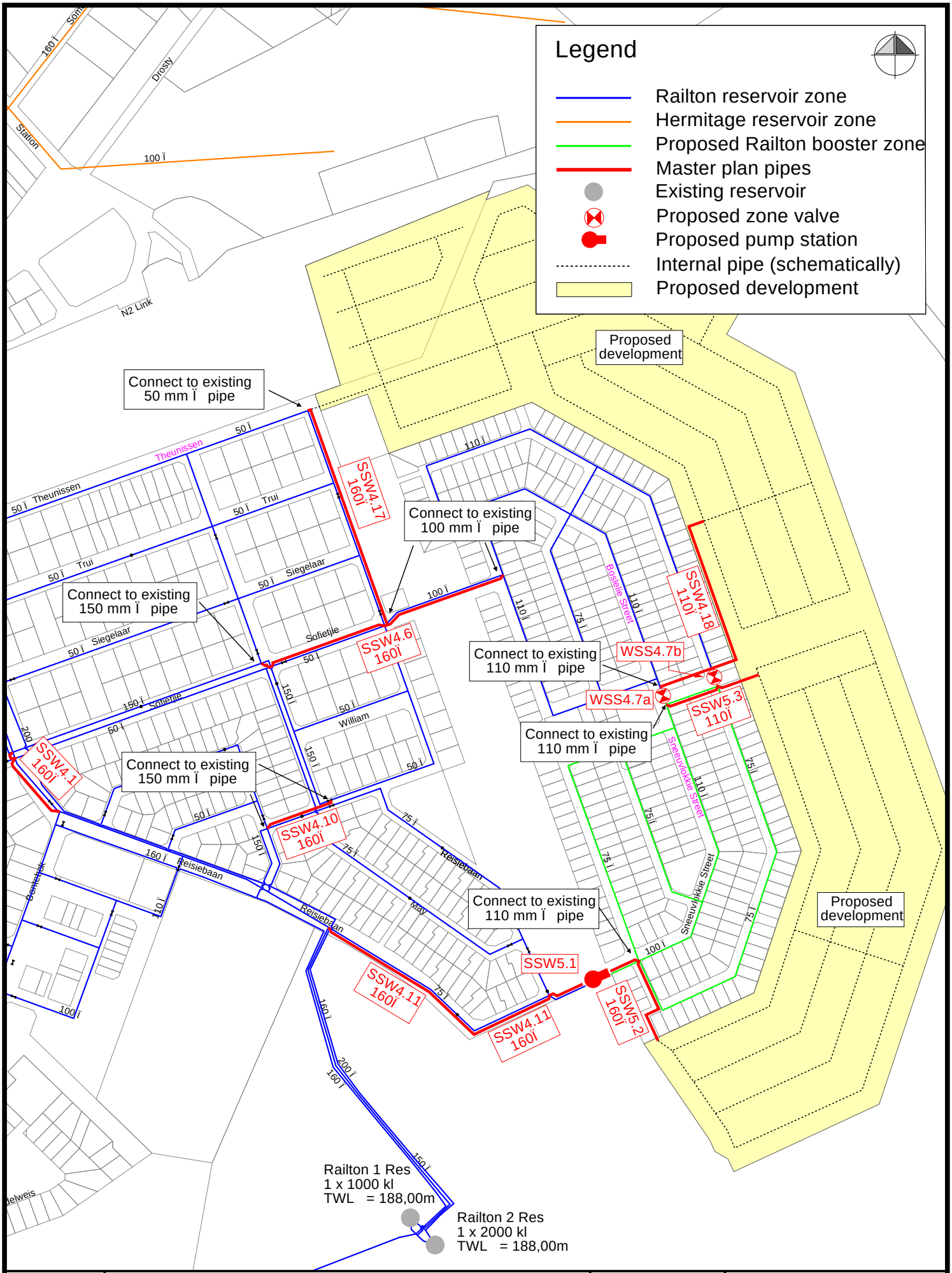


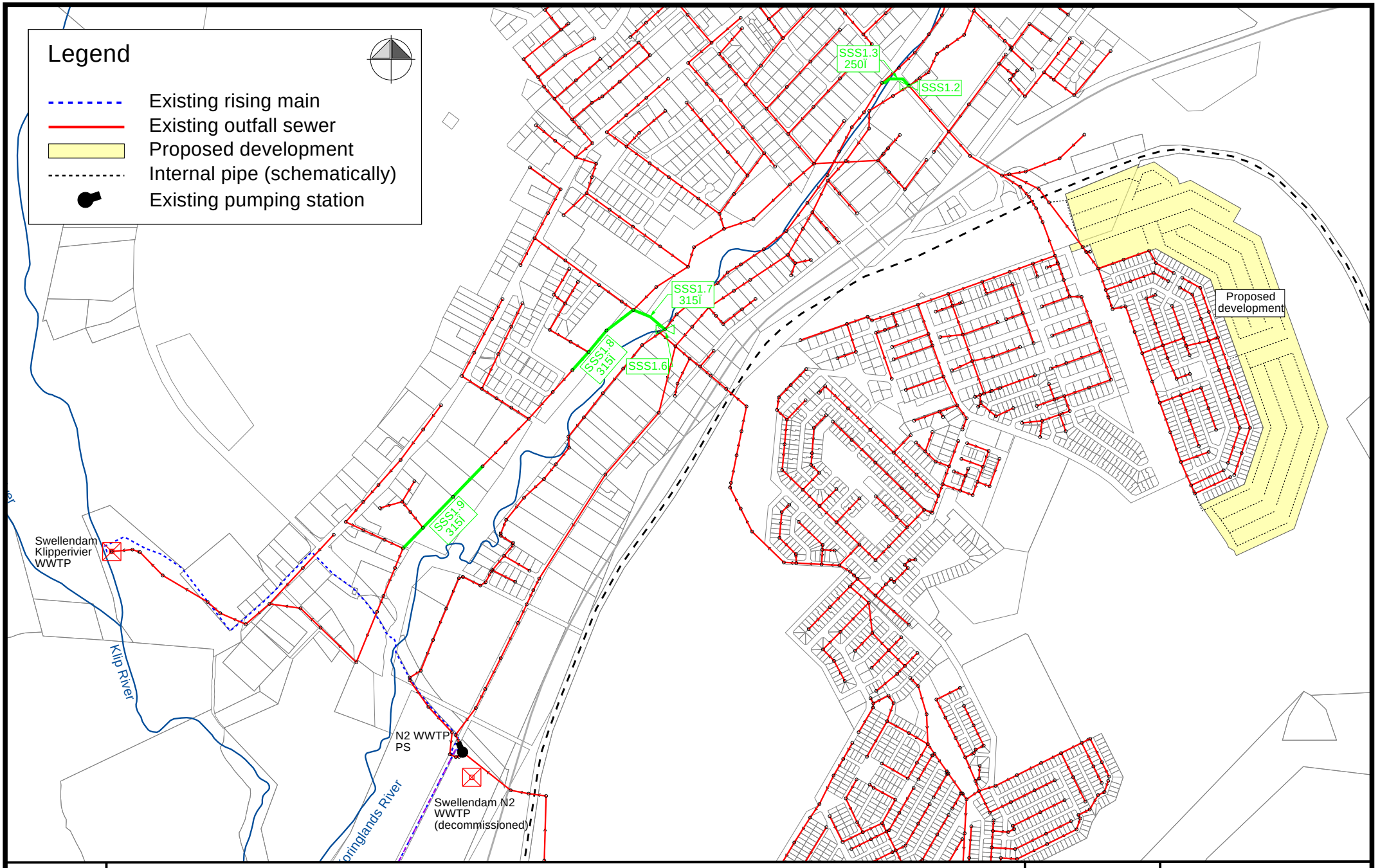
November 2017

Swellendam - Development of Remainder of Erf 1

gls consulting an EQH company

Figure 1

Proposed Development
Remainder of Erf 1 - Swellendam
Water Master Plan



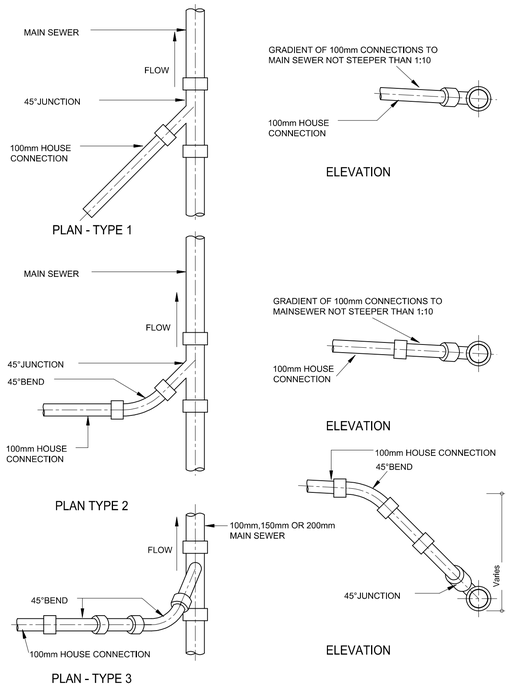
November 2017

Swellendam - Development of Remainder of Erf 1

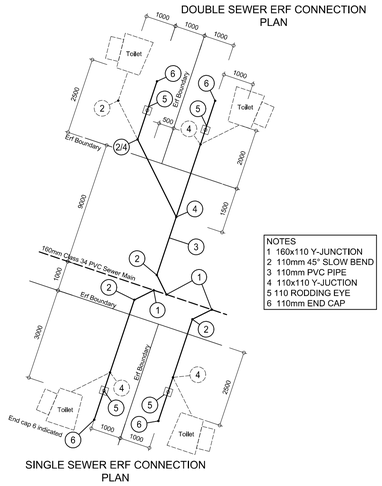
gls consulting
an EQH company

Figure 3

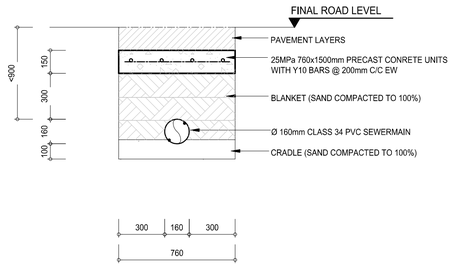
Proposed Development
Remainder of Erf 1 - Swellendam
Sewer Master Plan



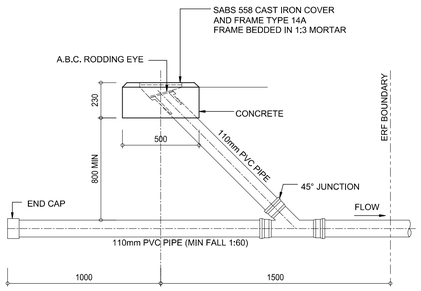
TYPICAL DETAIL OF SEWER ERF CONNECTIONS
N.T.S



NOTES
1 160x110 Y-JUNCTION
2 110mm 45° SLOW BEND
3 110mm PVC PIPE
4 110x110 Y-JUNCTION
5 110 RODDING EYE
6 110mm END CAP



PROTECTION OF PIPES AT REDUCED DEPTHS OF COVER
SECTION - TRENCH
N.T.S



TYPICAL DETAIL OF SEWER ERF CONNECTION
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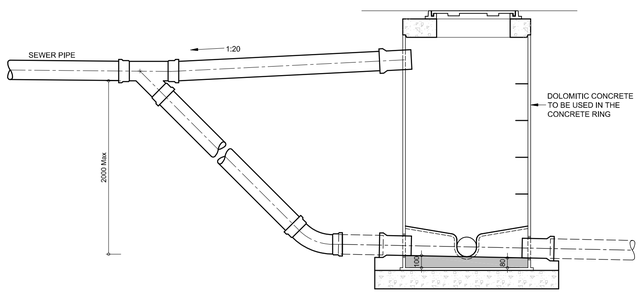
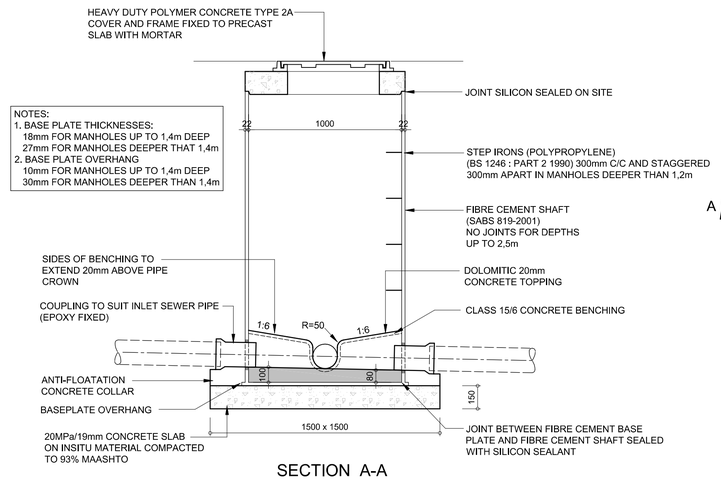


TYPICAL SECTION OF SEWER DROP CONNECTIONS
(2m MAX DEPTH)

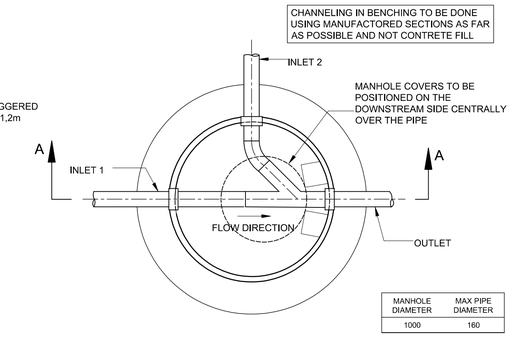
ALL MANHOLE COVERS TO BE CONSTRUCTED TO CONFORM TO ROAD OR WALKWAY LEVELS AND SLOPES, WHERE SURROUNDS ARE UNSURFACED COVER LEVELS ARE TO BE RAISED BY 100mm



NOTES:
1. BASE PLATE THICKNESSES:
18mm FOR MANHOLES UP TO 1,4m DEEP
27mm FOR MANHOLES DEEPER THAT 1,4m
2. BASE PLATE OVERHANG
10mm FOR MANHOLES UP TO 1,4m DEEP
30mm FOR MANHOLES DEEPER THAN 1,4m

SECTION A-A

CHANNELING IN BENCHING TO BE DONE USING MANUFACTORED SECTIONS AS FAR AS POSSIBLE AND NOT CONTRETE FILL

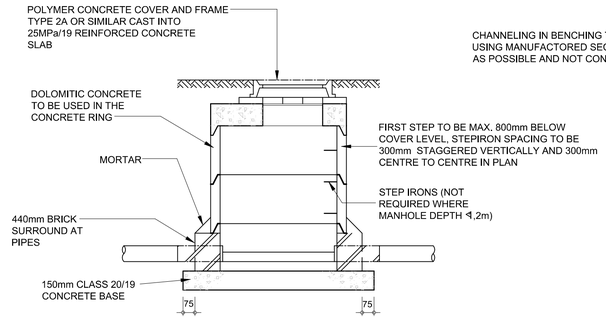


MANHOLE DIAMETER	MAX PIPE DIAMETER
1000	160

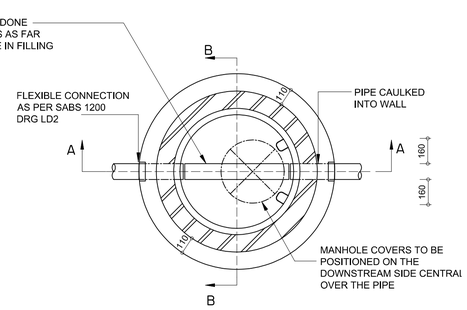
PLAN

TYPICAL DETAIL OF SEWER MANHOLE
N.T.S

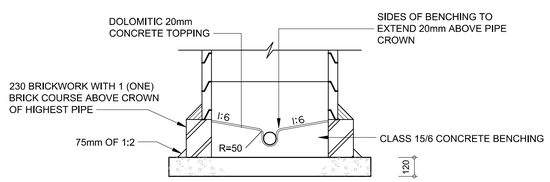
ALL MANHOLE COVERS TO BE CONSTRUCTED TO CONFORM TO ROAD OR WALKWAY LEVELS AND SLOPES, WHERE SURROUNDS ARE UNSURFACED COVER LEVELS ARE TO BE RAISED BY 100mm



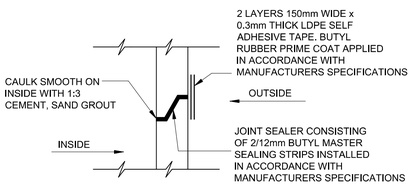
SECTION A-A



PLAN



SECTION B-B



DETAIL OF JOINT IN PRECAST RINGS

TYPICAL DETAIL OF CONCRETE SEWER MANHOLE
N.T.S

Wysiging/Amendment				
Nr. No	Datum Date	Nagesien Checked	Deur By	Beskrywing/Description

VERKLEINDE SKAAL/REDUCED SCALE
0 10 20 30 40 50
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Notas/Notes

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Geteken Drawn	AA
Nagesien Checked	

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Klient/Client
Datum/Date

Klient/Client
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Projek/Project
SWELLENDAM HOUSING

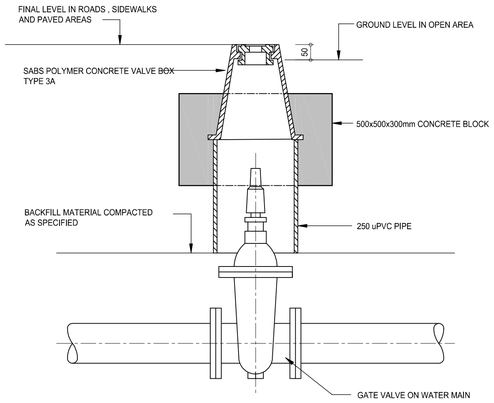
Tekening Beskrywing/Drawing descriptoin
SEWER RETICULATION TYPICAL DETAILS

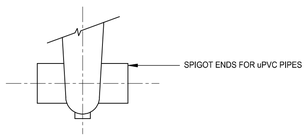
Skaal/Scale
N.T.S

Datum/Date
APRIL 2018

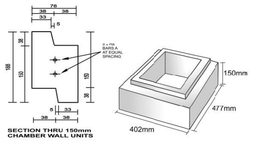
Tekening Nommer/Drawing number
HESRIV-470-S1

3 Apr 2018

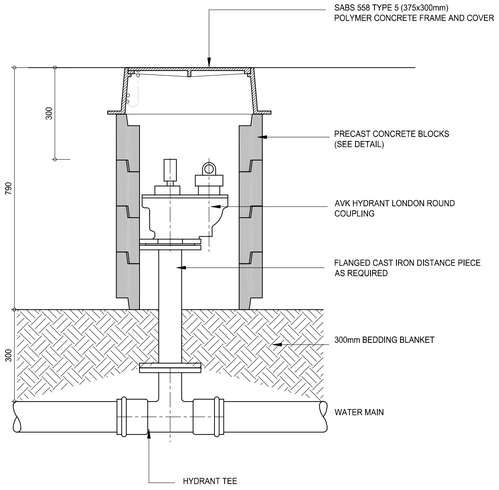




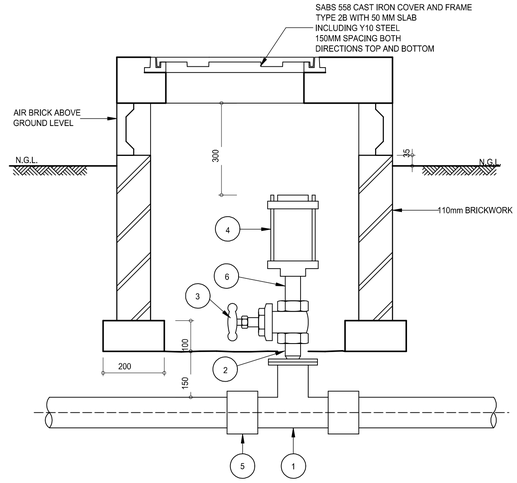
TYPICAL DETAIL OF VALVE CHAMBER



PRECAST CONCRETE BLOCK



HYDRANT CHAMBER



NOTES

VALVE CHAMBER SIZE IS 1000 x 1000mm FOR PIPES 500mm Ø AND SMALLER

1 TEE-PIECE (SIZE ACCORDING TO TABLE)

2 50mm GALVANISED THREADED STEEL PIPE WITH REDUCER TO LIFT THE AIR VALVE TO 300mm FROM THE SOFFIT OF THE VALVE CHAMBER

3 50mm BRASS VALVE, CLASS 8 WITH REMOVEABLE HEAD

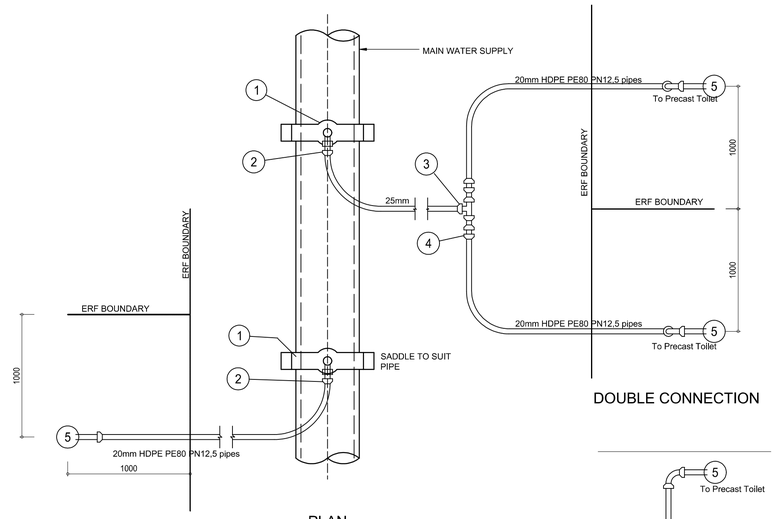
4 VENT-O-MAT 50mm RB DOUBLE AIR VALVE OR SIMILAR WITH SCREW THREAD

5 SHORT COLLAR REPAIR COUPLING OR VIKING JOHNSONS

6 50mm STAINLESS STEEL THREADED BARREL NIPPLE

PIPE Ø	TEE-PIECE
75	75 x 75
110	110 x 110
160	160 x 160

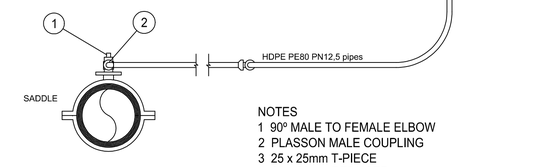
TYPICAL DETAIL OF AIR VALVE CHAMBER



DOUBLE CONNECTION

PLAN

SINGLE CONNECTION

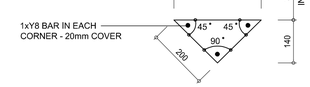


SECTION

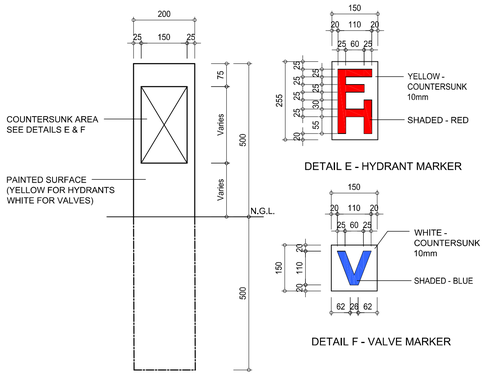
NOTES
1 90° MALE TO FEMALE ELBOW
2 PLASSON MALE COUPLING
3 25 x 25mm T-PIECE
4 25 x 20mm REDUCER
5 WATER METER

TYPICAL DETAIL OF
WATER CONNECTION ON ERVEN (25/20mm)

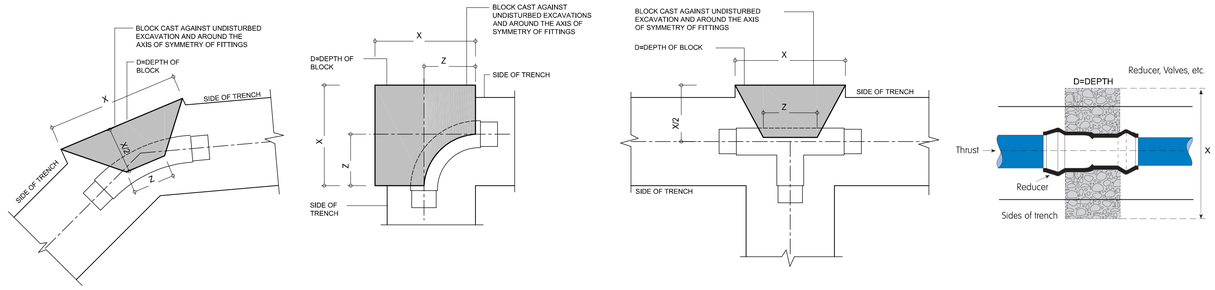
NOTE:
ALL AREAS TO BE PAINTED WITH TWO COATS OF ROAD PAINT IN SPECIFIED COLOURS.



PLAN ON VALVE AND HYDRANT MARKERS



TYPICAL DETAIL OF
VALVE AND HYDRANT MARKERS



TYPICAL THRUST BLOCK DETAILS
FIRM CLAYEY SOIL
BEARING CAPACITY 100-200kPA

NOTE: COUPLINGS AND FLANGES MUST BE LEFT FREE OF CONCRETE

PIPE	11¼° BEND			22½° BEND			BEND			90°BEND			T-JUNCTION			END CAPS/VALVES REDUCERS	
DIAM.	Xmm	Dmm	Zmm	Xmm	Dmm	Zmm	Xmm	Dmm	Zmm	Xmm	Dmm	Zmm	Xmm	Dmm	Zmm	Xmm	Dmm
75	200	150	120	250	200	150	350	300	150	410	300	180	410	300	150	700	300
100	250	200	150	350	250	200	500	400	200	480	450	250	530	400	200	1000	400
150	350	300	250	500	400	350	700	550	400	800	600	400	950	500	280	1050	500
200	500	350	350	650	500	400	900	700	450	1100	750	480	1250	650	350	1100	600
250	600	450	350	800	650	400	1100	900	500	1400	900	530	1600	800	450	1150	700
300	700	550	400	950	750	450	1300	1100	550	1700	1100	580	1850	1000	550	1200	800
350	850	700	400	1200	900	500	1700	1300	600	2080	1350	630	2150	1300	550	1500	800

Wysiging/Amendment

Nr. No	Datum Date	Nagesien Checked	Deur By	Beskrywing/Description

VERKLEINDE SKAAL/REDUCED SCALE
0 10 20 30 40 50
50

Notas/Notes

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Ontwerp Designed	AA
Geteken Drawn	AA
Nagesien Checked	

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Projek/Project
SWELLENDAM HOUSING

Tekening Beskrywing/Drawing description
TYPICAL WATER AND ASSOCIATED DETAILS

Skaal/Scale
N.T.S

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APRIL 2018

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HESRIV-470-W1

3 Apr 2018