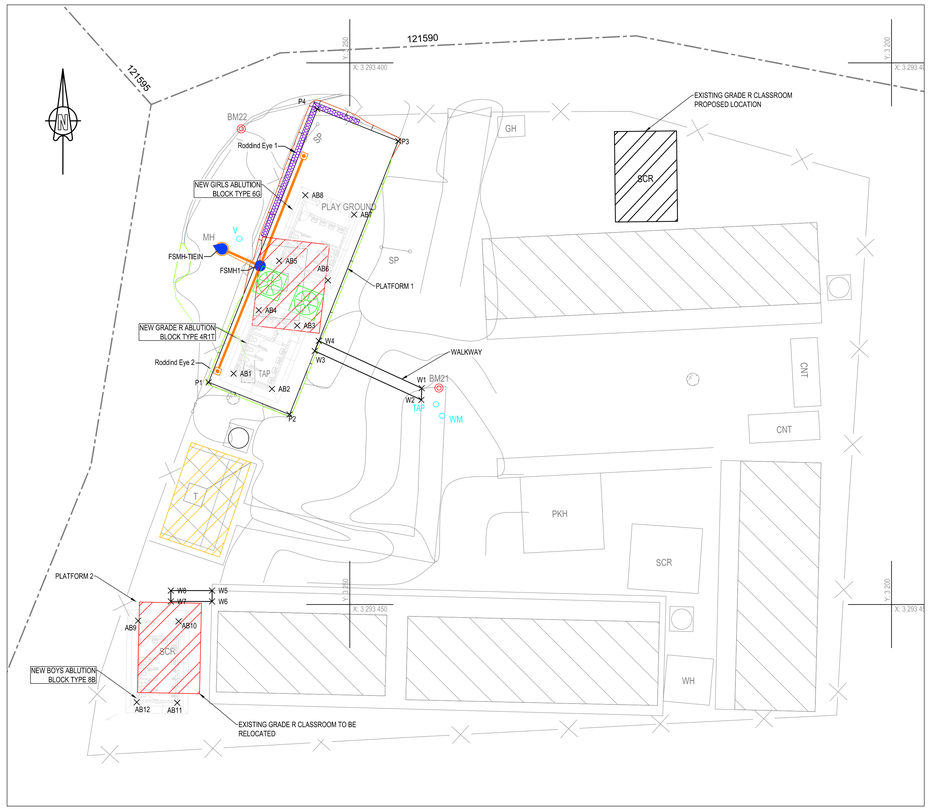
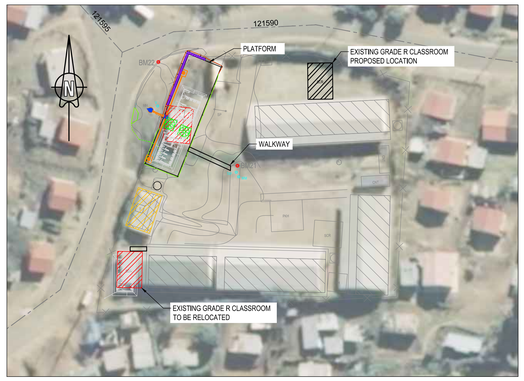


SEWER PLAN LAYOUT
SCALE 1:200



KEY PLAN LAYOUT
SCALE 1:500

LOCALITY PLAN
SCALE 1:10 000

MANHOLE SETTING OUT DETAILS_COORDINATE SYSTEM WG84

STRUCTURE NAME	Y	X	GROUND ELEVATION	INVERT ELEVATION	RIM TO SUMP DEPTH	PART AND TYPE	MANHOLE COVER TYPE
Roddind Eye 1	3 254.271	3 293 408.591	117.200	116.838	0.462	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER
FSMH1	3 258.309	3 293 418.742	117.200	116.698	0.602	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER
FSMH-TIEIN	3 261.818	3 293 417.181	117.000	116.660	0.455	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER

WALKWAY

POINT	Y	X
W1	3 243.389	3 293 430.034
W2	3 243.422	3 293 431.120
W3	3 253.260	3 293 426.603
W4	3 252.890	3 293 425.671
W5	3 262.739	3 293 448.720
W6	3 262.739	3 293 449.720
W7	3 266.542	3 293 449.720
W8	3 266.542	3 293 448.720

SETTING OUT COORDINATES ABLUTION BLOCKS

POINT	Y	X
AB1	3 260,757	3 293 428.686
AB2	3 257.207	3 293 430.098
AB3	3 254.883	3 293 424.251
AB4	3 258.432	3 293 422.840
AB5	3 256.543	3 293 418.286
AB6	3 252.046	3 293 420.074
AB7	3 249.633	3 293 414.006
AB8	3 254.130	3 293 412.218
AB9	3 269.569	3 293 451.502
AB10	3 265.829	3 293 451.563
AB11	3 265.952	3 293 459.082
AB12	3 269.691	3 293 459.021

SETTING OUT COORDINATES PLATFORM

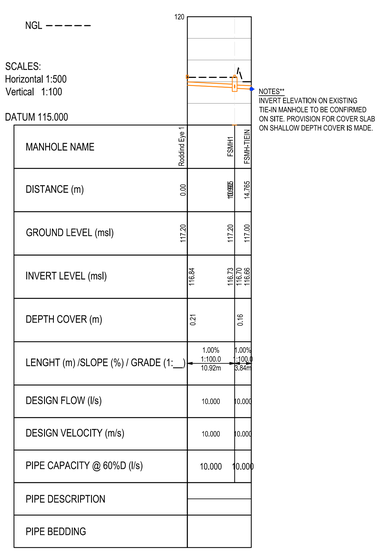
DESCRIPTION	Y	X	Z
P1	3 263.055	3 293 429.494	117.200
P2	3 255.590	3 293 432.463	117.200
P3	3 245.555	3 293 407.224	117.200
P4	3 253.021	3 293 404.260	117.200

BENCHMANRKS

DESCRIPTION	Y	X	Z
BM21	3 241.80	3 293 430.02	118.127
BM22	3 260.02	3 293 406.10	118.040

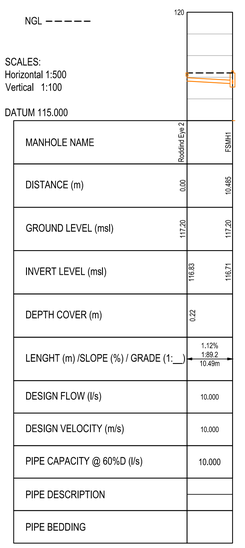
MANHOLE SETTING OUT DETAILS_COORDINATE SYSTEM WG84

STRUCTURE NAME	Y	X	GROUND ELEVATION	INVERT ELEVATION	RIM TO SUMP DEPTH	PART AND TYPE	MANHOLE COVER TYPE
Roddind Eye 2	3 262.231	3 293 428.466	117.200	116.825	0.375	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER
FSMH1	3 258.309	3 293 418.742	117.200	116.698	0.602	1m PRECAST RING MH	LIGHT DUTY CONCRETE COVER



MANHOLE NAME	Roddind Eye 1	FSMH1	FSMH-TIEIN
DISTANCE (m)	0.00	10.485	14.765
GROUND LEVEL (msl)	117.20	117.20	117.00
INVERT LEVEL (msl)	116.84	116.70 116.70	116.66
DEPTH COVER (m)	0.21		0.16
LENGHT (m) /SLOPE (%) / GRADE (1:__)		1.00% 1:100.0 10.92m	1.00% 1:100.0 3.64m
DESIGN FLOW (l/s)	10.000	10.000	
DESIGN VELOCITY (m/s)	10.000	10.000	
PIPE CAPACITY @ 60%D (l/s)	10.000	10.000	
PIPE DESCRIPTION			
PIPE BEDDING			

ALIGNMENT-1
FROM 0.000 TO 14.765

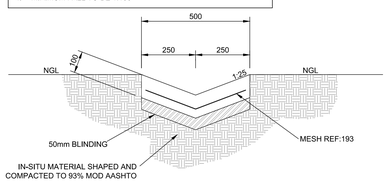


MANHOLE NAME	Roddind Eye 2	FSMH1
DISTANCE (m)	0.00	10.485
GROUND LEVEL (msl)	117.20	117.20
INVERT LEVEL (msl)	116.83	116.71
DEPTH COVER (m)	0.22	
LENGHT (m) /SLOPE (%) / GRADE (1:__)		1.12% 1:89.2 10.49m
DESIGN FLOW (l/s)	10.000	
DESIGN VELOCITY (m/s)	10.000	
PIPE CAPACITY @ 60%D (l/s)	10.000	
PIPE DESCRIPTION		
PIPE BEDDING		

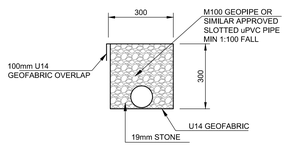
ALIGNMENT-2
FROM 0.000 TO 10.485

NOTE:

1. CONCRETE CHANNEL TO BE 100mm THICK USING 19/25 MPa CONCRETE.
2. TO BE CAST IN 2.0m ALTERNATE PANELS WITH EXPANSION JOINTS AT 10m INTERVALS (EVERY 5th PANEL).
3. CONCRETE CHANNEL TO BE REINFORCED WITH MESH REF:193 MINIMUM COVER = 40mm.
4. MINIMUM FALL TO BE 1:100



V-DRAIN DETAIL
SCALE 1:10



TYPICAL DETAIL - C SUBSOIL DRAINAGE WITH SYNTHETIC FIBRE FILTER FABRIC
SCALE 1:10

LEGEND

- EXISTING STORM WATER
- PROPOSED STORM WATER
- JOJO TANK
- EXISTING WATER MAINS
- PROPOSED WATER MAINS
- NEW END CAP
- SEWER TIE IN POINT
- WATER TIE IN POINT
- EXISTING SEWER MAINS
- PROPOSED SEWER MAINS
- RETAINING WALL DETAILS
- EXISTING STRUCTURES TO BE DEMOLISHED
- EXISTING STRUCTURES TO BE REFURBISHED
- EXISTING

(WATER)

FOR TENDER

DEPARTMENT OF HUMAN SETTLEMENT
DESIGN BRANCH
eThekwini Municipality

NOTES
1. ALL BANKS TO BE CONSTRUCTED AT A SLOPE OF 1:2 UNLESS OTHERWISE DIRECTED BY THE ENGINEER AND ALL TEMPORARY WORKS TO BE CONSTRUCTED AT 1:1.
2. THE INVERT LEVELS OF ALL EXISTING MANHOLES TO BE VERIFIED/CONFIRMED ON SITE PRIOR TO START OF CONSTRUCTION
3. LEVELS SHOWN REFLECT THE TOP OF BULK EARTHWORKS.
4. SETTING OUT COORDINATES ARE IN WGS 84 SYSTEM.
5. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING ALL EXISTING SERVICES ON SITE.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE WORKS FROM SURFACE RUNOFF THAT MAY CAUSE EROSION DAMAGE USING CHANNEL, BERMS,PUMPS, etc. AS AND WHEN REQUIRED AND IS TO DIRECT GROUND WATER AWAY FROM THE WORKS.
7. ALL DISCREPANCIES TO BE REPORTED TO THE ENGINEER

DESIGN CONSULTANT
UV'AMU (PTY) LTD
Project Management and Engineering Consultants

ADDRESS :
62
Old Main Road
Kloof
3610

Contact Details :
TEL : (031) 003 4270
FAX : (086) 003 4271
Email :
info@vuvamu.co.za

FUNCTION	NAME	SIGNATURE
DESIGNED BY	A. XOZWA	
DRAWN BY	M.MTHEMBU	
DESIGN CHECKED BY	S.MBUTHUMA	
DRAWING CHECKED BY	A.XOZWA	
APPROVAL - CONSULTANT		
NAME	S.MBUTHUMA	SIGNATURE
DATE	PROFESSIONAL REG No.	2018300301

SCALE: AS SHOWN
SHEET SIZE: A0

CONSTRUCTION INFORMATION	
MAINLAYER	
START DATE	
FINISH DATE	
W/O NUMBER	
LEVEL OF SERVICE	
SUPERVISOR NAME	
CONTACT NUMBER	
DATE SENT TO GIS	
GIS INFORMATION	
DATE RECEIVED	
NAME	

Rev. No	Date	Description	Drawn

NOTE: No construction work to commence until land and servitude acquisitions have been completed

Acquisitions completed:

Date ..... Engineer .....

UNDERGROUND SERVICES CHECKED -

SERVICE	DATE	SIGNATURE
S.W DRAINS		
SEWERS		
WATERMAINS		
TELKOM CABLES		
ELECTRIC CABLES		
S.A.R CABLES		
E.S.C CABLES		
OIL PIPE LINE		

NOTE: Only underground services affected by new construction are shown. Care must be taken during excavations for road foundations, trenches etc., to avoid damage to underground services such as sewers,drains,cables,watermains and connections. Wherever possible these must be located before work begins.

Contract No. XXX

Project No. S_0XXX_001

Planning Unit

Ward No.

Project Title

ETHEKWINI WATER & SANITATION PROVISION OF WATER & SANITATION SERVICES TO INFORMAL SETTLEMENTS IN ETHEKWINI - PHASE 3

Drawing Title

SIYANDA MAZULU PRIMARY SCHOOL
S_0XXX_001
EMIS NO. 500269989
NEW ABLUTION FACILITIES SETTING OUT DETAILS

Drawing No.	Sheet	Rev.
S-0XXX-001-VUV_C-102-001	1 OF 1	T0

c:\users\user\vuvamu pty ltd\vuvamu pty ltd team site - projects\sews schools\emis 500269989 siyanda mazulu primary school\4. drawings\3. tender drawings\2. civil drawings\s-0xxx-001-vuv_c-102-001 siyanda mazulu ps_rev t.dwg