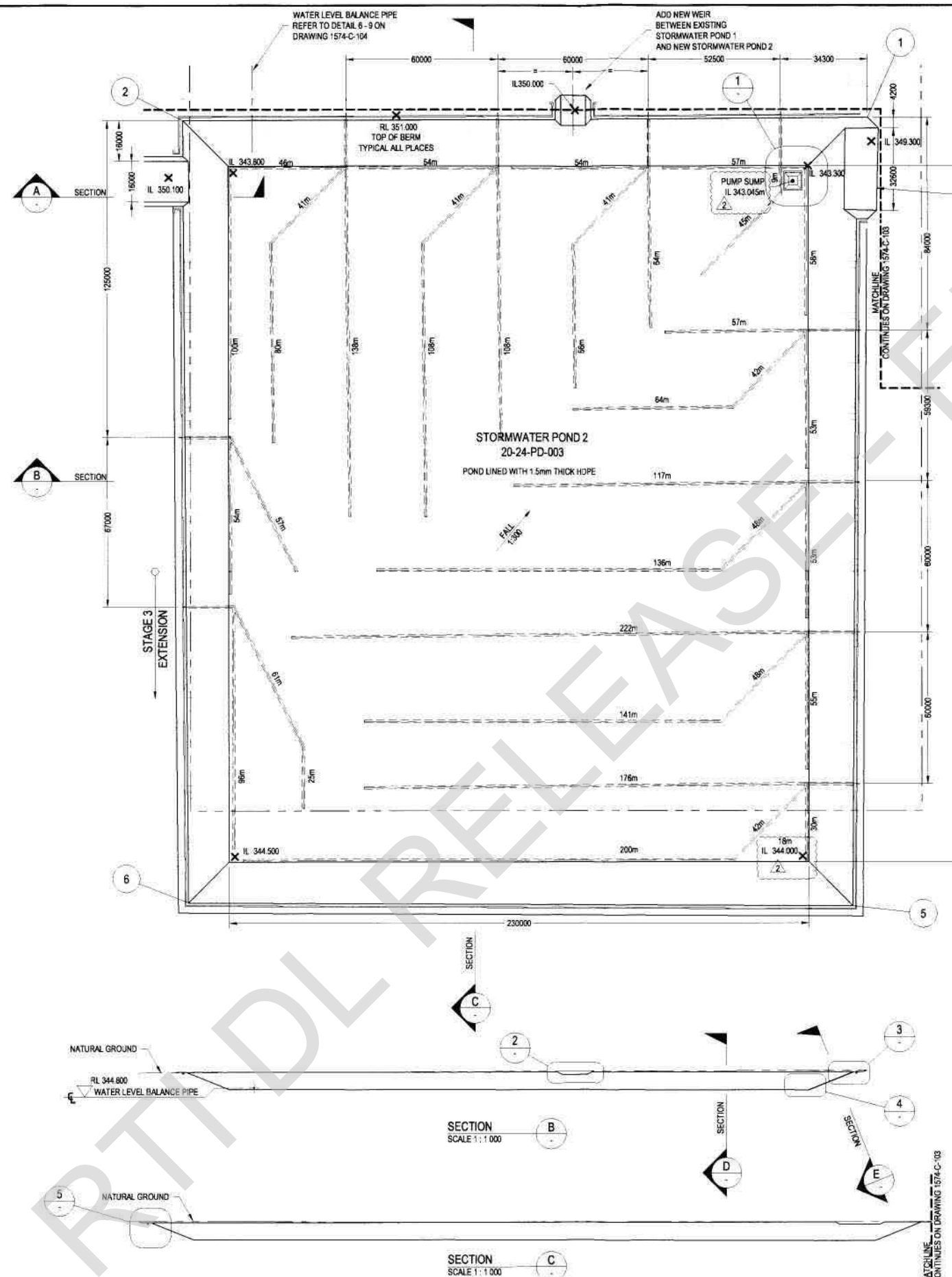
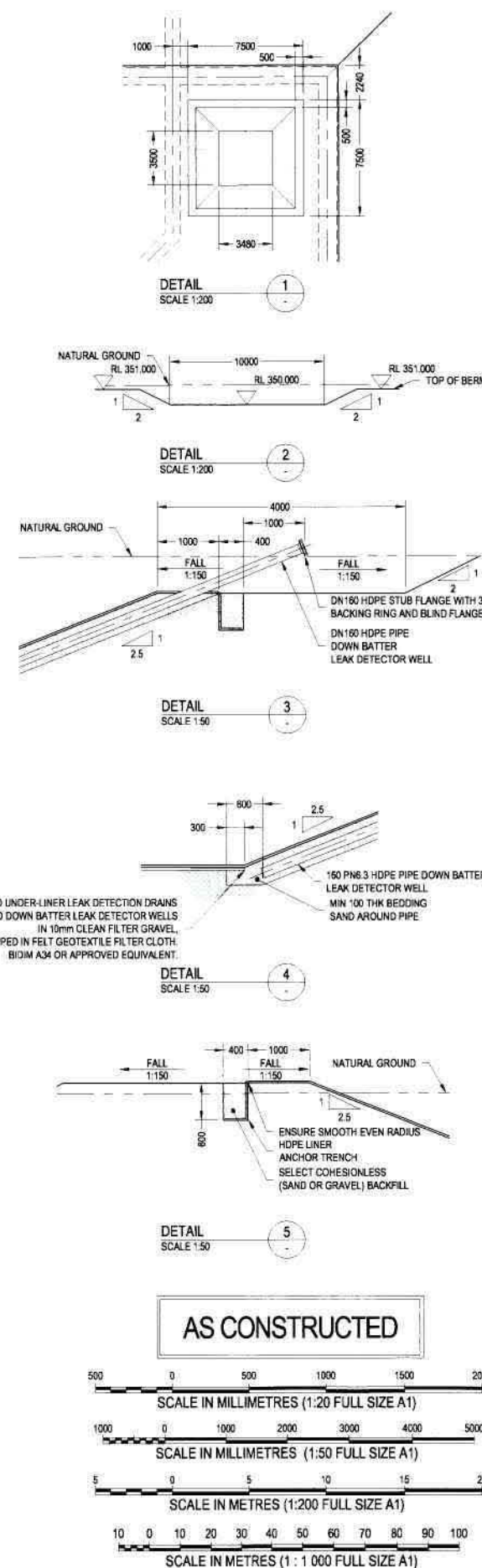
POINT	EASTING	NORTHING
1	301 738 800	7 797 383 800
2	301 467 300	7 797 382 100
5	301 732 600	7 797 072 200
6	301 469 100	7 797 073 600

STAGES 1, 2 & 3 HYDROLOGY PARAMETERS

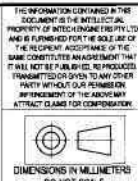
• TOTAL CONTRIBUTING CATCHMENT AREA	945 999 m ²
• REQUIRED PROCESS WATER STORAGE VOLUME	61 213 m ³
• 100 YEAR 2 MONTH WET SEASON RUNOFF TOTAL STORAGE VOLUME	779 384 m ³
• REQUIRED TOTAL STORAGE VOLUME	840 597 m ³
• AVAILABLE PROCESS POND STORAGE VOLUME	68 322 m ³
• AVAILABLE ALL PONDS FULL STORAGE VOLUME (TO STORMWATER POND OVERFLOW SPILL WAY LEVEL RL 350.10)	850 467 m ³
MANDATORY REPORTING LEVEL 1 VOLUME	RL 347.727 m
• 100 YEAR 72 HOUR STORM VOLUME	320 889 m ³
MANDATORY REPORTING LEVEL 2 VOLUME	RL 349.077 m
• 10 YEAR 24 HOUR STORM VOLUME	141 930 m ³



- NOTES
1. GRADE 1V: 2.5H ON PONDS AND 1V: 2H ON WIERS UNO.
 2. FOR DETAILED REQUIREMENTS COVERING EARTHWORKS, ROADWORKS & DRAINAGE, REFER TO 725-SP-0041.
 3. FOR DETAILED REQUIREMENTS COVERING GEO-TECH LINING, REFER TO 725-SP-0042.



95 Brunswick Street, Fortitude Valley, Brisbane QLD, 4006
ABN 58 011 070 625, TEL 61 7 3666 0006, FAX 61 7 3666 0004
Email: info@intechengineers.com.au, www.intechengineers.com.au



REV	REVISION DETAILS	DATE	BY	CHKD	APPD	DWG NO	REFERENCE DRAWING TITLE	SCALE	1:1000	CLIENT
A	ISSUED FOR INFORMATION		MAM			1574-C-0500	SITE LAYOUT	DRAWN	MAM	26/01/08
T2	ISSUED FOR TENDER	29/01/08	DMC	DJB		1574-C-0503	20-24-PD-003 STORMWATER POND 2 CIVIL SETOUT & SECTIONS	CHKD	DJB	18/02/08
0	APPROVED FOR CONSTRUCTION	18/02/08	MAM	DJB / WW	RRE	1574-C-103	MT KELLY PROCESS AND STORMWATER PONDS SETOUT PLAN	DESIGN	WW	18/02/08
1	REVISED CO-ORDINATES	23/04/08	MAM			1574-C-104	MT KELLY PROCESS AND STORMWATER PONDS CROSS SECTIONS	APPROVED - INTECH	DATE	
2	AS CONSTRUCTED	31/10/08	MAM	DJB/WW	RRE			APPROVED - CLIENT	DATE	
								R E ELLIS	18/02/08	



DWG TITLE
LADY ANNIE EXPANSION PROJECT - STAGE 3
MT KELLY PLANT SITE - HEAP LEACH AREA
20-24-PD-003 STORMWATER POND 2B
CIVIL - SETOUT AND SECTIONS

FILE NAME	PROJECT	DWG NO	REV	SHEET
725c0506 Rev2.dwg	0725	1574-C-0506	2	A1

