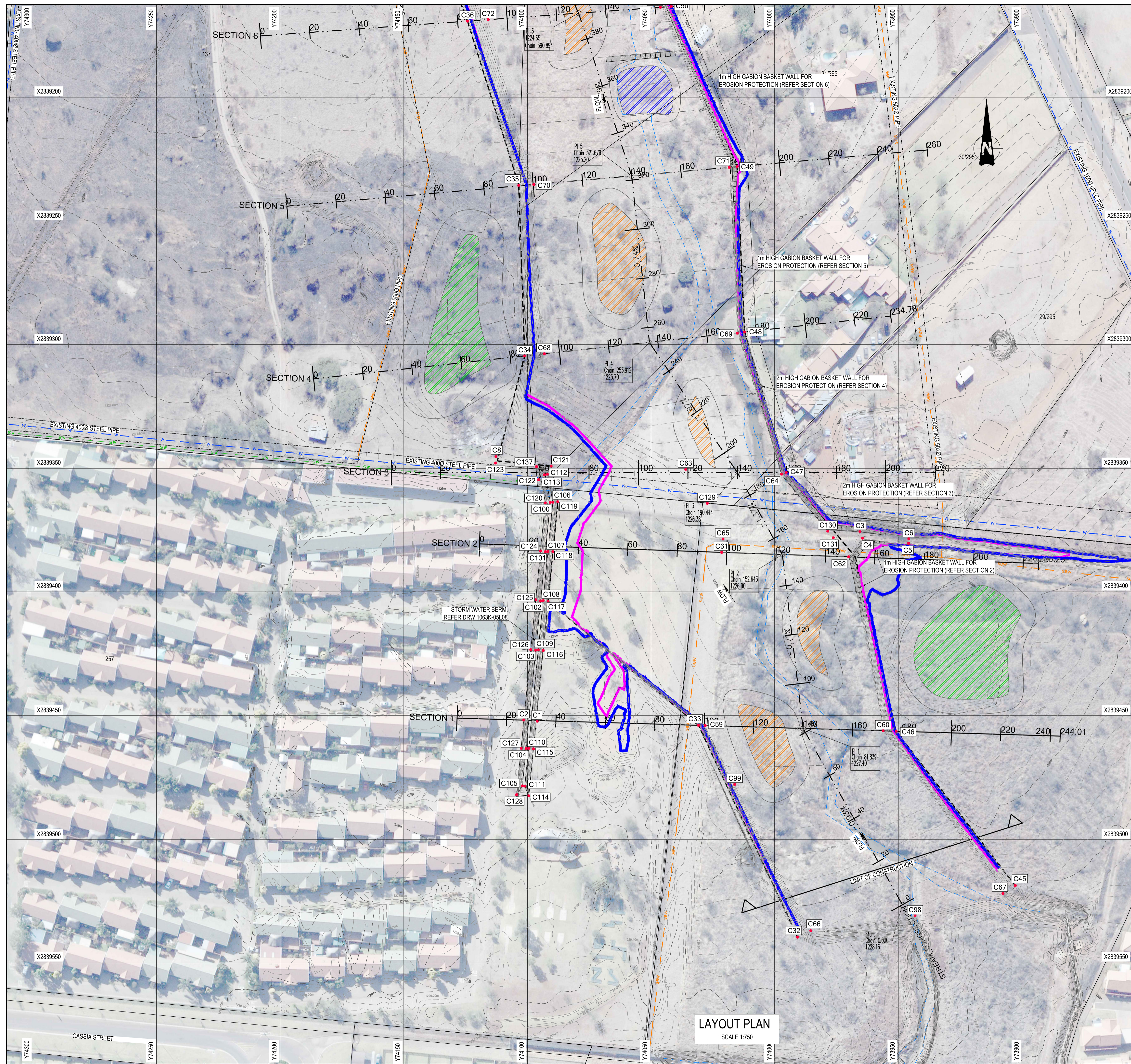


## **ANNEXURE D:**

### Stormwater Layout Drawing



**LAYOUT PLAN**  
SCALE 1:750

SETTING OUT LO 29, WGS84 DATUM			
TAG	Y	X	Z
C1	74096.070	2839452.261	1228.471
C2	74101.473	2839451.779	1228.552
C3	73965.508	2839375.637	1226.890
C4	73964.437	2839378.272	1227.013
C5	73945.824	2839380.325	1227.258
C6	73945.739	2839378.539	1227.127
C7	74162.991	2839058.794	1225.167
C8	74112.708	2839345.286	1227.726
C9	74150.970	2839090.016	1225.279
C10	74082.198	2839060.730	1225.427
C11	74085.732	2839052.523	1225.372
C12	74100.630	2839020.729	1225.174
C13	74094.935	2839034.999	1225.347
C14	74088.694	2839047.729	1225.321
C15	74066.924	2839108.645	1224.927
C16	74274.609	2838749.298	1222.582
C17	74239.422	2838900.913	1224.192
C18	74241.282	2838915.926	1223.509
C19	74241.708	2838915.739	1223.961
C20	74237.786	2838913.157	1223.400
C21	74277.552	2838747.182	1222.484
C22	74277.017	2838748.365	1222.109
C23	74166.438	2839049.358	1225.142
C24	74239.290	2838907.202	1224.229
C25	74240.070	2838897.863	1223.893
C26	74236.351	2838915.975	1224.065
C27	74262.064	2838733.514	1222.517
C28	74274.702	2838744.540	1222.543
C29	74273.730	2838768.701	1222.939
C30	74157.855	2838483.716	1220.200
C31	74230.645	2838913.253	1223.937
C32	73990.751	2839539.536	1229.231
C33	74030.817	2839453.921	1228.556
C34	74101.101	2839304.568	1227.024
C35	74103.486	2839235.578	1226.557
C36	74124.226	2839159.204	1226.650
C37	74184.084	2839005.398	1224.731
C38	74217.095	2838938.701	1224.228
C39	74251.733	2838872.533	1223.636
C40	74271.098	2838875.872	1223.052
C41	74259.357	2838716.338	1222.252
C42	74247.968	2838654.654	1222.131
C43	74231.157	2838571.623	1221.433
C44	74212.331	2838474.929	1220.764
C45	73902.700	2839518.720	1229.241
C46	73950.878	2839456.297	1228.594
C47	73995.353	2839351.731	1228.211
C48	74012.165	2839294.881	1227.536
C49	74015.235	2839228.053	1225.919
C50	74041.817	2839163.305	1225.800
C51	74107.708	2839002.862	1224.953
C52	74120.447	2838937.295	1223.773
C53	74143.230	2838872.502	1223.467
C54	74168.582	2838795.174	1223.506
C55	74163.874	2838725.447	1222.250
C56	74145.785	2838665.217	1222.259
C57	74120.498	2838489.939	1220.887
C58	74128.487	2838585.927	1221.335
C59	74028.112	2839454.001	1227.400
C60	73956.140	2839456.140	1227.400
C61	74021.434	2839383.990	1226.900
C62	73970.069	2839385.801	1226.900
C63	74035.945	2839350.409	1226.350
C64	73997.204	2839352.382	1226.400
C65	74020.884	2839378.592	1226.787
C66	73985.370	2839356.976	1226.100
C67	73907.690	2839219.927	1226.300
C68	74093.164	2839303.703	1225.700
C69	74015.145	2839295.382	1225.700
C70	74097.415	2839235.261	1225.200
C71	74018.365	2839228.328	1225.200
C72	74115.861	2839168.608	1224.650
C73	74046.250	2839163.622	1224.650
C74	74113.744	2839003.509	1223.300
C75	74177.657	2839005.226	1223.300
C76	74210.526	2838938.605	1222.850
C77	74124.933	2838937.360	1222.850
C78	74147.386	2838872.503	1222.650
C79	74245.137	2838872.531	1222.650
C80	74266.492	2838786.290	1222.100
C81	74174.858	2838794.605	1222.100
C82	74255.286	2838716.743	1221.350
C83	74169.024	2838724.957	1221.350
C84	74241.964	2838655.350	1220.600
C85	74151.527	2838664.623	1220.600
C86	74223.370	2838572.708	1220.200
C87	74132.281	2838585.399	1220.200
C88	74206.100	2838476.105	1220.000
C89	74124.261	2838489.510	1220.000
C90	74151.302	2839059.580	1223.600
C91	74133.002	2839066.804	1223.550
C92	74114.014	2839063.709	1223.550
C93	74091.543	2839058.849	1223.550
C94	74089.272	2839085.340	1223.750
C95	74109.041	2839089.053	1223.750
C96	74127.580	2839092.375	1223.750
C97	74134.764	2839093.934	1223.900
C98	73943.233	2839530.957	1228.231
C99	74016.125	2839477.799	1227.550
C100	74090.750	2839363.817	1228.542
C101	74092.710	2839383.721	1228.683
C102	74094.670	2839403.624	1229.024
C103	74096.629	2839423.528	1229.371
C104	74100.549	2839463.336	1229.748
C105	74102.032	2839478.405	1229.818
C106	74089.736	2839363.724	1228.531
C107	74091.696	2839383.628	1228.666
C108	74093.656	2839403.532	1228.907
C109	74095.615	2839423.436	1229.386
C110	74099.535	2839463.243	1229.790
C111	74101.037	2839478.503	1229.815
C112	74091.982	2839352.402	1228.766
C113	74093.142	2839352.659	1228.766
C114	74099.414	2839482.433	1228.806
C115	74097.544	2839463.432	1228.926
C116	74093.625	2839423.636	1228.410
C117	74091.663	2839403.702	1227.854
C118	74089.695	2839383.719	1227.626
C119	74087.709	2839363.540	1227.499
C120	74092.778	2839364.002	1227.565
C121	74090.406	2839349.104	1227.500
C122	74095.476	2839354.619	1227.641
C123	74112.847	2839347.901	1227.752
C124	74094.692	2839383.439	1227.723
C125	74096.634	2839403.163	1227.971
C126	74098.622	2839423.354	1228.327
C127	74102.546	2839463.210	1228.719
C128	74104.390	2839481.943	1228.828
C129	74027.258	2839364.171	1226.550
C130	73978.506	2839375.410	1226.745

**NOTES AND SPECIFICATIONS**

**GENERAL**

- ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
- ALL DIMENSIONS ARE IN MILLIMETERS (UNLESS OTHERWISE SPECIFIED)
- DO NOT SCALE FROM THESE DRAWINGS.
- ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
- ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD DETAIL DRAWINGS.
- THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE).
- THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
- THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
- THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
- FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

**ROADS:**

- KERBING TO BE AS PER STANDARD DETAIL PLANS AND IN SECTION 10 OF VOLUME 1 OF CONTRACT DOCUMENT.
- TRAFFIC CONTROL MUST COMPLY WITH THE REQUIREMENTS OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL (THIRD EDITION).
- VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROAD SURFACE, WITH A MINIMUM CROSS FALL OF 2% (IF APPLICABLE).

**STORMWATER**

- MINIMUM PIPE DIAMETER TO BE 450mm.
- MINIMUM FALL TO BE 1:50.
- PIPE BEDDING TO BE CLASS B UNLESS OTHERWISE SPECIFIED.
- ALL EXCAVATIONS AND BEDDING MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE LAYING OF ANY PIPES.
- CLEAN EXISTING STORMWATER INLETS AND REPAIR WHERE NECESSARY (IF APPLICABLE).

**LEGEND**

- CHANNEL IMPROVEMENT AREA
- NATURAL SPRUIT DRAINAGE
- 1:100 YEAR FLOOD LINE
- 1:50 YEAR FLOOD LINE
- SHALLOW ATTENUATION INSIDE CHANNEL IMPROVEMENT
- SHALLOW ATTENUATION OUTSIDE CHANNEL IMPROVEMENT
- EXISTING PONDING TO BE KEPT
- SW --- EXISTING SEWER PIPE
- W --- EXISTING WATER PIPE
- SW --- EXISTING STORM WATER PIPE

**AMENDMENTS**

NO.	DATE	APPROVED	DESCRIPTION	PREP.
A				
B	AUG 2018		ISSUED FOR APPROVAL	

**PROJECT STATUS**

PROJECT ENGINEER (CONSULTANT): F.J. VAN RENSBURG  
 PROJECT NO.: RTD01-2016/2017-TIDC18  
 DRAWING NO.: 1063K-03U02

**CONSULTANT DETAIL**

**MILLOU**  
 14 Eskom Street, Montana Park, 0182  
 Tel: +27 12 548 0196, Fax: +27 12 548 0296, Email: info@milou.co.za

**CITY OF TSHWANE**  
 ROADS AND TRANSPORT DEPARTMENT  
 Mr. L. V. Kgagale-Pa (EXECUTIVE DIRECTOR)  
 Mr. N. N. P. Kgagale-Pa (EXECUTIVE DIRECTOR)

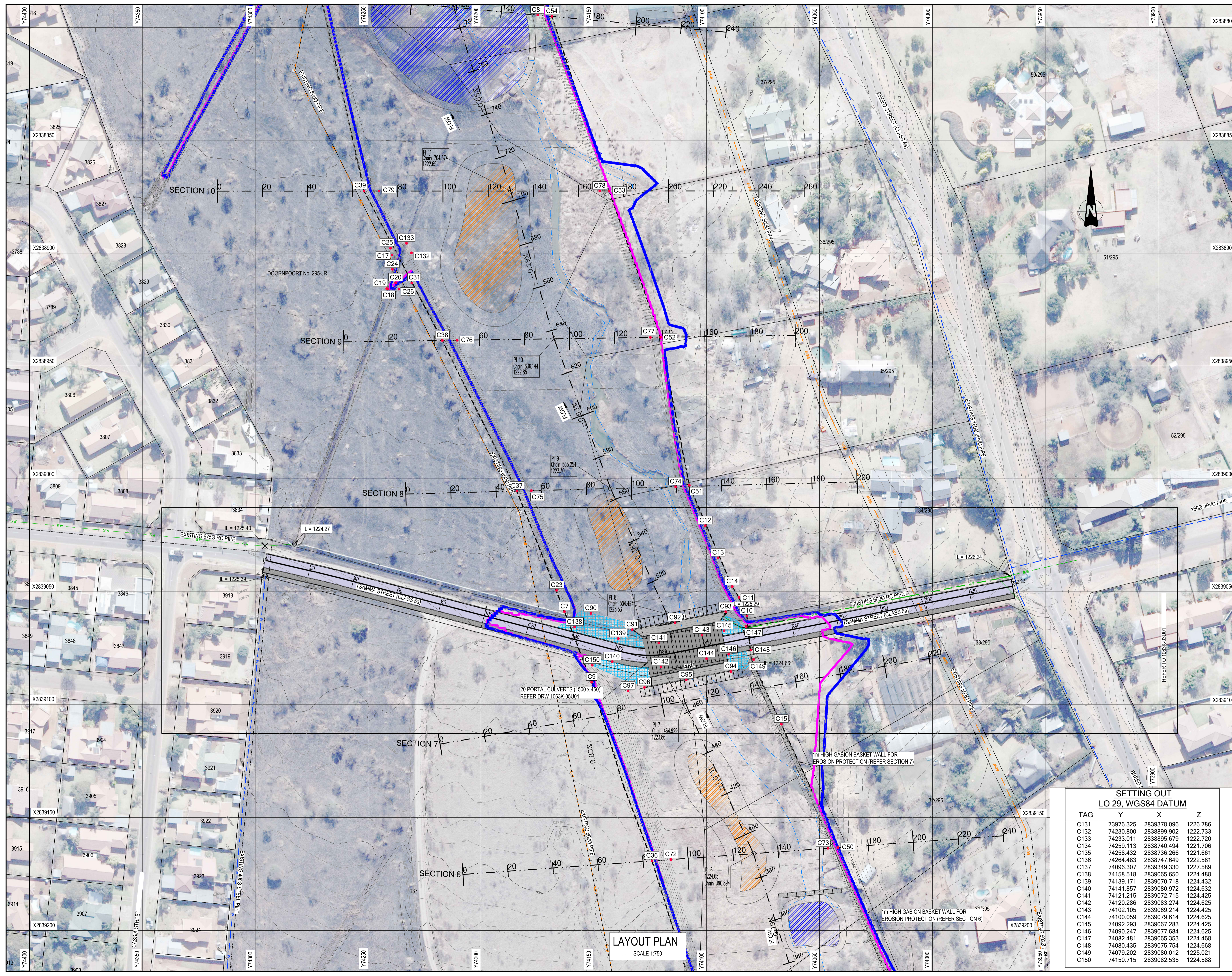
**LOCATION OF PROJECT**

**MONTANA SPRUIT CHANNEL IMPROVEMENT: PHASE 1**

**DESCRIPTION OF PROJECT**

**MONTANA SPRUIT CHANNEL LAYOUT PLAN 1 OF 3**

CONTRACT NO.: RTD01-2016/2017-TIDC18 | PROJECT NO.: 1063K  
 DATE: AUG 2018 | SCALE: 1:750 | ORIGINAL PAPER SIZE: A1  
 DRAWING NO.: 1063K-03U02 | SHEET NO.: 1



**LAYOUT PLAN**  
SCALE 1:750

SETTING OUT LO 29, WGS84 DATUM			
TAG	Y	X	Z
C131	73976.325	2839378.096	1226.786
C132	74230.800	2838899.902	1222.733
C133	74233.011	2838895.679	1222.720
C134	74259.113	2838740.494	1221.706
C135	74258.432	2838736.266	1221.661
C136	74264.483	2838747.649	1222.581
C137	74096.307	2839349.330	1227.589
C138	74158.518	2839065.650	1224.488
C139	74139.171	2839070.718	1224.432
C140	74141.857	2839080.972	1224.632
C141	74121.215	2839072.715	1224.425
C142	74120.286	2839083.274	1224.625
C143	74102.105	2839069.214	1224.425
C144	74100.059	2839079.614	1224.625
C145	74092.293	2839067.283	1224.425
C146	74090.247	2839077.684	1224.625
C147	74082.481	2839065.353	1224.468
C148	74080.435	2839075.754	1224.668
C149	74079.202	2839080.012	1225.021
C150	74150.715	2839082.535	1224.588

**NOTES AND SPECIFICATIONS**

**GENERAL**

- ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
- ALL DIMENSIONS ARE IN MILLIMETERS, (UNLESS OTHERWISE SPECIFIED)
- DO NOT SCALE FROM THESE DRAWINGS.
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- THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS, (IF APPLICABLE).
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- FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

**ROADS:**

- KERBING TO BE AS PER STANDARD DETAIL PLANS A AND B AND SECTION 10 OF VOLUME 1 OF CONTRACT DOCUMENT.
- TRAFFIC CONTROL MUST COMPLY WITH THE REQUIREMENTS OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL, (THIRD EDITION).
- VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROAD SURFACE, WITH A MINIMUM CROSS FALL OF 2% (IF APPLICABLE).

**STORMWATER**

- MINIMUM PIPE DIAMETER TO BE 450mm.
- MINIMUM FALL TO BE 1:50.
- PIPE BEDDING TO BE CLASS B UNLESS OTHERWISE SPECIFIED.
- ALL EXCAVATIONS AND BEDDING MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE LAYING OF ANY PIPES.
- CLEAN EXISTING STORMWATER INLETS AND REPAIR WHERE NECESSARY (IF APPLICABLE).

**LEGEND**

- CHANNEL IMPROVEMENT AREA
- NATURAL SPRUIT DRAINAGE
- 1:100 YEAR FLOOD LINE
- 1:50 YEAR FLOOD LINE
- SMALL ATTENUATION INSIDE CHANNEL IMPROVEMENT
- SMALL ATTENUATION OUTSIDE CHANNEL IMPROVEMENT
- EXISTING POND/DAM TO BE KEPT
- EXISTING SEWER PIPE
- EXISTING WATER PIPE
- EXISTING STORM WATER PIPE

**AMENDMENTS**

NO.	DATE	APPROVED	DESCRIPTION	PREPARED BY
A	15 AUG 2018		ISSUED FOR APPROVAL	
B	AUG 2018		ISSUED FOR APPROVAL	

**PROJECT STATUS**

PROJECT ENGINEER (CONSULTANT): F.J. VAN RENSBURG  
 PROJECT NO: 1063K-03U03  
 DATE: 2017/01/2

**CONSULTANT DETAIL**

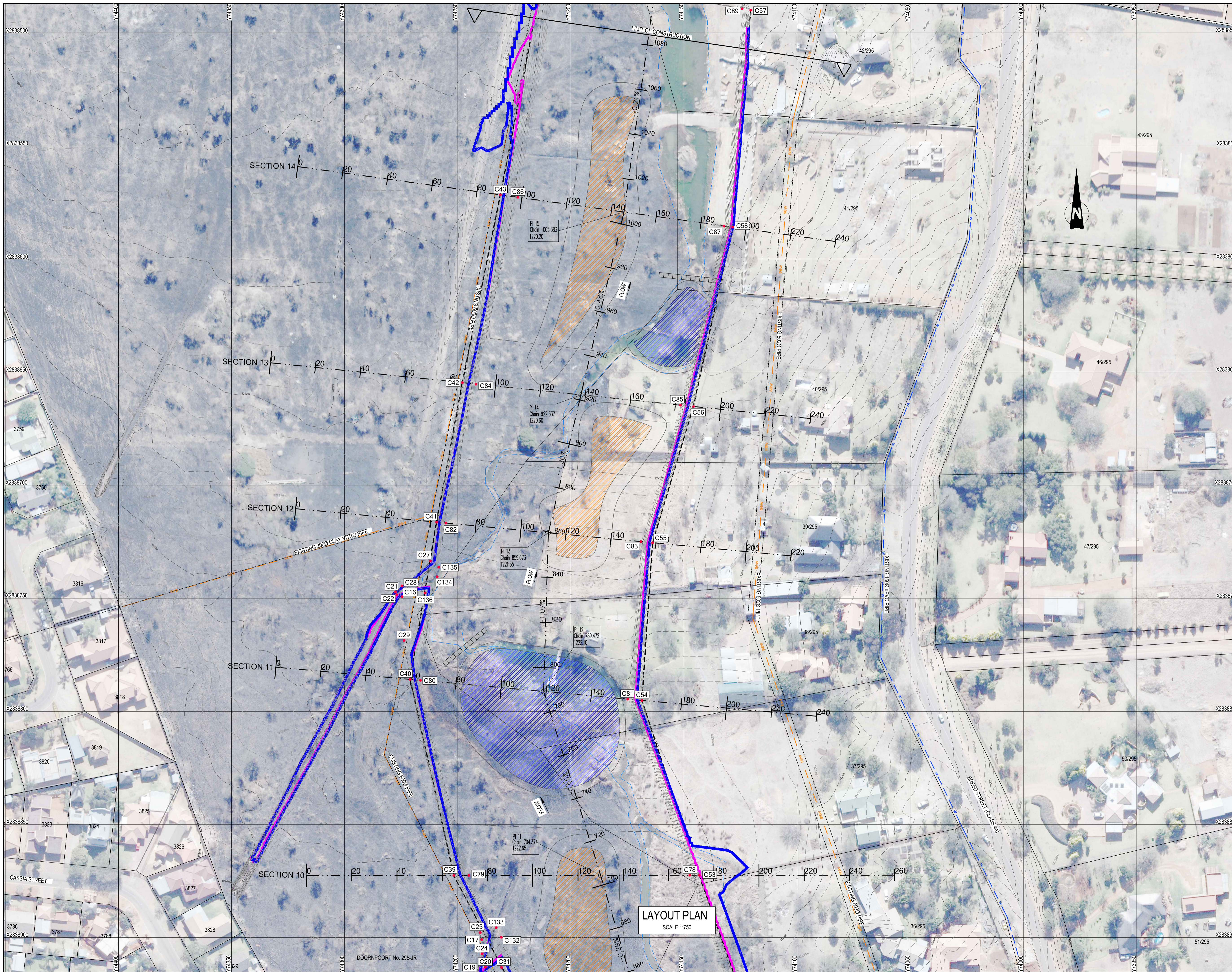
**MITLOU**  
 14 Excelsior Street, Montana Park, 0182  
 Tel: +27 12 548 0196, Fax: +27 12 548 0196, Email: info@mitlou.co.za

**CITY OF TSHWANE**  
 ROADS AND TRANSPORT DEPARTMENT  
 EXECUTIVE DIRECTOR: Mr. L. V. Kgagale-Pa  
 P.O. BOX 1409, PRETORIA 0001

**MONTANA SPRUIT CHANNEL IMPROVEMENT: PHASE 1**

**MONTANA SPRUIT CHANNEL LAYOUT PLAN 2 OF 3**

CONTRACT NO: RTD01-2016/2017-TIDC18  
 PROJECT NO: 1063K  
 DATE: AUG 2018  
 SCALE: 1:750  
 ORIGINAL PAPER SIZE: A1  
 DRAWING NO: 1063K-03U03  
 SHEET NO: 1



LAYOUT PLAN  
SCALE 1:750

**NOTES AND SPECIFICATIONS**

**GENERAL**

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- 3 DO NOT SCALE FROM THESE DRAWINGS.
- 4 ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
- 5 ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD DETAIL DRAWINGS.
- 6 THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS, (IF APPLICABLE).
- 7 THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
- 8 THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
- 9 THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
- 10 FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

**ROADS:**

- 1 KERRING TO BE AS PER STANDARD DETAIL PLANS A AND SECTION 10 OF VOLUME 1 OF CONTRACT DOCUMENT.
- 2 TRAFFIC CONTROL MUST COMPLY WITH THE REQUIREMENTS OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL, (THIRD EDITION).
- 3 VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROAD SURFACE, WITH A MINIMUM CROSS FALL OF 2% (IF APPLICABLE).

**STORMWATER**

- 1 MINIMUM PIPE DIAMETER TO BE 450mm.
- 2 MINIMUM FALL TO BE 1:150.
- 3 PIPE BEDDING TO BE CLASS B UNLESS OTHERWISE SPECIFIED.
- 4 ALL EXCAVATIONS AND BEDDING MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE LAYING OF ANY PIPES.
- 5 CLEAN EXISTING STORMWATER INLETS AND REPAIR WHERE NECESSARY (IF APPLICABLE).

**LEGEND**

- CHANNEL IMPROVEMENT AREA
- NATURAL SPRUIT DRAINAGE
- 1:100 YEAR FLOOD LINE
- 1:50 YEAR FLOOD LINE
- SHALLOW ATTENUATION INSIDE CHANNEL IMPROVEMENT
- SHALLOW ATTENUATION OUTSIDE CHANNEL IMPROVEMENT
- EXISTING POND/DAM TO BE KEPT
- SW --- EXISTING SEWER PIPE
- W --- EXISTING WATER PIPE
- SW --- EXISTING STORM WATER PIPE

**AMENDMENTS**

NR.	DATE	APPROVED	DESCRIPTION	PKR.
B	AUG 2018		ISSUED FOR APPROVAL	

**PROJECT STATUS**

PROJECT ENGINEER (CONSULTANT): F.J. VAN RENSBURG, 201770172, DATE: 08/2018

**CONSULTANT DETAIL**

**MILLOU**  
 14 Eskom Street, Montevue Park, 0182  
 P.O. BOX 1409, PRETORIA, 0001  
 Tel: +27 12 548 0196, Fax: +27 12 548 0266, email: info@milou.co.za

**CITY OF TSHWANE**  
 ROADS AND TRANSPORT DEPARTMENT  
 Mr. L.V. Kgagiso-PA Executive Director

**MONTANA SPRUIT CHANNEL IMPROVEMENT: PHASE 1**

**LAYOUT PLAN 3 OF 3**

CONTRACT NO: RTD01-2016/2017-TIDC18, PROJECT NO: 1063K, DATE: AUG 2018, SCALE: 1:750, ORIGINAL PAPER SIZE: A1, DRAWING NO: 1063K-03U04, SHEET NO: 1

**NOTES AND SPECIFICATIONS**

**GENERAL**

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- 3 DO NOT SCALE FROM THESE DRAWINGS.
- 4 ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
- 5 ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD CTM DETAIL DRAWINGS (IF APPLICABLE)
- 6 THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS. (IF APPLICABLE)
- 7 THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 6.
- 8 THE SIGNATURE OR INITIALS ON THIS DRAWING, OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
- 9 THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
- 10 FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

**LEGEND:**

- STORMWATER:**
- NEW PROPOSED PIPE: - - - - -
  - EXISTING PIPE: - · - · - · -
  - NEW PROPOSED MANHOLE: ●
  - PROPOSED GRID INLET: [Symbol]
- SEWER:**
- NEW PROPOSED PIPE: - - - - -

**ABBREVIATIONS:**

1. 4500/uPVC/120m  
  - LENGTH OF PIPE
  - PIPE MATERIAL
  - NOMINAL DIAMETER OF PIPE

**AMENDMENTS**

NR	DATE	APPROVED	DESCRIPTION	PAR
A	JUNE 2018		ISSUED FOR APPROVAL	
B	AUG 2018		ISSUED FOR APPROVAL	

DESIGNED: M. RAMONGANE	DRAWN: M. RAMONGANE
DATE: _____	DATE: _____
DESIGN CHECKED BY: F.J. VAN RENSBURG	INFRASTRUCTURE TECHNICAL INFORMATION MANAGEMENT
DATE: _____	DATE: _____

**PROJECT STATUS**

<input type="radio"/> CONCEPT DRAWING	<input checked="" type="radio"/> TENDER DRAWING	<input type="radio"/> APPROVED CONSTRUCTION DRAWING	<input type="radio"/> AS-BUILT DRAWING
PROJECT ENGINEER (CONSULTANT)			
F.J. VAN RENSBURG	2017 70172	DATE	
INITIALS AND SURNAME			
INSPECTOR OF WORKS (CITY OF TSHWANE)			
INITIALS AND SURNAME			
SIGNATURE AND P. No.			
DATE			

**CONSULTANT DETAIL**

ITILOU CONSULTING ENGINEERS  
 Unit 4, 5th Dimension P.O. Box 15684, Lynn East, 0039  
 14 Escaltonia Street Tel: +27 12 548 0196  
 Montana Park Fax: +27 12 548 0298  
 0182 email: info@itilou.co.za

**CITY OF TSHWANE**

**ROADS AND TRANSPORT DEPARTMENT**

Mr Nava Pillay Acting STRATEGIC EXECUTIVE DIRECTOR  
 P.O. BOX 1409 PRETORIA 0001

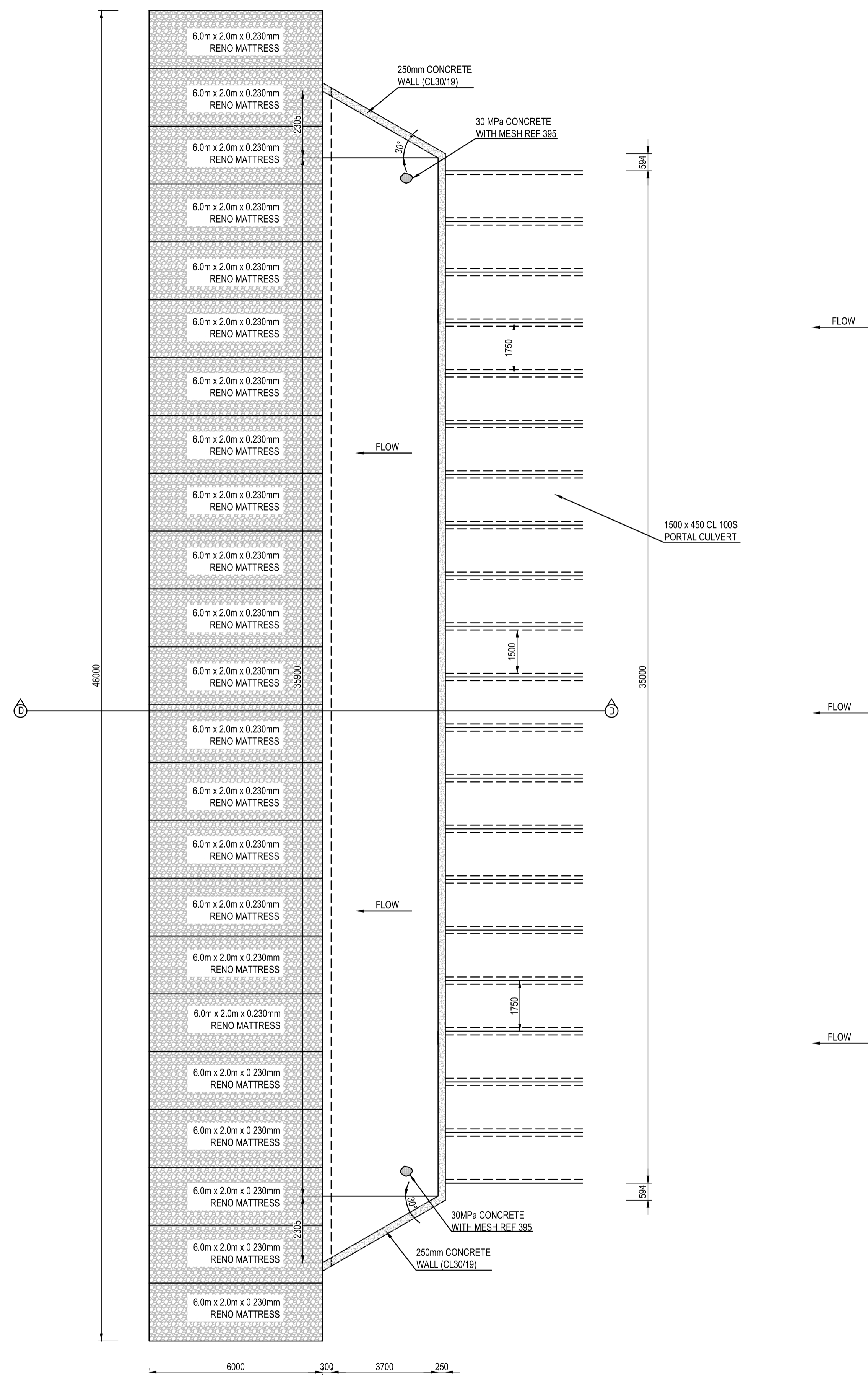
Ms. L. V. Kogakhe-Piki EXECUTIVE DIRECTOR  
 P.O. BOX 1409 PRETORIA 0001

DRAWING APPROVED BY EXECUTIVE DIRECTOR  
 Ms. L. V. Kogakhe-Piki

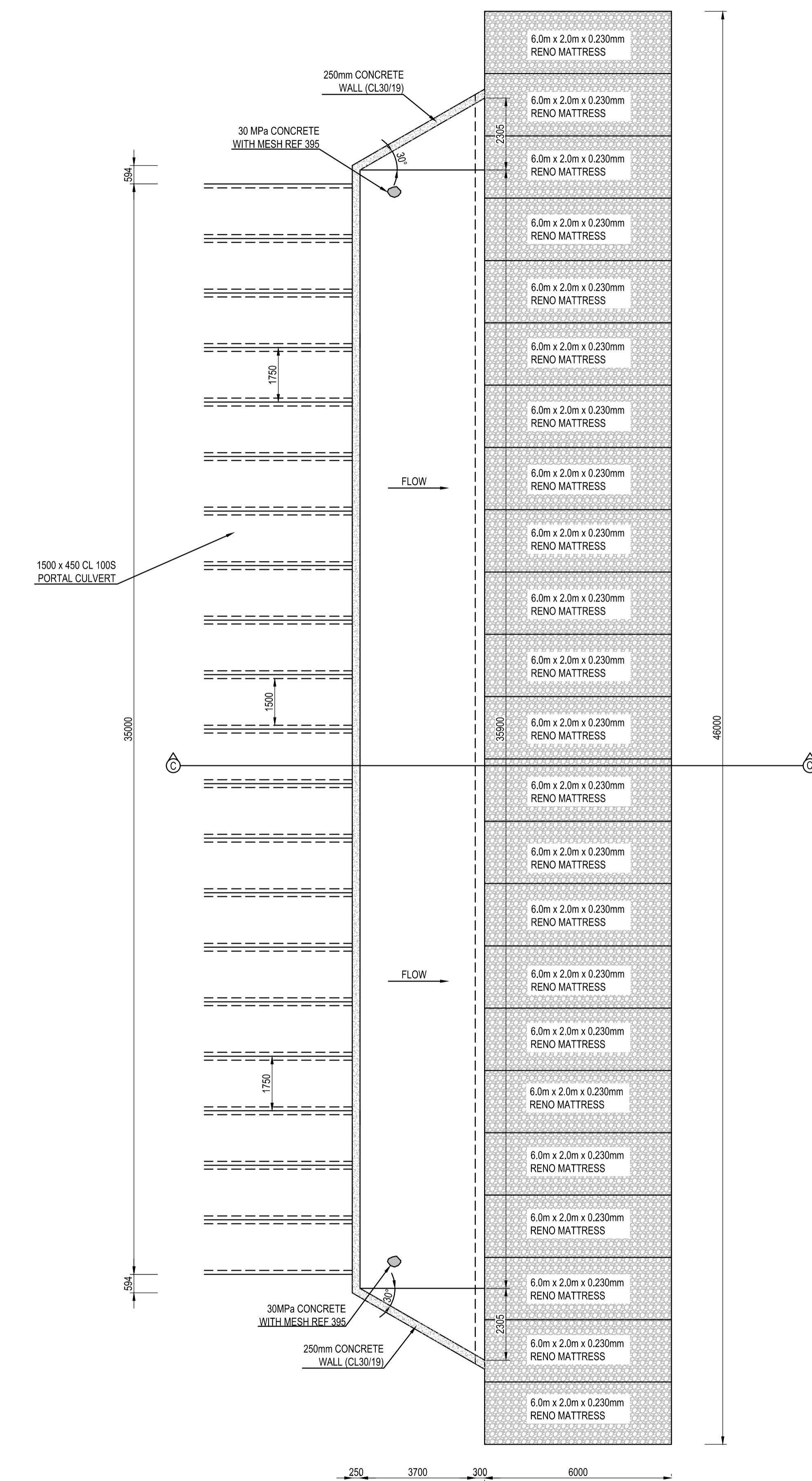
**MONTANA SPRUIT CHANNEL IMPROVEMENT: PHASE 1**

**STORMWATER HEADWALL DETAILING PLAN 1 OF 2**

CONTRACT No.:	PROJECT No.:	
RTD01-2016/2017-TIDC18	1063K	
DATE:	SCALE:	ORIGINAL PAPER SIZE:
AUG 2018	1:100	A1
DRAWING NO.:	SHEET NO.:	REVISION
1063K-05D01	1	B

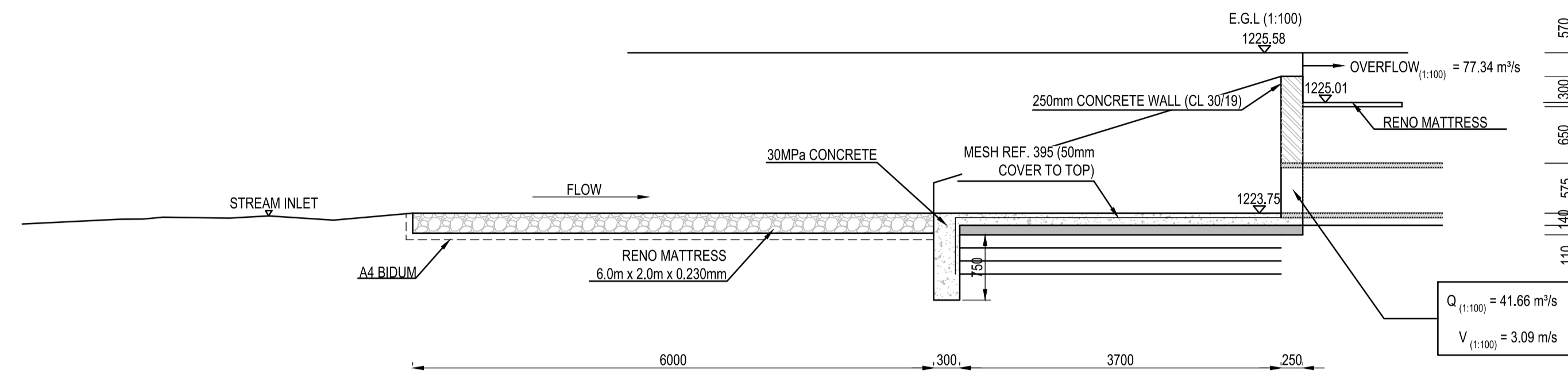


**PLAN VIEW - STORMWATER HEAD WALL OUTLET SECTION B-B**  
 SCALE: 1:100

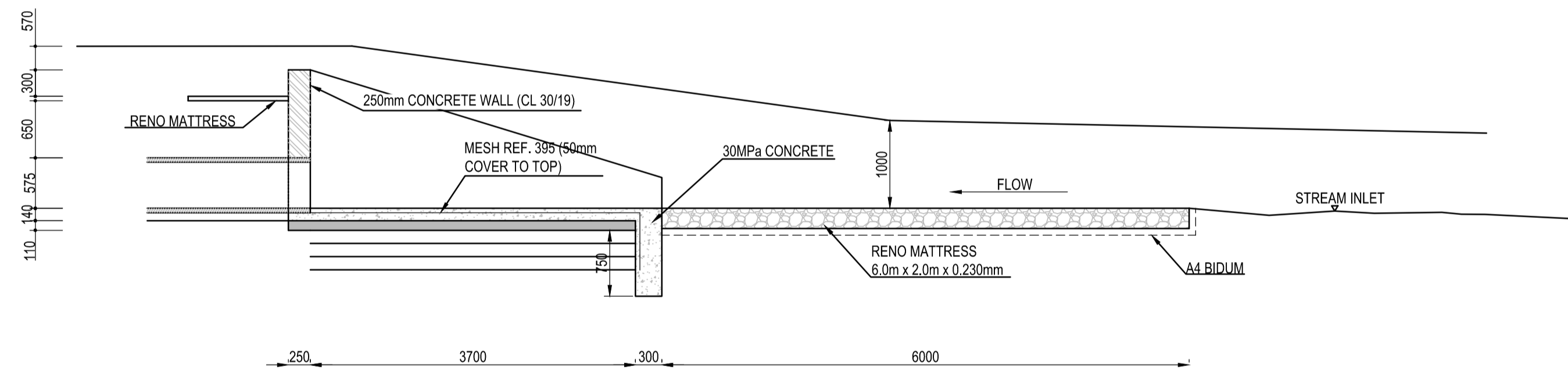


**PLAN VIEW - STORMWATER HEAD WALL INLET SECTION A-A**  
 SCALE: 1:100

REFER TO DRW 1063K-05D01 FOR  
STORMWATER HEAD WALL INLET  
AND OUTLET DETAIL



SECTION D-D  
SCALE 1:50



SECTION C-C  
SCALE 1:50

NOTES AND SPECIFICATIONS

GENERAL

- 1 ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
- 2 ALL DIMENSIONS ARE IN MILLIMETERS. (UNLESS OTHERWISE SPECIFIED)
- 3 DO NOT SCALE FROM THESE DRAWINGS.
- 4 ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
- 5 ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD CTMM DETAIL DRAWINGS
- 6 THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS. (IF APPLICABLE)
- 7 THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 6.
- 8 THE SIGNATURE OR INITIALS ON THIS DRAWING, OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
- 9 THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
- 10 FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

LEGEND:

- STORMWATER:
- NEW PROPOSED PIPE: - - - - -
  - EXISTING PIPE: ······
  - NEW PROPOSED MANHOLE: ●
  - PROPOSED GRID INLET: [Symbol]
- SEWER:
- NEW PROPOSED PIPE: - - - - -

ABBREVIATIONS:

1. 4500/uPVC/120m  
  - LENGTH OF PIPE
  - PIPE MATERIAL
  - NOMINAL DIAMETER OF PIPE

AMENDMENTS				
NR	DATE	APPROVED	DESCRIPTION	PAR.
A	JUNE 2018		ISSUED FOR APPROVAL	
B	AUG 2018		ISSUED FOR APPROVAL	

DESIGNED: M. RAMONGANE	DRAWN: M. RAMONGANE
DESIGN CHECKED BY: F.J. VAN RENSBURG	INFRASTRUCTURE TECHNICAL INFORMATION MANAGEMENT
SIGNATURE: _____	SIGNATURE: _____
DATE: _____	DATE: _____

PROJECT STATUS			
<input type="radio"/> CONCEPT DRAWING	<input type="radio"/> TENDER DRAWING	<input type="radio"/> APPROVED CONSTRUCTION DRAWING	<input type="radio"/> AS-BUILT DRAWING
PROJECT ENGINEER (CONSULTANT):			
F.J. VAN RENSBURG	2017 70172	DATE	
INITIALS AND SURNAME	SIGNATURE AND P. No.	DATE	
INSPECTOR OF WORKS (CITY OF TSHWANE):			
INITIALS AND SURNAME	SIGNATURE AND P. No.	DATE	

**CONSULTANT DETAIL**

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0182

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email: info@oitou.co.za

**CITY OF TSHWANE**  
ROADS AND TRANSPORT DEPARTMENT

Mr Nava Pillay  
Acting STRATEGIC EXECUTIVE DIRECTOR  
P.O. BOX 1409  
PRETORIA  
0001

Ms. L. V. Kegakhe-Piki  
EXECUTIVE DIRECTOR  
P.O. BOX 1409  
PRETORIA  
0001

DRAWING APPROVED BY EXECUTIVE DIRECTOR  
Ms. L. V. Kegakhe-Piki

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

LOCATION OF PROJECT:  
**MONTANA SPRUIT CHANNEL IMPROVEMENT: PHASE 1**

DESCRIPTION OF PROJECT:  
**STORMWATER HEADWALL DETAILING PLAN 2 OF 2**

CONTRACT No.:	PROJECT No.:	
RTD01-2016/2017-TIDC18	1063K	
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1063K-05D02	1	[Symbol]