



SEWER SETTING OUT CO-ORDINATES		
MH NAME	Y	X
MH1	69 068.445	3 227 634.955
MH2	69 063.730	3 227 636.539
MH3	69 058.945	3 227 622.295
MH4	69 037.563	3 227 629.555
MH5	69 036.064	3 227 625.069
MH6	69 033.569	3 227 617.604
MH7	69 029.487	3 227 605.387
MH8	69 008.334	3 227 612.457
MH9	69 003.717	3 227 598.584
MH10	68 996.914	3 227 578.142
MH11	68 987.671	3 227 581.232
MH12	68 978.370	3 227 553.234
MH13	68 976.372	3 227 547.219
MH14	68 944.691	3 227 557.808
MH15	68 902.077	3 227 572.106

SEWER SETTING OUT CO-ORDINATES		
MH NAME	Y	X
MH16	68 885.590	3 227 577.529
MH17	68 811.716	3 227 602.238
MH18	68 734.592	3 227 628.033
MH19	68 969.441	3 227 647.565
MH20	68 971.427	3 227 653.592
MH21	68 927.367	3 227 668.329
MH22	68 921.045	3 227 649.626
MH23	68 916.308	3 227 635.610
MH24	68 906.140	3 227 639.009
MH25	68 895.865	3 227 608.269
MH26	69 019.208	3 227 574.628
MH27	69 018.029	3 227 571.085
MH28	69 011.272	3 227 573.343
MH29	68 997.762	3 227 600.575
MH30	68 982.125	3 227 551.978

LEGEND:

MH1 NEW MANHOLE

39.2mx1600uPVCx1:60 PIPE LENGTH(m)xDIAMETER(mm)xSLOPE(1:x)

RE1 NEW RODDING EYE

EX MH EXISTING MANHOLE

--- EXISTING SEWER LINE

MH5 CL = 1370.000 CL = COVER LEVEL (m)
IL2 = 1369.200 IL2 = UPSTREAM INVERT OF DROP/RAMP (m)
IL1 = 1368.969 IL1 = INVERT LEVEL OF SEWER LINE (m)
D = 1.011m D = DEPTH OF MANHOLE/CONNECTION

- NOTES:
1. REFER TO DETAILS DRAWING FOR TYPICAL SEWER DETAILS.
 2. ALL INTERNAL SEWER LINES TO BE 160mm Ø uPVC SOLID WALL HEAVY DUTY CL34 (FREE FLOW OR SIMILAR APPROVED) UNLESS OTHERWISE SPECIFIED.
 3. FINAL LEVELS AND POSITIONS OF MANHOLE AND SEWER LINE TO BE CONFIRMED ON SITE BY ENGINEER.
 4. ALL COVER LEVELS MUST BE CONFIRMED WITH PAVING & STORM WATER LEVELS AND POSITIONS OF ALL MANHOLES (INCLUDING TIE-INS TO EXISTING) MUST BE CONFIRMED ON SITE BEFORE CONSTRUCTION COMMENCES.
 5. IN ROADS TYPE 2A (176KG) HEAVY DUTY CAST IRON MANHOLE FRAME AND LIDS TO BE USED. ALL OTHER MANHOLE COVERS TO BE AS PER GENERAL DETAILS.
 6. SEWAGE PIPES WITH LESS THAN 450mm FREE COVER UNDER GROUND LAYER MUST BE FULLY ENCASED WITH A MINIMUM OF 150mm THICK, CLASS 15/25 CONCRETE. ALL EXCAVATIONS, BACK FILLINGS, SURFACE BEDS AND PLACING OF PIPES SHOULD BE DONE ACCORDING TO SABS 1200.
 7. FLEXIBLE JOINTS:
 - 6.1. RUBBER RINGS COMPLYING WITH PART 1 OF SABS974 TO BE USED FOR FLEXIBLE PIPES.
 - 6.2. FLEXIBLE JOINTS TO BE TIGHT WITH NO SIGN OF LEAKAGE WHEN TESTED ACCORDING TO SUB CLAUSE 4.4 OF SECTION LD OF PART 3 OF SABS 1200
 7. FIELD TEST:
 - 7.1. AIR TEST ACCORDING TO CLAUSE 7.2 OF SABS 1200 LD MUST BE CARRIED OUT BETWEEN MANHOLES DURING THE FOLLOWING PHASES OF CONSTRUCTION:
 - 7.1.1. AFTER THE PIPES HAVE BEEN LAID;
 - 7.1.2. AFTER THE INITIAL BACKFILLING HAS BEEN COMPLETED
 - 7.2. THE AIR TEST IS ONLY AN INDICATION OF ACCEPTANCE OF A COMPLETED PORTION OF THE LINE.
 - 7.3. THE WATER TEST WILL BE CONDUCTED AS THE FINAL INSPECTION.
 8. MANHOLES AND FITTINGS:
 - 8.1. ALL CONCRETE, BENCHING AND SEALERS SHALL COMPLY WITH SABS 1200 GA OR SABS 1200 AS APPLICABLE.
 - 8.2. PRECAST CONCRETE SECTIONS TO COMPLY WITH SABS 1294
 - 8.3. CLASSES OF CONCRETE:
 - 8.3.1. PRECAST CONCRETE SECTIONS = 30/19
 - 8.3.2. ALL OTHER CONCRETE = 25/19
 - 8.4. CHANNELS IN MANHOLES TO BE LAID IN THE WET CONCRETE FLOOR AND THE FIRST PRECAST CONCRETE SECTION TO BE PLACED AND BENCHING TO BE COMPLETED WITHIN 24 HOURS AFTER CASTING THE CONCRETE FLOOR. NO DRIERS WILL BE PERMITTED FOR THE BENCHING. BENCHING TO BE STEEL TROWEL TO A SMOOTH FINISH.

Member of the Surbana Jurong Group

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Building Africa's Prosperity

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REFERENCE DRAWINGS		No.	REVISIONS	DATE	DRG SIZE	SCALE	DATE DRAWN
DRG. No.	DESCRIPTION						
					A1	1:500	2021/05/03
					DESIGNED	CHECKED	
					V NAIDOO	S MARAIS	
					DRAWN	CHECKED	
					V NAIDOO	S MARAIS	

PROJECT

FSDoE
ARBEIDSGENOT PRIMARY

DRAWING DESCRIPTION

SEWER
LAYOUT
SHEET 1 of 1

PROJECT NO.		PHASE	DISCIPLINE	STAGE
B	S			
0	3	A	CE	P

DOC TYPE		DRAWING NUMBER				REVISION
DRG		TYPE	LEVEL	NUMBER	LO	
		A	B	3	00	A