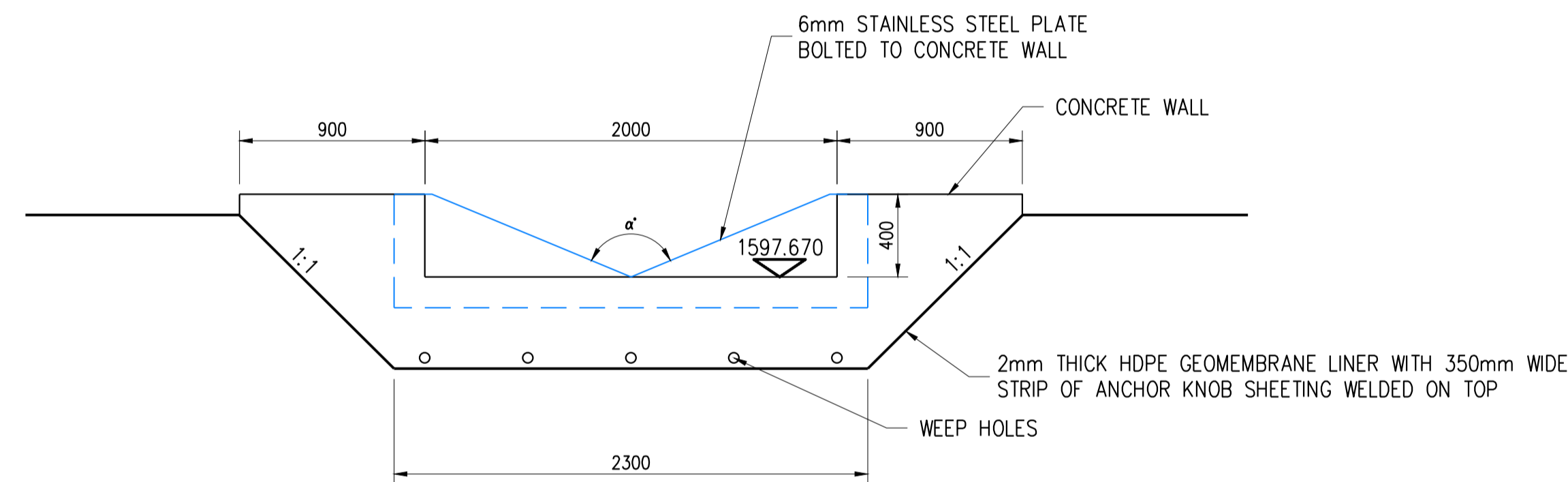
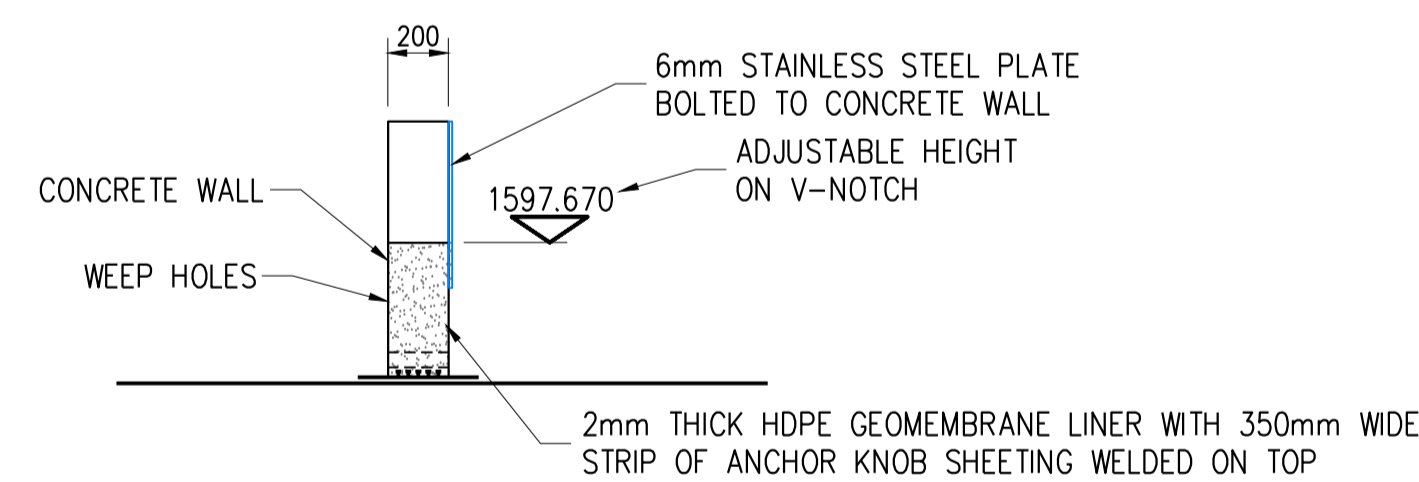


SCALE 1:50 **P** FIRST FLUSH SYSTEM DETAIL  
0401



**ELEVATION**



**SECTION**

SCALE 1:25 **PA** V-NOTCH WEIR DETAIL  
0510

ISSUED FOR INFORMATION  
**DRAFT**

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED	PR ENG No.
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB	800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB	800395

CLIENT  
SASOL SYNFUELS

CONSULTANT



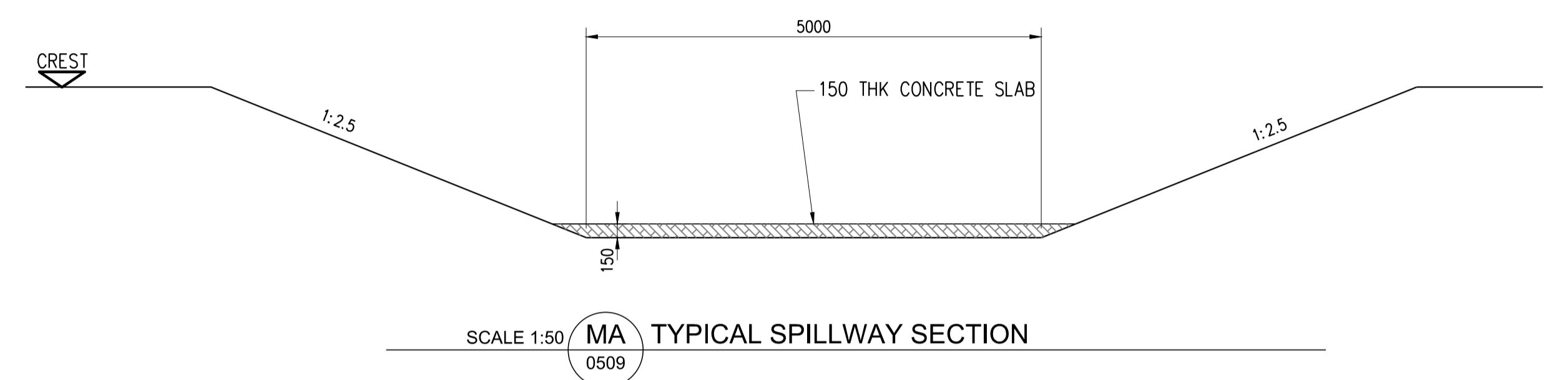
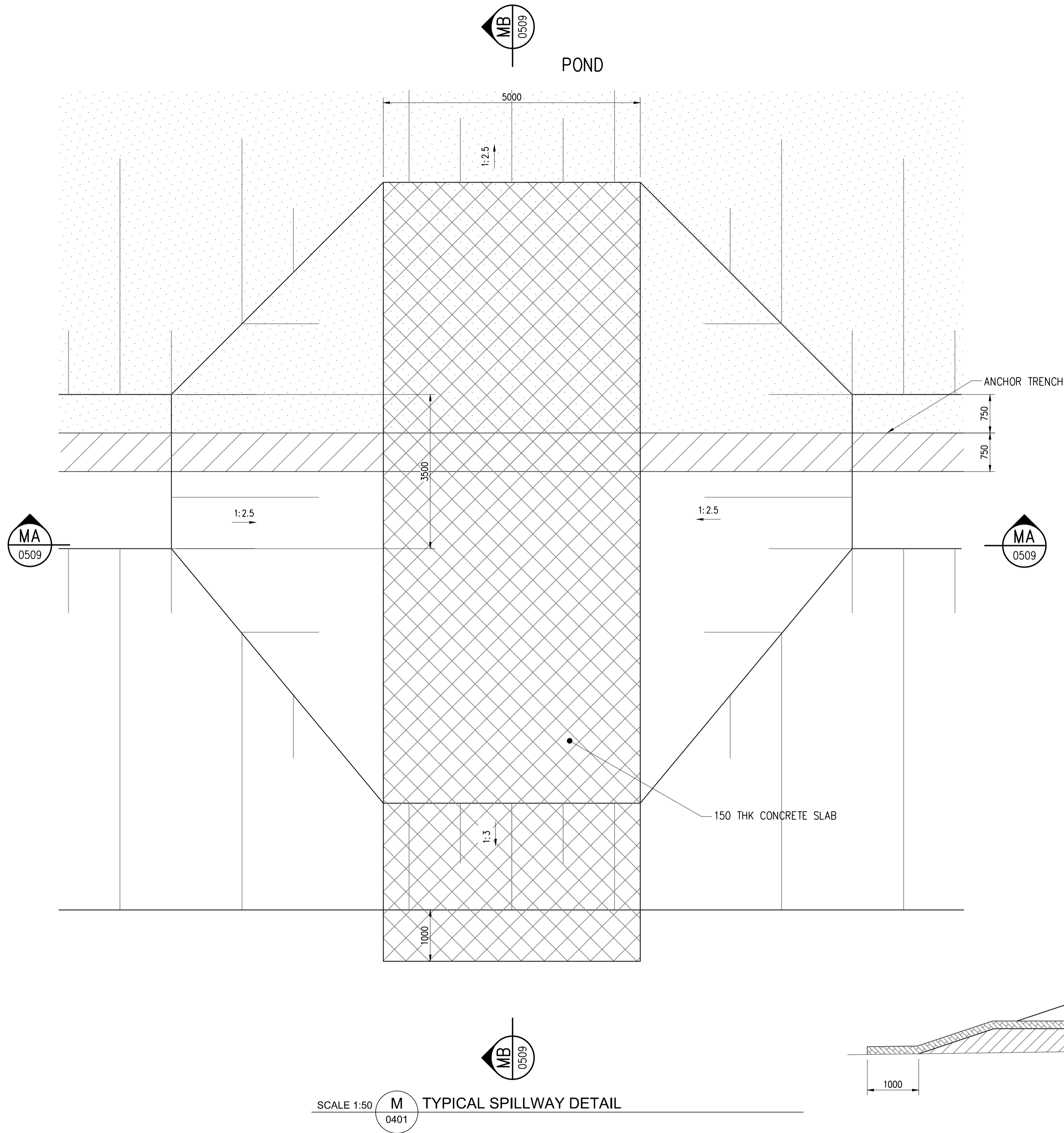
PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

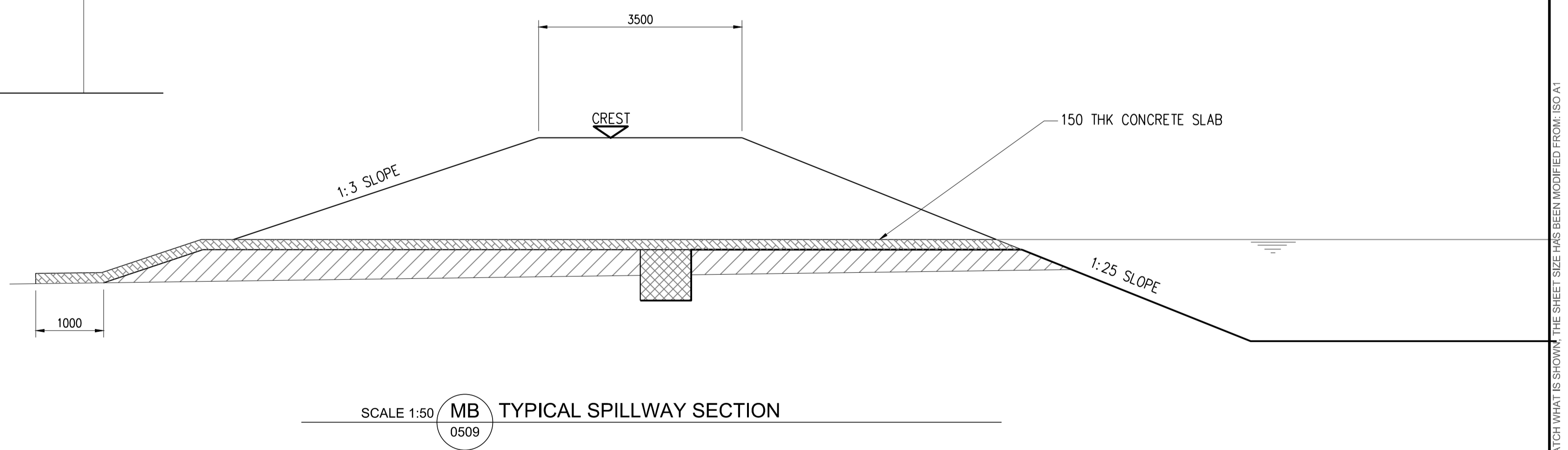
TITLE  
**FIRST FLUSH SYSTEM DETAILS**

PROJECT No. 1418079	CONTROL 0500	Rev. B	26 of 31	DRAWING 0510
------------------------	-----------------	-----------	----------	-----------------

Path: \\p1\48\gms\main\Projects\1418079 - Sasol - Charlie 1 Landfill - ICF\Drawings\5.2 Drawings - Images\Drawings\RevB\_20150527\_1 - File Name: 1418079-0509-D-Spillway Details\_20150528.dwg



ISSUED FOR INFORMATION  
**DRAFT**



Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED	PR	ENG No.
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB		800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB		800395

CLIENT  
**SASOL SYNFUELS**

CONSULTANT  
**Golder Associates**

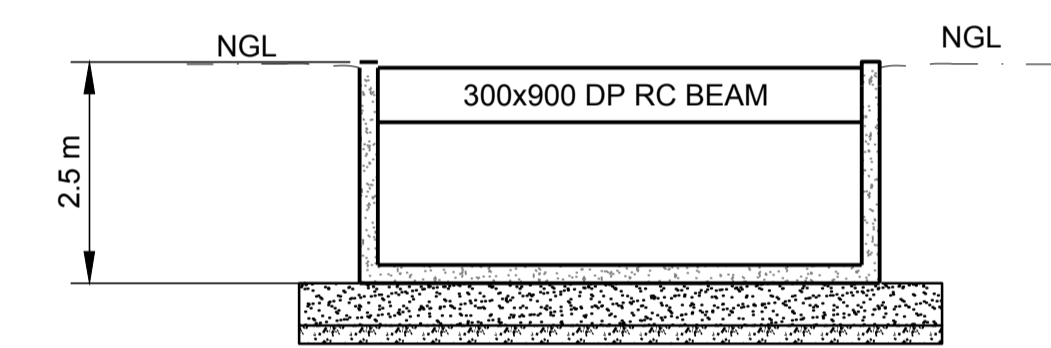
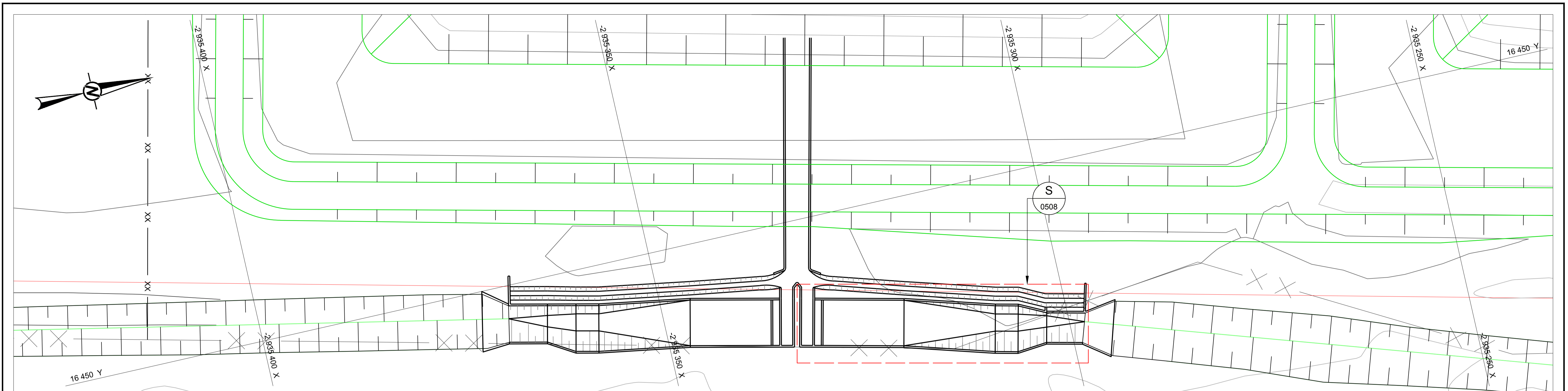
PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

PROJECT  
**SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE**

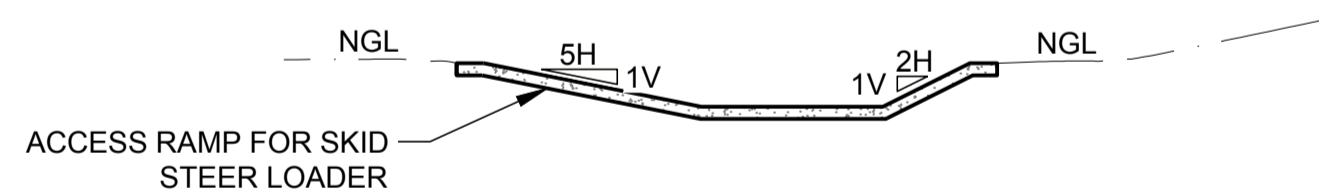
TITLE  
**TYPICAL SPILLWAY DETAIL**

PROJECT No. 1418079    CONTROL 0500    Rev. B    25 of 31    DRAWING 0509

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ISO A1  
25 mm

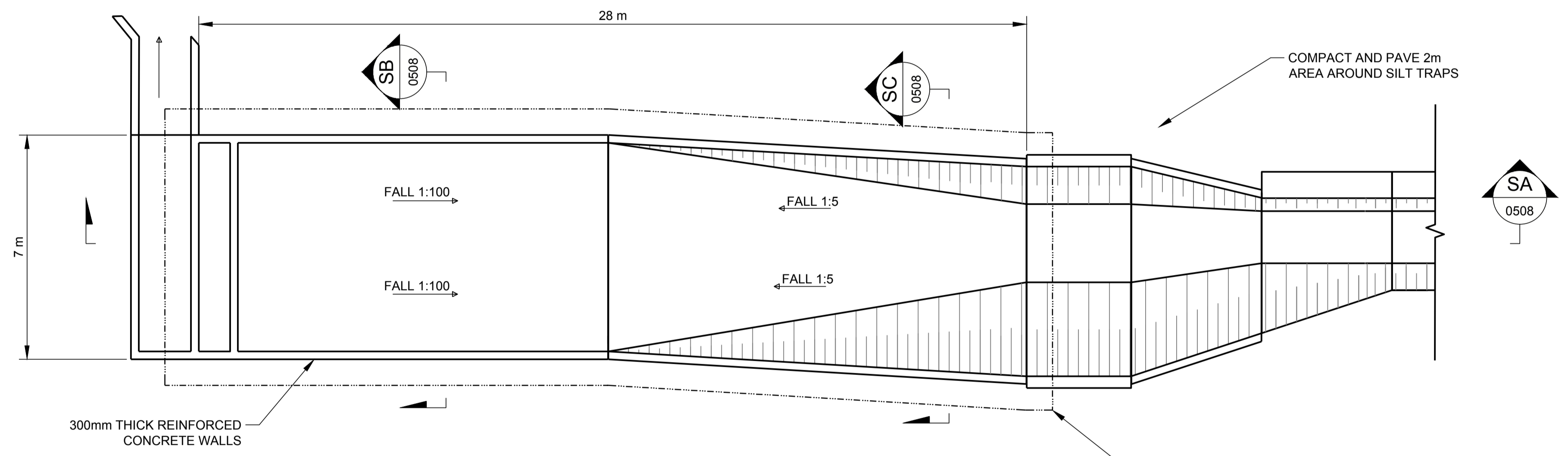
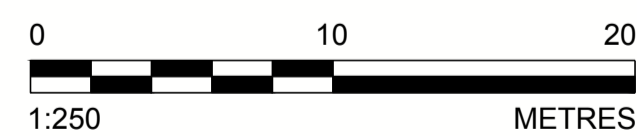


SCALE 1:125 **SB** SILT TRAP CROSS SECTION  
0508

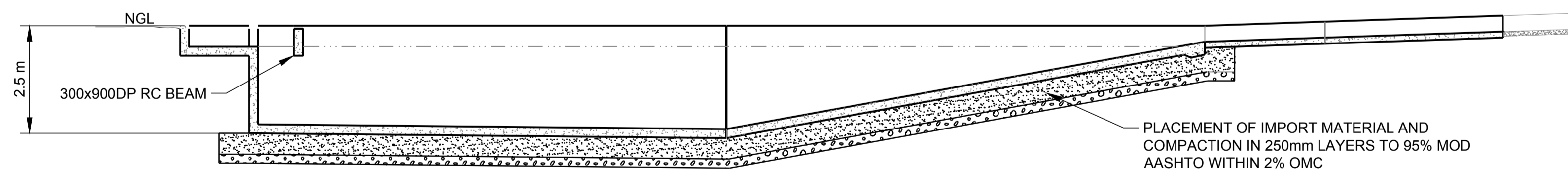


SCALE 1:125 **SC** SILT TRAP RAMP CROSS SECTION  
0508

ISSUED FOR INFORMATION  
**DRAFT**



SCALE 1:125 **S** SILT TRAP PLAN DETAIL  
0401



SCALE 1:125 **SA** SILT TRAP LONG SECTION  
0508

CLIENT  
SASOL SYNFUELS

CONSULTANT

PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

TITLE  
**SILT TRAP TYPICAL DETAILS**

REV.	YYYY-MM-DD	DESCRIPTION
B	2015-05-28	FINAL DRAFT
A	2015-05-08	FIRST DRAFT FOR REVIEW

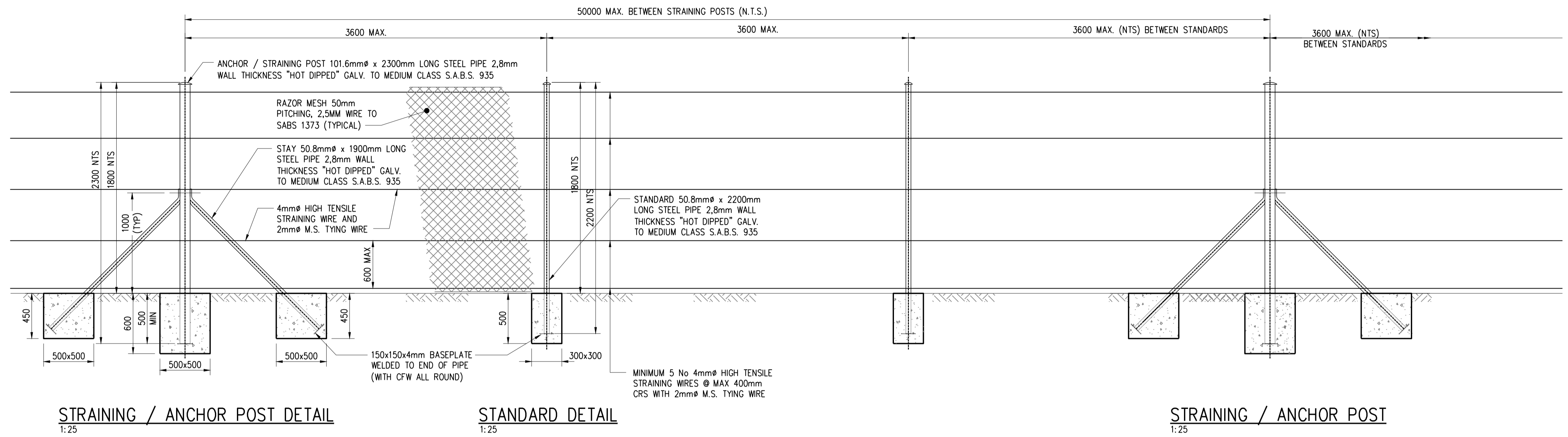
DESIGNED	PREPARED	REVIEWED	APPROVED
GD	GD	SAPB	SAPB
800395	800395	800395	800395



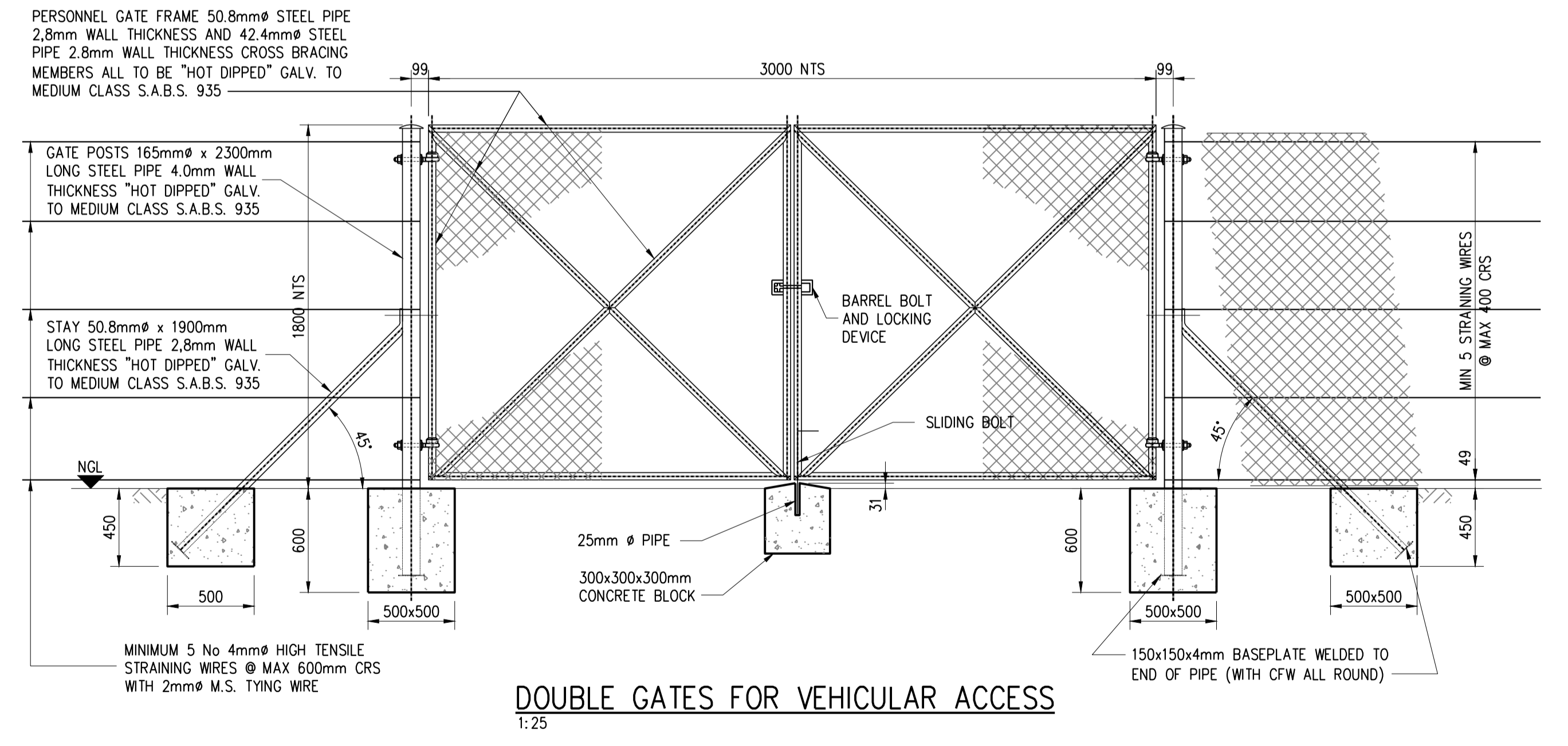
PROJECT NO.	CONTROL	REV.	24 of 31	DRAWING
1418079	0500	B		0508

Path: \\p1er1-1\sl\gsa\ad\Projects\1418079 - Sasol Charlie1\CEPS\Drawings\2 Drawings - Images\DRAWINGS\RevB\_20150527\_1 File Name: 1418079-0508-D-Silt Trap Details\_20150528.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1



SCALE 1:25 **L** PERIMETER FENCE DETAILS  
0401



ISSUED FOR INFORMATION  
**DRAFT**

Path: \\p1er1-1\k1\gsad\proj\1418079 - Sasol Charlie1\CEPS\sec\1418079 - Fence Details - 20150528.dwg

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB 800395

CLIENT  
**SASOL SYNFUELS**

CONSULTANT  
**Golder Associates**

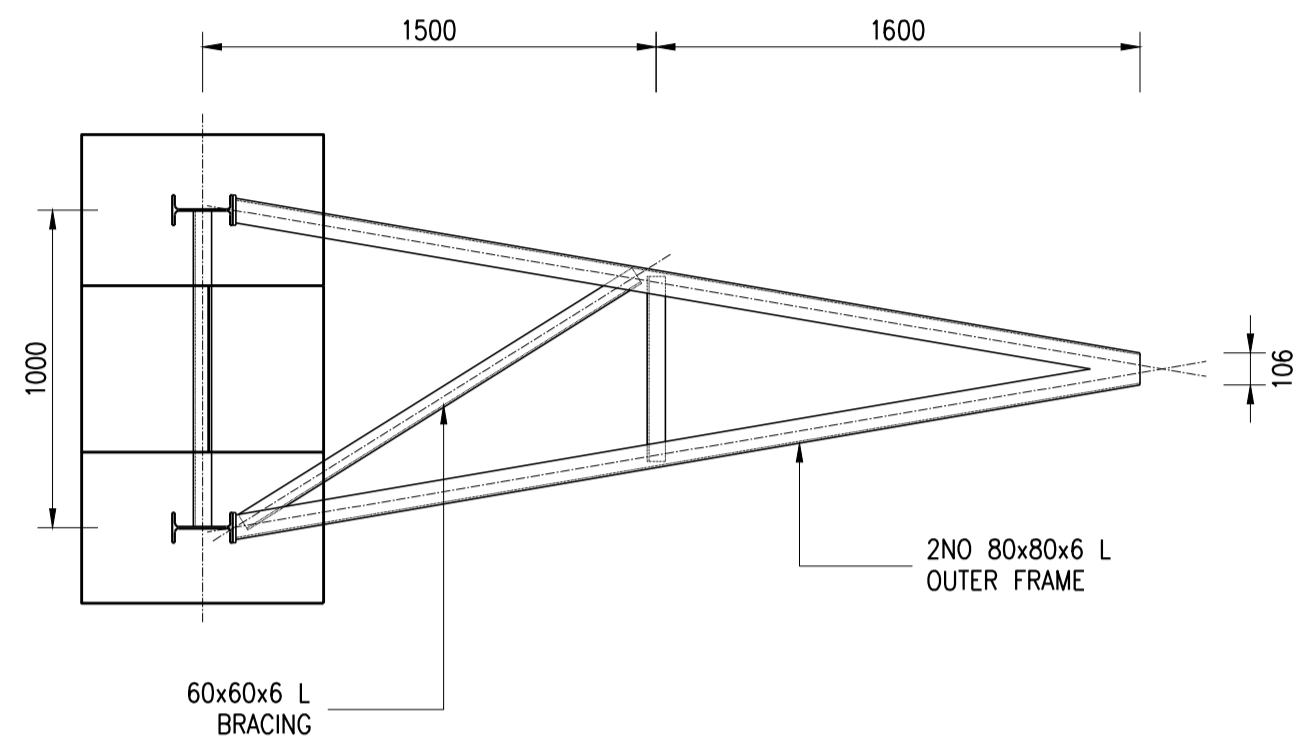
PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

PROJECT  
**SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE**

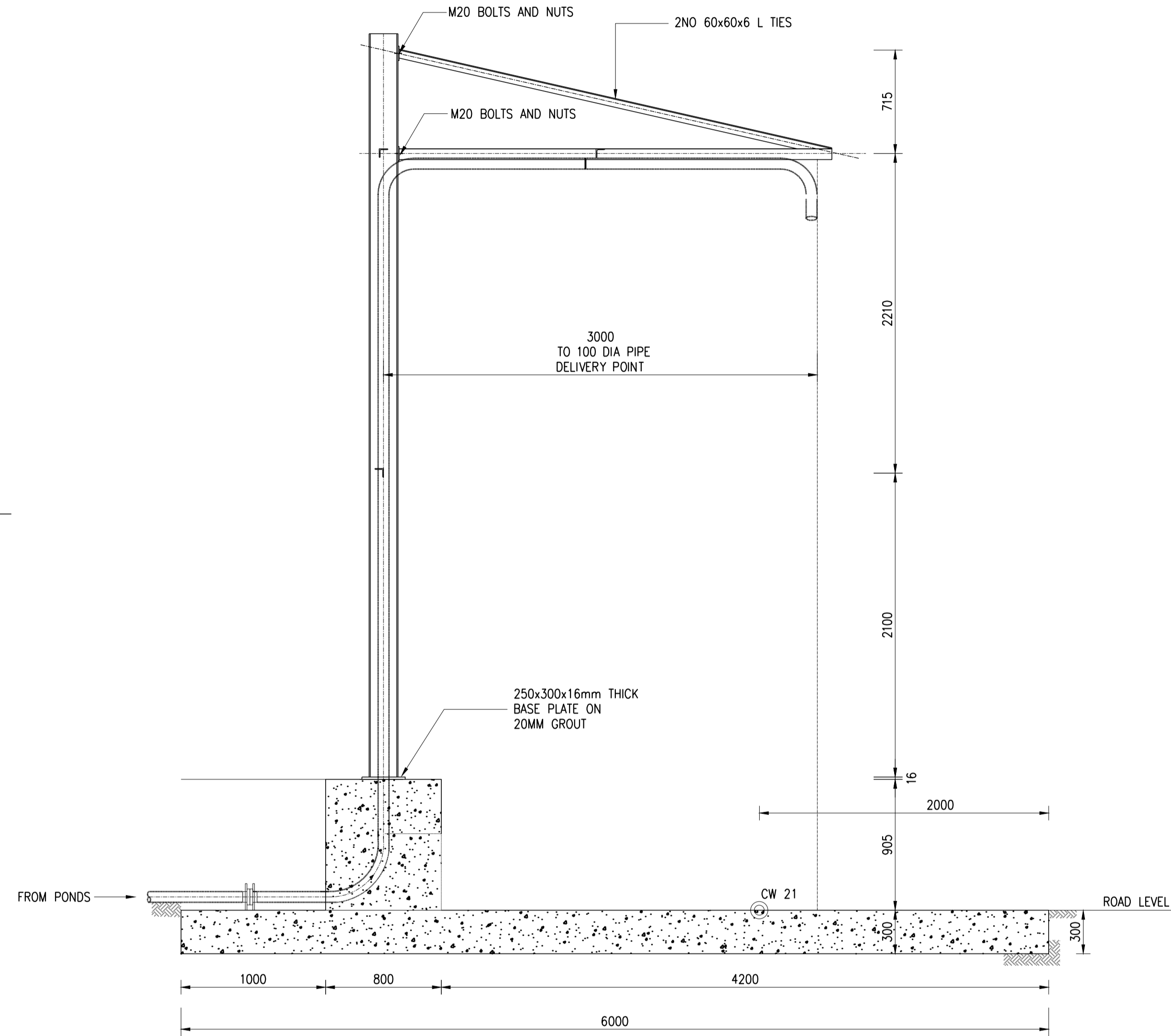
TITLE  
**FENCE DETAILS**

PROJECT NO. 1418079 CONTROL 0500 REV. B 23 of 31 DRAWING 0507

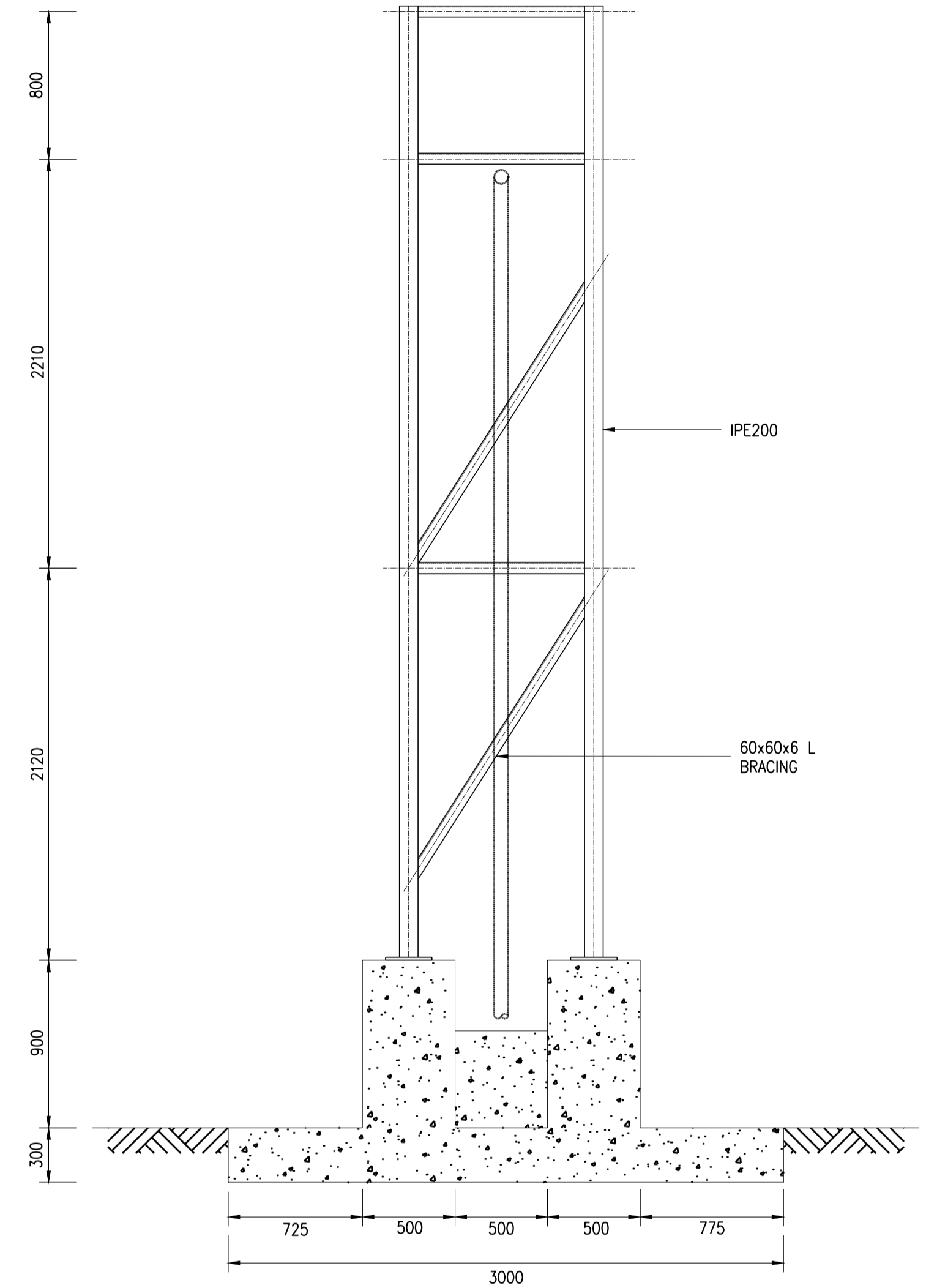
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm



SCALE 1:25 **K** GOOSENECK PLAN DETAIL  
0401



SCALE 1:25 **K** GOOSENECK SECTION DETAIL  
0401



ISSUED FOR INFORMATION  
**DRAFT**

Path: \\p1-e1-1\gsa\ad\Projects\1418079 - Sasol Charlie1\CEPS\Secur\B2 Drawings - Images\DRAWINGS\RevB\_20150527\_1 File Name: 1418079-0506-D-Gooseneck Details\_20150528.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB 800395

CLIENT  
SASOL SYNFUELS

CONSULTANT

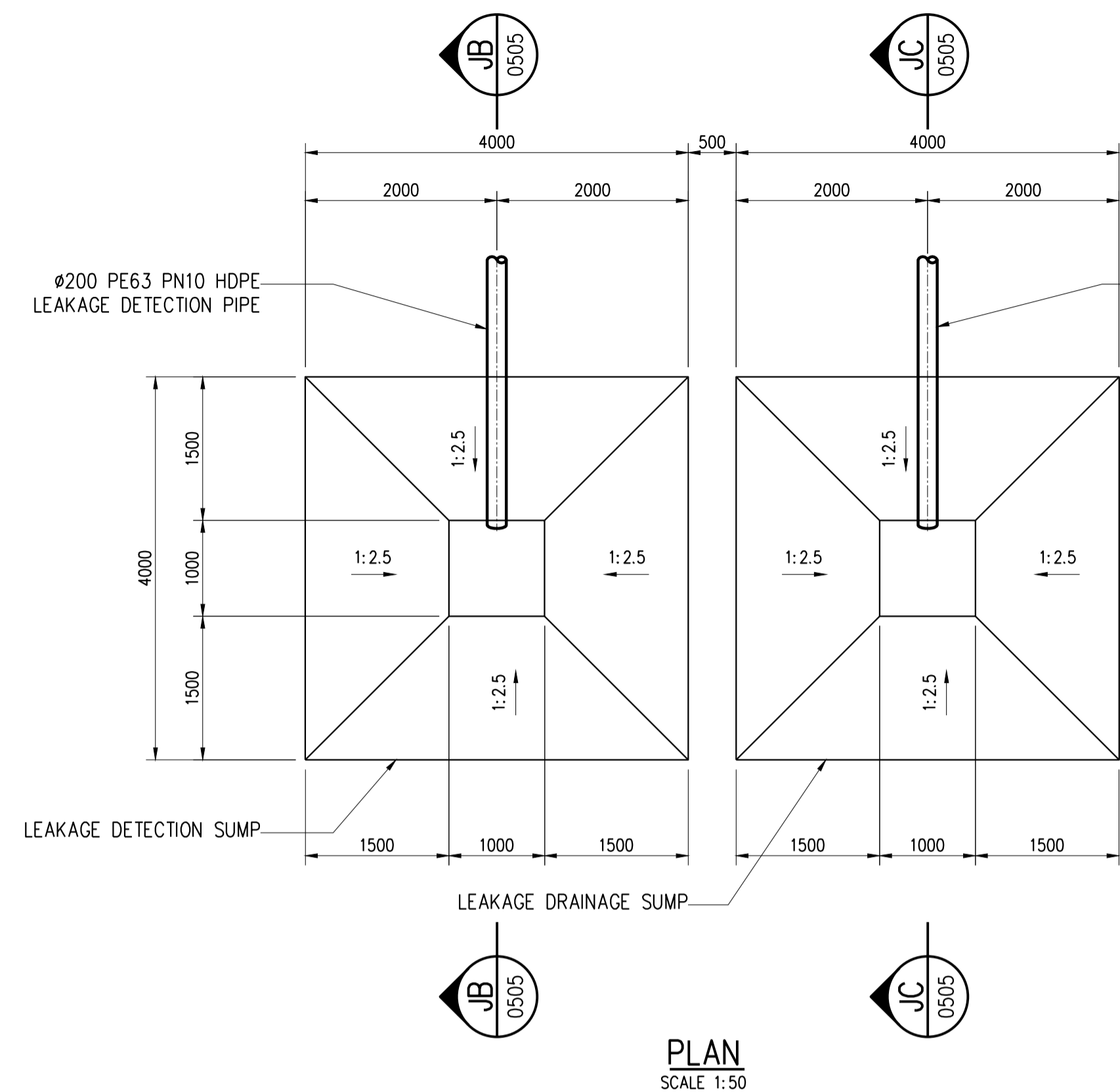


PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

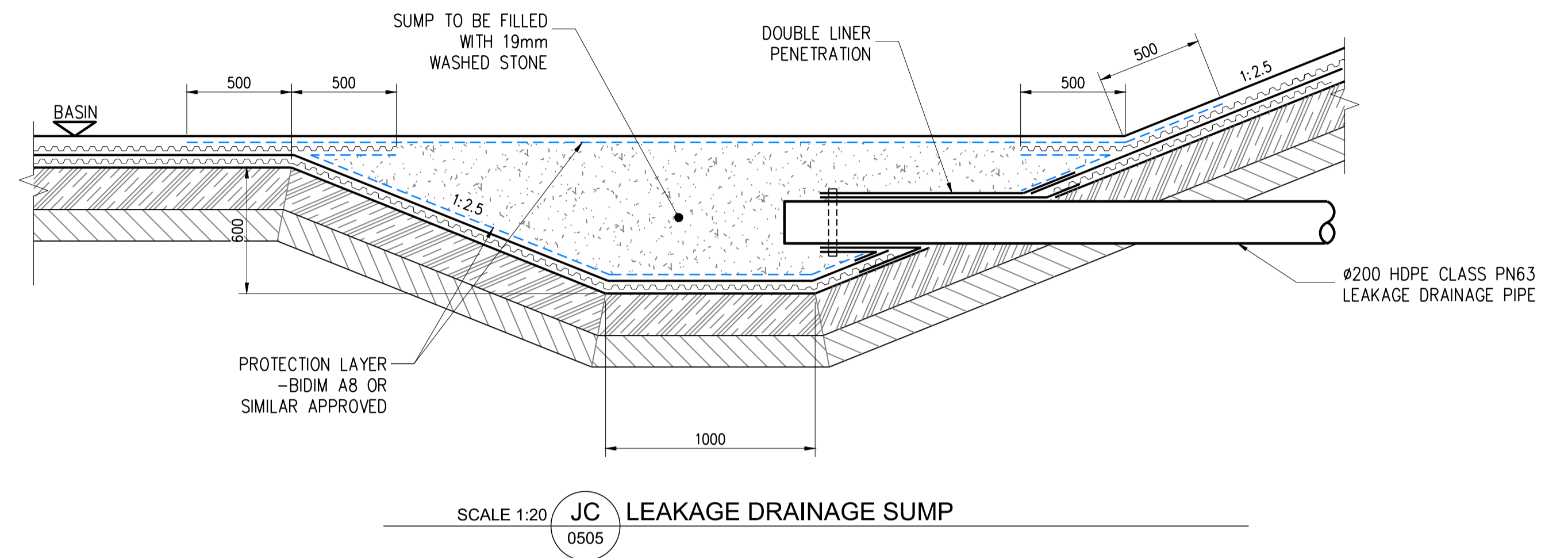
PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

TITLE  
**GOOSENECK DETAILS**

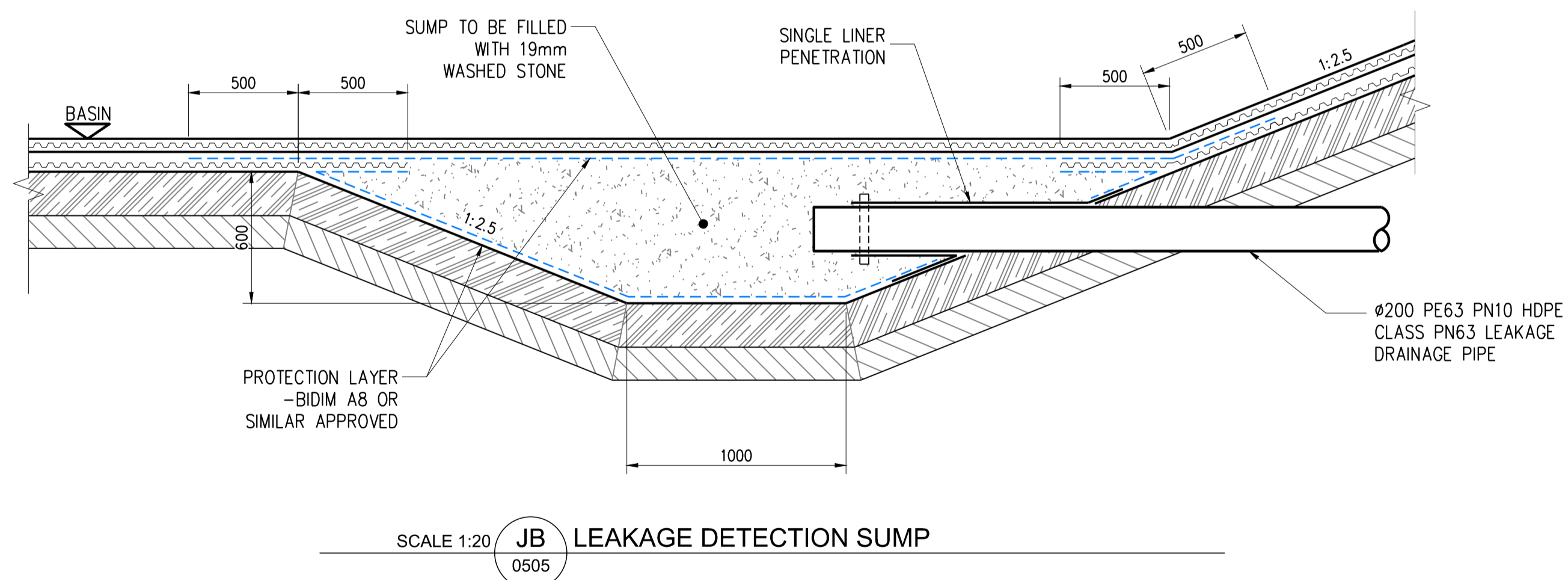
PROJECT NO.	CONTROL	REV.	22 of 31	DRAWING
1418079	0500	B		0506



PLAN  
SCALE 1:50



SCALE 1:20 JC 0505 LEAKAGE DRAINAGE SUMP



SCALE 1:20 JB 0505 LEAKAGE DETECTION SUMP

ISSUED FOR INFORMATION  
**DRAFT**

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED	PR ENG No.
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB	800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB	800395

CLIENT  
SASOL SYNFUELS

CONSULTANT

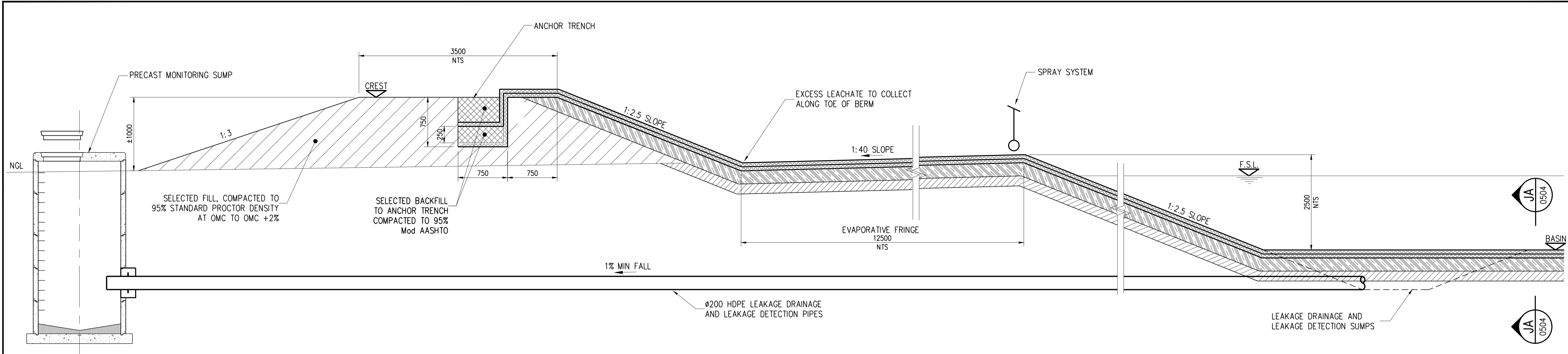


PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

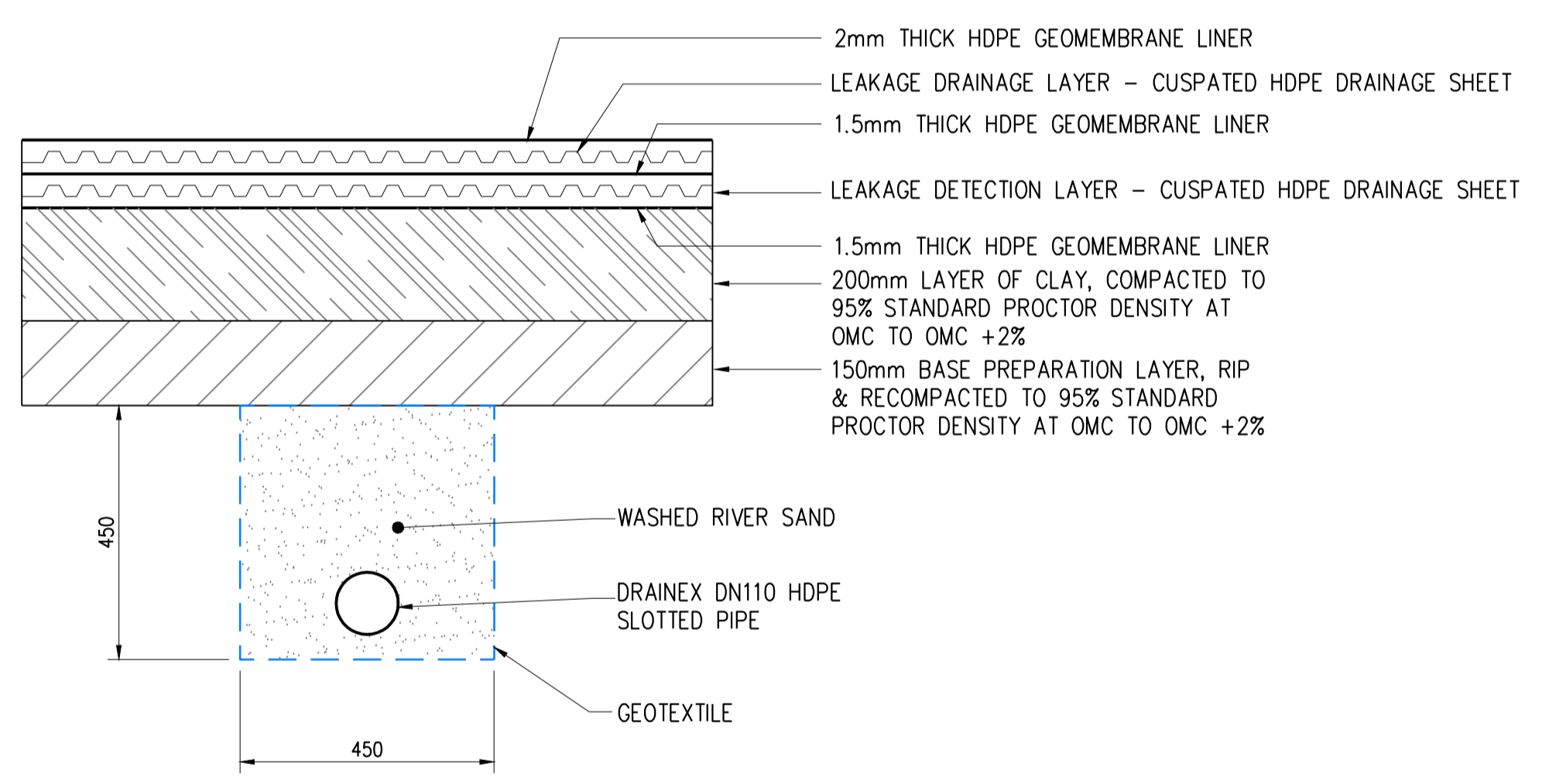
TITLE  
**LEACHATE POND DETAILS SHEET 2 OF 2**

PROJECT No.	CONTROL	Rev.	21 of 31	DRAWING
1418079	0500	B		0505

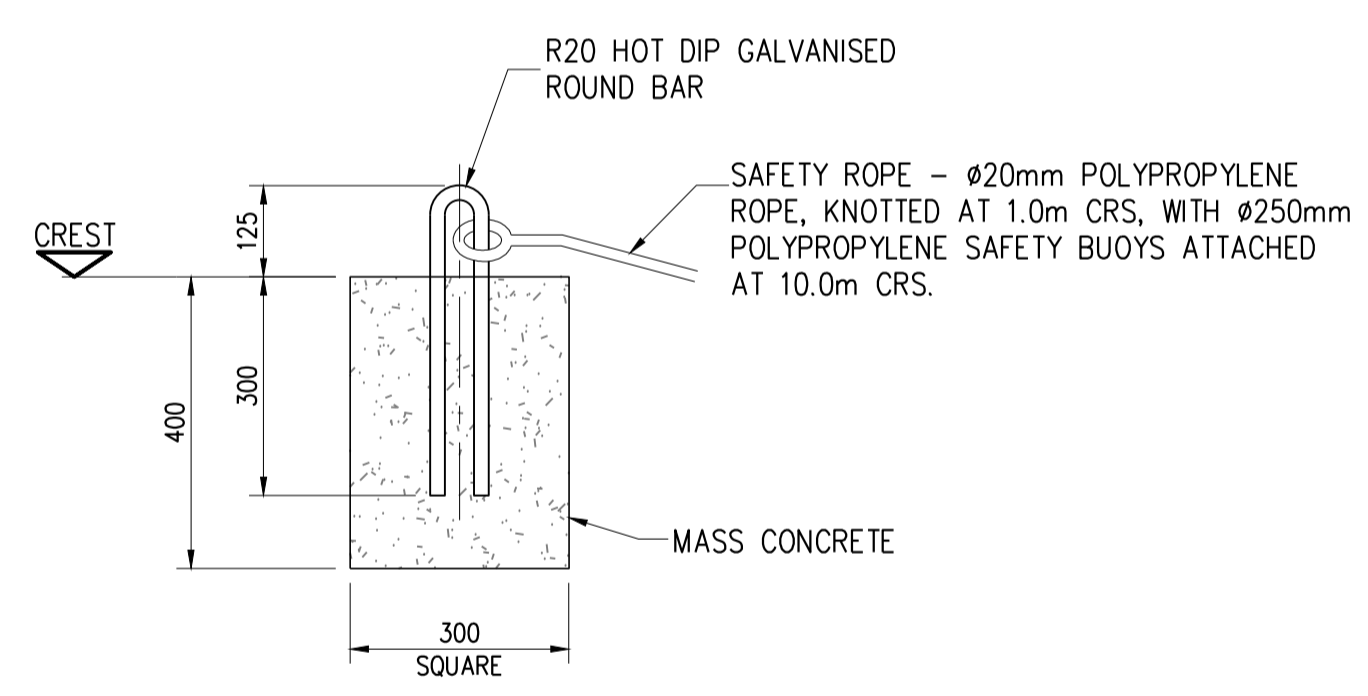


SCALE 1:30 **J** LEACHATE POND SECTION  
0401

ISSUED FOR INFORMATION  
**DRAFT**



SCALE 1:10 **JA** LINER DETAIL WITH SUBSOIL DRAIN:  
0504 LEACHATE POND



SCALE 1:10 **I** SAFETY ROPE:  
0504 ANCHOR BLOCK

CLIENT  
SASOL SYNFUELS



PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

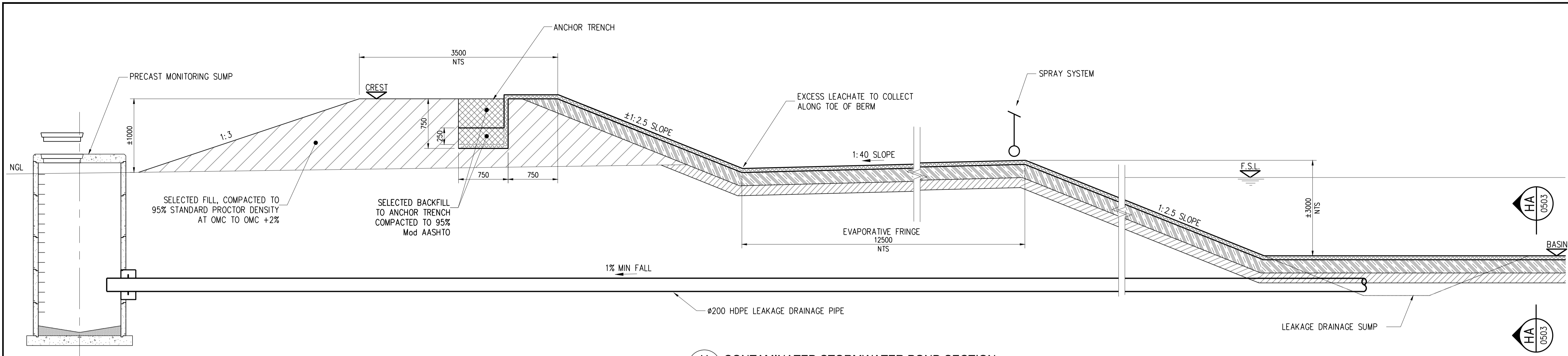
PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE  
TITLE  
**LEACHATE POND DETAILS SHEET 1 OF 2**

B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB	800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB	800395
Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED	PR ENG No.

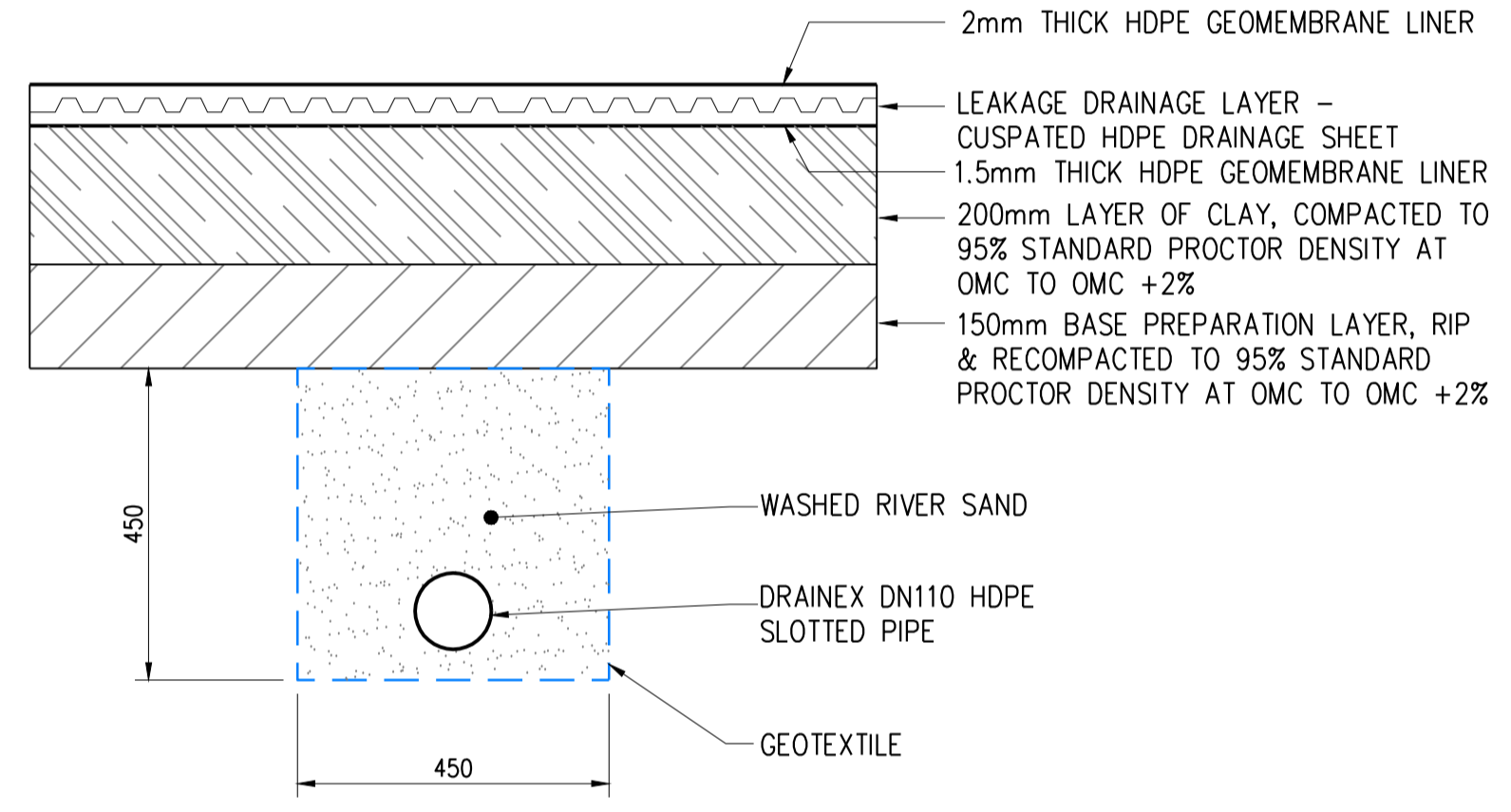
PROJECT No.	CONTROL	Rev.	20 of 31	DRAWING
1418079	0500	B		0504

Path: I:\projects\1418079 - Sasol Charlie\CEPS\Drawings\6.2 Drawings - Images\DRAWINGS\RevB\_20150527 - File Name: 1418079-0504-D-Leach Pond Details\1\_20150528.dwg

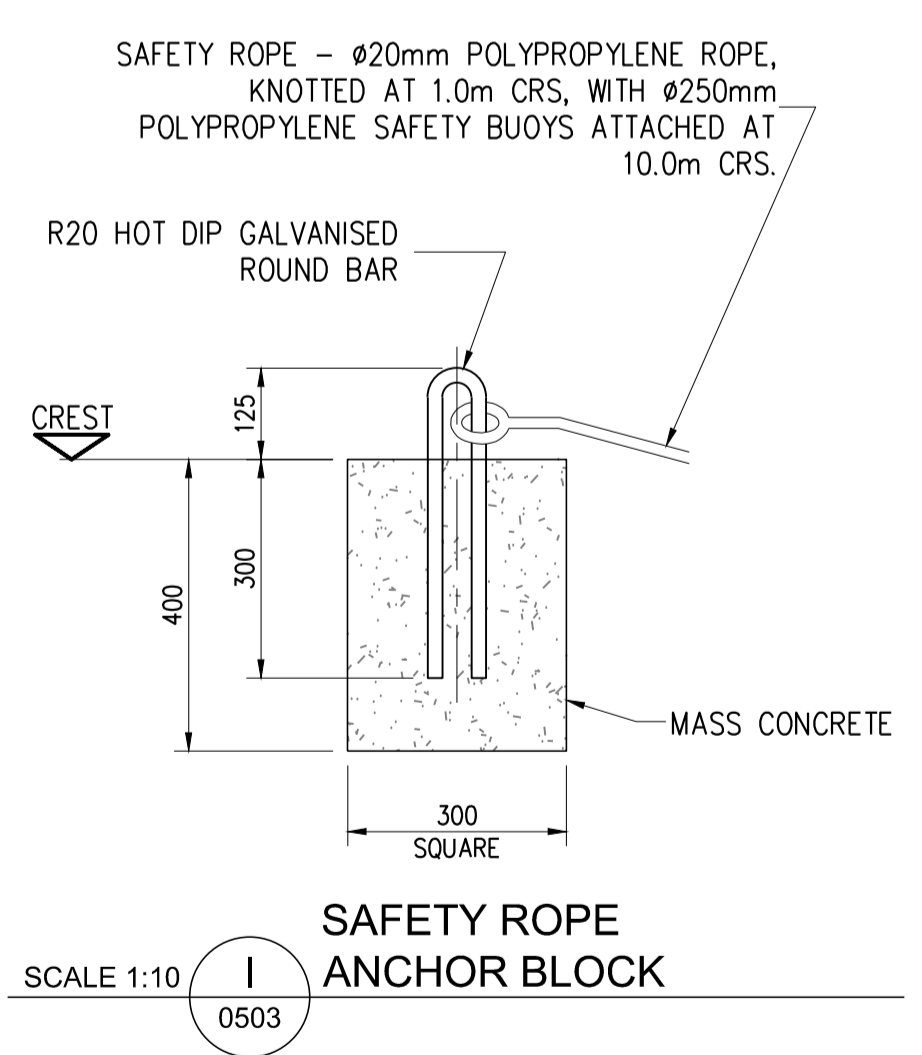
25 mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1



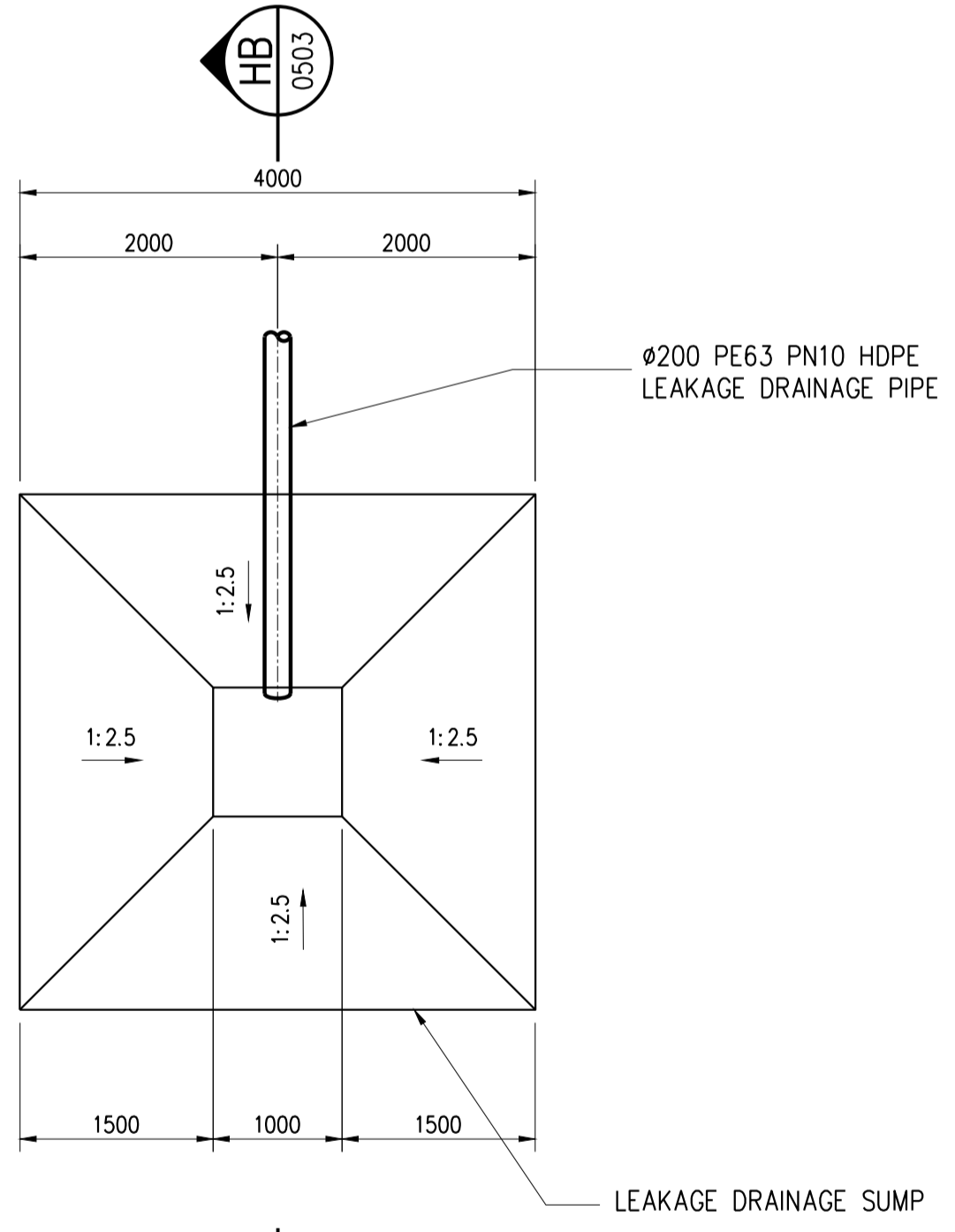
SCALE 1:30 **H** CONTAMINATED STORMWATER POND SECTION  
0401



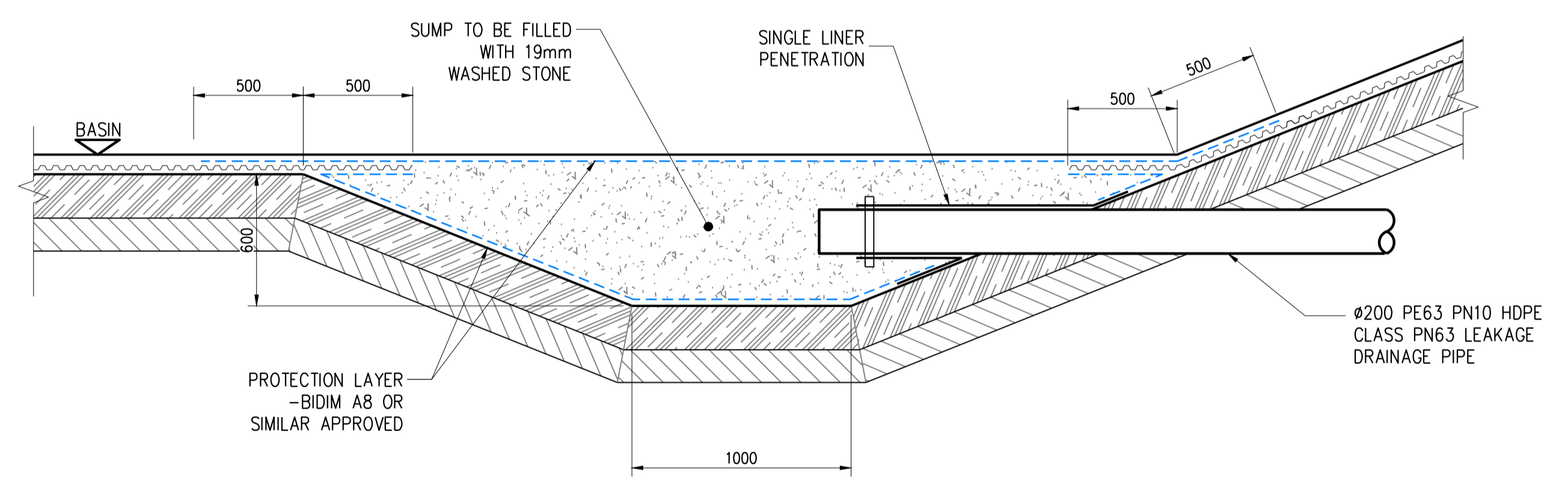
SCALE 1:10 **HA** LINER DETAIL WITH SUBSOIL DRAIN:  
0503 CONTAMINATED STORMWATER POND



SCALE 1:10 **I** SAFETY ROPE  
0503 ANCHOR BLOCK



SCALE 1:50 **HB** PLAN - LEAKAGE DRAINAGE SUMP  
0503



SCALE 1:20 **HB** LEAKAGE DRAINAGE SUMP  
0503

ISSUED FOR INFORMATION  
**DRAFT**

Path: I:\projects\1418079 - Sasol Charlie CEPS\Drawings - Images\Drawings\RevB\_20150527 - 1418079-0503-Contaminated Stormwater Pond Details\_20150528.dwg

CLIENT  
SASOL SYNFUELS



PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

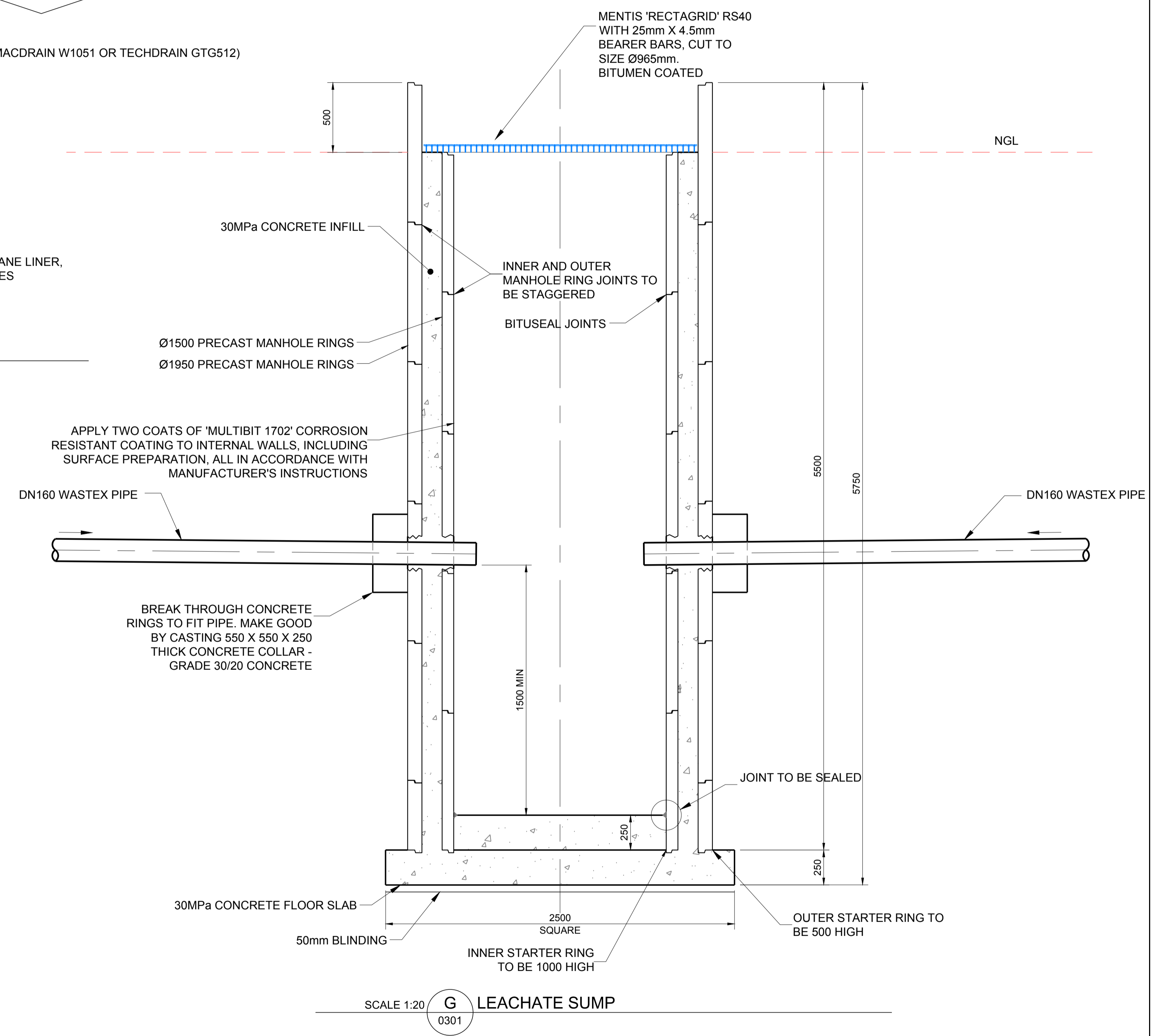
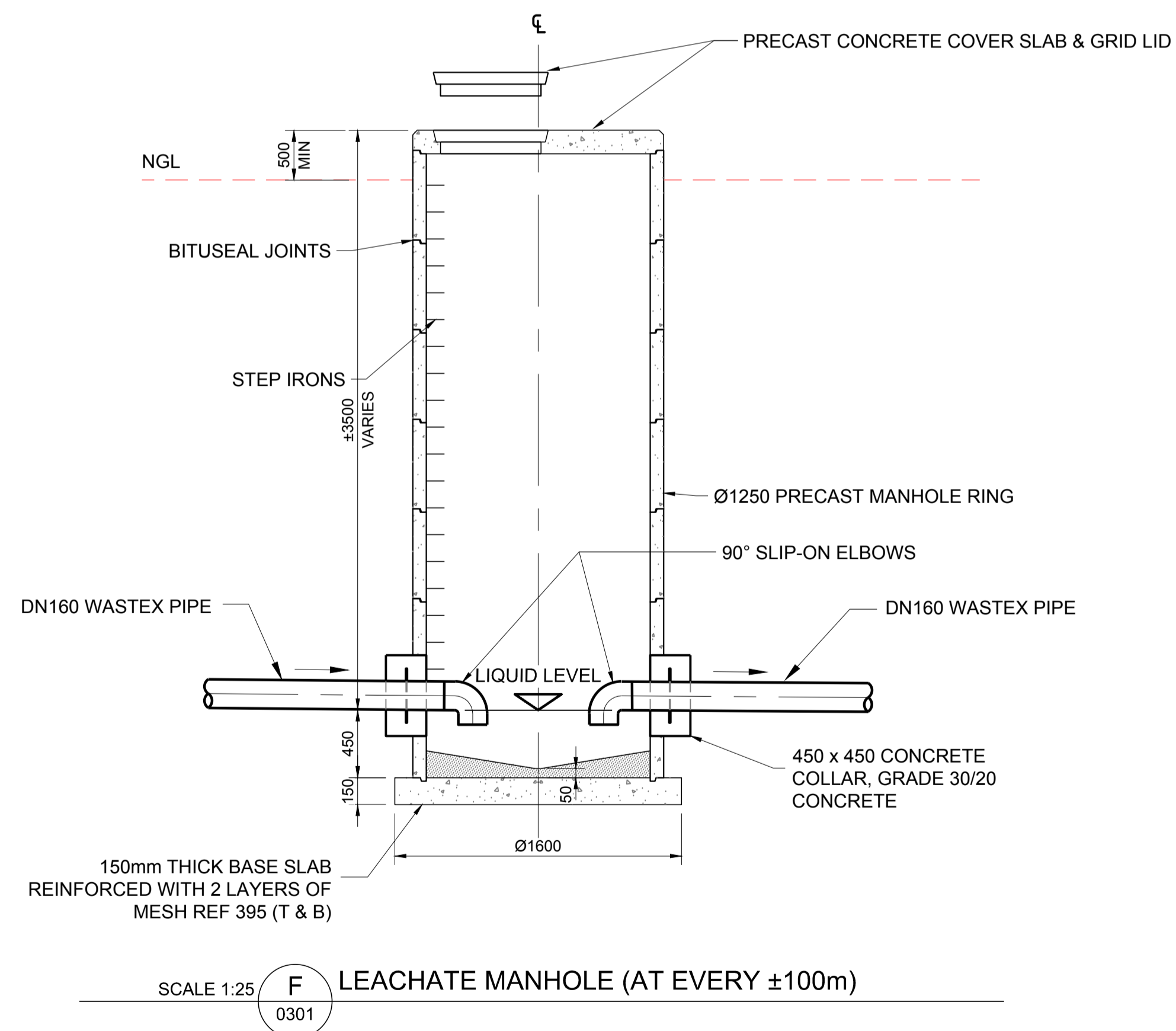
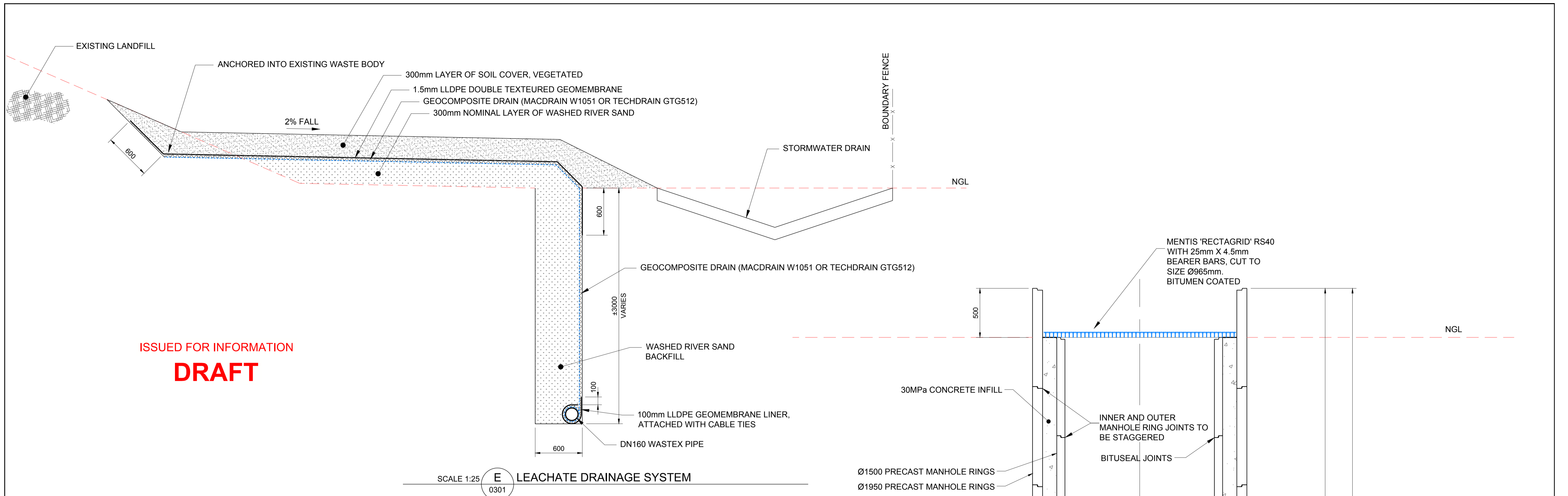
PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE  
TITLE  
**CONTAMINATED WATER POND DETAILS**

B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB	800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB	800395
Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED	PR ENG No.

PROJECT No.	CONTROL	Rev.	19 of 31	DRAWING
1418079	0500	B		0503

25 mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1



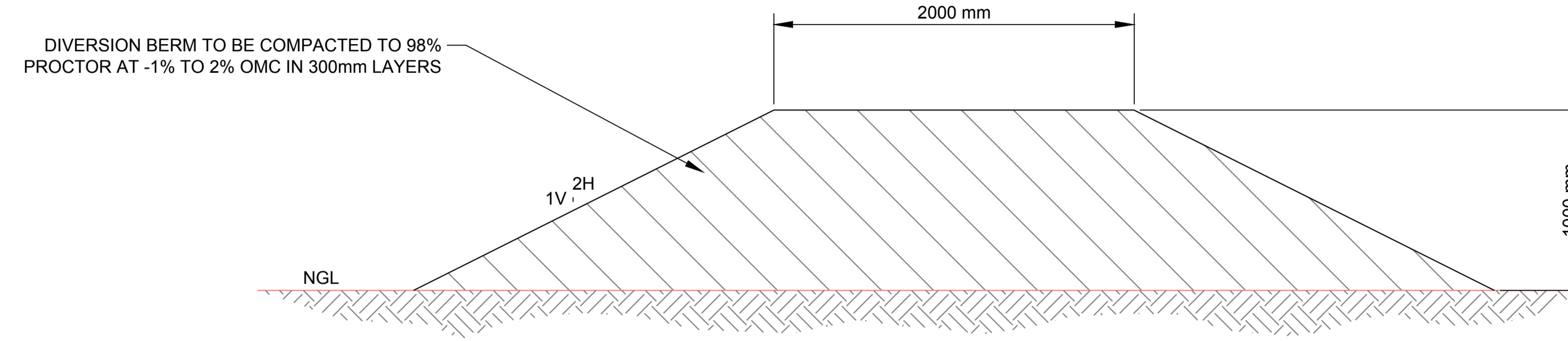


CLIENT	SASOL SYNFUELS				
CONSULTANT	Golder Associates				
PREPARED	DESIGN	REVIEW	APPROVED	PR ENG No.	
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB SAPB 800295
Rev.	YYYY-MM-DD	DESCRIPTION			

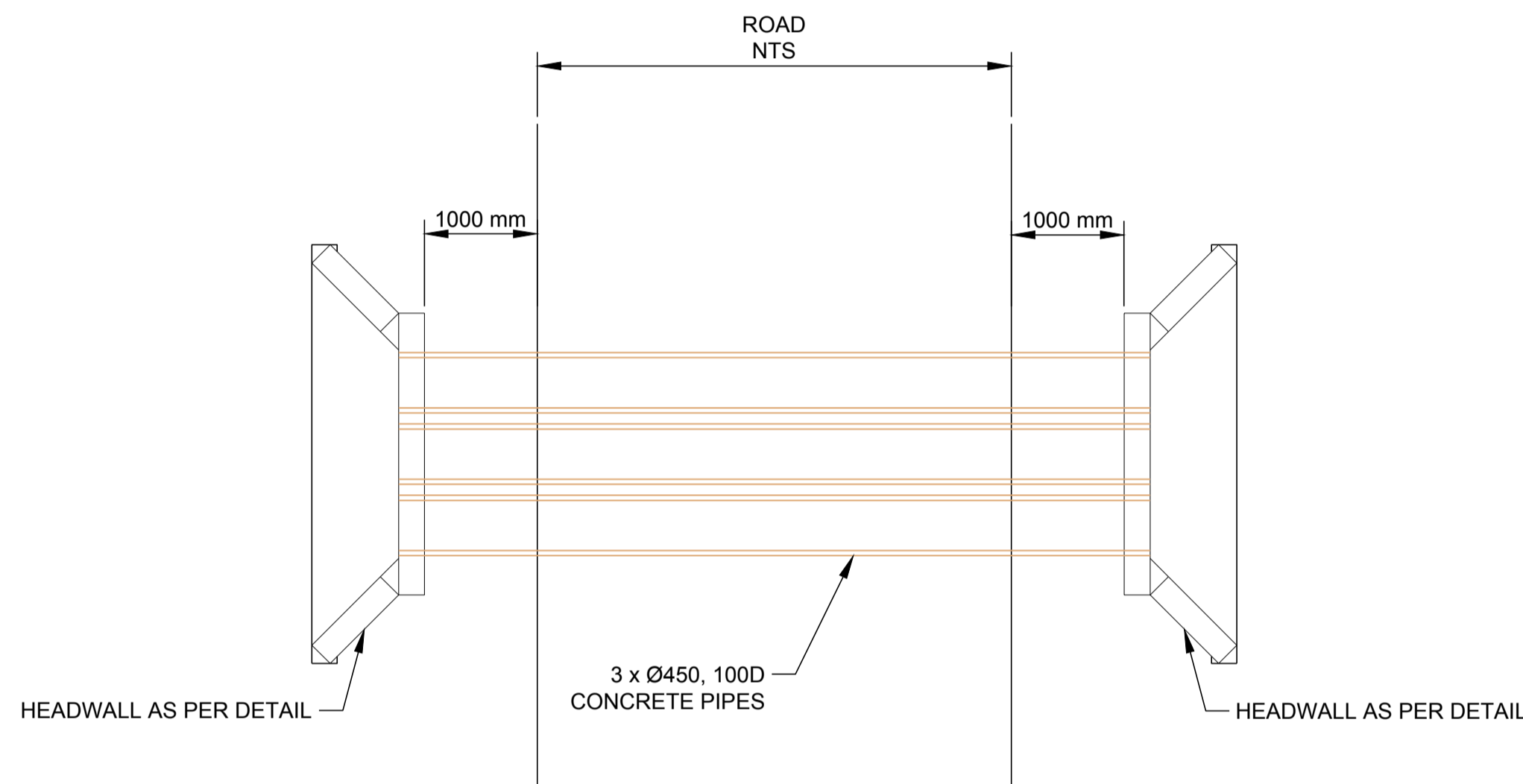
PROJECT	SASOL CHARLIE 1 LANDFILL STORMWATER AND LEACHATE MANAGEMENT FEASIBILITY ENGINEERING PACKAGE		
TITLE	LEACHATE DRAINAGE DETAILS		
PROJECT No.	CONTROL	Rev.	18 of 31
1418079	0500	B	0502

PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

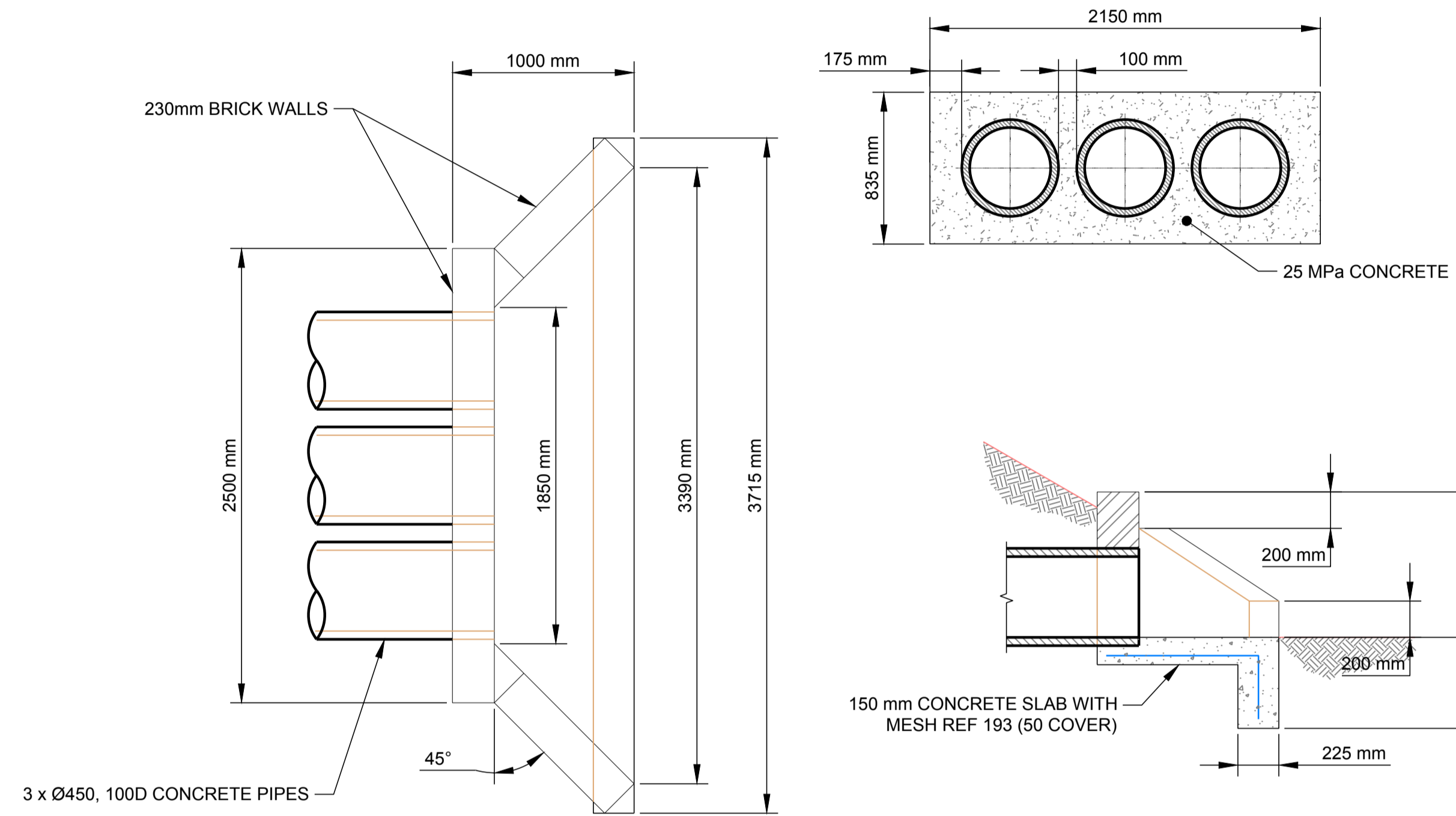
ISSUED FOR INFORMATION  
**DRAFT**



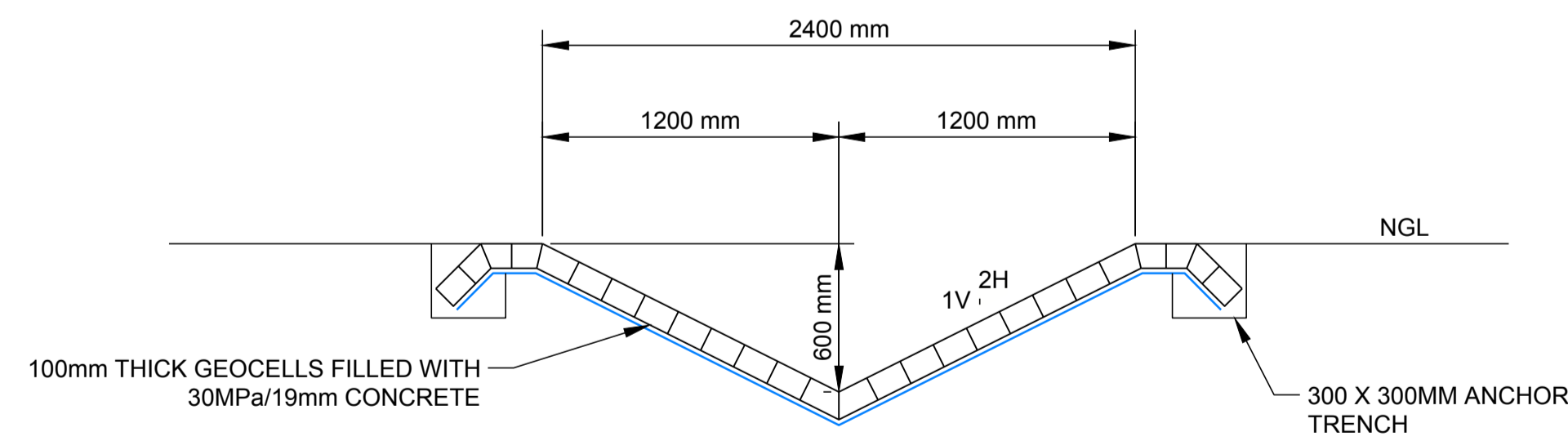
SCALE 1:25 **A** STORMWATER DIVERSION BERM CROSS SECTION  
0501



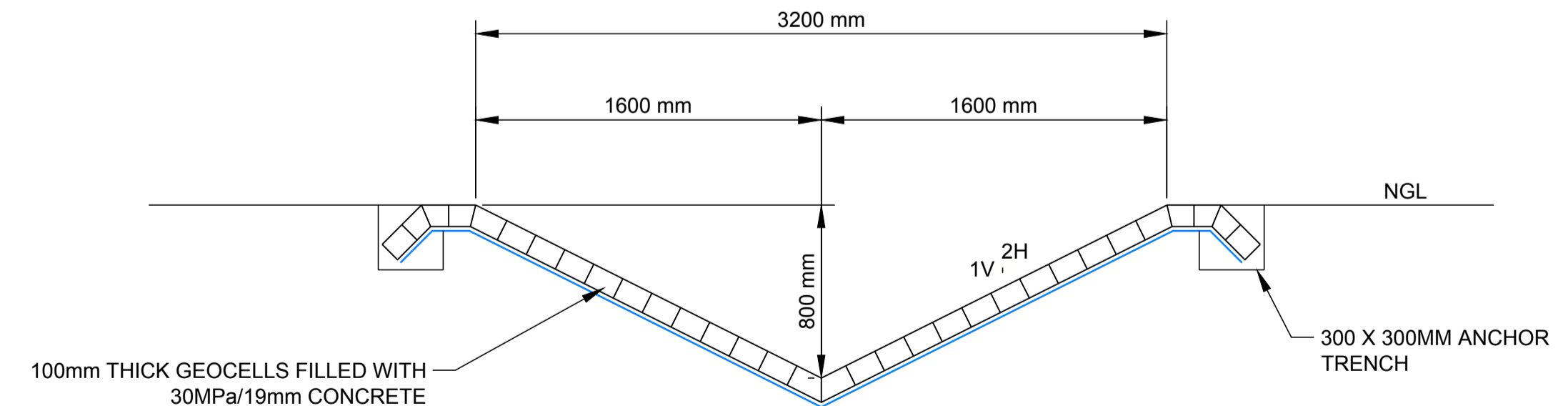
SCALE 1:50 **B** ROAD CHANNEL CROSSING DETAIL  
0501



SCALE 1:25 **B** ROAD CHANNEL CROSSING HEADWALL DETAIL  
0501



SCALE 1:25 **C** STORMWATER V-DRAIN TYPE 1  
0501



SCALE 1:25 **D** STORMWATER V-DRAIN TYPE 2  
0501

CLIENT  
SASOL SYNFUELS

PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

CONSULTANT

PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

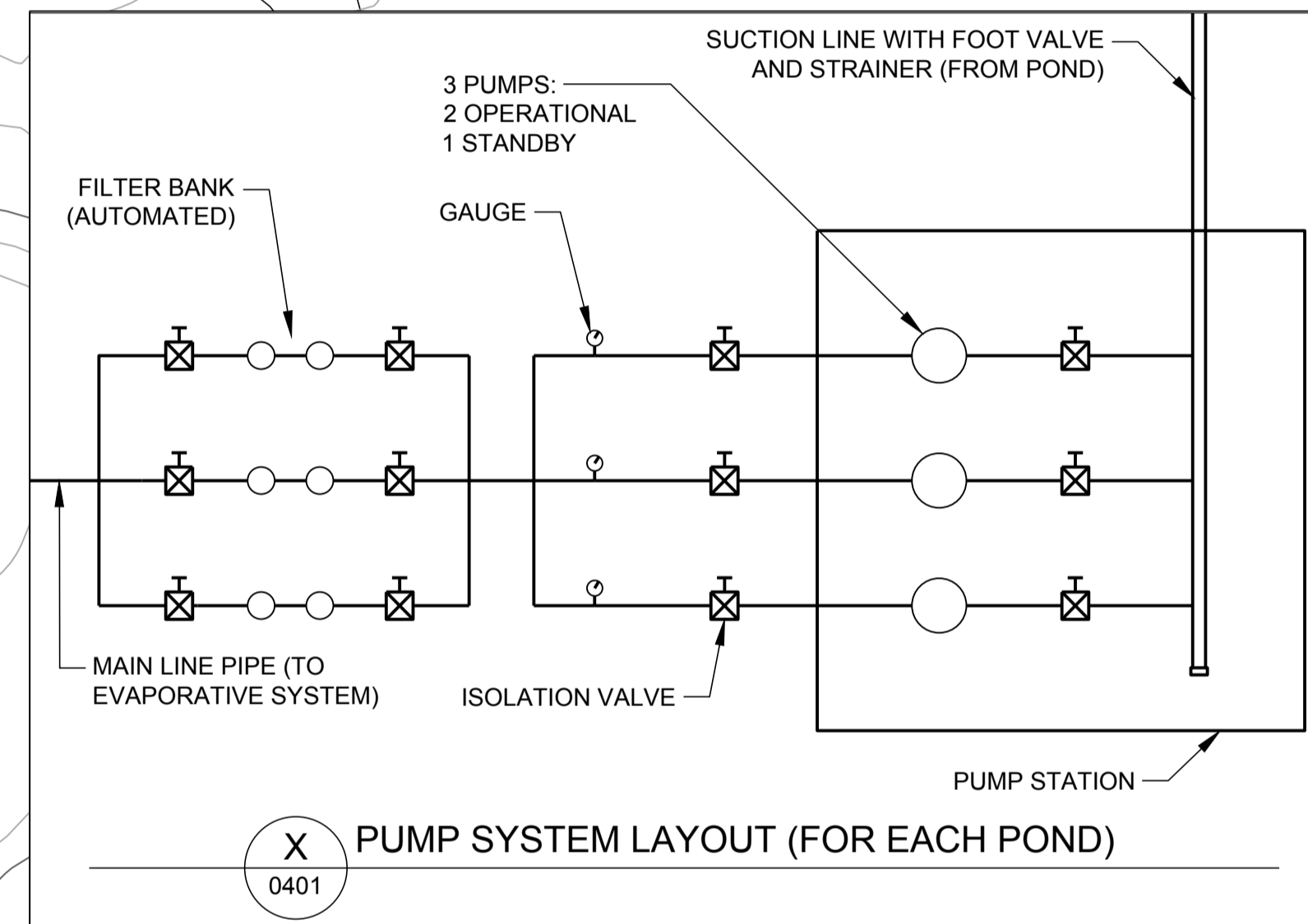
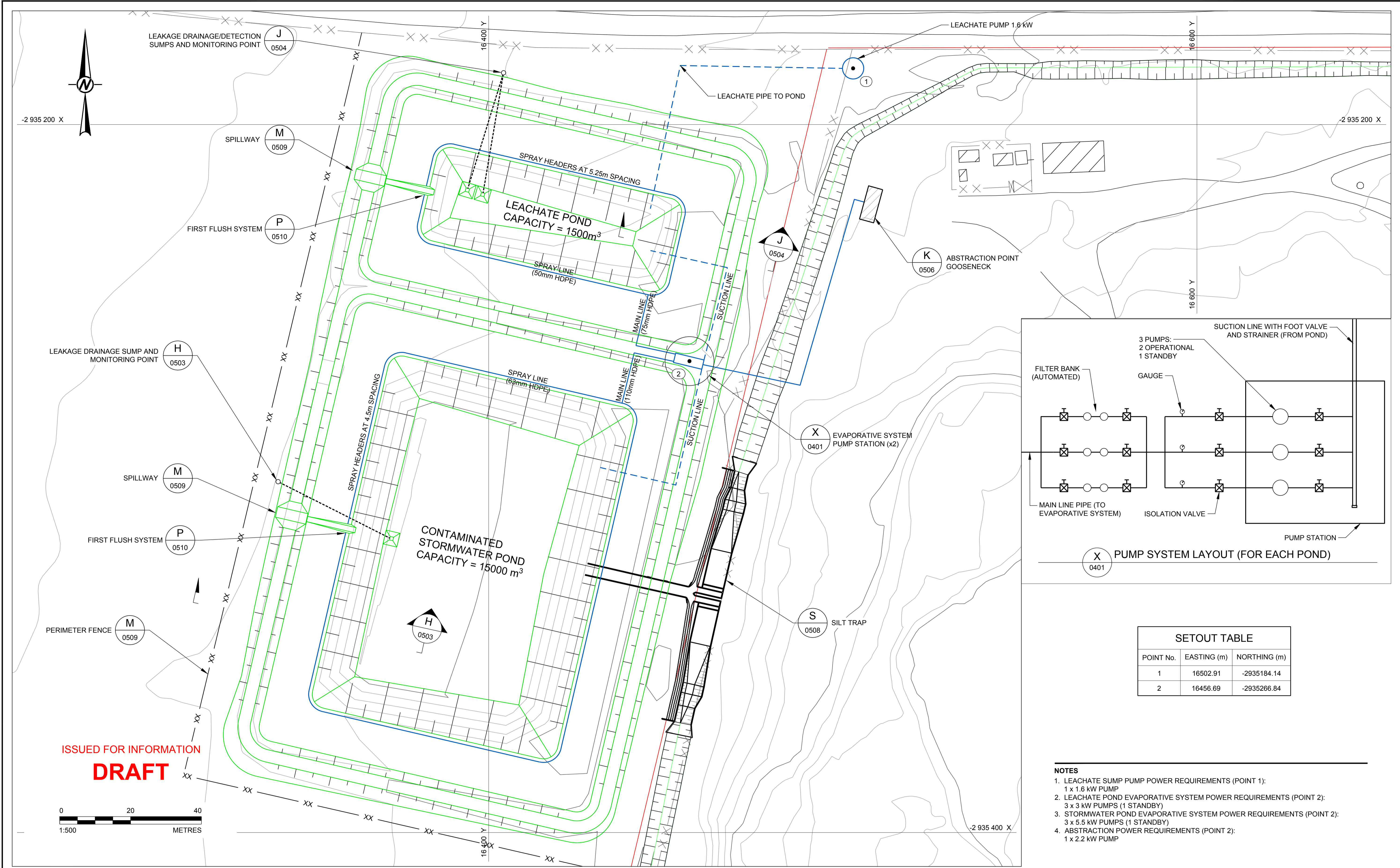
TITLE  
**STORMWATER DRAINAGE DETAILS**

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB 800395



Path: \\p1-1-1\gsa\ad\Projects\1418079 - Sasol Charlie1\CEP\Secured\15.2 Drawings - Images\DRAWINGS\RevB\_20150527\_1 File Name: 1418079-0501-D-SV Drain Details\_20150528\_2.dwg

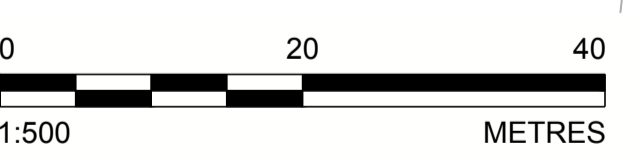
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1



SETOUT TABLE		
POINT No.	EASTING (m)	NORTHING (m)
1	16502.91	-2935184.14
2	16456.69	-2935266.84

- NOTES**
- LEACHATE SUMP PUMP POWER REQUIREMENTS (POINT 1):  
1 x 1.6 kW PUMP
  - LEACHATE POND EVAPORATIVE SYSTEM POWER REQUIREMENTS (POINT 2):  
3 x 3 kW PUMPS (1 STANDBY)
  - STORMWATER POND EVAPORATIVE SYSTEM POWER REQUIREMENTS (POINT 2):  
3 x 5.5 kW PUMPS (1 STANDBY)
  - ABSTRACTION POWER REQUIREMENTS (POINT 2):  
1 x 2.2 kW PUMP

**ISSUED FOR INFORMATION  
DRAFT**



Path: \\p1\c1\1\gda\as\Projects\1418079 - Sasol Charlie CEP\Drawings\RevB\_20150527\_1 - File Name: 1418079-0401-D-Ponds Pumps\_20150526.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB 800395

CLIENT  
**SASOL SYNFUELS**

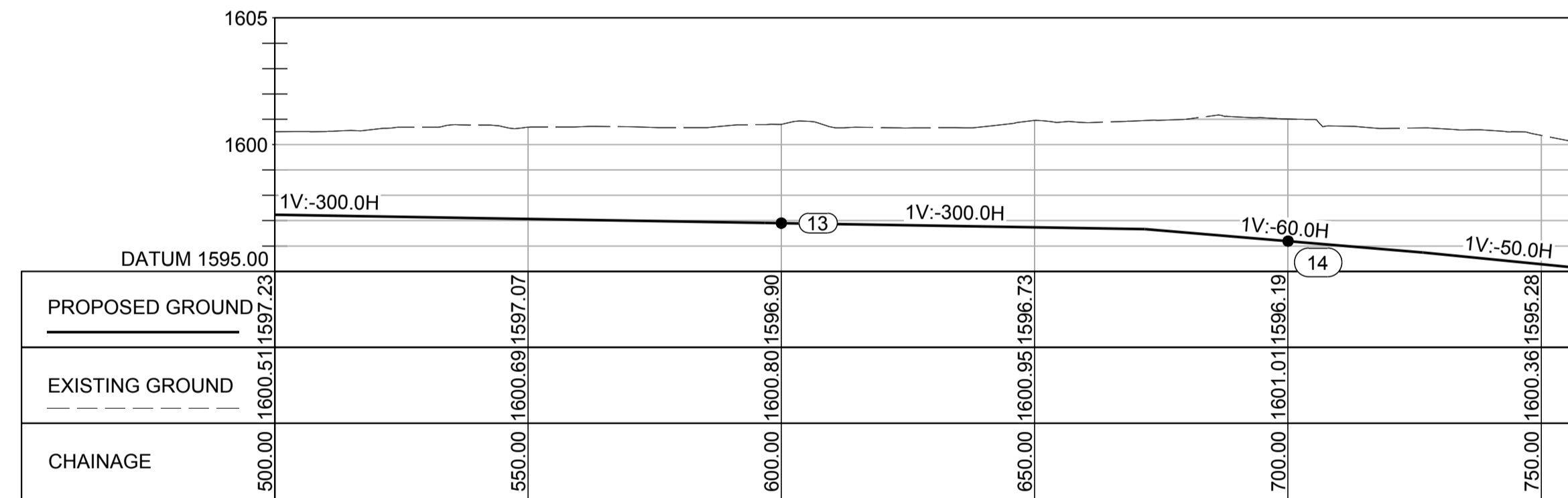
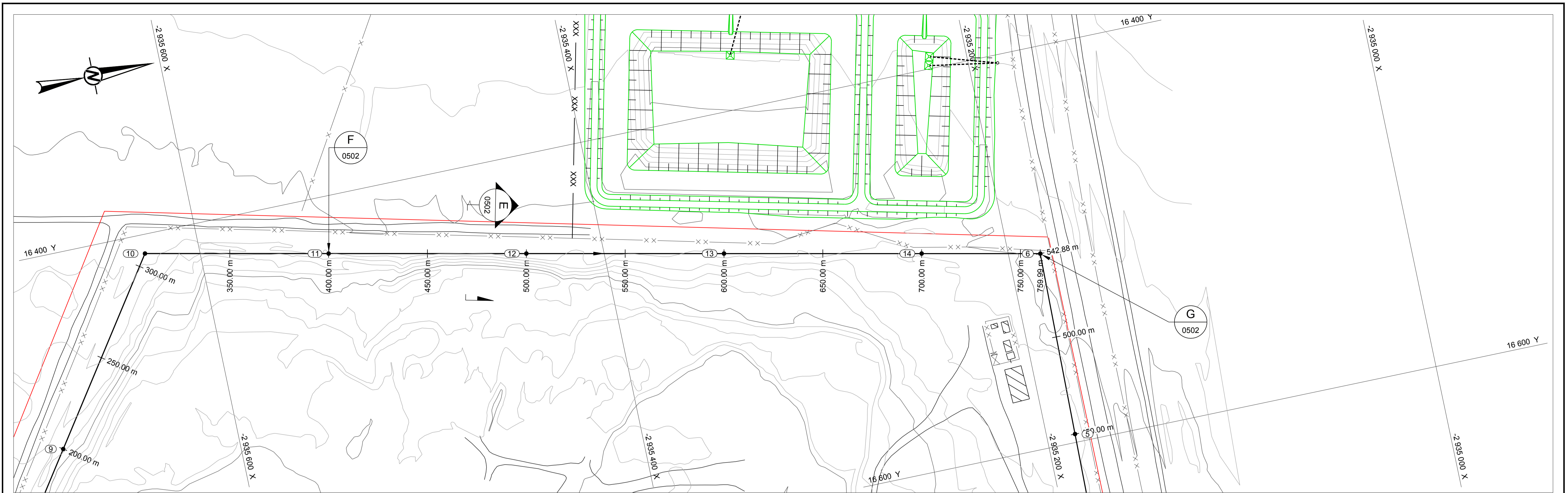
CONSULTANT  
**Golder Associates**

PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
(+27) (0) 12 364 4000  
www.golder.com

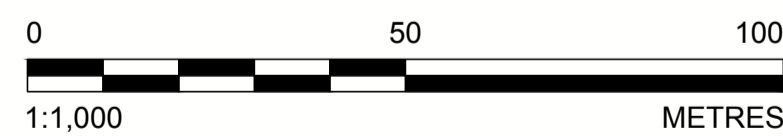
PROJECT  
**SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE**

TITLE  
**PONDS PIPE AND PUMP LAYOUT PROPOSED  
INFRASTRUCTURE**

PROJECT NO. <b>1418079</b>	CONTROL <b>0400</b>	REV. <b>B</b>	16 of 31	DRAWING <b>0401</b>
-------------------------------	------------------------	------------------	----------	------------------------



ISSUED FOR INFORMATION  
**DRAFT**



SETOUT TABLE			
POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
13	16469.95	-2935340.70	1596.90
14	16490.55	-2935242.84	1596.19

**NOTES**

1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

Path: \\p1-1\1\gsa\asat\Projects\1418079 - Sasol Charlie1\CEPS\asat\1418079-0300-D-Leach Drain (S-2)\_20150528.dwg

B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB	800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB	800395
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED	

CLIENT  
SASOL SYNFUELS

CONSULTANT



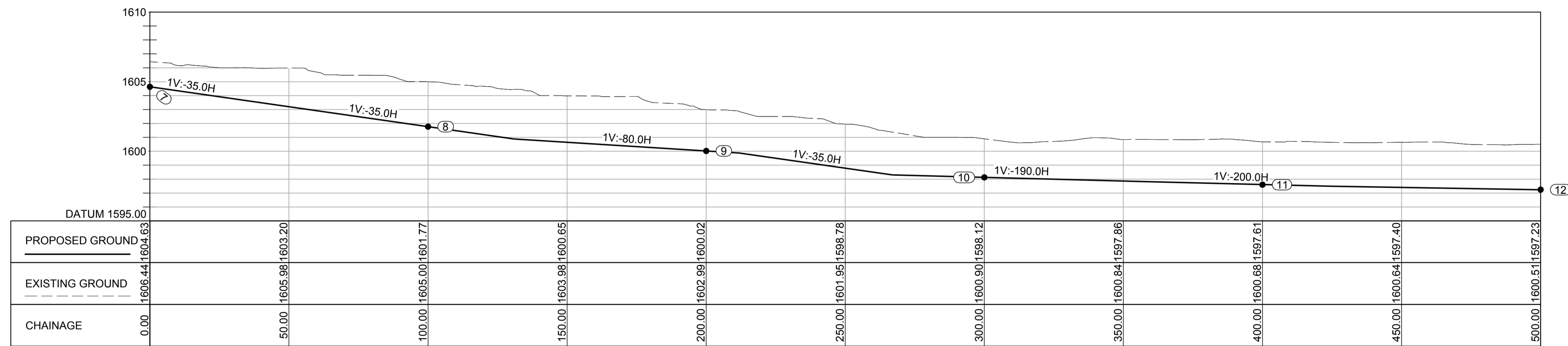
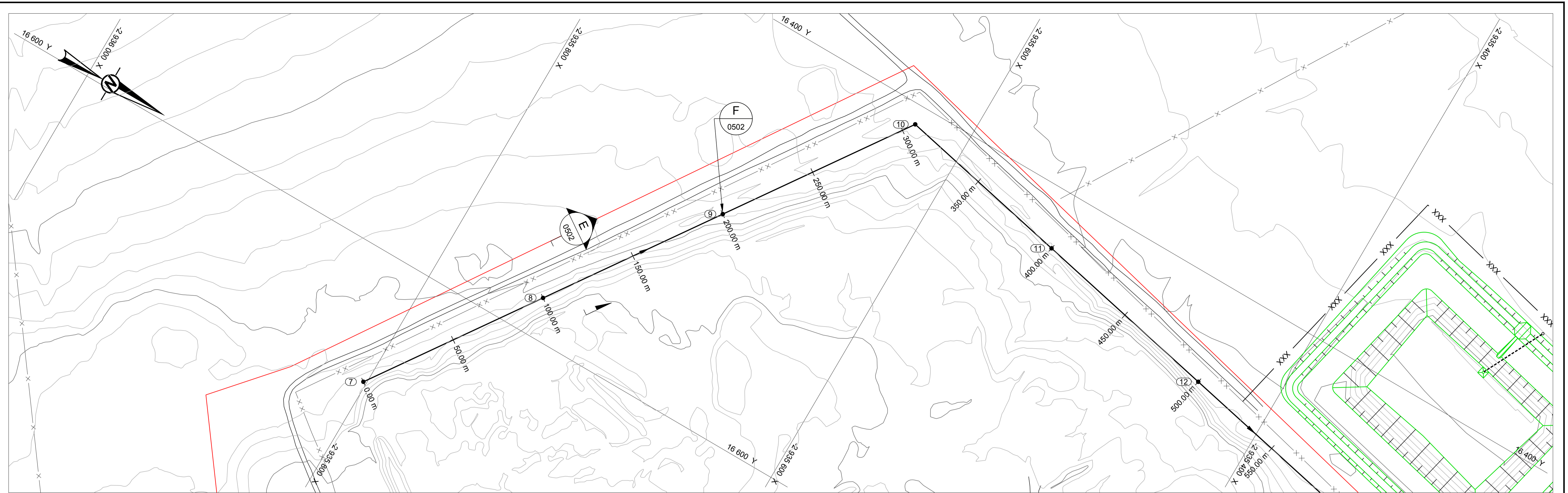
PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

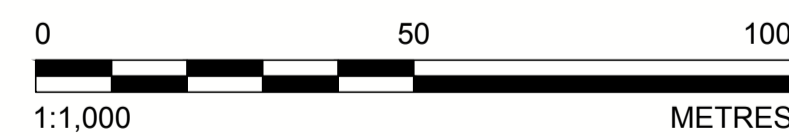
TITLE  
**LEACHATE INTERCEPTION SOUTH LONGSECTION SHEET 2**  
OF 2

PROJECT NO.	CONTROL	REV.	15 of 31	DRAWING
1418079	0300	B		0305

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1



ISSUED FOR INFORMATION  
**DRAFT**



SETOUT TABLE			
POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
7	16662.40	-2935801.69	1604.63
8	16580.08	-2935744.91	1601.77
9	16497.76	-2935688.14	1600.02
10	16409.62	-2935627.35	1598.12
11	16428.76	-2935536.41	1597.61
12	16449.36	-2935438.56	1597.23

**NOTES**

1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB 800395

CLIENT  
**SASOL SYNFUELS**

CONSULTANT



PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

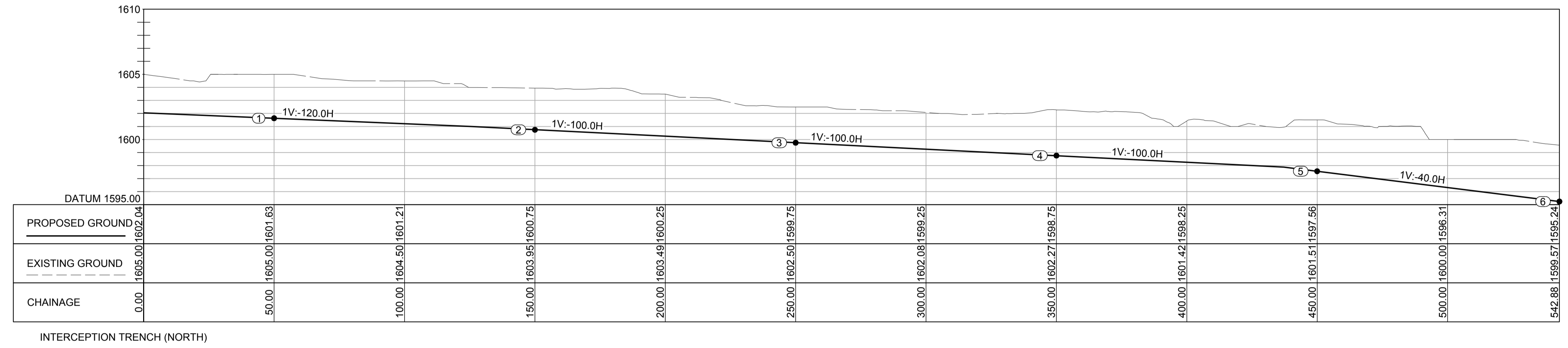
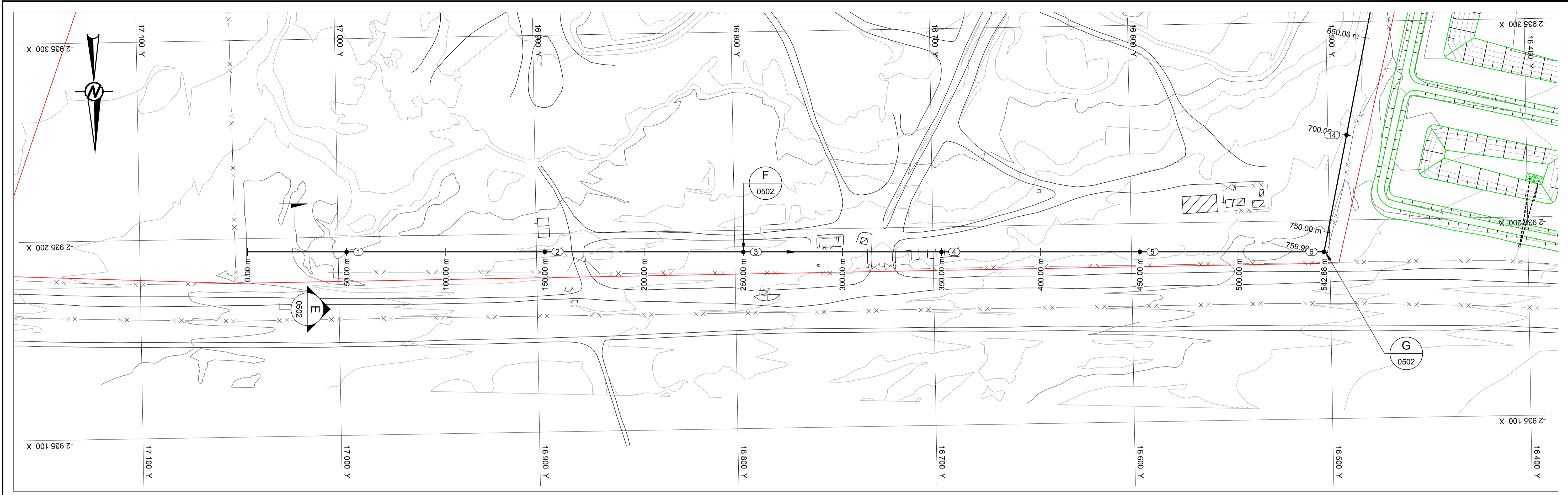
PROJECT  
**SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE**

TITLE  
**LEACHATE INTERCEPTION SOUTH LONGSECTION SHEET 1  
OF 2**

PROJECT NO.	CONTROL	REV.	14 of 31	DRAWING
1418079	0300	B		0304

Path: \\p1-1\k1\gsa\ad\Projects\1418079 - Sasol Charlie1\CEP\Secur\15.2 Drawings - images\DRAWINGS\RevB\_20150527\1 File Name: 1418079-0304-D-Leach Drain (S-1)\_20150528.dwg

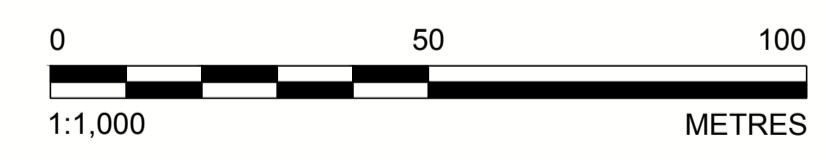
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm



INTERCEPTION TRENCH (NORTH)

SETOUT TABLE			
POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
1	16995.75	-2935192.53	1601.63
2	16895.77	-2935190.83	1600.75
3	16795.71	-2935189.12	1599.75
4	16695.80	-2935187.42	1598.75
5	16595.78	-2935185.72	1597.56
6	16502.94	-2935184.14	1595.24

ISSUED FOR INFORMATION  
**DRAFT**



- NOTES**
1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
  2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
  3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
  4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

Path: \\p1\c\1\gsa\asaf\Projects\1418079 - Sasol Charlie 1 Landfill\CEP\Drawings\RevB\_20150528.dwg File Name: 1418079-0300-D-Leach Drain (N)\_20150528.dwg

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB 800395

CLIENT  
**SASOL SYNFUELS**

CONSULTANT

**Golder Associates**

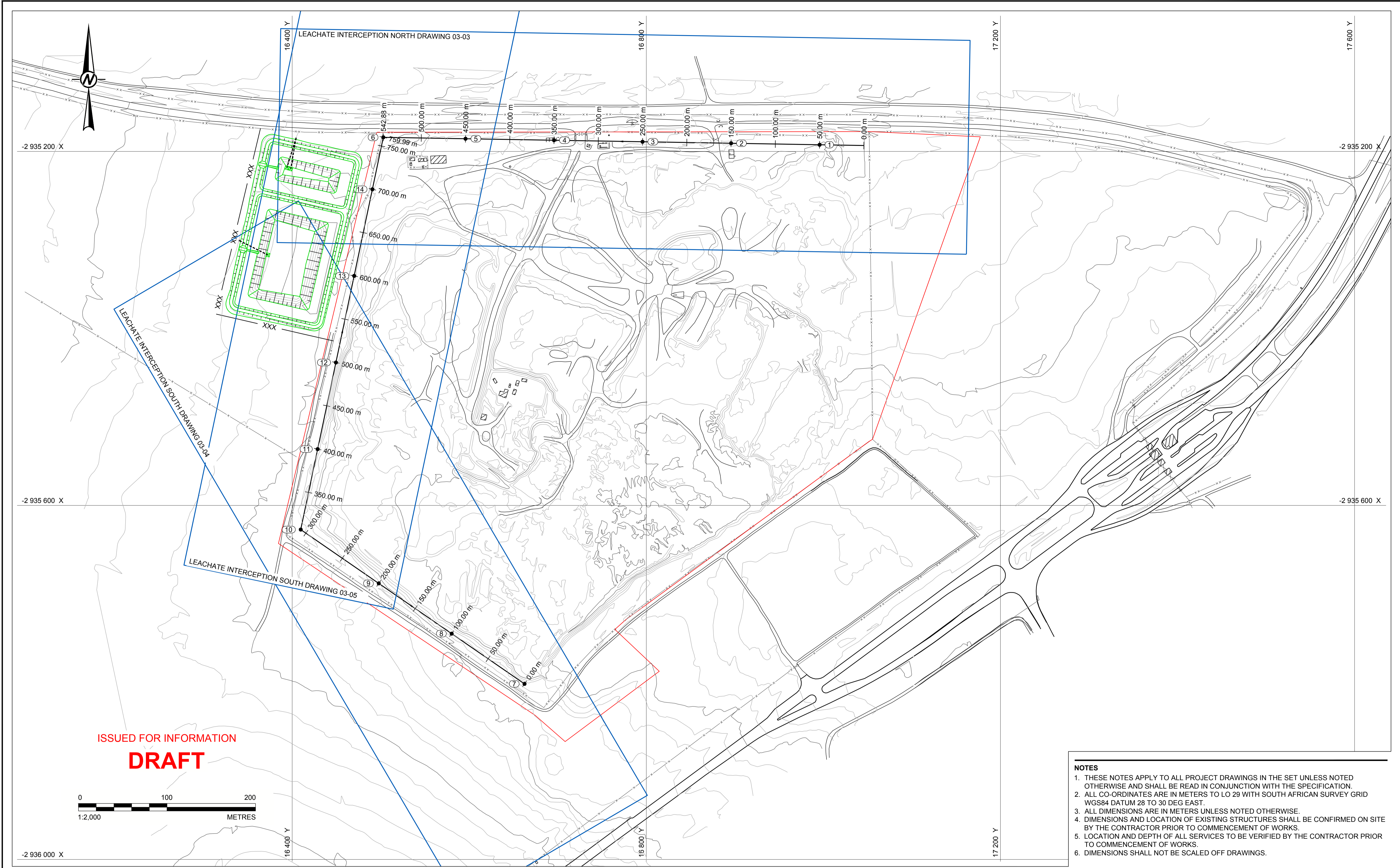
PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
(+27) (0) 12 364 4000  
www.golder.com

PROJECT  
**SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE**

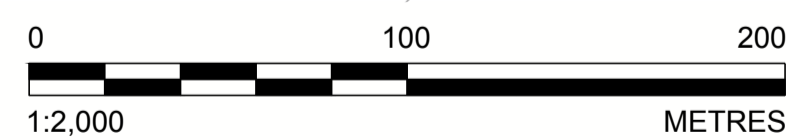
TITLE  
**LEACHATE INTERCEPTION NORTH LONGSECTION**

PROJECT NO. <b>1418079</b>	CONTROL <b>0300</b>	REV. <b>B</b>	13 of 31	DRAWING <b>0303</b>
-------------------------------	------------------------	------------------	----------	------------------------

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm



ISSUED FOR INFORMATION  
**DRAFT**



**NOTES**

1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

CLIENT  
SASOL SYNFUELS

CONSULTANT

PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com



PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

TITLE  
**LEACHATE LAYOUT KEY PLAN**

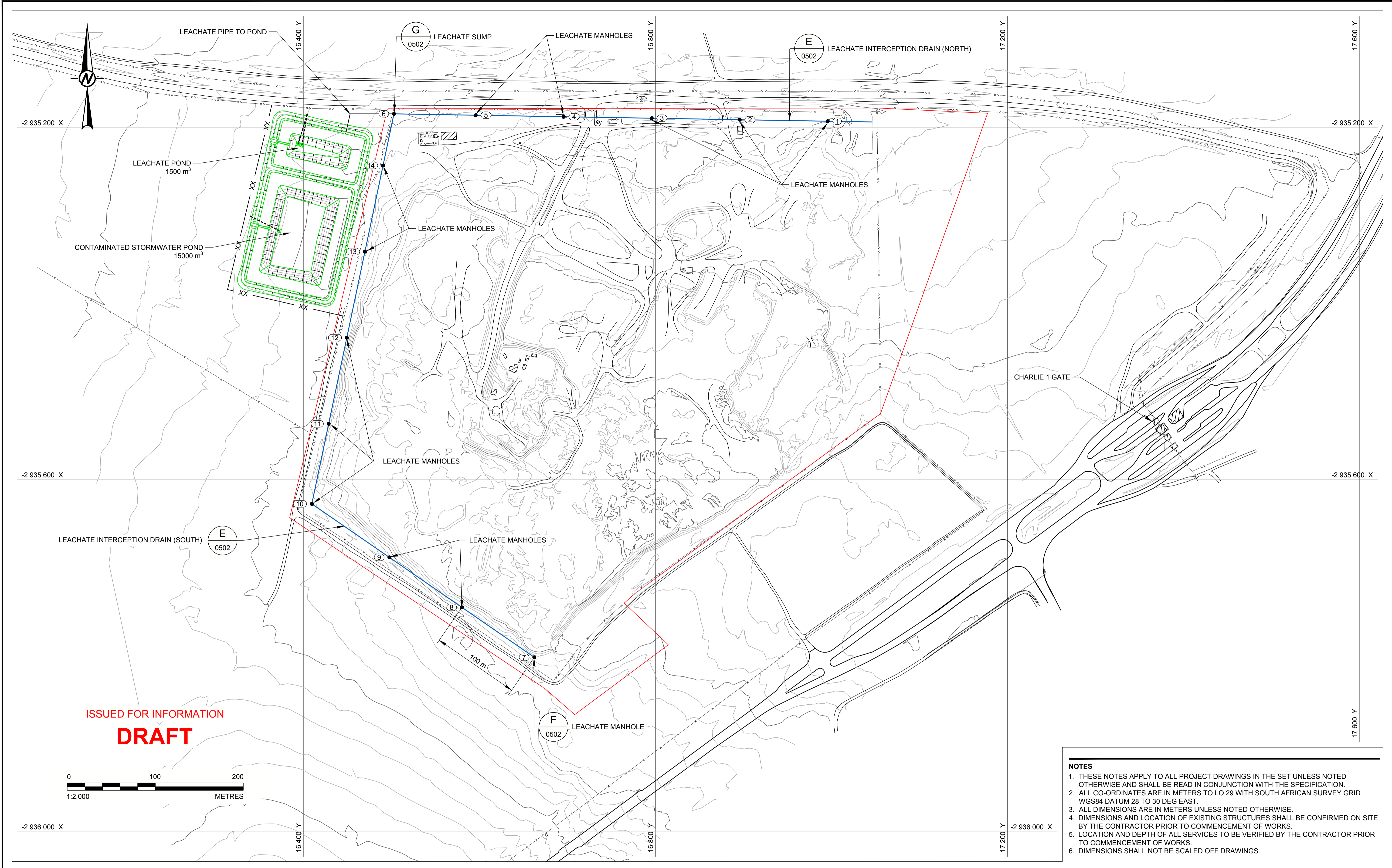
B	2015-05-28	FINAL DRAFT
A	2015-05-08	FIRST DRAFT FOR REVIEW
REV.	YYYY-MM-DD	DESCRIPTION

GD	GD	SAPB	SAPB	800395
GD	GD	SAPB	SAPB	800395
DESIGNED	PREPARED	REVIEWED	APPROVED	

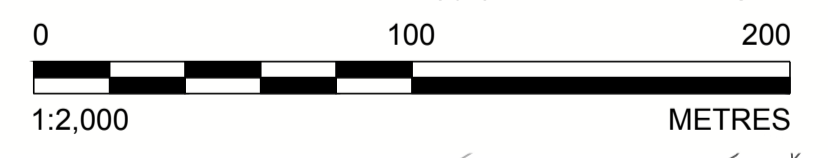
PROJECT NO.	CONTROL	REV.	12 of 31	DRAWING
1418079	0300	B		0302

Path: \\p1er1-1\k1\gsad\proj\1418079 - Sasol Charlie1\CEP\Sec\1418079 - 1418079-0302-D-Leach Key Plan\_20150528.dwg


IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm



ISSUED FOR INFORMATION  
**DRAFT**



- NOTES**
1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
  2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
  3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
  4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

CLIENT		SASOL SYNFUELS					
CONSULTANT		 Golder Associates					
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB	800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB	800395
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED	

PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

TITLE  
**LEACHATE LAYOUT PLAN** *PROPOSED INFRASTRUCTURE*

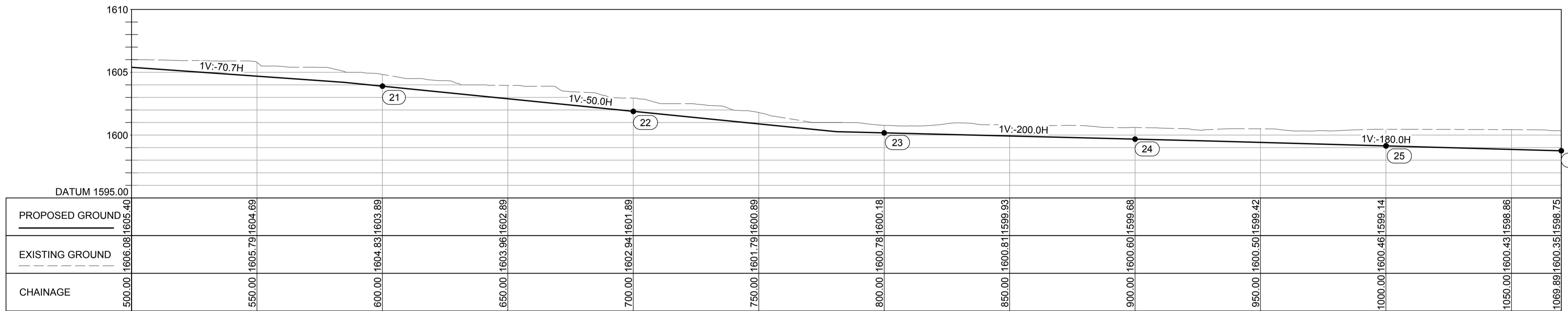
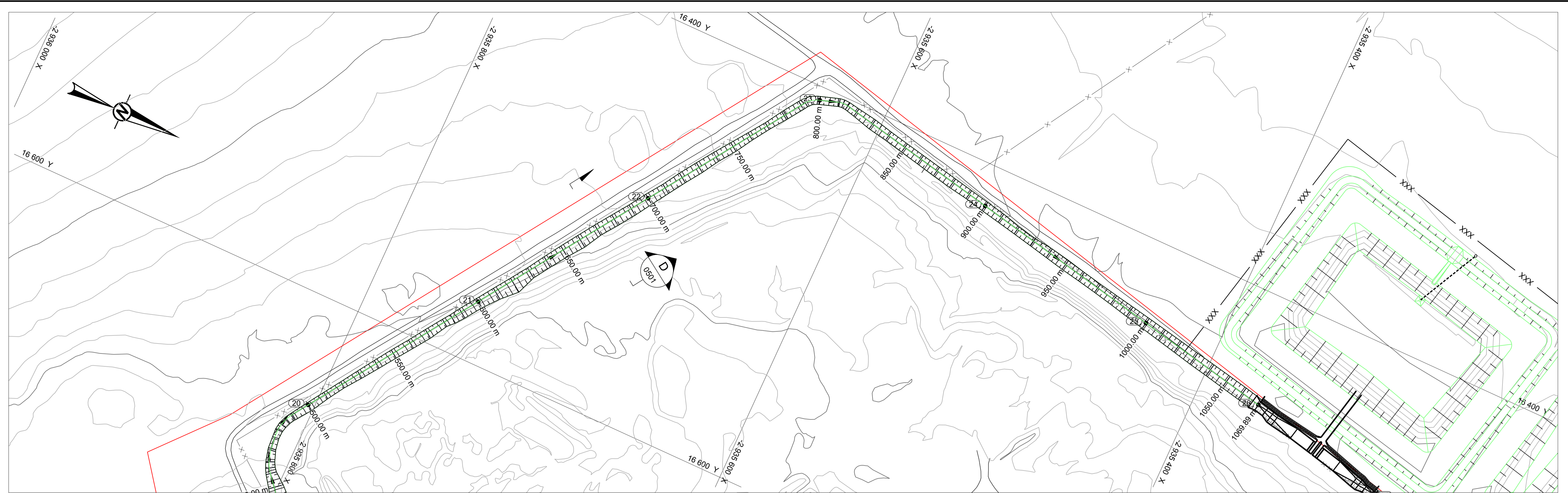
PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

PROJECT NO. 1418079    CONTROL 0300    REV. B    11 of 31    DRAWING 0301

Path: \\p1-1\k1\gdata\Projects\1418079 - Sasol Charlie1 CEP\Secured\B2 Drawings - Images\DRAWINGS\RevB\_20150527\1 File Name: 1418079-0301-D-Leach Layout\_20150528.dwg

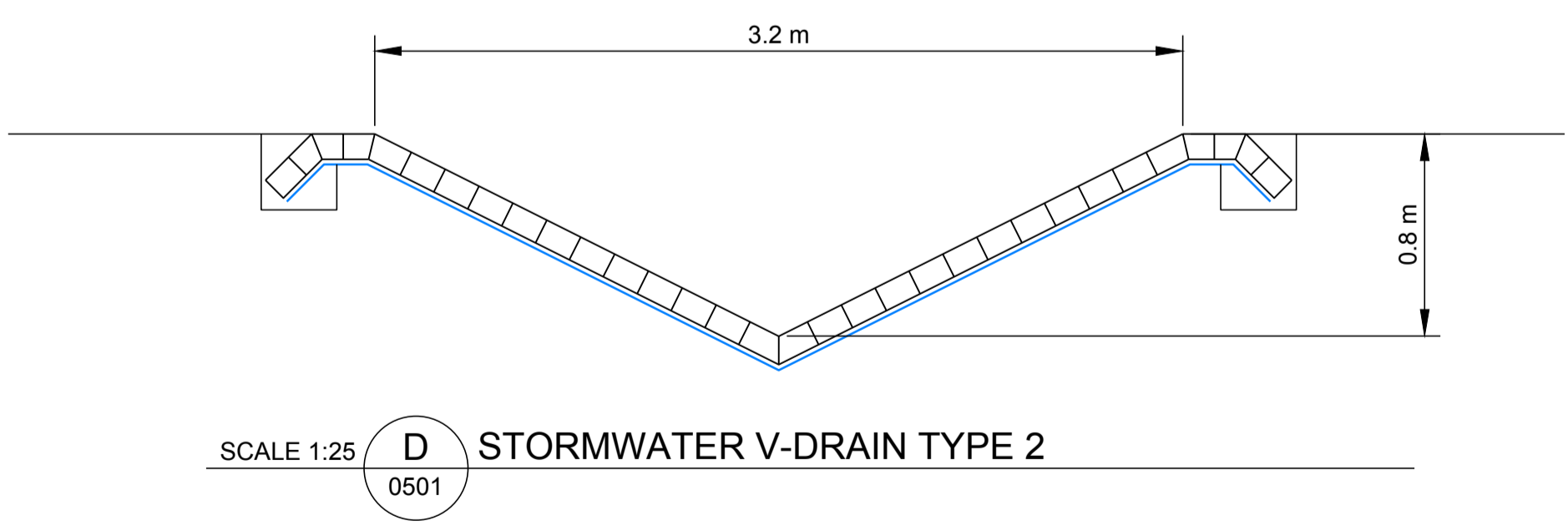
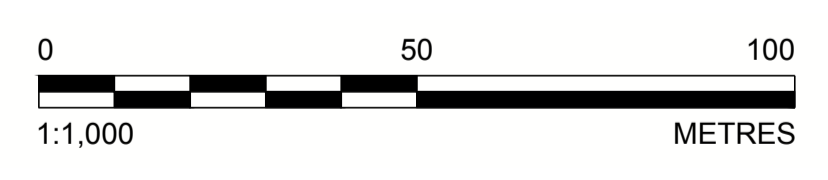
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm





POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
21	16570.26	-2935747.19	1603.89
22	16487.42	-2935691.18	1601.89
23	16406.66	-2935633.28	1600.18
24	16420.37	-2935535.54	1599.68
25	16440.24	-2935437.53	1598.14
26	16454.12	-2935369.04	1598.75

ISSUED FOR INFORMATION  
**DRAFT**



- NOTES**
1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
  2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
  3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
  4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

Path: \\p1-1-1\gsd\proj\1418079\_Sasol\_Charlie1\CEP\Secured\2 Drawings - images\DRAWINGS\RevB\_20150627\_1 File Name: 1418079-0207-D-SW Drain (S-2)\_20150628.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB 800395

CLIENT  
**SASOL SYN FuELS**

CONSULTANT

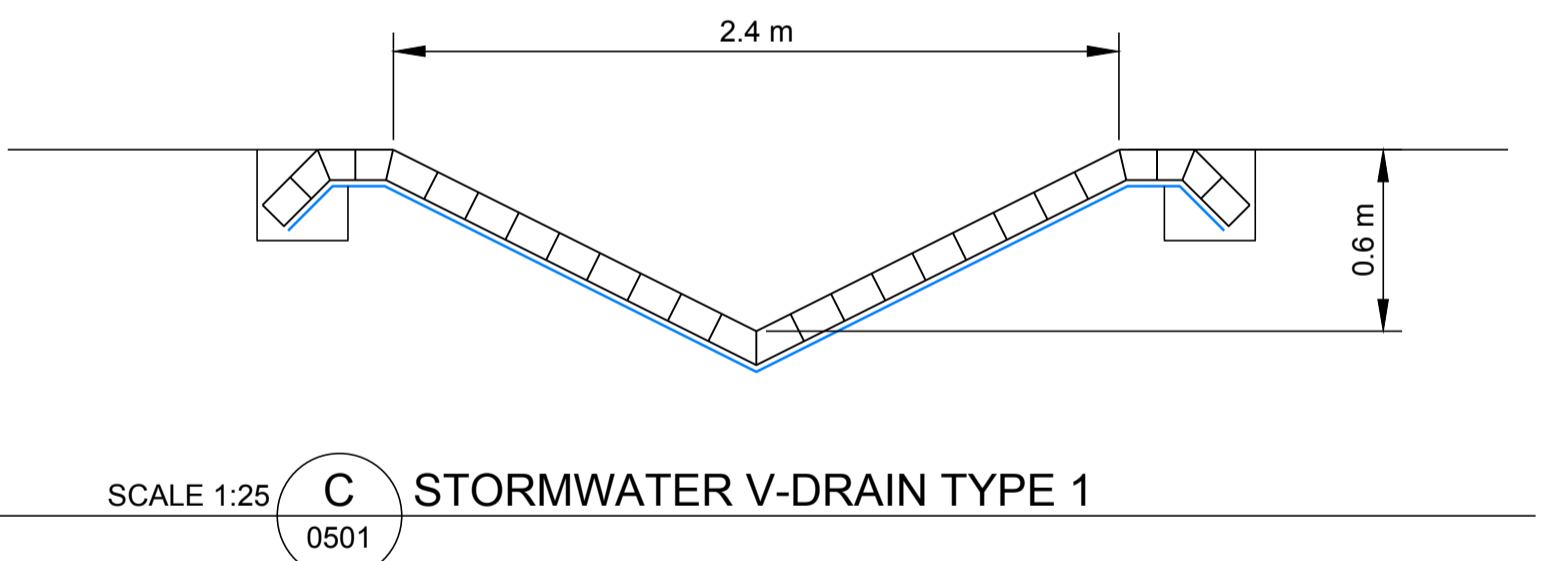
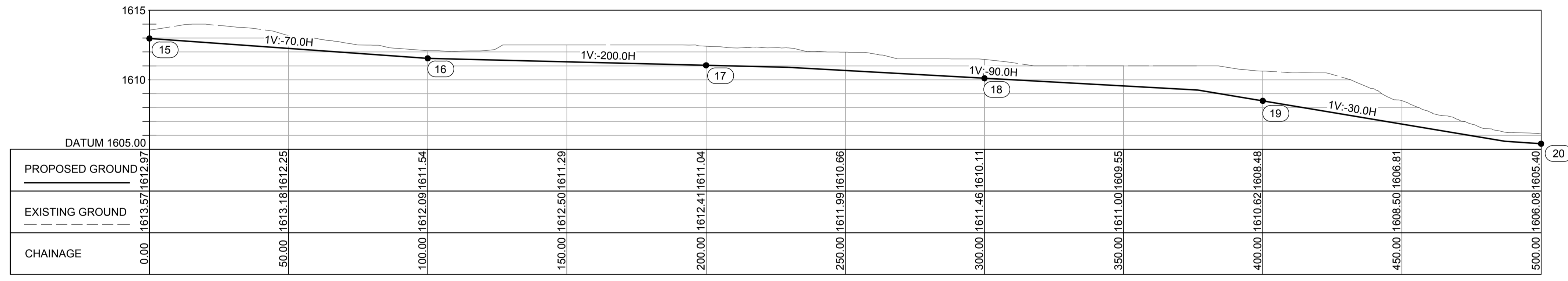
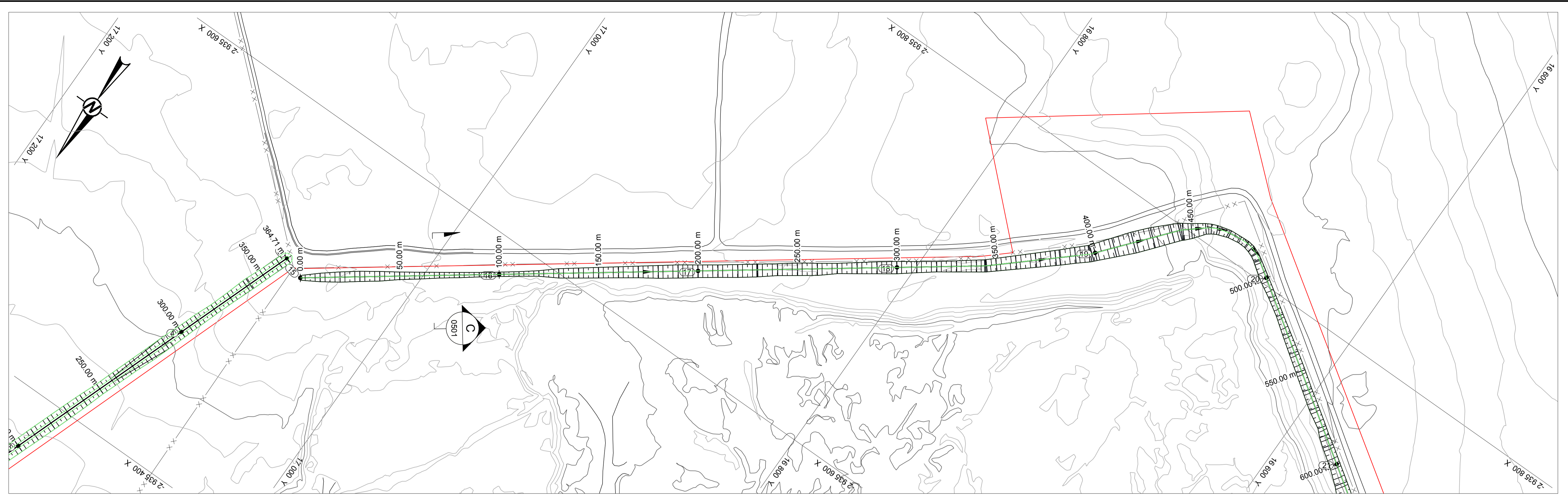
**Golder Associates**

PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

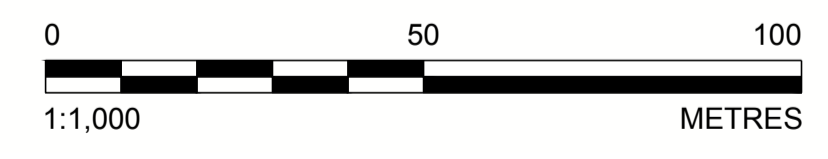
PROJECT  
**SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE**

TITLE  
**STORMWATER DRAIN SOUTH LONGSECTION SHEET 2 OF 2**

PROJECT NO. <b>1418079</b>	CONTROL <b>0200</b>	REV. <b>B</b>	10 of 31	DRAWING <b>0207</b>
-------------------------------	------------------------	------------------	----------	------------------------



ISSUED FOR INFORMATION  
**DRAFT**



POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
15	17049.82	-2935523.20	1612.97
16	16969.14	-2935582.28	1611.54
17	16888.46	-2935641.37	1611.04
18	16807.79	-2935700.47	1610.11
19	16730.66	-2935763.87	1608.48
20	16653.09	-2935803.22	1605.40

- NOTES**
1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
  2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
  3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
  4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

Path: \\p1-1\k1\gms\asat\Projects\1418079 - Sasol Charlie1\CEP\Secured\2 Drawings - images\DRAWINGS\RevB\_20150527\_1 File Name: 1418079-0206-D-SV Drain (S-1)\_20150528.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ISO A1 25 mm

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB 800395

CLIENT  
**SASOL SYNFUELS**

CONSULTANT

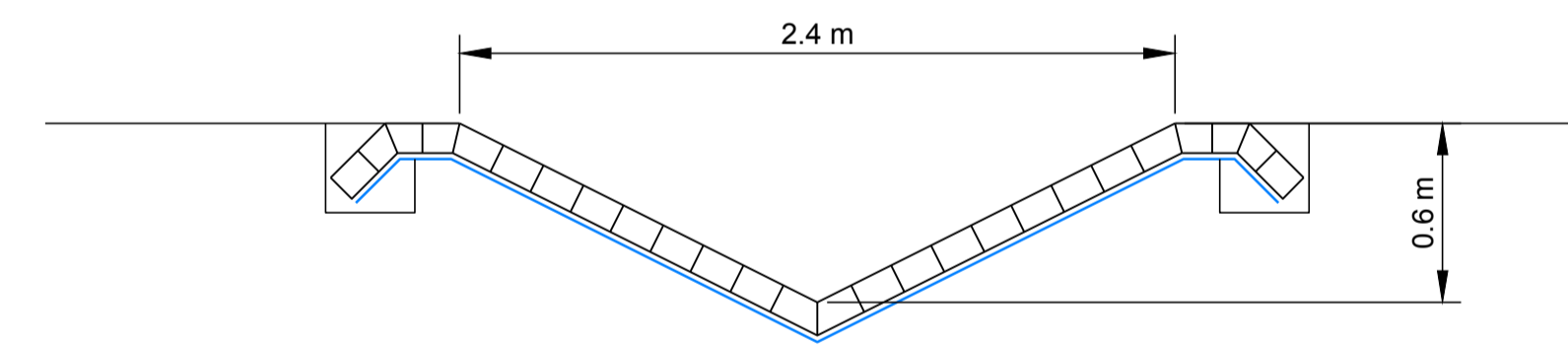
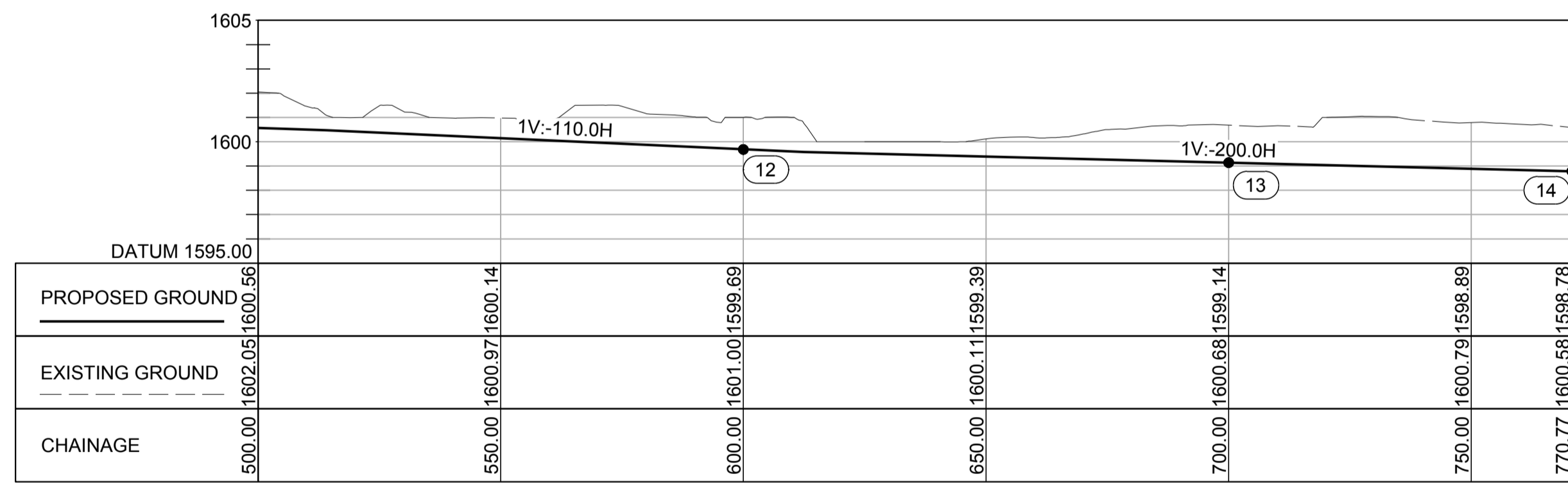
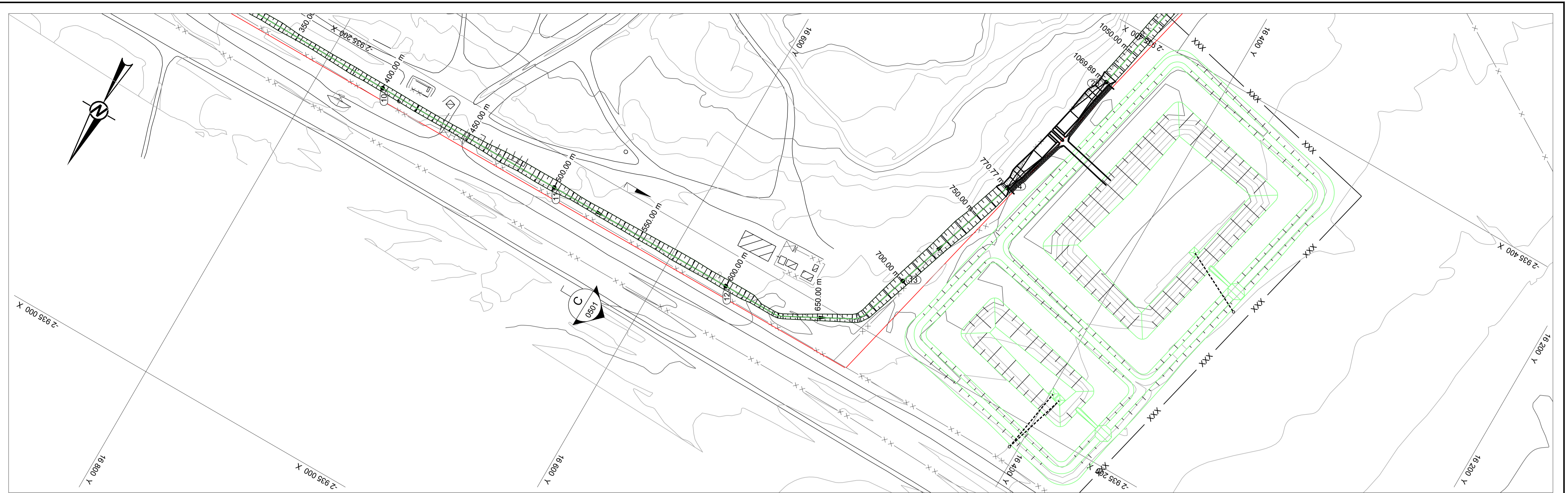
**Golder Associates**

PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
(+27) (0) 12 364 4000  
www.golder.com

PROJECT  
**SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE**

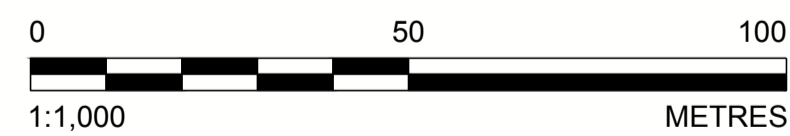
TITLE  
**STORMWATER DRAIN SOUTH LONGSECTION SHEET 1 OF 2**

PROJECT NO. 1418079 CONTROL 0200 REV. B 9 of 31 DRAWING 0206



SCALE 1:25 **C** STORMWATER V-DRAIN TYPE 1  
0501

ISSUED FOR INFORMATION  
**DRAFT**



SETOUT TABLE			
POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
12	16568.58	-2935183.89	1599.69
13	16492.60	-2935230.85	1599.14
14	16470.62	-2935298.13	1598.78

**NOTES**

1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

CLIENT  
SASOL SYNFUELS

PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

CONSULTANT

PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

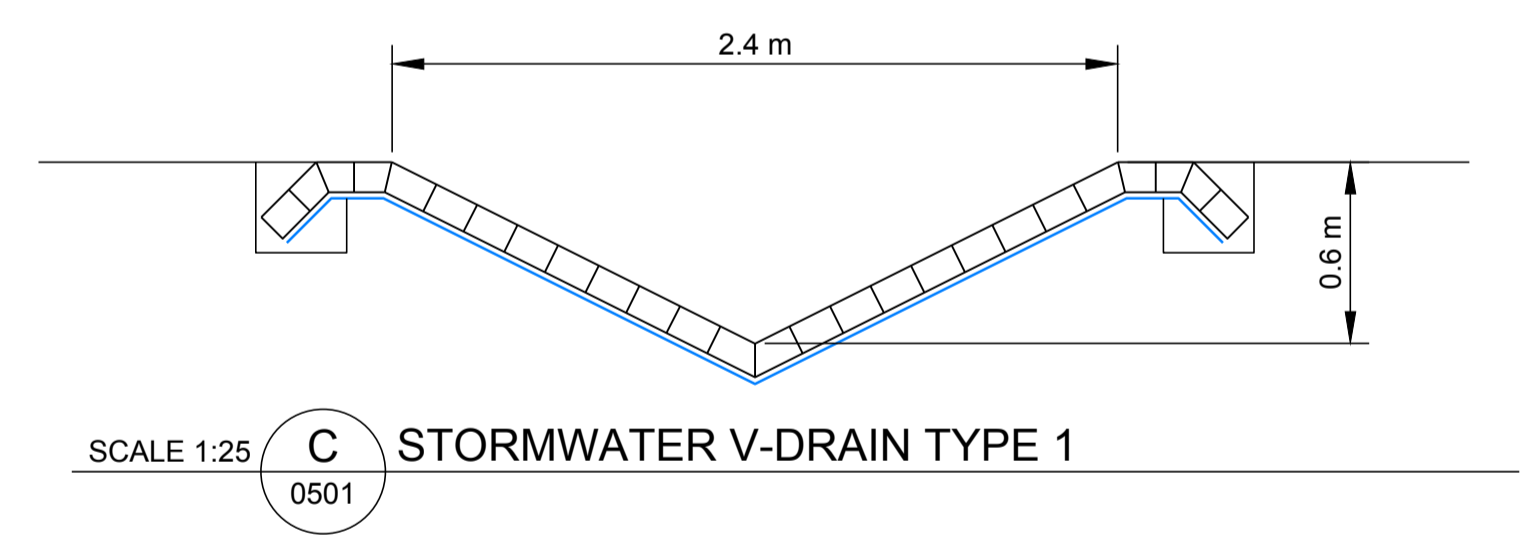
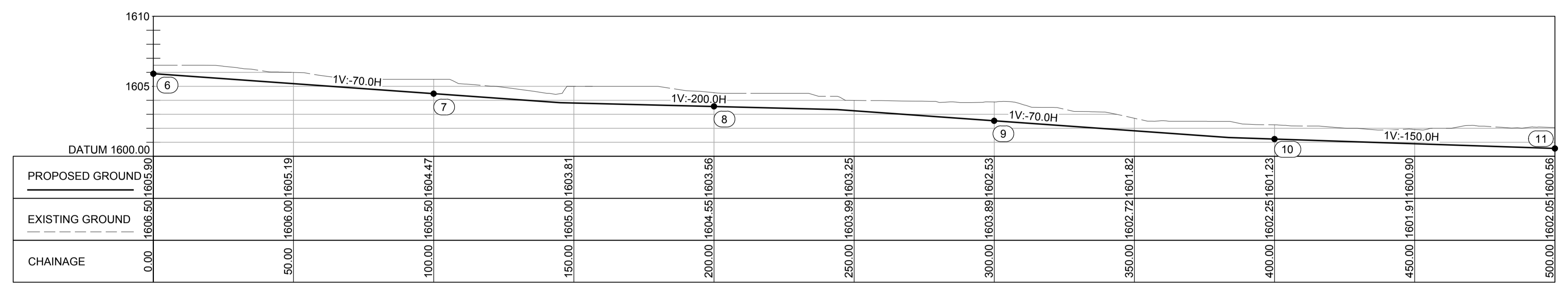
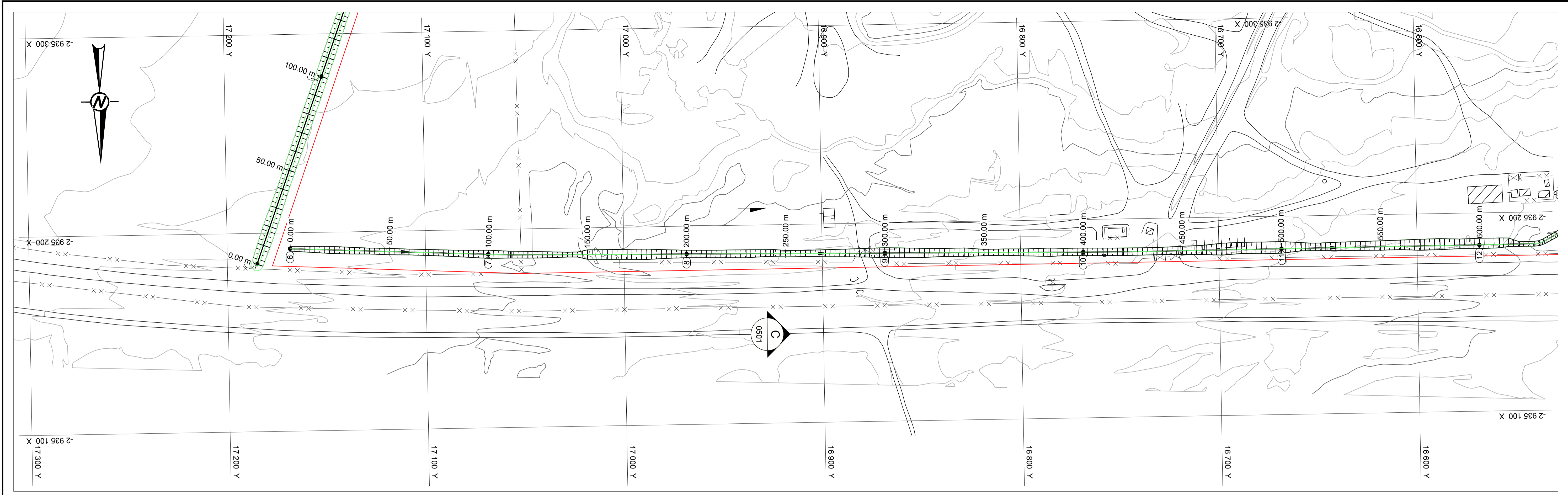
TITLE  
**STORMWATER DRAIN NORTH LONGSECTION SHEET 2 OF 2**

REV.	YYYY-MM-DD	DESCRIPTION
B	2015-05-28	FINAL DRAFT
A	2015-05-08	FIRST DRAFT FOR REVIEW

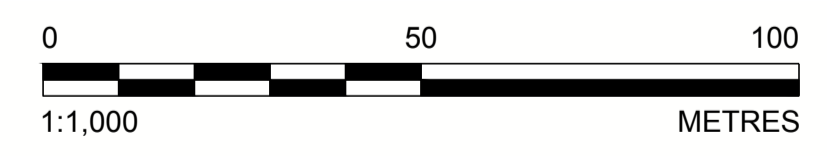
DESIGNED	PREPARED	REVIEWED	APPROVED
GD	GD	SAPB	SAPB
800395	800395	800395	800395



PROJECT NO.	CONTROL	REV.	8 of 31	DRAWING
1418079	0200	B		0205



ISSUED FOR INFORMATION  
**DRAFT**



POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
6	17168.26	-2935191.97	1605.90
7	17068.36	-2935187.48	1604.47
8	16968.35	-2935185.93	1603.56
9	16868.36	-2935184.75	1602.53
10	16768.39	-2935183.56	1601.23
11	16668.39	-2935183.58	1600.56

- NOTES**
1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
  2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
  3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
  4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

Path: \\p1er1-1\sl\gpad\al\Projects\1418079 - Sasol Charlie1\CEP\Secured\16.2 Drawings - images\DRAWINGS\RevB\_20150528.dwg File Name: 1418079-0204-D-SW Drain (R-1)\_20150528.dwg

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB 800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB 800395

CLIENT  
**SASOL SYNFUELS**

CONSULTANT  
**Golder Associates**

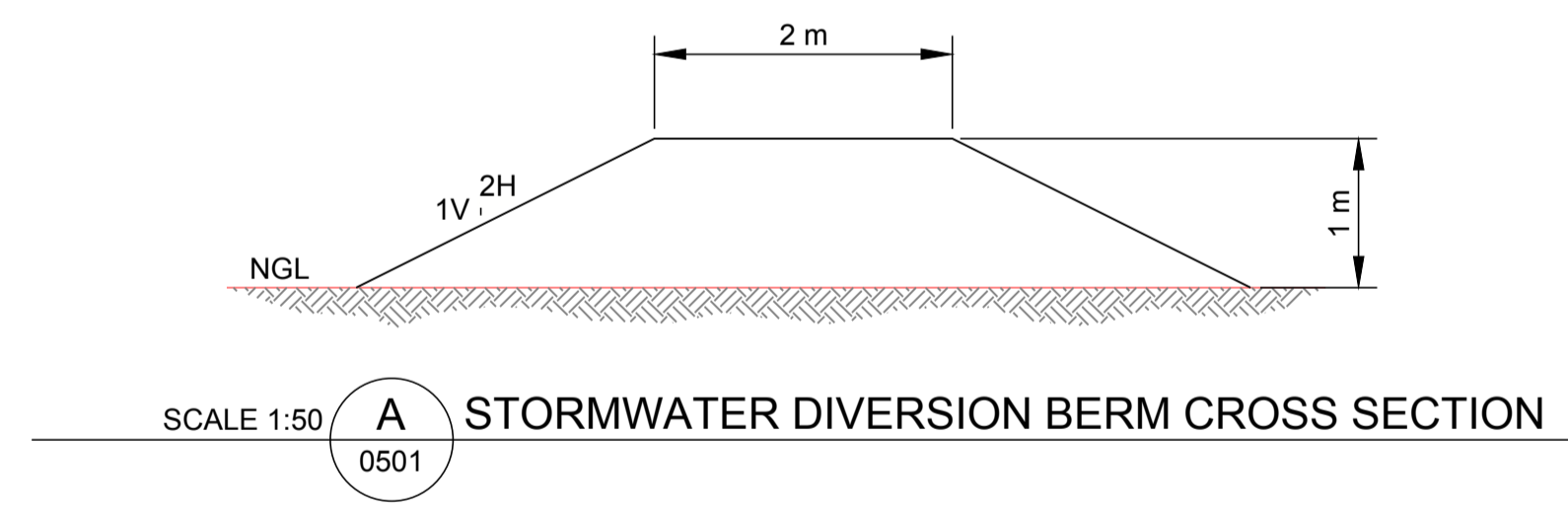
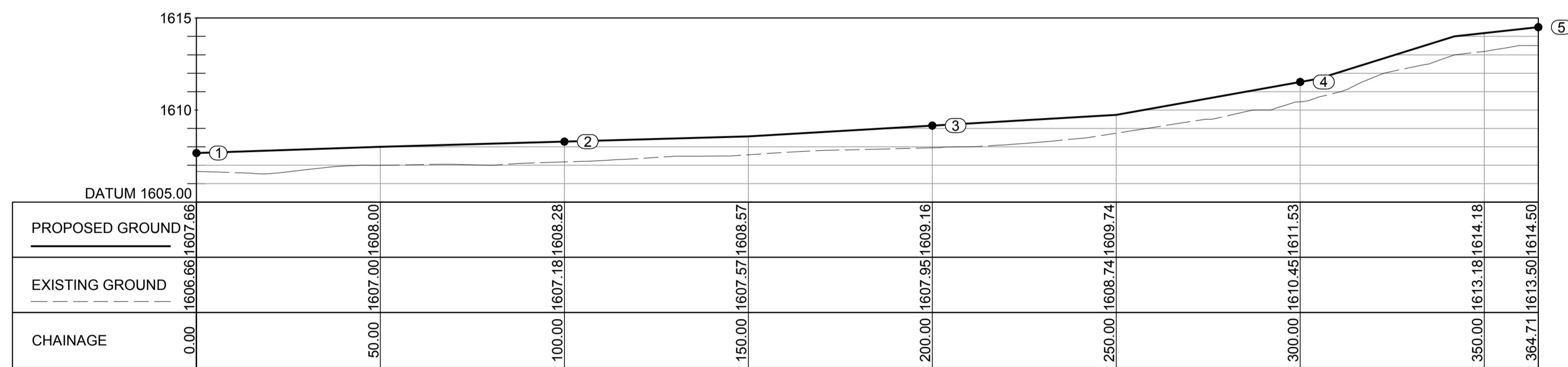
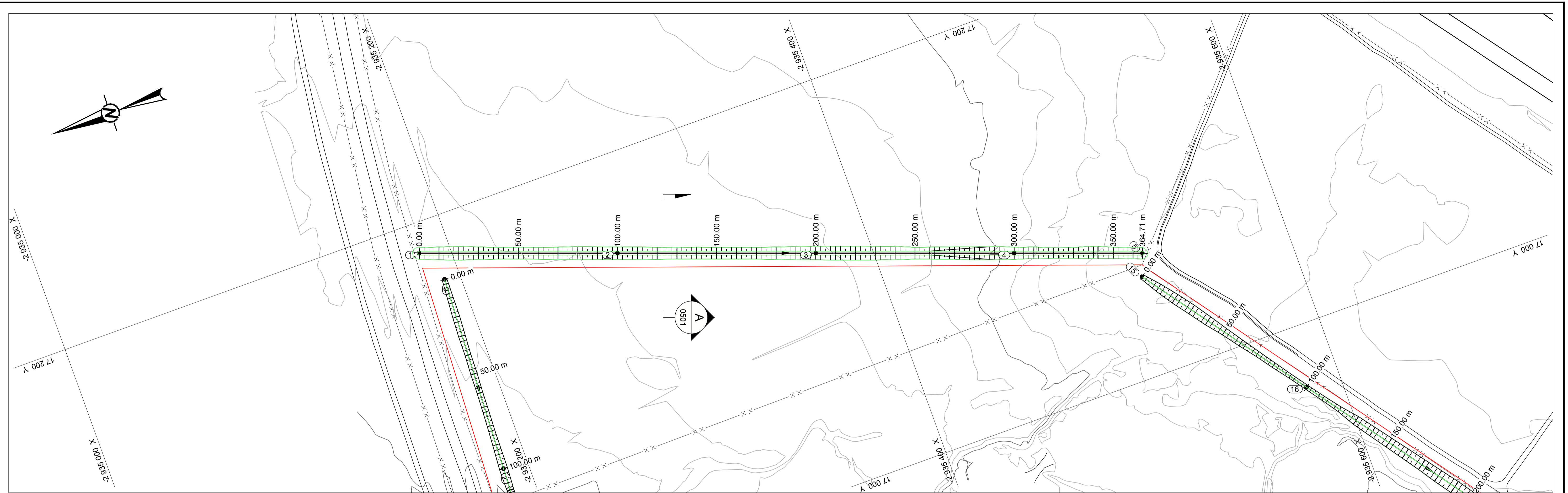
PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

PROJECT  
**SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE**

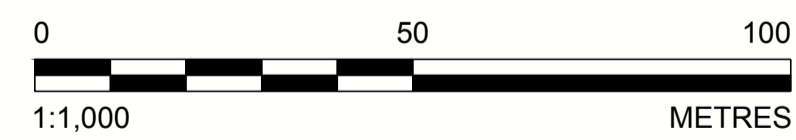
TITLE  
**STORMWATER DRAIN NORTH LONGSECTION SHEET 1 OF 2**

PROJECT NO. 1418079 CONTROL 0200 REV. B 7 of 31 DRAWING 0204

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm



ISSUED FOR INFORMATION  
**DRAFT**



SETOUT TABLE			
POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
1	17185.03	-2935184.47	1607.66
2	17151.02	-2935278.51	1608.28
3	17117.01	-2935372.55	1609.16
4	17082.97	-2935466.58	1611.53
5	17060.94	-2935527.42	1614.50

**NOTES**

1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

CLIENT  
SASOL SYNFUELS

PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

CONSULTANT

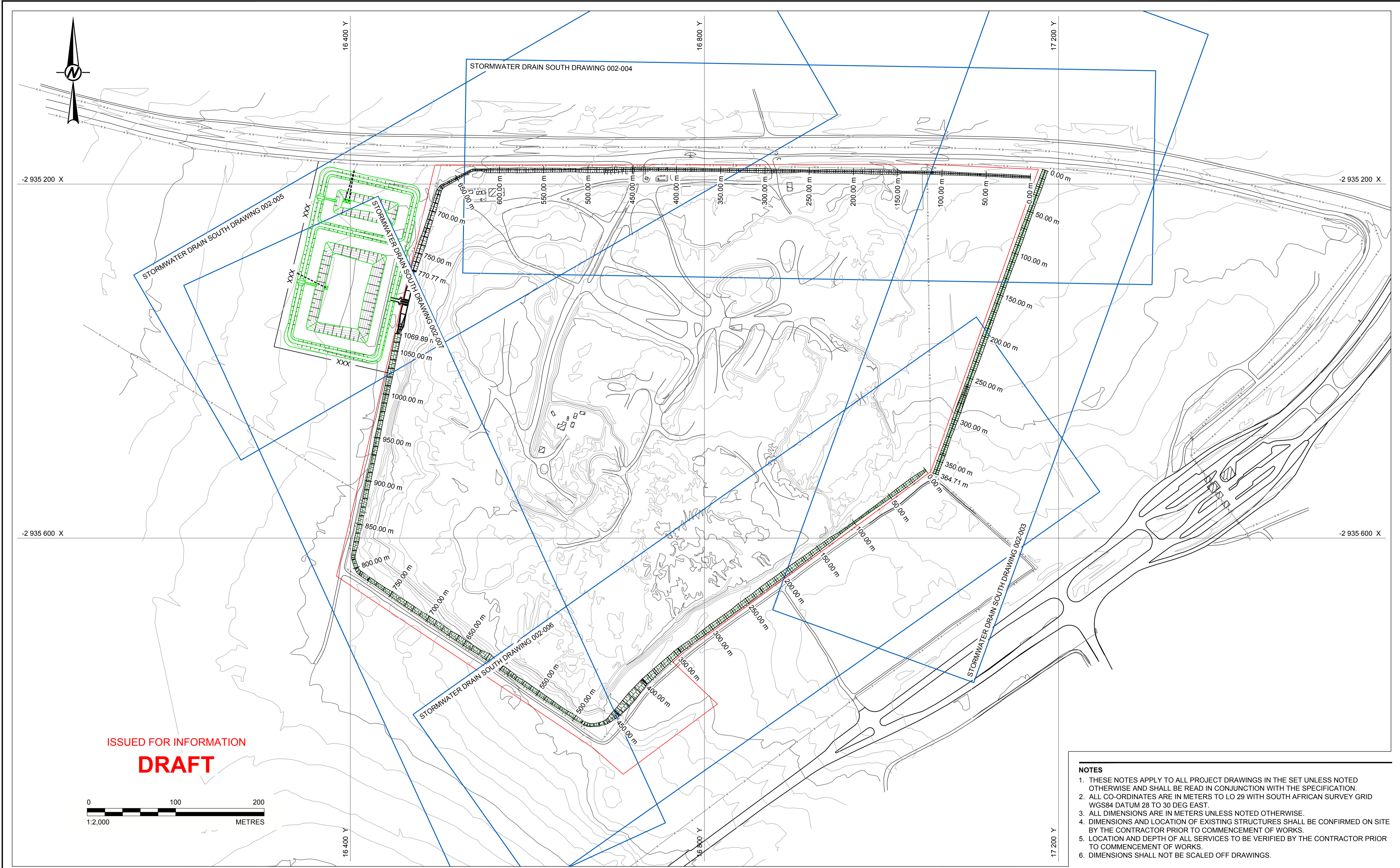
PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
[+27] (0) 12 364 4000  
www.golder.com

TITLE  
**STORMWATER DIVERSION BERM LONGSECTION**

B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB	800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB	800395
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED	



PROJECT NO.	CONTROL	REV.	6 of 31	DRAWING
1418079	0200	B		0203



- NOTES**
1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
  2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
  3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
  4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

CLIENT  
SASOL SYNFUELS

CONSULTANT

PRETORIA  
1204 PARK STREET  
HATFIELD, 0028  
SOUTH AFRICA  
(+27) (0) 12 364 4000  
www.golder.com



PROJECT  
SASOL CHARLIE 1 LANDFILL  
STORMWATER AND LEACHATE MANAGEMENT  
FEASIBILITY ENGINEERING PACKAGE

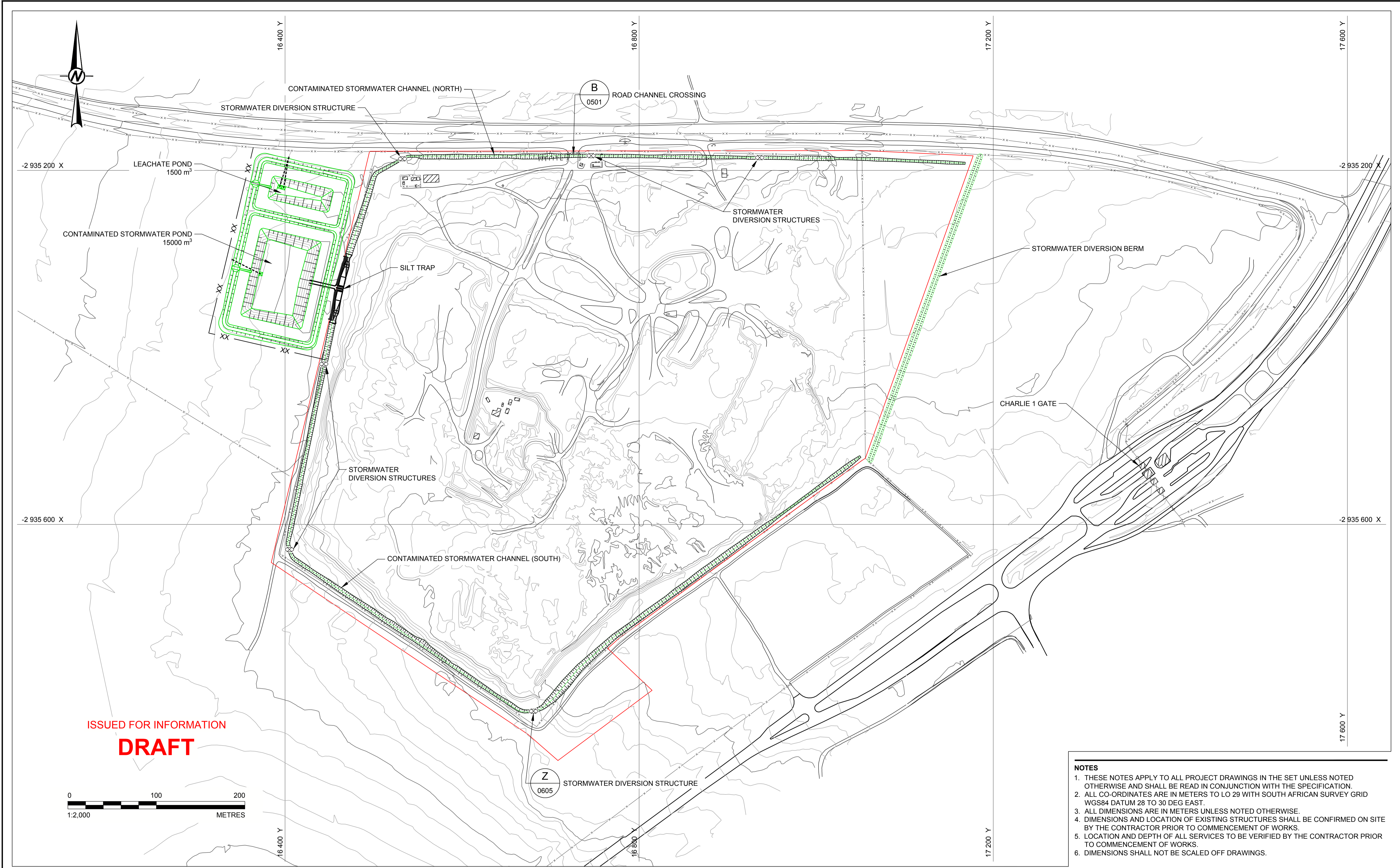
TITLE  
**STORMWATER LAYOUT KEY PLAN**

B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB	800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB	800395
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED	


PROJECT NO.	CONTROL	REV.	5 of 31	DRAWING
1418079	0200	B		0202

Path: \\p1er1-1\k1\gsad\proj\1418079 - Sasol Charlie1 CEP\Sec\Drawings - Images\DRAWINGS\RevB\_20150528\1 - File Name: 1418079-0202-D-SV Key Plan\_20150528.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm



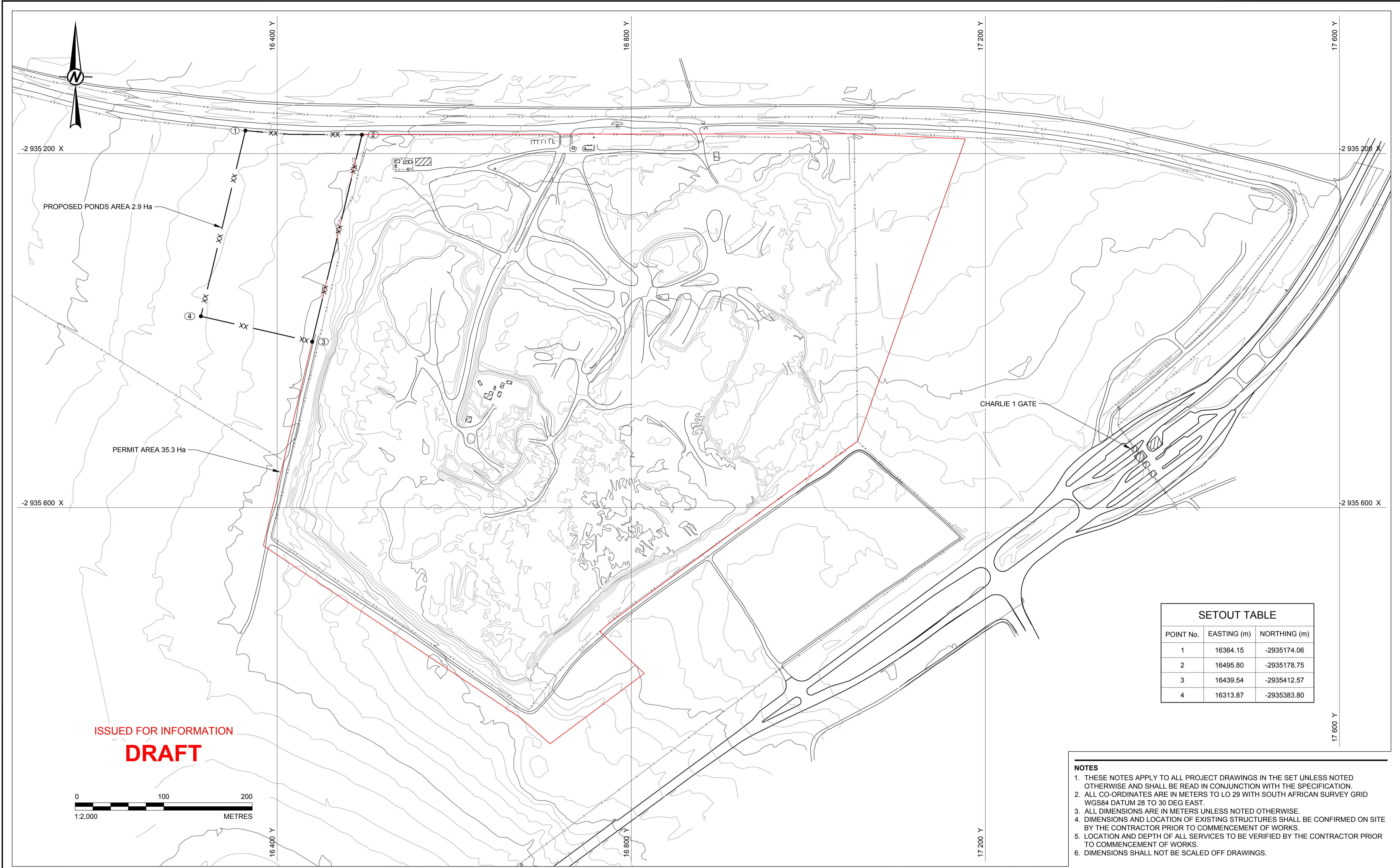
- NOTES**
1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
  2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
  3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
  4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

CLIENT		SASOL SYNFUELS					
CONSULTANT		 <b>Golder Associates</b> PRETORIA 1204 PARK STREET HATFIELD, 0028 SOUTH AFRICA (+27) (0) 12 364 4000 www.golder.com					
B	2015-05-28	FINAL DRAFT	GD	GD	SAPB	SAPB	800395
A	2015-05-08	FIRST DRAFT FOR REVIEW	GD	GD	SAPB	SAPB	800395
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED	

PROJECT		SASOL CHARLIE 1 LANDFILL STORMWATER AND LEACHATE MANAGEMENT FEASIBILITY ENGINEERING PACKAGE		
TITLE		<b>STORMWATER LAYOUT</b> <i>PROPOSED INFRASTRUCTURE</i>		
PROJECT NO.	CONTROL	REV.	4 of 31	DRAWING
1418079	0200	B		0201

Path: \\p1er1-1\k1\gsa\ad\Projects\1418079 - Sasol Charlie 1\CEP\Secured\16.2 Drawings - Images\DRAWINGS\RevB\_20150527\_1 File Name: 1418079-0201-D-SW Layout\_20150528.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1



SETOUT TABLE		
POINT No.	EASTING (m)	NORTHING (m)
1	16364.15	-2935174.06
2	16495.80	-2935178.75
3	16439.54	-2935412.57
4	16313.87	-2935383.80

- NOTES**
1. THESE NOTES APPLY TO ALL PROJECT DRAWINGS IN THE SET UNLESS NOTED OTHERWISE AND SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
  2. ALL CO-ORDINATES ARE IN METERS TO LO 29 WITH SOUTH AFRICAN SURVEY GRID WGS84 DATUM 28 TO 30 DEG EAST.
  3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
  4. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  5. LOCATION AND DEPTH OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
  6. DIMENSIONS SHALL NOT BE SCALED OFF DRAWINGS.

CLIENT		SASOL SYNFUELS				
CONSULTANT						
B 2015-05-28 FINAL DRAFT A 2015-05-08 FIRST DRAFT FOR REVIEW		GD GD DESIGNED PREPARED	SAPB SAPB REVIEWED APPROVED	800395 800395	PRETORIA 1204 PARK STREET HATFIELD, 0028 SOUTH AFRICA (+27) (0) 12 364 4000 www.golder.com	
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED

PROJECT		SASOL CHARLIE 1 LANDFILL STORMWATER AND LEACHATE MANAGEMENT FEASIBILITY ENGINEERING PACKAGE		
TITLE		<b>GENERAL ARRANGEMENT</b> <i>PROPOSED PONDS AREA</i>		
PROJECT NO.	CONTROL	REV.	3 of 31	DRAWING
1418079	0100	B		0102

Path: \\p1-1\k1\gdata\Projects\1418079 - Sasol Charlie1\CEP\Secur\16.2 Drawings - Images\DRAWINGS\RevB\_20150527\1 File Name: 1418079-0102-D-Ponds Area\_20150528.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A1 25 mm



As a global, employee-owned organisation with over 50 years of experience, Golder Associates is driven by our purpose to engineer earth's development while preserving earth's integrity. We deliver solutions that help our clients achieve their sustainable development goals by providing a wide range of independent consulting, design and construction services in our specialist areas of earth, environment and energy.

For more information, visit [golder.com](http://golder.com)

Africa	+ 27 11 254 4800
Asia	+ 86 21 6258 5522
Australasia	+ 61 3 8862 3500
Europe	+ 44 1628 851851
North America	+ 1 800 275 3281
South America	+ 56 2 2616 2000

[solutions@golder.com](mailto:solutions@golder.com)  
[www.golder.com](http://www.golder.com)

**Golder Associates Africa (Pty) Ltd.**  
**P.O. Box 13776**  
**Hatfield, 0028**  
**Ditsela Place**  
**1204 Park Street**  
**Hatfield**  
**Pretoria, 0083**  
**South Africa**  
**T: [+27] (12) 364 4000**





**Royal  
HaskoningDHV**  
*Enhancing Society Together*

## **Appendix E: Public Participation Documents**

# **E1: I&AP Database**

First Name	Last Name	Company
H J	Badenhorst	Govan Mbeki Local Municipality
Tarnia	Baker	Govan Mbeki Local Municipality
A	Bosman	Waterval Farmer's Association
Carl	Brown	Mpumalanga Communication Service
Musa	Chamane	groundWork
Muzi	Chirwa	African National Congress (ANC)
Brenda	de Jongh	Mercury Mining Supplies
Timothy	Denny	Govan Mbeki Local Municipality
Augustus	Dludlu	Mpumalanga Department of Water Affairs (DWA)
Andre	du Preez	OTB Construction
Rico	Euripidou	groundWork
Chris	Ferreira	Witbank Chamber of Commerce
Glenda	Gallieboy	Telkom South Africa
Andries	Gamede	Gert Sibande District Municipality
CA	Habile	Gert Sibande District Municipality
Reveck	Hariram	Randwater
Dan	Hlanyane	Gert Sibande District Municipality
B	Jackson	Inkomati Catchment Management Agency
Lucas	Klopper	Waterval Farmers Association
Frans	Krige	Mpumalanaga Tourism and Parks Agency (MTPA)
Hennie	Laas	Mpumalanga Agricultural Union
Elzma	Labuschagne	Govan Mbeki Local Municipality
Gugu	Langa	SA Local Government Association Mpumalanga (SALGA)
Altus	Lotter	Mpumalanga Department of Economic Development Environment and Tourism (MDEDET)
Miss	Louise	WESSA
David	Mabuza	Office of the Premier
MF	Mahlangu	Govan Mbeki Local Municipality
Sister	Mahlangu	SACP
Themba	Mahlangu	Department of Local Government and Housing (DPLG)
Nomcebo	Makhubelo	Mrimalanga Youth Against Climate Change
S	Marebane	Mpumalanga Department of Agriculture & Land Administration
Hannes	Maritha	JP Jansen van Vuuren Farms
Timothy	Mark	Ward 5 Gavon Mbeki Local Municipality
Tshilidzi	Masalesa	Transnet (Freight Rail) Risk Management
F	Mashabela	Mpumalanga Department of Agriculture and Land Administration (MDALA)
Lindi	Masina	Govan Mbeki Local Municipality
G	Masuku	Mpumalanga Department of Transport and Public Works
S	Mnisi	Office of the Premier
Benjamin	Moduka	South African Heritage Resources Agency
Mary	Mogale	Department of Agriculture Forestry and Fisheries
Evelyn	Mokoena	Mpumalanga Department of Labour
Doctor	Mtshali	National Education Health and Allied Workers' Union (NEHAWU)
Mbali	Nhlengethwa	Eskom
Mariana	Nieuwoudt	Olifants River Catchment Forum (ORCF)
Rhigardt	Nolte	Proconics Pty Limited
Monde	Nqiwa	Community Member
Ria	Ntuli	Department of Agriculture (DoA)
Andy	Nuns	Umjindi Ratepayers Association
Andy	O'Toole	Solidarity
Nthabeleng	Ramashoai	SACP
Kamesh	Rohan	Govan Mbeki Local Municipality
L	Rootman	Harmony Gold Mines
Estelle	Russell	Witbank Chamber of Commerce
Clix	Salman	Graceland Hotel Casino & Country
Shabangu	Sampie	Mpumalanga Department of Water Affairs (DWA)
H	Schoeman	Agri Mpumalanga VLU
Willem	Schoombie	Secunda Medi Clinic
Israel	Silinda	Mpumalanga Department of Economic Development, Environment & Tourism
Danie	Smit	Secunda Resident
M	Taylor	Govan Mbeki Local Municipality