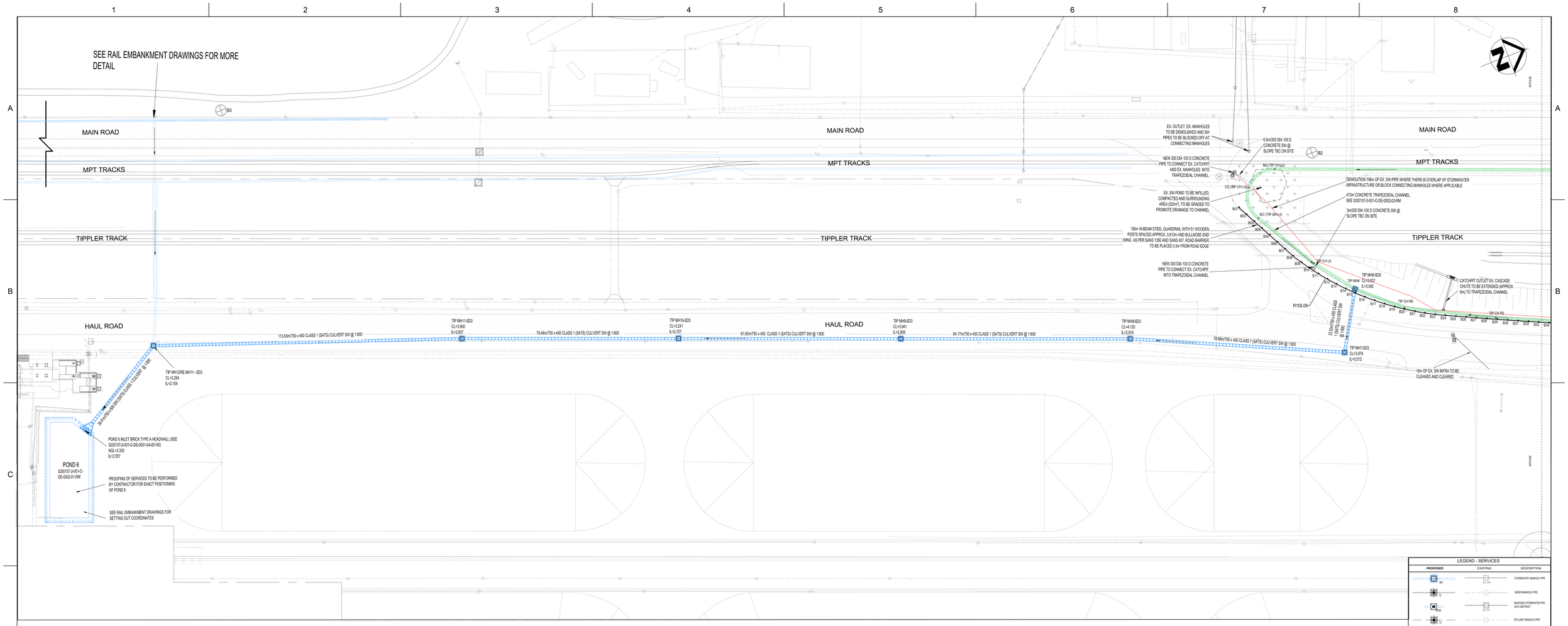

TIPPLER LAYOUT DETAIL
SCALE 1:500

TIPPLER SETTING OUT COORDINATES		
Position X	Position Y	COORDINATE ID
-93734.58	-3653422.36	B01
-93731.22	-3653420.57	B02
-93727.85	-3653418.78	B03
-93724.49	-3653416.99	B04
-93721.13	-3653415.21	B05
-93717.76	-3653413.42	B06
-93714.40	-3653411.63	B07
-93711.03	-3653409.84	B08
-93707.81	-3653407.81	B09
-93704.69	-3653405.62	B10
-93701.65	-3653403.33	B11
-93698.70	-3653400.92	B12
-93695.83	-3653398.41	B13
-93693.06	-3653395.80	B14
-93690.38	-3653393.09	B15
-93687.81	-3653390.28	B16
-93685.33	-3653387.38	B17
-93682.97	-3653384.40	B18
-93680.71	-3653381.33	B19
-93678.57	-3653378.18	B20
-93676.54	-3653374.95	B21
-93674.63	-3653371.65	B22
-93672.85	-3653368.29	B23
-93671.18	-3653364.86	B24
-93669.59	-3653361.40	B25
-93668.00	-3653357.94	B26
-93666.41	-3653354.48	B27
-93664.83	-3653351.01	B28
-93663.26	-3653347.54	B29
-93661.69	-3653344.06	B30
-93660.13	-3653340.59	B31
-93658.58	-3653337.11	B32
-93657.03	-3653333.63	B33
-93655.48	-3653330.15	B34
-93653.94	-3653326.66	B35
-93652.41	-3653323.17	B36
-93650.89	-3653319.68	B37
-93649.37	-3653316.19	B38
-93647.85	-3653312.69	B39
-93646.34	-3653309.19	B40
-93644.84	-3653305.69	B41
-93643.34	-3653302.19	B42
-93641.85	-3653298.68	B43
-93640.37	-3653295.17	B44
-93638.89	-3653291.66	B45
-93637.42	-3653288.15	B46
-93635.95	-3653284.63	B47
-93634.49	-3653281.11	B48
-93633.03	-3653277.59	B49
-93631.59	-3653274.07	B50
-93630.33	-3653270.99	B51
-93743.21	-3653405.24	BC (TIP CH L2)
-93740.05	-3653416.56	CC (TIP CH L3)
-93728.31	-3653417.04	EC (TIP CH L4)
-93525.08	-3653079.60	ER1
-93512.17	-3653085.80	ER2
-93528.18	-3653135.61	ER3
-93546.30	-3653129.57	ER4
-93567.05	-3653175.68	P01
-93568.83	-3653170.54	P02
-93567.12	-3653171.07	P03
-93565.94	-3653174.49	P04
-93551.76	-3653179.43	P05
-93550.70	-3653181.71	P06
-93533.99	-3653136.39	P07
-93536.28	-3653137.48	P08
-93553.56	-3653129.17	P09
-93552.51	-3653131.45	P10
-93536.96	-3653084.60	P11
-93532.38	-3653081.80	P12
-93535.47	-3653085.76	P13
-93532.19	-3653083.76	P14
-93544.35	-3653104.62	P15
-93542.07	-3653103.66	P16
-93523.96	-3653112.15	P17
-93525.01	-3653109.87	P18
-93517.39	-3653089.22	P19
-93515.11	-3653088.17	P20
-93293.34	-3653407.34	P21
-93285.38	-3653403.73	P22
-93291.94	-3653408.66	P23
-93285.31	-3653405.65	P24
-93308.46	-3653448.10	P25
-93306.18	-3653447.05	P26
-93261.58	-3653465.48	P27
-93262.62	-3653463.20	P28
-93244.32	-3653418.95	P29
-93246.60	-3653420.00	P30
-93651.08	-3653157.86	TIP CH L MH6 (START)
-93705.68	-3653403.68	TIP CH L5
-93631.23	-3653270.60	TIP CH R3 (START)
-93644.01	-3653301.68	TIP CH R4
-93663.90	-3653347.93	TIP CH R5
-93678.99	-3653378.17	TIP CH R6
-93691.69	-3653392.78	TIP MH6
-93289.76	-3653402.32	TIP P4 CH1
-93289.52	-3653406.95	TIP P4 CH2

TIPPLER STORMWATER SCHEDULE		
Name	Y-Coord	X-Coord
TIP MH1	-93631.57	-3653103.45
TIP MH2	-93650.60	-3653156.23
TIP MH3	-93599.12	-3653174.31
TIP MH4	-93588.27	-3653174.63
TIP MH5	-93543.81	-3653061.29
TIP MH6	-93691.72	-3653393.40
TIP MH7	-93671.22	-3653404.96
TIP MH8	-93703.08	-3653477.12
TIP MH9	-93732.32	-3653556.05
TIP MH10	-93760.41	-3653632.66
TIP MH11	-93787.77	-3653707.28
TIP MH12	-93826.42	-3653814.13
TIP CH L START MH6	-93651.30	-3653158.39
TIP CH L1 MID	-93717.58	-3653336.93
TIP CH L2	-93743.22	-3653405.92
TIP CH C1 BC	-93743.83	-3653409.39
TIP CH C2	-93742.59	-3653414.17
TIP CH L3	-93739.21	-3653417.80
TIP CH C3	-93734.71	-3653419.33
TIP CH L4 EC	-93728.40	-3653417.75
TIP CH L5	-93706.26	-3653403.07
TIP CH R1 EX	-93627.97	-3653239.86
TIP CH R2	-93627.83	-3653254.09
TIP CH R3	-93631.39	-3653271.15
TIP CH R4	-93644.14	-3653302.25
TIP CH R5	-93663.98	-3653348.52
TIP CH R6	-93678.03	-3653378.78
POND 2 INLET	-93585.23	-3653174.34
TIP MH3A	-93600.95	-3653181.91
TIP CH MH4	-93545.04	-3653069.26
TIP CH MH5	-93527.13	-3653016.70
POND 1 INLET	-93534.94	-3653086.30
TIP P1 OVERFLOW	-93538.05	-3653104.44
TIP P1 INLET TO P2	-93551.95	-3653139.93
TIP P2 OVERFLOW	-93551.03	-3653177.17
TIP CH to P4	-93537.40	-3653186.31
TIP P4CH	-93288.01	-3653398.13
POND 4 INLET	-93287.03	-3653408.27

BENCHMARK NAME	Y	X	Z	TYPE
PN02_S1	-93475.257	-3654091.102	5.692	Pillar Beacon
PN04_S1	-94315.598	-3652798.626	11.637	Pillar Beacon
PN05_S1	-94350.064	-3653384.385	4.526	Pillar Beacon
PN06_S1	-94121.326	-3654507.768	11.216	Pillar Beacon
ZZCC05_S1	-97521.795	-3653141.320	8.446	Town Survey Mark
B1	-93569.668	-3653064.208	6.915	Drill Hole in Concrete
B2	-93748.380	-3653393.098	3.313	12mm Round Iron Peg
B3	-93899.392	-3653764.514	2.997	12mm Round Iron Peg
B4	-94090.972	-3654037.881	2.839	12mm Round Iron Peg
B5	-94146.158	-3654428.016	3.055	12mm Round Iron Peg
B6	-94360.974	-3654714.558	3.666	Roof Nail in Concrete
B7	-94294.497	-3655014.636	3.386	12mm Round Iron Peg
B8	-93529.849	-3656056.752	8.241	12mm Round Iron Peg
B9	-93166.652	-3653381.886	3.673	12mm Round Iron Peg
B10	-93431.837	-3653261.361	3.484	12mm Round Iron Peg

GENERAL NOTES:-

1. THE CONTRACTOR WILL BE DEEMED TO HAVE INSPECTED THE SITE, AND BE IN AGREEMENT WITH THE WORKS REQUIRED AS PER THE TENDER DOCUMENTS, UNLESS ALTERNATIVE PROPOSALS WITH COST IMPLICATIONS ARE RECEIVED TOGETHER WITH THE TENDER DOCUMENTS. ALTERNATIVE PROPOSALS SUBMITTED DURING CONSTRUCTION SHALL BE ON A DESIGN AND CONSTRUCT BASIS, WITH THE DESIGN AT CONTRACTOR'S EXPENSE.
2. VARIATIONS DEEMED NECESSARY BY THE CONTRACTOR SHALL BE FORWARDED TO THE PROJECT MANAGER IN WRITING FOR APPROVAL BEFORE ANY CONSTRUCTION BASED ON THE VARIATION COMMENCES.
3. SERVICES SHOWN ON DRAWING ARE KNOWN OR SOURCED FROM EXISTING DRAWINGS. THE CONTRACTOR MUST ENSURE THAT ALL SERVICES THAT INTERSECT OR RUN ALONGSIDE THE PROPOSED WORKS ARE LOCATED BEFORE CONSTRUCTION COMMENCES. ANY CLASHES SHALL BE REPORTED TO THE PROJECT MANAGER IN WRITING. THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGES TO EXISTING SERVICES DUE TO NEGLIGENCE.
4. ALL EXISTING PIPES AND MANHOLES INCORPORATED INTO THE NEW SYSTEM SHALL HAVE DEFECTS RECTIFIED TO COMPLY TO STANDARDS FOR NEW WORKS.
5. DIMENSIONS SHOWN ON DRAWINGS SHALL TAKE PREFERENCE OVER DIMENSIONS SCALED.
6. ALL LEVELS AND DIMENSIONS SHALL BE CHECKED BEFORE ANY WORK COMMENCES. FAILURE TO DO SO SHALL DEEM THE CONTRACTOR LIABLE FOR ANY WORK REQUIRED TO RECTIFY ERRORS AS A RESULT OF THE FAILURE TO CHECK THE LEVELS AND DIMENSIONS.
7. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS, UNLESS OTHERWISE INDICATED
8. THE LATEST REVISION OF SANS SPECIFICATIONS SHALL APPLY. ALL WORK SHALL BE DONE IN ACCORDANCE WITH RELEVANT SANS SPECIFICATIONS, UNLESS OTHERWISE INDICATED.
9. ALL LENGTHS SHOWN ARE APPROXIMATE AND SHALL BE CONFIRMED ON SITE BY CONTRACTOR.

EARTHWORKS:-

1. ANY DISCREPANCIES IN LEVELS AND SETTING OUT DATA TO BE QUERIED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.
2. ALL WORKMANSHIP TO BE IN ACCORDANCE WITH SANS 1200 PART D : EARTHWORKS AND THE RELEVANT PROJECT SPECIFICATIONS AS INCLUDED IN THE CONTRACT.
3. BEFORE PLACING ANY FILL MATERIAL, THE EXISTING GROUND SURFACE MUST BE CLEARED AND GRUBBED OF ALL VEGETATION AND ORGANIC MATTER.
4. UNLESS OTHERWISE INDICATED, ALL BANK BATTERS TO BE : 1:1.5 CUT AND 1:2 FILL
5. THE UNCOMPLICATED THICKNESS OF FILL LAYERS SHALL NOT EXCEED 300mm
6. LOCATE ALL EXISTING SERVICES IN AREA PRIOR TO ANY CONSTRUCTION TAKING PLACE.
7. THE CONTRACTOR IS TO TAKE DEWATERING AND ENCOUNTERING BEDROCK INTO ACCOUNT IN ACCORDANCE TO THE TRUE NATURE AND EXTENT OF THE WORKS. SEE WORKS INFORMATION FOR MORE DETAIL.

STORMWATER NOTES:-

1. TRENCHES FOR PIPES TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH THE REQUIREMENT OF SANS 1200 DB - PIPE TRENCHES.
2. ALL RIGID CONCRETE PIPES SHALL HAVE CLASS B BEDDING UNLESS STATED OTHERWISE.
3. FOR STORMWATER PIPES SHALL BE SPIGOT & SOCKET CLASS 100D (SANS 677).
4. ALL CONCRETE PIPE JOINTS TO BE WRAPPED WITH 'A2 BIDIM' (NONWOVEN,CONTINUOUS FILAMENT,NEEDLE PUNCHED, POLYESTER,GEOTEXTILE) MIN. WIDTH TO BE 750mm FOR PIPES 3000 TO 6000.
5. NB. ALL MANHOLE COVERS TO SUIT CROSSFALL OF FINISHED PAVING .
6. ON COMPLETION, THE INSTALLATION SHALL BE TESTED TO THE ENGINEER'S SPECIFICATION.
7. THE CONTRACTOR SHALL SUBMIT A FULL SET OF AS-BUILT DRAWINGS UPON COMPLETION OF THE INSTALLATION.
8. ALL EXISTING STORMWATER PIPES, MANHOLES, CHANNELS AND ANY OTHER STORMWATER INFRASTRUCTURE TO BE CLEANED AND CLEARED OF ALL DEBRIS BEFORE ANY WORK COMMENCES. ALL DAMAGED EXISTING STORMWATER INFRASTRUCTURE SHALL BE REINSTATED TO ORIGINAL CONDITION.
9. ANY DISCREPANCIES IN LEVELS AND SETTING OUT DATA TO BE QUERIED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.
10. ALL EXISTING STORMWATER PIPES ARE CONCRETE UNLESS STATED OTHERWISE.
11. WHERE MINIMUM COVER OF 1000mm FOR OPERATIONAL AREAS & 600mm FOR NON OPERATIONAL AREA CANNOT BE ACHIEVED. CONCRETE ENCASEMENT IS REQUIRED AS PER THE DETAIL DRAWINGS.

CONSTRUCTION & REHABILITATION ACTIVITIES FOR STORMWATER SYSTEM:-

1. REMOVE ALL DUST & CAKED MATERIAL FROM SURFACE & SUB-SURFACE DRAINAGE SYSTEMS.
2. REPAIR EROSION RUNNELS & RE-SHAPE ALL HARD STANDING AREAS TO ENSURE DRAINAGE TOWARDS THE DETENTION POND.
3. PIPES, CULVERTS, MANHOLES & CHANNELS NEED TO BE CLEANED REGULARLY AS SYSTEM IS BLOCKED & MANHOLES ARE SILTED UP.
4. LENGTHS OF PIPES, NUMBER OF CULVERTS & MANHOLES CLEARLY SHOWN IN LONGITUDINAL SECTION FOR QUANTIFYING.
5. CLEAN OUT ALL SLABS & DRYING BEDS.
6. RE-SHAPE ALL HARD STANDING AREAS TO ENSURE DRAINAGE AWAY FROM THE ROADS TOWARDS THE STORMWATER POND.
7. LOW POINTS TO BE REPAIRED WITH A MINIMUM OF 150 mm G2 LAYER COMPACTED TO 95 % MOD-AASHTO.

CONSTRUCTION & REHABILITATION ACTIVITIES FOR POND 1, POND 2 AND POND 4:-

1. FOR RESPECTIVE POND DETAIL REFER TO DRAWING 5200157-2-001-C-DE-0002-01.
2. CLEAR ALL GRUB & VEGETATION.
3. COMPACT TO 90 % MOD AASHTO.
4. REPAIR & REINSTATE ALL DOWN CHUTES IF APPLICABLE.
5. PLACE STONE PITCHING ENERGY DISSIPATORS AT OUTLET OF CULVERTS & DOWN CHUTES.
6. DETENTION POND TO BE CONSTRUCTED TO NEW APPROVED LAYERWORKS.
7. PLEASE SEE 5200157-2-001-C-DE-0002-01 FOR POND 1, POND 2 AND POND 4 LAYERWORKS.

DRAWING NO.	REFERENCE
REFERENCE DRAWINGS	
5200157-2-001-C-LA-0002-01	TIPPLER - STORMWATER TIPPLER GENERAL LAYOUT AND KEY PLAN
5200157-2-001-C-LA-0002-02	TIPPLER - LAYOUT DETAIL SHEET 1 OF 3
5200157-2-001-C-LA-0002-03	TIPPLER - LAYOUT DETAIL SHEET 2 OF 3
5200157-2-001-C-LA-0002-04	TIPPLER - LAYOUT DETAIL SHEET 3 OF 3
5200157-2-001-C-SE-0002-01	TIPPLER - STORMWATER LONGSECTION SHEET 1 OF 3
5200157-2-001-C-SE-0002-02	TIPPLER - STORMWATER LONGSECTION SHEET 2 OF 3
5200157-2-001-C-SE-0002-03	TIPPLER - STORMWATER LONGSECTION SHEET 3 OF 3
5200157-2-001-C-DE-0002-01	TIPPLER - POND 1, POND 2 AND POND 4 CROSS SECTION DETAIL
5200157-2-001-C-DE-0002-02	TYPICAL GRID CHANNEL, MOUNTABLE KERB, SUBSOIL COLLECTOR DRAIN (SCD) AND TRAPEZOIDAL CHANNEL DETAIL
5200157-2-002-C-DE-0002-03	TIPPLER - TYPICAL STORMWATER MANHOLE DETAILS SD4 AND SD5

NOTES:

a. MEASUREMENTS ARE BASED ON METRIC SYSTEM.
b. ALL LEVELS ARE IN METERS TO MEAN SEA LEVELS (MSL)
c. DO NOT SCALE DRAWING - ONLY DIMENSIONS SHOWN TO BE USED.
d. THE CONTRACTOR SHALL VERIFY ALL SERVICES OR CONDITIONS ON THE SITE AND NOTIFY THE ENGINEERING OF ANY VARIATIONS FROM DIMENSIONS BEFORE CONSTRUCTION.

NO.	DESCRIPTION	BY	CHKD	APPD	DATE
00	ISSUED FOR CONSTRUCTION	RM	HvdW	RN	03/08/2023
0B	ISSUED FOR CLIENT APPROVAL	RM	HvdW	RN	24/04/2023
0A	ISSUED FOR CLIENT APPROVAL	RM	HvdW	RN	01/07/2022

REVISIONS

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CONTRACTOR / CONSULTANT			
TITLE	NAME	SIGN	DATE

OPERATING DIVISIONS			
TITLE	NAME	SIGN	DATE

TRANSNET PORT TERMINALS			
TITLE	NAME	SIGN	DATE
DRAWN	RM		03 08 23
CHECKED	HvdW		03 08 23
DESIGNED	RM		03 08 23
CHECKED	HvdW		03 08 23

PR.ENG. / PR.TECH./PR. ARCH	
NAME	R. NAIDOO
SIGNATURE	03 08 23
REG. NUMBER	201070216
SCALE :	AS SHOWN

Transcribe Port Terminals

TRANSNET

PORT OF SALDANHA

TIPPLER AREA

LAYOUT DETAIL 1:500

SHEET 2 OF 3

PROJECT NUMBER	OD	FBS	DIS	TYPE	DRAWING NO.	SHEET	REV	ID
5200157-2001-C-LA-0002-03								

A0