

Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic

ANNEXURE 20

Civil Engineer Drawings







NOTE: - FOR RE AND MANHOLE DETAILS REFER TO DRAWING J14039/120



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Manhala MU11 to MU1	Δ
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	:	277				
	Determ 07	276				
	Datum 27	о 				
Chainage		0.000	12.13		22.21	
Ground Level		286.024	285.915		284.299 283.480	Į
Manhole Name		MH16	ZHM		MH8 MH9	
Inlet Level / Outlet Level			284.467 284.406	283.915	282.799 282.929	281.860
Link Type / Link Size			PV0	C-U mm		
Length / Slope		-	12.132 m 0.500%	0.14	9 n 2.695 34.86 4%	6%



Manhole MH16 to MH9

Manhole RE to MH7



	294									
	290				1					
LEGEND: Design Ground — — — — Pipe Alignment —————	286			H			- - - 	ſ)	
Stormwater Longsection for:										
NODE SWMH16 to SWMH8 Hor Scale 1:1000 Ver Scale 1:100	282									
Datum 27	8.000									
Chainage	0.000	13.234	16.039	23.546	34.529	38.407	61 BOC	400.10		74.117
Design Ground Level	289.195	287.247	286.887	287.971	290.108	290.079	986 673	0.0004		285.927
Drainage Structure No.	SWMH16	SWMH28	GI9	GI10	SWMH27	SWMH18	SWMH10			SWMH8
Inlet / Outlet Level		287.788 286.340	286.840	285.887 285.470	285.470 285.308	285:398	285.078	284.084		282.927 282.927
Length		13.3 m 2	81	7.5 m	<u>11.0 m</u>	3.9 i	1 13.5 m		22.3 m	-
Link Type			<u> </u>		1000		ncrete			
Link Size				3	75 mm				450 mm	-
Gradient		1196	6.9	6%	49/		74	┢		\neg

		292			
		288			
	LEGEND: Design Ground — — — — Pipe Alignment — — —	284			LE De Pi
	Stormwater Longsection for:				S
1	NODE SWMH23 to SWMH22 Hor Scale 1:1000 Ver Scale 1:100	280		1	NC Ho Ve
	Datum 276	.000			
74.117	Chainage	0.000	17.268		
285.927	Design Ground Level	284.706	285.507		
SWMH8	Drainage Structure No.	SWMH23	SWMH22		
282.927 282.927	Inlet / Outlet Level		283.399 283.100 283.100	283.100	
_	Length		<u>17.3 m</u>	-	
_	Link Type		100D Concrete		
-	Link Size		375 mm		
-	Gradient		2%		



	301			
	297			
LEGEND:			ľ,	
Design Ground — — — — Pipe Alignment — — —	293			
Stormwater Longsection for	:			
NODE GI4 to GI3	289			
Hor Scale 1:1000 Ver Scale 1:100				
	Datum 285 000			-
Chainage	000.0	101 00	27.497	34.749
Design Ground Level	297.047	808 P0C	293.859	293.186
Drainage Structure No.	G 4	919	GI6	GI3
Inlet / Outlet Level		295,640	293.491 292.452	292.452 291.579
Length		20.2 m	7.5 m	<u>7,3 m</u>
Link Type		100D Co	ncrete	_
Link Size		3751	nm	
Gradient		11%	14%	12%

	291		
	287		
LEGEND:			1
Design Ground — — — — — Pipe Alignment — —	283		
Stormwater Longsection for: NODE SWMH24 to SWMH9 Hor Scale 1:1000 Ver Scale 1:100	279		
Datum 2	275.000		
			_
Chainage	0.000		1001
Chainage Design Ground Level	283.616 0.000		100 11 001 100
Chainage Design Ground Level Drainage Structure No.	SWMH24 283.616 0.000		CIVINITIO 001 700 12
Chainage Design Ground Level Drainage Structure No. Inlet / Outlet Level	SWMH24 283.616 0.000	282.816	
Chainage Design Ground Level Drainage Structure No. Inlet / Outlet Level Length	SWMH24 283.616 0.000	9192882 17.2 m	200 200 200 200 200 200 200 200 200 200
Chainage Design Ground Level Drainage Structure No. Inlet / Outlet Level Length Link Type	SWMH24 283.616 0.000	9- 19:0 cci 20:0 10:00 Coner	00 100 100 001 100 001 100 110 001
Chainage Design Ground Level Drainage Structure No. Inlet / Outlet Level Length Link Type Link Size	SWMH24 233.616 0.000	9 9 9 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Chainage Design Ground Level Drainage Structure No. Inlet / Outlet Level Length Link Type Link Size Gradient Gradient	SWMH24 283.616 0.000	1000 Conce 17.2 m 1900 Conce 1900 Conce	

	296					
	292			Ser 160 MH IL =	wer Dnyr 117 = 28	Link LM n PVC-U - MH18 89.7
LEGEND: Design Ground — — — — Pipe Alignment ————	288			لم الم		
Stormwater Longsection for NODE GI7 to SWMH4 Hor Scale 1:1000 Ver Scale 1:100	284					
	Datum 280.000					
Chainage	0.000	6.535	1.814	27.367	30.575	
Design Ground Level	291.640	291.526	291.478	288.597	288.326	
Drainage Structure No.	GI7	GI8		SWMH25	SWMH13	
Inlet / Outlet Level		289.440 287.878	287.878	287.190	288.990	286.919
Length	-	8.0 m	19.6 r	<u>n 3</u>	2 1	<u>17.4 r</u>
Link Type		•	100	D Conc	<u>ret</u>	8
Link Size		-		375 mr	n	
Gradient		20%	. 4%	_	8%	. 7%

		297	
		293	
	LEGEND: Design Ground — — — — Pipe Alignment — —	289	
٦	Stormwater Longsection for: NODE SWMH15 to GI8 Hor Scale 1:1000 Ver Scale 1:100	285	
	Datum 28	81.000	
	Chainage	0.000	15.001
	Design Ground Level	0	
		290.14	291.478
	Drainage Structure No.	SWMH15 290.14	GI8 291.478
	Drainage Structure No.	SWMH15 290.14	288.733 GI8 291.475
	Drainage Structure No. Inlet / Outlet Level Length	SWMH15 290.14	288/233 0.01475 287.878 0.01 287.878 0.18 287.878 0.18 287.878 0.18 287.878 0.18 287.878 0.18 20 20 1475
	Drainage Structure No. Inlet / Outlet Level Length Link Type	SWMH15 290.14	2/F1-62 8IS 82/82/882 15.0 m 1000 Concrete
	Drainage Structure No. Inlet / Outlet Level Length Link Type Link Size	SWMH15 290.14	2171-167 819 8282.882 15.0 m 15.0 m Concrete 375 mm
	Drainage Structure No. Inlet / Outlet Level Length Link Type Link Size Gradient	SWMH15 290.14	247-162 819 15.0 m 1000 Concrete 975 mm

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1. NOTES: 2. GENERAL

- 3. ALL PRECAST CONCRETE MANHOLE COMPONENTS TO COMPLY WITH THE REQUIREMENTS OF S.A.B.S.1294 (WHERE APPLICABLE) 4. LENGTHS OF INDIVIDUAL WALL UNITS ARE TO VARY IN MULTIPLES OF
- 250mm. 5. HEAVY DUTY CAST IRON COVERS AND FRAMES TO ALL MANHOLES.
- C. SEWER MANHOLE:-6. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING 101. RENDERING FOR MANHOLE BENCHING SHALL CONSIST OF 1 PART H.A.C. TO 2 PARTS SAND THOROUGHLY MIXED AND APPLIED TO CONCRETE SURFACES WHILETHE LATTER ARE STILL GREEN. RENDERING SHALL BE AT LEAST 20mm THICK.
- 8. ALL PIPES BUILT INTO MANHOLES SHALL NOT EXCEED 1.0m IN LENGTH, AND AND THE ADJOINING PIPE SHALL NOT EXCEED 2.0m IN LENGTH. 9. EVERY U.P.V.C. PIPE BUILT INTO A MANHOLE SHALL HAVE CLEAN DRY SAND (TO S.A.B.S. 1083 TABLE 1.) GLUED TO ITS OUTSIDE AS RECOMMENDED BY PIPE MANUFACTURER USING SPECIAL PVC CEMENT (HENKEL S.A. PTY. LTD. TANGIT OR SIMILAR) TO ENSURE GOOD ADHESION TO BASE CONCRETE. 12.IN LOCATIONS DEFINED BY THE ENGINEER AS SUBJECT TO FLOODING, C.I. MANHOLE COVERS AND JOINTS SEALED WITH BOSTIK BUTYL TAPE OR SIMILAR, SHALL BE USED.

NOTE

- 1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING 101. WHERE APPROACH GRADES INTO THE MANHOLE ARE 1 : 15 OR STEEPER AND ASSOCIATED WITH A CHANGE IN DIRECTION IN THE MANHOLE OF 30 OR MORE, THE BENCHING IS TO BE BROUGHT UP TWO PIPE DIAMETERS ABOVE THE PIPE INVERT (TYPE B BENCHING SEWERS)
- 3. DIMENSION D VARIES WITH THE DIAMETER OF THE SEWER PIPES AND SHALL BE TO A POINT 50MM ABOVE THE HIGHEST CROWN OF THE PIPES. 4. RENDERING FOR MANHOLE BENCHING SHALL CONSIST OF ONE PART H.A.C. TO TWO PARTS SAND THOROUGHLY MIXED AND APPLIED TO CONCRETE SURFACES WHILE THE LATTER ARE STILL GREEN. RENDERING SHALL BE AT LEAST 20MM THICK.









Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic

ANNEXURE 21

Structural Engineer Drawings

GENERAL

- 1.ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT SECTIONS OF THE SANS 1200 OR SANS 2001.
- 2.READ THIS DRAWING IN CONJUNCTION WITH
- THE ARCHITECT'S DRAWINGS AND OTHER ENGINEERING DRAWINGS AND PROJECT
- SPECIFICATIONS.
- 3.ALL CONTRACTOR'S QUALITY
- ASSURANCE/QUALITY CONTROL DOCUMENTATION TO BE FORWARDED TO ENGINEER BEFORE COMMENCING WITH ANY STRUCTURAL WORK.
- 4.CONTRACTOR TO CONDUCT HIS OWN QUALITY ASSURANCE/ CONTROL BEFORE
- CALLING THE ENGINEER FOR INSPECTION. 5.48 HOURS WRITTEN NOTICETO BE GIVEN TO
- ENGINEER BEFORE TIME OF INSPECTION.
- 6.ALL LEVELS ARE IN METRES RELATIVE TO THE APPROPRIATE LOCAL DATUM.
- 7.ALL LEVELS ON DRAWINGS INDICATE TOP OF CONCRETE UNLESS INDICATED OTHERWISE.
- 8.ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
- 9.NO DIMENSIONS ON DRAWINGS ARE TO BE SCALED.
- 10.FOR SETTING OUT DATA, SETTING OUT POINTS AND DATUM LEVELS REFER TO SURVEY INFORMATION.
- 11.CONTRACTOR TO CHECK ALL DIMENSIONS AND LEVELS ON SITE AND REPORT ANY DISCREPANCIES TO THE ENGINEER, BEFORE SUBMITTING FABRICATION DRAWINGS.
- 12.JOINTS INDICATED ON SLABS ARE ALSO TO BE CONSTRUCTED IN BRICK WALLS, SCREED AND FINISHES.
- DESIGN CRITERIA 1.DESIGN IN ACCORDANCE WITH THE FOLLOWING CODES: LOADINGS: SANS 10160 FOUNDATIONS: SANS 01610 CONCRETE: SANS 10100 STRUCTURAL STEEL: SANS 10162 STRUCTURAL TIMBER: SANS 10163 2.DESIGN SUPERIMPOSED DEAD LOADS:
- CONCRETE SELF WEIGHT: 24kN/m² SERVICES IN FLOORS: 0.2kN/m² CEILINGS AND SERVICES: 0.5kN/m² 3.DESIGN SUPERIMPOSED LIVE LOADS: DESCRIPTION $q_k (kN/m^2) Q_k (kN)$

SPECIAL LOADINGS ONLY TBA TBA TBA

SURFACE BED

OF CASTING.

CASTING

- **1.REFER TO ARCHITECT DETAILS FOR** SURFACE FINISH AND COVERING.
- 2.PROVIDE 250 MICRON DPC UNDER ALL SURFACE BEDS WITH A MINIMUM LAP OF
- 3.MINIMUM LAP OF MESH REINFORCEMENT IS 450mm UNLESS OTHERWISE NOTED. 4.PROVIDE A VERTICAL ISOLATION JOINT
- BETWEEN THE SURFACE BED AND ALL VERTICAL WALLS AND COLUMNS PROTRUDING THROUGH THE SURFACE BED.
- 5.CONCRETE CAST UNDER ROOF COVER: SAW CUT SURFACE BEDS WITHIN 24 HOURS
- 6.CONCRETE CAST IN OPEN AIR. SAW CUT FLOOR SLABS WITHIN 6 HOURS OF

IN SITU CONCRETE WORK 1.ALL CONCRETE WORK TO BE CARRIED OUT IN ACCORDANCE WITH SANS 1200 G OR SANS 2001-

CC1 (LATEST ADDITION).

2.MINIMUM CONCRETE CUBE STRENGTH AT 28 DAYS AND MINIMUM COVER TO REINFORCEMENT:

ELEMENT	28 DAY STRENGTH	EXPOSURE CONDITION	COVER (mm)
BLINDING, MASS CONCRETE, SCREED	(MPa) 15	SEVERE	N/A
INTERNAL SURFACE BEDS	30	MODERATE	40
APRON SLAB	25	SEVERE	N/A
(INTERNAL)RC FOUNDATIONS	25	SEVERE	50
(INTERNAL)RC COLUMNS	30	MODERATE	40
(INTERNAL)RC SLABS	30	MODERATE	40
(INTERNAL)RC BEAMS	30	MODERATE	40
(COVERED)RC FOUNDATIONS	25	SEVERE	50
(EXPOSED)RC COLUMNS	30	SEVERE	50
(EXPOSED)RC SLABS	30	SEVERE	50
(EXPOSED)RC BEAMS	30	SEVERE	50
LIQUID RETAINING STRUCTURE	35	SEVERE	50

- 3.MAXIMUM NOMINAL CONCRETE AGGREGATE SIZE = 19MM, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 4.NO-FINES CONCRETE SHALL CONSIST OF COURSE AGGREGATE OF A SINGLE SIZE (19mm), CEMENT AND WATER ONLY. NO FINE AGGREGATE SHALL BE ALLOWED.
- 5.MIX DESIGNS, TRIAL MIX CUBE TEST RESULTS AND SLUMP LIMITS TO BE SUBMITTED TO ENGINEER FOR APPROVAL AT LEAST 7 DAYS BEFORE CONCRETE IS DUE TO BE CAST.
- 6.A SLUMP TEST SHALL BE CARRIED OUT ON EVERY BATCH/TRUCK OF CONCRETE DELIVERED TO SITE AND ANY BATCH OR TRUCK LOAD OF CONCRETE THAT FALLS OUTSIDE THE LIMITS WILL BE REJECTED AND REMOVED FROM SITE 7.CUBES SHALL BE TESTED 28 DAYS AFTER
- CASTING AND REULLTS TO BE SUBMITTED TO THE ENGINNER WITHIN 7 DAYS FROM DATE OF TEST
- 8.DIMENSIONS OF BEAMS ARE INDICATED AS WIDTH x DEPTH.
- 9.THE CONTRACTOR MUST ENSURE THAT ALL EMBEDDED ITEMS AND PENETRATIONS FOR SERVICES HAVE BEEN PROVIDED FOR AND POSITIONED ACCORDING TO THE LATEST DRAWINGS OF ALL DISCIPLINES BEFORE CASTING CONCRETE, NO HOLES ARE TO BE CORED WITHOUT THE ENGINEER'S WRITTEN APPROVAL.
- 10.ACRONYMS ARE DEFINED AS FOLLOWS: SC: SAW CUT JOINT CJ: CONSTRUCTION JOINT ISOLATION JOINT EJ: EXPANSION JOINT
- 11.CONSTRUCTION JOINT POSITIONS ARE INDICATIVE ONLY AND SHALL BE AGREED WITH THE ENGINEER. MOVEMENT JOINTS ARE TO BE INSTALLED AS INDICATED ON THE DRAWINGS.

12. CONSTRUCTION JOINTS:

- NO HORIZONTAL JOINTS WILL BE ALLOWED IN BASES, BEAMS AND SLABS. NO VERTICAL JOINTS IN COLUMNS AND SHEAR WALLS. 13. WHERE IT IS NECESSARY TO UTILIZE
- CONSTRUCTION JOINTS, SUCH JOINTS SHALL BE INSPECTED BY THE ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 14.THE PROPOSED CASTING SEQUENCE OF ALL CONCRETE TO BE APPROVED BY THE ENGINEERS REPRESENTATIVE 14 DAYS BEFORE CASTING.\
- 15.IF FOR ANY REASON A COLD JOINT SHOULD FORM DURING CASTING, THE PLANE OF THE JOINT SHOULD BE AT 45 DEGREES TO THE SOFFIT OF THE MEMBER AND THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.
- 16. ARCHITECTS DRAWINGS TO BE FOLLOWED FOR CONCRETE FINISHES, GROOVES, CHAMFERS, ETC OR ALL EXPOSED CONCRETE CORNERS WITH AN ANGLE OF 90° OR LESS SHALL HAVE A 20mm x 20mm CHAMFER UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 17.NO CONCRETE SHALL BE CAST IN LIFTS IN EXCESS OF 3m UNLESS MEASURES ARE TAKEN TO ENSURE SEGREGATION DOES NOT OCCUR, AS APPROVED BY ENGINEER. 18. ALL CONCRETE TO BE COMPACTED USING A
- MECHANICAL VIBRATOR OF A SUITABLE SIZE POURS DEEPER THAN 300mm TO BE DOUBLE VIBRATED, THE SECOND VIBRATING BEING DONE JUST BEFORE INITIAL SET.
- 19. THE TOP OF CONCRETE ELEMENTS AND THE SURFACE OF ALL CONSTRUCTION JOINTS SHALL BE SCABBLE OR WATER JETTED TO REMOVE LAITENCE AND LOOSE MATERIAL AND TO ROUGHENED EDGES PRIOR TO CASTING THE NEXT LIFT OF CONCRETE. A WET TO DRY EPOXY TO BE PROVIDED TO THE ENGINEER'S APPROVAL ON TOP OF SLABS WHERE UPSTAND
- 20.ALL CONCRETE TO BE CONTINUOUSLY CURED USING AN APPROVED METHOD FOR A MINIMUM OF 7 DAYS.

BEAMS ARE CAST.

- 21.SHOULD NO ALTERNATIVE CURING METHOD BE APPROVED BY THE ENGINEER IN WRITING, THE FOLLOWING SHOULD BE DONE: FOR CONCRETE CAST UNDER ROOF COVER:
- MINIMUM OF 7 DAYS. CONCRETE CAST IN OPEN AIR: CURE BY COVERING WITH PLASTIC SHEETING IMMEDIATELY AFTER STRIKING OF FORMWORK.
- FOR POWER FLOATED SLABS COVER SLAB WITH WHITE PLASTIC SHEETING IMMEDIATELY AFTER STRIKING OFF FORMWORK AND REPLACE PLASTIC SHEETING AFTER POWER FLOATING.
- · COLUMNS TO BE WRAPPED IN PLASTIC. CURING COMPOUND TO BE APPROVED BY THE
- ENGINEER PRIOR TO COMMENCING WORKS. 22.CONCRETE DEFECTS MAY ONLY BE REPAIRED
- AFTER THE ENGINEER HAS APPROVED A METHOD STATEMENT FOR THE REPAIR.

CURE BY WETTING SIX TIMES PER DAY FOR A

FORMWORK 1.STAGING AND FORMWORK SHALL BE DESIGNED AND CERTIFIED BY SUITABLY

EXPERIENCED PROFFESIONALLY REGISTERED ENGINEER. WHERE APPROPRIATE THE CONTRACTOR SHALL SUBMIT FORMWORK AND TEMPORARY WORKS DESIGN AND DETAILS TO THE ENGINEER FOR REVIEW.

- 2.THE STAGING AND BACK PROPPING DETAILS ARE TO BE SUBMITTED TO THE ENG. REP. FOR REVIEW. ALLOWANCE SHALL BE MADE FOR BACK PROPPING LOWER FLOORS WHILST CONCRETE IS BEING CAST ABOVE.
- 3. THE CONTRACTOR TO ENSURE THAT THE NECESSARY PROVISION IS MADE IN THE FALSEWORK FOR 3 SLABS TO SUPPORT THE WET WEIGHT OF ONE SLAB. e.g FOR THE CASTING OF LEVEL 5 SLAB 100% SUPPORT WORK MUST BE PROVIDED ON LEVEL 4, 70% ON LEVEL 3 AND 30% ON LEVEL 2.
- 4.ALL SLAB PANELS WITH UPSTAND BEAMS REMAIN PROPPED UNTIL THE UPSTANDS HAVE BEEN CAST AND ARE 14 DAYS OLD.
- 5.CLASS OF FORMWORK AS FOLLOWS: FORMED VERICAL CONCRETE SURFACE AS

DEFINED IN SANS 1200 G OR TABLE 1 OF SANS 2001- CC1

SURFACE	FINISH
UNEXPOSED SURFACE MORE THAN 300mm BELOW GROUND LEVEL AND SIDES OF GROUND BEAMS	ROUGH
UNEXPOSED SURFACE 0-300mm BELOW GROUND LEVEL	SMOOTH
EXPOSED WALLS, COLUMNS, BEAMS AND SLABS IN PARKING AREAS	SMOOTH
EXPOSED WALLS, COLUMNS, BEAMS AND SLABS IN OFFICES AND OTHER HABITABLE AREAS	SMOOTH

HORIZONTAL UNFORMED SURFACES:					
SURFACE	FINISH				
SURFACE BED	POWER FLOATED				
SUSPENDED SLAB	WOOD FLOATED				
WALL TOPS	STEEL FLOATED				
TOP OF EXPOSED FOUNDATIONS	STEEL FLOATED				
TOP OF COVERED FOUNDATIONS	WOOD FLOATED				

6.DEGREE OF ACCURACY FOR FORMED CONCRETE SURFACES AS DEFINED IN SANS 1200 G OR TABLE 11 OF SANS 2001. CC1

SURFACE	DEGREE OF ACCURACY
UNEXPOSED SURFACE MORE THAN 300mm BELOW GROUND LEVEL AND SIDES OF GROUND BEAMS	II
UNEXPOSED SURFACE 0-300mm BELOW GROUND LEVEL	II
EXPOSED WALLS, COLUMNS, BEAMS AND SLABS IN PARKING AREAS	11
EXPOSED WALLS, COLUMNS, BEAMS AND SLABS IN OFFICES AND OTHER HABITABLE AREAS	I

PRE-CAST PRESTRESSED CONRETE LINTELS

1.LINTELS TO COMPLY WITH SANS 1504

2.LINTELS MINIMUM BEARING LENGTH: LOADING MIN, LENGTH (mm)

MASONRY ONLY	150
3.LINTELS MAY NOT SPAN FU UNLESS APPROVED METHO	RTHER THAN 3m D OF

CONSTRUCTION IS USED.

4.LINTELS TO HAVE AT LEAST 5 LAYERS OF BRICKWORK ABOVE IT WITH BRICKFORCE AS PER MASONRY NOTES.

5.LINTELS TO BE ADEQUATELY SUPPORTED FOR AT LEAST 7 DAYS AFTER COMPLETION

PRESTRESSED CONCRETE:

OF THE WORKS.

1.PRECAST CONCRETE WORKS SHOULD BE CARRIED OUT IN ACCORDANCE WITH SANS

1200 GE OR SANS 2001 - CC1(LATEST REVISION)

2.PRECAST FORMED AND FLOATED SURFACES SHALL BE TO DEGREE OF ACCURACY I.

3. THE CONTRACTOR SHALL SUBMIT A DETAILED METHOD STATEMENT FOR APPROVAL BY THE ENGINEER FOR THE INSTALLATION OF ANY PRECAST ELEMENTS THAT MAY FORM PART

REINFORCEMENT

- 1.ALL REINFORCEMENT SHALL COMPLY WITH SANS 920, TYPE C, CLASS 2 GRADE 1. 2.BAR DESIGNATION IS AS FOLLOWS :
- 'R' = 250MPa YIELD STRENGTH PLAIN ROUND MILD STEEL BARS Y = GRADE 450MPa YIELD STRENGTH DEFORMED TYPE 2 HIGH YIELD BARS
- 3.WIRE MESH SHALL BE WELDED WIRE FABRIC REINFORCEMENT SMOOTH ROUND BARS MINIMUM PROOF STRESS 485MPa COMPLYING WITH THE REQUIREMENTS OF SANS 1024.

4.REINFORCING BARS ARE CALLED UP ON DRAWINGS IN THE FOLLOWING MANNER : NO. OFF : BAR TYPE : BAR DIAMETER - BAR MARK - PITCH : POSITION AND/OR COMMENTS E.G. 7 Y20 03 - 200 B1

5.POSITION/COMMENT IS DESIGNATED AS FOLLOWS : T = TOP FACE B = BOTTOM FACE FF = FAR FACE NF = NEAR FACE

EW = EACH WAY EF = EACH FACE AB = ALTERNATE BARS ABR = ALTERNATE BARS REVERSED AP = ALTERNATIVELY PLACED AS = ALTERNATIVELY STAGGERED

STG = BARS STAGGERED BY AMOUNT SHOWN. ALT = ALTERNATING SUFFIX 1,2 INDICATES THE LAYER WITH 1 BEING CLOSEST TO THE CONCRETE SURFACE WHERE TWO BAR MARKS ARE CALLED UP

TOGETHER AND IDENTIFIED AS 'ALT' THE SPACING STATED IS THE SPACING OF ALL BARS, NOT OF EACH BAR MARK E.G. 5 Y25 03 - 125T ALT 6 Y20 02 INDICATES 11 BARS AT 125 CENTRES IN THE TOP FACE.

6.SYMBOLS DENOTING LAYERS OF REINFORCEMENT IN SLABS AND BASES ARE SHOWN IN FIGURE 1 BELOW:

TOP <u>−</u>T2 B2 −

FIGURE 1

7.MINIMUM LAP LENGTH TO REINFORCING TO BE 50 X SMALLER DIAMETER BAR, AND MINIMUM ANCHORAGE LENGTH TO BE 40 X THE BAR DIAMETER UNLESS NOTED OTHERWISE

8.SPLICES SHALL BE AVOIDED AT POINTS OF MAXIMUM STRESS AND ALL SPLICES SHALL BE STAGGERED.

9.COUPLERS MAY BE PROPOSED WHERE SITE CONSTRAINTS PREVENT THE ACHIEVEMENT OF FULL LAP LENGTHS. WHERE COUPLERS ARE USED THEY ARE TO BE POSITIONED SO AS TO ACHIEVE THE SAME NOMINAL COVER AS THAT SPECIFIED FOR THE REINFORCING BARS WHICH THEY JOIN. THE USE OF COUPLERS IS SUBJECT TO THE APPROVAL OF

THE ENGINEER. **10.WELDING OF REINFORCEMENT IS NOT** ALLOWED UNLESS APPROVED BY ENGINEER IN WRITING.

11. FABRIC REINFORCEMENT IS CALLED UP ON THE DRAWINGS BY REFERENCE TO ITS SANS REFERENCE, AND BY INDICATION OF THE AREA TO BE REINFORCED.

12. FOR FABRIC REINFORCEMENT OTHER THAN SQUARE MESH FABRIC, THE DIRECTION OF THE MAIN LONGITUDINAL BARS SHALL BE AS SHOWN ON THE DRAWINGS.

13. ALL LAPS TO FABRIC REINFORCEMENT SHOULD BE A MINIMUM OF 450MM.

14. SPACERS, TIES AND STOOLS SHALL BE SUPPLIED AND FIXED BY THE CONTRACTOR AS NECESSARY TO SECURE THE REINFORCEMENT AGAINST DISPLACEMENT CONCRETE COVER BLOCKS MUST BE MANUFACTURED FROM CONCRETE WITH THE SAME STRENGTHS AS THE UNITS IN WHICH IT IS INCORPORATED.

15.CARE SHOULD BE TAKEN TO ENSURE THAT THE MINIMUM CONCRETE COVER OVER REINFORCEMENT IS ACHIEVED THROUGHOUT.

16.PULL OUT BAR REINFORCEMENT MAY NOT BE USED UNLESS WRITTEN CONFORMATION IS GIVEN BY THE ENGINEER.

17. ALL REINFORCEMENT IS TO BE APPROVED BY THE ENGINEER BEFORE CONCRETE IS

18. THE FOLLOWING ESTIMATED REBAR QUANTITIES SHALL BE ALLOWED FOR:

ELEMENT	REINFORCEMENT MASS (kg/m [©])
BASES	95
COLUMNS	185
BEAMS	125
COFFER SLABS	120
RETAINING WALLS	100
INTERNAL WALLS	75

FOUNDATIONS

1.EXCAVATIONS, FOUNDING CONDITIONS AND LEVELS TO BE APPROVED BE APPROVED BY ENGINEER PRIOR TO CASTING BLINDING.

2. THE MINIMUM DEPTH TO BOTTOM OF FOUNDATION SHALL NOT BE LESS THAN 400mm DEEP BELOW UNFINISHED GROUND LEVEL.

3.ANY OVER EXCAVATIONS BELOW FOUNDATIONS ARE TO BE MADE GOOD WITH 10MPa CONCRETE AT THE CONTRACTORS EXPENSE.

4 UNLESS OTHERWISE SPECIFIED ALL FILL UNDER FOUNDATIONS SHALL BE AN APPROVED MATERIAL COMPACTED TO 98% MOD AASHTO.

5.PROVIDE 50mm BLINDING UNDER ALL COLUMN AND WALL BASES.

6.DESIGN ALLOWABLE BEARING CAPACITIES:-PAD FOOTINGS: 150 kPa

STRIP FOOTINGS: 150 kPa 7.NO BACKFILL MATERIAL TO BE BROUGHT ONTO SITE WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.

8.BACKFILLING OVER COLUMN BASES SHALL BE DONE WITH AN APPROVED MATERIAL COMPACTED IN LAYERS.

9.BACKFILL AROUND COLUMNS AND WALLS COMMENCE EVENLY.

10.COMPACTION TEST RESULTS OF IN SITU MATERIAL UNDER STRUCTURES TO CONFIRM ALLOWABLE BEARING CAPACITY, TO BE SUBMITTED AND APPROVED BY THE ENGINEER BEFORE CONCRETE WORKS COMMENCES.

PILES: 1.ALL PILING WORKS TO BE CARRIED OUT IN

REVISION) UNLESS OTHERWISE NOTED. 2.BLINDING TO BE CAST BENEATH ALL PILE CAPS EXCEPT AS APPROVED BY THE ENGINEER.

PROPRIETARY EXPANSION JOINTS AND ANCHORS

ANCHORS FOR FIXING INTO CONCRETE AND MASONRY TO BE INSTALLED STRICTLY TO MANUFACTURERS SPECIFICATION.

2.ALL EXPANSION AND CHEMICAL ANCHORS TO BE HOT DIP GALVANISED.

LIQUID RETAINING STRUCTURES 1.ALL CONCRETE SHALL BE MADE WITH ORDINARY PORTLAND CEMENT WITH 30% FLY ASH OR SIMILAR APRROVED CEMENT

EXTENDER . 2.WATER:CEMENT RATIO NOT TO EXCEED 0.50. 3.CEMENT CONTENT 325 kg/m 2 - 450 kg/m 3

4.NO OPEN FERRELS ARE PERMITTED. ALL SHUTTERS TO BE SUPPORTED USING AN APPROVED EMBEDDED BOLT SYSTEM.

WATERPROOFING

1.ALL WATERPROOFING AND TANKING TO BE CARRIED OUT TO MANUFACTURER'S SPECIFICATIONS AND ENGINEER'S DETAILS.

ACCORDANCE WITH SANS 1200 F (LATEST

1.ALL EXPANSION JOINTS AND CHEMICAL TYPE

MASONRY 1.ALL MASONRY WORK SHALL BE IN

ACCORDANCE WITH SANS 10164, SANS 10400K OR SANS 2001-CM1. 2.REFER TO ARCHITECT'S DRAWINGS FOR

MASONRY WALL LAYOUTS. 3.THE FOLLOWING BRICK AND MORTAR STRENGTHS SHALL APPLY:

	MASONRY COMPRESSIVE STRENGTH (MPa)	MORTAR CLASS ANS 0164)		
AINING WALLS & AASONRY BELOW GL	14	CLASS I		
LOAD BEARING WALLS	14	CLASS I		
FRAME	7	CLASS II		

4.GALVANISED BUTTERFLY WALL TIES TO SANS 28 WITH A WIRE THICKNESS OF 3.15mm ARE TO BE PROVIDED IN CAVITY WALLS AS FOLLOWS (NO SINGLE STRAND TYPE WALL TIES WILL BE PERMITTED):

1	WALL TYPE	NUMBER OF TIES
GROUTED CAVITY WALLS		4/m²
	CAVITY WALLS	3/m²
WITHIN 230mm EITHER SIDE OF VERTICAL CONTROL JOINT IN THE OUTER SKIN OF A CAVITY WALL		VERTICAL ROW OF TIES AT 250mm c/c (EVERY THIRD COURSE)
	CAVITY WALLS ON SUSPENDED SLABS AND BEAMS	EVERY 500mm FOR FIRST TWO COURSE AND CONTINUE AS ABOVE THEREAFTER

EACH TIE SHALL BE EMBEDDED AT LEAST 50mm INTO THE MORTAR JOINT OF EACH

LEAF.

5.GALVANISED BRICKFORCE IS TO BE PROVIDED AS FOLLOWS: ALL BRICKFORCE

TO BE SABS APPROVED, READ IN CONJUNCTION WITH NOTE 6.

WALL TYPE	BRICKFORCE QUANTITY
MASONRY FOUNDATION WALLS BELOW DPC	EVERY COURSE
MASONRY WALLS IN GENERAL	EVERY 4 th COURSE
CEMENT BLOCKS (THROUGHOUT)	EVERY 2 nd COURSE
WALLS WITH OPENINGS	FIRST 5 COURSES ABOVE AND WHERE APPLICABLE BELOW OPENINGS, CONTINUING 600mm PAST OPENINGS
CONTROL JOINTS	CONTINUOUS THROUGH CONTOL JOINT
WALLS ON SUSPENDED SLABS AND BEAMS	IN EACH COURSE FOR THE FIRST THREE COURSES AND CONTINUE AS ABOVE THEREAFTER

MINIMUM DIAMETER OF BRICKFORCE: 3.55mm YIELD STRENGTH: 485MPa LAP LENGTH: 400mm

6.PROVIDE DPC LAYER AS BOND BREAKER BETWEEN CONCRETE AND FIRST COURSE OF BRICKWORK.

- 7.WALLS BUILT ON SUSPENDED RC SLABS/BEAMS: ALL TEMPORARY PROPS TO HAVE BEEN REMOVED PRIOR TO COMMENCEMENT OF BRICKWORK. PROVIDE GALVANISED BRICKFORCE TO THE BOTTOM THREE COURSES AND AS PER NOTE 5 THEREAFTER. PRE LOAD THE FLOOR SLAB WITH BRICKS PRIOR TO BUILDING THE WALL.
- 8.BRICK PANEL WALLS TO BE ANCHORED TO RC COLUMNS WITH GALVANISED HOOP IRON ANCHORS (1.2x30mm CROSS SECTION), FIXED TWICE TO THE COLUMN EVERY 4TH COURSE AND BUILT 700 mm INTO BRICKWORK. PROVIDE 10 mm JOINTEX BETWEEN BRICKWORK AND COLUMN.
- 9.PROVIDE A SKIMMED MORTAR FINISH AND TWO LAYERS OF 250 MICRON DPC AS A SLIP JOINT TO THE TOPS OF ALL LOADBEARING BRICK WALLS PRIOR TO CASTING OF SLAB. 10.PROVIDE A 10 mm SOFT JOINT (JOINTEX)
- BETWEEN THE TOP OF ALL NON LOADBEARING BRICK PANEL WALLS AND THE SOFFIT OF CONCRETE STRUCTURE ABOVE.
- 11.HEIGHT OF BRICKWORK ERECTED IN 24 HOURS NOT TO EXCEED 10 BRICK COURSES. 12.NO HORIZONTAL CHASING OF SERVICES IN
- WALLS WILL BE PERMITTED. 13.NO BRICK WALLS ARE TO BE FOUNDED ON THE SURFACE BED WITHOUT WRITTEN
- CONSENT FROM THE ENGINEER. **REINFORCED MASONRY CONSTRUCTION:** 1.CAVITIES IN REINFORCED MASONRY WALLS TO BE GROUTED UP WITH 25 MPa/10mm CONCRETE IN MAXIMUM LIFTS OF 450mm AS BRICK LAYING PROCEEDS.
- 2.CAVITIES TO BE CLEAR OF MORTAR DROPPINGS AND PROVIDED WITH WALLS TIES

= 20mm.

IN ACCORDANCE WITH MASONRY NOTES. 3.MINIMUM GROUT COVER TO REINFORCEMENT

- STEELWORK
- 1.ALL STRUCTURAL STEELWORK SHALL BE IN ACCORDANCE WITH SANS 1200H OR SANS 2001 - CS1 WHERE APPLICABLE.
- 2. THE CONTRACTOR SHOULD CHECK THAT THE ENGINEERS DRAWING CONTAINS ALL THE INFORMATION REQUIRED FOR THE PREPERATION OF THE WORKSHOP DRAWING AS SOON AS POSSIBLE.
- 3.WORKSHOP DRAWINGS TOGETHER WITH SUPPORTING CALCULATIONS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
- APPROVAL PROCESS WILL TAKE A MINIMUM OF 10 WORKING DAYS
- 4.MATERIALS SPECIFIED ON SHOP DRAWINGS MUST CORRESPOND WITH MATERIALS STATED ON ENGINEER'S DRAWINGS AND APPLICABLE SPECIFICATIONS. 5.STEEL GRADES:

PRODUCTION METHOD	STEEL GRADE
HOT FORMED HOLLOW SECTIONS	S355JR
HOT ROLLED SECTIONS (SANS 1431)	S355JR
COLD FORMED STEEL SECTIONS	MIN. 200 MPa YIELD STRENGTH
HOLLOW SECTIONS	S355JR
PLATES AND ELATS	\$355 IP

- PLATES AND FLATS S355JR 6.ALL WELDING SHALL BE IN ACCORDANCE WITH SANS 10044.
- 7.ALL WELDS ARE TO BE DESIGNED TO GIVE FULL MEMBER STRENGTH AND TO BE MINIMUM 6mm FILLET WELD TO GRADE E70XX, UNLESS SPECIFIED OTHERWISE.
- 8.ALL INTERSECTIONS TO BE WELDED CONTINUOUS ALL ROUND.
- 9.NO SITE WELDING IS PERMITTED. 10.ALL WELDING TO BE CARRIED OUT UNDER SUPERVISION OF A CODED WELDER AND BY A SUITABLY EXPERIENCED AND TRAINED
- WELDER. ALL WELDS TO BE CERTIFIED BY THE CODED WELDER 11. DETAILS OF WELDING CONSUMABLES AND
- CERTIFICATES TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL 12.ALL WELDS MUST BE VISUALLY INSPECTED AND 10% OF ALL WELDS MUST BE CRACK
- TESTED USING DYE INDICATORS OR ANY OTHER TEST APPROVED BY THE ENGINEER. 13. ALL BOLTED CONNECTIONS ARE TO BE
- DESIGNED TO SANS 10162. 14. ALL BOLTS TO BE GRADE 8,8 UNLESS NOTED OTHERWISE. ALL BOLTS TO BE HOT DIP GALVANISED.
- 15. ALL BOLTS TO RECEIVE WASHERS WITH MATERIAL OF WASHER TO MATCH MATERIAL OF BOLTS. EG. HOT DIP GALVANISED BOLT TO HAVE HOT DIP GALVANISED WASHER.
- 16.ALL BOLTED CONNECTIONS TO CONSIST OF MINIMUM 2M16 GRADE 8.8 BOLTS UNLESS SPECIFIED OTHERWISE.
- 17. ALL HOLDING DOWN BOLTS TO BE MINIMUM M16 AND HOT DIP GALVANISED.
- 18.ALL GUSSET PLATES ARE TO BE MIN. 6mm THICK UNLESS NOTED OTHERWISE.
- 19. PROVIDE 60MPa NON-SHRINK STRUCTURAL GROUT BELOW ALL BASE PLATES. 20. ALL MECHANICAL AND ELECTRICAL SUPPORTS ON TRUSSES TO BE AT NODE
- POINTS OR AS AGREED WITH THE ENGINEER. 21. CONNECTIONS TO PURLINS FOR MECHANICAL AND ELECTRICAL SUPPORTS
- WILL ONLY BE MADE BY BOLTING TO THE WEB OF THE PURLIN MAXIMUM LOAD 25kg. 22. ALL FIXINGS TO ROOF STEELWORK TO BE
- APPROVED BY THE ENGINEER. 23.ALL RUNNERS AND BRACING TO BE FULLY FIXED IN POSITION BEFORE SHEETING
- COMMENCES. 24. ALL CORROSION PROTECTION SHALL BE BE DONE IN ACCORDANCE WITH SANS 1200 HC.
- 25. ALL STRUCTURAL STEEL BELOW GROUND LEVEL, CAST INTO CONCRETE OR BUILT INTO BRICKWORK, SHALL BE PAINTED WITH TWO COATS OF BITUMEN.
- 26. SURFACE PREPARATION OF STRUCTURAL STEELWORK: SANDBLAST ALL NEW STEELWORK TO A MINIMUM SA 2.5 IN ACCORDANCE WITH SWEDISH SIS 055900-1967.
- 27. ALL STEELWORK THAT IS SPECIFIED TO BE HOT DIPPED GALVANISED SHALL BE HOT DIPPED GALVANISED FOR EXPOSURE CLASS C3 IN ACCORDANCE TO SANS 121.
- 28. WHERE PAINTED FINISH IS SPECIFIED ON GALVANISED STEEL, DEGREASE WITH GALVANISED IRON CLEANER AND 3M SCOTCH BRITE PADS AND RINSE WITH FRESH WATER PRIOR TO APPLICATION OF PRIMER COAT.
- 29. NO ALKYD PRIMERS ON GALVANIZING. ALL STEELWORK SPECIFIED TO BE PAINTED SHALL BE PAINTED AS FOLLOWS:
- PRIMER: STEELWORK TO BE PAINTED ONI COAT OF EPOXY ZINC PHOSPHATE PRIMER, (85 microns DTF). INTERMEDIATE COAT: STEELWORK TO BE
- PAINTED WITH ONE COAT OF POLYAMIDE EPOXY M10, (125 microns DTF). • TOP COAT: STEELWORK TO BE SPRAY PAINTED WITH ONE COAT ACRYLIC POLYURETHANE (60 microns DTF).
- 30. FINAL COLOUR TO ARCHITECTURAL SPEC. 31. PAINT DFT TO BE TESTED USING A PAINT THICKNESS GAUGE.
- 32. NO CUTTING, DRILLING OR WELDING OF CORROSION PROTECTED MEMBERS SHALL BE ALLOWED.
- 33.ALL PAINTWORK DAMAGED DURING ERECTION AND TRANSPORTATION TO BE TOUCHED UP TO ABOVE SPEC.

IN ACCORDANCE SANS 2001-CT2 2.TIMBER STRUCTU STRICTLY IN ACCO AND ARCHITECT'S 3.WORKSHOP DRAW THE ENGINEER FO FABRICATION.

TIMBER STRUCTU

1.ALL STRUCTURAL

4.TIMBER GRADE AN SHALL BE CHECKE OF FABRICATION C ANY POSSIBLE PRO BE REPORTED TO ORDERING.

5.TIMBER GRADES: ELEME

LAMINATED SALIGNA
SALGNA POLES
PINE RAFTERS
PINE BATTENS/PURLI
PINE STRUTS

6.EXTERNAL TIMBER PLANED ALL ROUND
7.ALL BOLT HOLES TO OF 1mm LARGER TH

8.BOLTS AND COACI DIRECTLY TO TIME BRACKETS TO BE GALVANISED STEE

COACH SCREV
M6
M8
M10
M12
M16

9.ALL COACH SCREV INTO PRE DRILLEI SPLITTING. THE HO FOLLOWS AND SHA THE DEPTH OF THE PARTS RESPECTIV

COACH SCREW SIZE	
M6	
M8	
M10	
M12	

10.COACH SCREWS S AND UNDER NO CI COACH SCREWS E HAMMER.

- 11. ALL BOLTS, COAC SHALL BE HOT DIP
- 12. ALL CONNECTING TO BE HOT DIPPED FABRICATION.
- **13.SURFACE PREPAF** • ENSURE THAT ALL AND FREE OF ANY CONTAMINANTS.
- · SAND WITH 150 GR DIRECTION OF GR REMOVE DUST WIT APPLY KNOT SEAL
- 14. PROTECTIVE CO. APPROVED PENE COATING FOR WAT PROTECTION OF T FOLLOWS: a. APPLY TWO COAT
- INSTALLATION OF b. APPLY TWO COAT TIMBER MEMBERS BETWEEN APPLIC
- **15. PROTECTIVE COA** ARCHITECTS SPEC **16.TIMBER MEMBERS**

TO BE GIVEN TWO SIMILAR AND WRA

17. TIMBER STRUCT BEFORE ROOF CO INSTALLED.

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	 All drawings to read to be read in conjunction with Engineers Drawings Contractor to report any discrepancies or contradiction 	∥ to
	the engineer. 3. No drawings are to be scaled.	
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COLUMN SCHEDULE
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C2 - 400 x 400
C3 - 350 x 350
C4 - 350 x 350
C5 - 100 x 100 x 4 SHS
C6 - 150 x 100 x 4 RHS

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NOTE: SEE ARCHITECTURAL DRAWINGS FOR FINISHES AND HANDRAIL DETAILS - 300x600 Dp RC BEAM - 400x400 RC COLUMN

BELOW GROUND FLOOR 282900 mm

GROUND FLOOR 286210 mm

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Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic

ANNEXURE 22

Electrical Engineer Drawings

TES: (1) - CONTRACTOR TO ENSURE MAX DISTANCE BETWEEN DRAW BOXES TO BE 20 METERS NOTWITHSTANDING ANYTHING TO CONTRARY. (2) - DRAW BOXES REQUIRED AFTER EVERY 90 DEGREE BEND OR 180 DEGREE TOTAL OF SLOW BENDS. 100 x 100 CONDUIT BOX X ROUND DRAW BOX X ROUND DRAW BOX X 00 x 100 CONDUIT BOX AT 500AFFL 0C OVERHEAD CAST 0S OVERHEAD ON SUFFACE OR LAID ON CEILING 150 SQUARE GALV. STEEL DRAW 100 x 100 CONDUIT BOX AT 1400AFFL P 100 x 100 DRAW BOX X N N DM DOOR MONITOR M OC OVERHEAD ON SUFFACE OR LAID ON CEILING 150 SQUARE GALV. STEEL DRAW 100 x 100 CONDUIT BOX AT 1400AFFL P 100 x 100 DRAW BOX X N DM DOOR MONITOR M OC OVERHEAD ON SUFFACE OR LAID ON CEILING 150 SQUARE GALV. STEEL DRAW 100 x 100 CONDUIT BOX 100 x 100 DRAW BOX X N N A ACCESS CONTROL S S S S S SUBCINO FCONDUIT S FC FLOOR SUBFACE (IN FLOOR VOID) INTERCOM JUNCTION BOX INTERCOM JUNCTION BOX DATA/COMMS JUNCTION BOX S S S SUBCINO FCONDUIT S S S S S <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>										
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	GENERAL NOTESThis drawing is issued for Electrical purposes only, and should be read in conjunction with the Electrical Specification. Setting out of Electrical and Electronic accessories are to be as indicated on Architects details.Refer to Architects and Structural Drawings for all building dimensions, latest building revisions and services.Do not scale this drawing.All work to comply with relevant Standards, Codes of Practice, Specification and Regulations.Notwithstanding anything to the contrary, all rights reserved. No part of this drawing may be reproduced in any material form (including photo-copying or storage in any medium or by electronic means and whether or not transiently or incidentally to some other use of this drawing). In addition, this drawing may not be used for any purpose or reason other than for which it was originally issued, without written permission of the author.
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REE TOTAL OF SLOW BENDS. (3) - ALL UNWIRED CONDUITS TO BE PROVIDED WITH DRAW WIRES. THESE WILL BE WITDRAWN AND CHECKED AT RANDOM. (4) - CAST IN CONDUITS TO BE SPACED AT A MINUMUM OF 35MM.	Paper Size: SCALE: Drawn: Checked: Approved: CP MK MK IBUYA PROJECT NO. 23023 IBUYA DRAWING NO.: A

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Security Guards Search Room & Safes Kitchen 🗲 – ^{OS} Security WC and Lockers _____ Public Female WC Public Dis wc lobby Public Male wc SECURITY GUARD HOUSE 3 ELECTRONICS LAYOUT

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GENERAL NOTES

This drawing is issued for Electrical purposes only, and should be read in conjunction with the Electrical Specification. Setting out of Electrical and Electronic accessories are to be as indicated on Architects details.

Refer to Architects and Structural Drawings for all building dimensions, latest building revisions and services.

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FOR INFORMATION

Key ValueCluster box m consisting of 164-1), 1 x Eu Essential S.S RJ45 outlets.2Conduit Drop built in brickw (Refer to Deta3Conduit Drop built in brickw (Refer to Deta3Conduit Drop built in brickw (Refer to Deta4Conduits cast 3 x 32mm(poi 32mm(voice/a)5Power Skirtin 66Vertical Behe No. UPS Ded 4 No. Essentia 164-2), 2 No. point and 2 N7Cast-in Floor Normal S.S.C Essential Eur Dedicated UF RJ45 outlets and 1010300mm x 30011SSO at 110012SSO mounted examination I	Keynote Text nounted at 1200mmAFFL 1 x Normal S.S.O (SANS uro S.S.O (SANS 164-2), 1 x O (SANS 164-1) and 1 x per: 2 x 32mm PVC Conduit ork/partition for voice/data ail F). per: 3 x 25mm PVC Conduit ork/partition for power ail F). t-in feeds to Power skirting, wer) and 2 x data). g Mounted above Worktop. ad Trunking consisting of 4 licated S.S.O (SANS 164-4), ail Euro S.S.O (SANS 164-4), ail Euro S.S.O (SANS Oxygen points, 1 No. LP Air o. Vaccum points. box consisting of 1 x O (SANS 164-1), 1 x O (SANS 164-1), 1 x o S.S.O (SANS 164-2), 1 x PS S.S.O (SANS 164-2), 1 x PS S.S.O (SANS 164-4), 1 x and 1 x HDMI Power Point. Dmm Data Junction Box. mmAFFL. d on soffit. Dunted on soffit. d at 1350mm AFFL for ight.
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Client: Owner Signature: PROJECT: NEWTOWN CLII ADDRESS: Enter address here DRAWING TITLE: GROUND FLOO LA Services: Electrical Paper Size: A1	Date: NIC OR SMALL POWER AYOUT DATE: 09/06/23 SCALE: 1 : 100
Client: Owner Signature: PROJECT: NEWTOWN CLII ADDRESS: Enter address here DRAWING TITLE: GROUND FLOO LA Services: Electrical Paper Size: A1 Drawn: Checked:	Date: NIC OR SMALL POWER AYOUT DATE: 09/06/23 SCALE: 1 : 100 Approved:
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2 REFERENCE TO QUANTITY i.e. DETAIL 2. 3 REFERENCE TO AN ELECTRICAL NOTE i.e. NOTE 4

H³⁵ REFERENCE TO STANDARD DRAWING i.e. STANDARD DRAWING №.34

HD^B LUMINAIRE TYPE "B" - REFER TO LUMINAIRE SCHEDULE

CB RECESSED CLUSTER BOX

FB RECESSED FLOOR BOX

Ø ROUND CONDUIT BOX

L OF SLOW BENDS.	(3) - ALL UNWIRED CONDUITS TO BE PROVIDED	WITH DRAW WIRES. THESE WILL BE WITDRAWN AND CHECKED A	AT RANDOM.	(4) - CAST IN CONDUITS TO B	E SPACED AT A MINUMUM OF 35M	IM.
 SQUARE GALV. STEEL DRAW TRAY SIZE AS SHOWN TELEPHONE JUNCTION BOX INTERCOM JUNCTION BOX DATA/COMMS JUNCTION BOX SECURITY, ETC. JUNCTION BOX DISTRIBUTION BOARD POSITION BOARD DESIGNATION NUMBER 	 → 16A SANS 164-1 SWITCHED SOCKET OUTLET (SSO) → 16A SANS 164-1 DOUBLE SSO → 16A SANS 164-1 SSO ON PEDESTAL → 16A SANS 164-2 3 PIN SSO → 16A SANS 164-1 AND 164-2 COMBINATION SSO → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO ON PEDESTAL → 3 PHASE C-FORM SSO 	D- 16A SANS 164-4 UNSWITCHED SOCKET OUTLET ⊖ 2 POLE ISOLATOR ⊕ 3 POLE ISOLATOR ⊕ 4 POLE ISOLATOR ∽ SINGLE LEVER ONE WAY LIGHT SWITCH o≺ INTERMEDIATE LIGHT SWITCH o TWO WAY LIGHT SWITCH LED PANEL LUMINAIRE 0	LINEAR LUMINAIRE BULKHEAD/DOWNLIGHTER, ETC WALL MOUNTED LUMINAIRES POLE MOUNTED LUMINAIRE MOTION SENSOR LIGHT SWITCH WITH MOTION SENSOR	TELEPHONE POINT TELEPHONE POINT ON PEDESTAL DIRECT OUTSIDE LINE TELEPHONE POINT(CALL BOX) + TV OUTLET DATA/COMMS OUTLET	H BELL PUSH H BELL OUTLET S SIGN POINT □ CLOCK OUTLET ▲ H H PHOTOCELL	< [(7
						1

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	GENERAL NOTES This drawing is issued for Electrical purposes only, and should be read in conjunction with the Electrical Specification. Setting out of Electrical and Electronic accessories are to be as indicated on Architects details. Refer to Architects and Structural Drawings for all building dimensions, latest building revisions and services. Do not scale this drawing. All work to comply with relevant Standards, Codes of Practice, Specification and Regulations. Notwithstanding anything to the contrary, all rights reserved. No part of this drawing may be reproduced in any material form (including photo-copying or storage in any medium or by electronic means and whether or not transiently or incidentally to some other use of this drawing]. In addition, this drawing may not be used for any purpose or reason other than for which it was originally issued, without written permission of the author.
ouse	REVISIONS NO. DATE DESCRIPTION REV BY: 0 2023/09/13 A Original Issue Updated Architectural Layout CP CP
Iting Consulting Consulting	Designed By: Signature: Date: Image: Date: Image: Date: Image: Date: Image: Date: Image: Date: Image: Date:
	PROJECT: NEWTOWN CLINIC ADDRESS: Enter address here DRAWING TITLE: FIRST FLOOR ELECTRONICS LAYOUT Services: DATE:
M. 1 REFERENCE TO QUANTITY i.e. 3No. 2 REFERENCE TO QUANTITY i.e. DETAIL 2. 3 REFERENCE TO AN ELECTRICAL NOTE i.e. NOTE 4 H^{35} REFERENCE TO STANDARD DRAWING j.e. STANDARD DRAWING No.34	Electrical 09/13/23 Paper Size: SCALE: A1 1 : 100 Drawn: Checked: Approved: CP MK MK IBUYA PROJECT NO. 23023 REVISION: 301 A A

NOTES: (1) - Contractor to ensure max distance between draw boxes 20	metres notwithstanding anything to contrary.	. (2) — Draw boxes re	required after every second 90 deg. bend or 180 de	g. total of slow bends.	(3) – All unwired conduits to be provided	with draw wires. These will be withdrawr	n and checked at random.	(4) –	- Cast in conduits to
Image: Sign 100x100 CONDUIT BOX. Image: Sign 100x100 CONDUIT BOX AT 500AFFL. Image: Sign 100x100 CONDUIT BOX AT 1400AFFL. Image: Sign 100x50 CONDUIT BOX AT 1400AFFL. Image: Sign 100x50 CONDUIT BOX AT 1100AFFL. Image: Sign 100x50 CONDUIT BOX AT 1100AFFL. Image: Sign 100x50 CONDUIT BOX AT 1100AFFL. Image: Sign 100x50 CONDUIT BOX. Image: Sign 100x50 CONDUIT.	OC OVERHEAD CAST-IN OS OVERHEAD ON SURFACE OR LAID ON CEILING. FC FLOOR SLAB CAST-IN. POWER SKIRTING TRUNKING CABLE SLEEVE. F CABLE TRAY/LADDER POWER CABLE	③ REFERENCE TO QUANTITY i.e. 3No. □ INTERCOM ② REFERENCE TO A DETAIL i.e. DETAIL 2. □ INTERCOM ④ REFERENCE TO AN ELECTRICAL NOTE i.e. NOTE 4. □ DATA/COM # 34 REFERENCE TO A STANDARD DRAWING i.e. STANDARD DRAWING No.34 □ DISTRIBUT 6 CABLE NUMBER - REFER TO SCHEDULE FOR DETAILS □ DATA/COM	HONE JUNCTION BOX. CCTV CAMERA COM JUNCTION BOX. CCTV CAMERA ON AUTO PANNING M COMMS JUNCTION BOX. CCTV CAMERA ON AUTO PANNING M COMMS JUNCTION BOX. CCTV CAMERA ON PAN & TILT MOULD COMMS OUTLET. CCTV CAMERA ON AUTO PANNING M CCTV CAMERA ON AUTO PANNING M CCTV CAMERA ON AUTO PANNING M CCTV CAMERA ON AUTO PANNING M CCTV CAMERA ON AUTO PANNING M CCTV CAMERA ON AUTO PANNING M DISCRETE OPAQUE DOME COVER CCTV CAMERA FIELD OF VI CCTV CAMERA FIELD OF VI COMMS OUTLET. PASSIVE INFRARED CURTAIN	OUNT	P 220 VOLT POWER OUTLET FACILITY S SIGNAL OUTLET 2x4/4x4 FLUSH CONDUIT BOX. S SECURITY CONTROL PANEL/JUNCTION BOX ∴ FLOOR PEDAL SWITCH ● SPRING RETURN PUSH BUTTON/LEVER RELEASE DM DOOR MONITOR CAMERA ER ER ELECTRIC RELEASE	EL – ELECTRIC LOCK/STRIKE MA – MOTION ALARM CR ACCESS CONTROL CARD READER POLE MOUNTED ACCESS CONTROL CARD READER VEHICLE BARRIER BOOM CONTROLLER AA – ACCESS ALARM AC – ACCESS CONTROL CR – CARD READER EO – EXIT OVERRIDE AO – ALARM OVERRIDE	C COMMUNICATION PANEL/JUNCTION BOX INTERCOM MASTER STATION INTERCOM SLAVE/SUBSTATION INTERCOM CALL PUSH BUTTON UNIT HORN/TRUMPET LOUDSPEAKER CEILING FLUSH MOUNTED LOUDSPEAKER WALL MOUNTED LOUDSPEAKER TALK-BACK WALL MOUNTED LOUDSPEAKER	COLUMN SPEAKER AT ATTENUATOR MJ MICROPHONE INPUT JACK IN 100x100 CONDUIT BOX SJ SPEAKER OUTPUT JACK IN 100x100 CONDUIT BOX FM FM OR AM ANTENNA AS SPECIFIED SOUND EQUIPMENT - CABINET RACK	COM - COMMUNICATION/INT BGM - BACK GROUND MUS WITHOUT AUDIBLE V (P.A.) CEILING MOUNTED MICROPHONE CADIO MICROPHON

Light well above

Light well above

286.50m

RETAINING WALL

Light well above

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NOTES: (1) - Contractor to ensure max distance between draw boxes 20	metres notwithstanding anything to contrary.	<i>v</i> . (2) –	Draw boxes required after every	y second 90 deg. be
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DRAWING NOTES:

0	05/07/23	СР	Original Issue	МК
REV	DATE	BY	DESCRIPTION	CHK
			REVISIONS	

BAKER TILLY HOUSE FIRST FLOOR 18 WESTVILLE ROAD WESTVILLE, 3629 P O Box 1469 WESTVILLE, 3630 TEL: +27 (031) 2667332 E-mail: ibuya@ibuya.co.za

PROJECT/SERVICES Newtown Conversion to Large Clinic

Electrical Installation

Security Level

n conduits to be spaced 35mm. minimum.

COMMUNICATION/INTERCOM
 BACK GROUND MUSIC SYSTEM WITH OR
WITHOUT AUDIBLE VOICE REINFORCEMENT
 (P.A.)
 CEILING MOUNTED MICROPHONE
 MICROPHONE
 RADIO MICROPHONE

FIRE ALARM PANEL/JUNCTION BOX ALARM BELL SMOKE IONISATION DETECTOR HEAT DETECTOR B BREAK GLASS UNIT

NOTES: (1) - Contractor to	o ensure max distance between draw boxes 20 r	metres notwithstanding anything to contro	лгу. (2) —	Draw boxes required after ever,	y second 90
\$\mathcal{S}\$ 100x100 CONDUIT BOX. \$\mathcal{S}\$ 100x100 CONDUIT BOX AT 500AFFL. \$\mathcal{S}\$ 100x100 CONDUIT BOX AT 1400AFFL \$\mathcal{L}\$ 100x50 CONDUIT BOX AT 300AFFL. \$\mathcal{L}\$ 100x50 CONDUIT BOX AT 300AFFL. \$\mathcal{L}\$ 100x50 CONDUIT BOX AT 1100AFFL. \$\mathcal{L}\$ 100x50 CONDUIT BOX. \$\mathcal{L}\$ 100x50 CONDUIT BOX. \$\mathcal{L}\$ ROUND CONDUIT BOX. \$\mathcal{L}\$ ROUND DRAW BOX \$\mathcal{L}\$ 100x100 DRAW BOX	P 100x50 BOX BEHIND POWER SKIRTING U CONDUIT TURNED UP ("D" FOR DOWN) DOWN CONDUCTOR TO EARTH OR EARTH TIE. SQUARE GALV. STEEL DRAW TRAY AS SHOWN SHOWN. SECTION OF CONDUIT OMITTED FOR CLARITY 20mm. DIA. CONDUIT. 25mm. DIA. CONDUIT. 32mm. DIA. CONDUIT.	OC OVERHEAD CAST-IN OS OVERHEAD ON SURFACE OR LAID ON CEILING. FC FLOOR SLAB CAST-IN. POWER SKIRTING TRUNKING CABLE SLEEVE. CABLE TRAY/LADDER POWER CABLE	 REFERENCE TO QUANTITY i.e. 3No. REFERENCE TO A DETAIL i.e. DETAIL 2. REFERENCE TO AN ELECTRICAL NOTE i.e. NOTE 4. #34 REFERENCE TO A STANDARD DRAWING i.e. STANDARD DRAWING No.34 CABLE NUMBER - REFER TO SCHEDULE FOR DETAILS 	T TELEPHONE JUNCTION BOX. INTERCOM JUNCTION BOX. D D DATA/COMMS JUNCTION BOX. S SECURITY, ETC. JUNCTION BOX D DISTRIBUTION BOARD POSITION. DB-1 BOARD DESIGNATION NUMBER. △ TELEPHONE POINT. DATA/COMMS OUTLET.	

A Image: Constraint of the consthe constraint of the constraint of the con	bend or 180 deg. tot	al of slow bends.	(3) – All unwired conduits to be provided	with draw wires. These will be withdrawn	and checked at random.	(4) -	- Cast i
SIVE INFRARED CURTAIN SIVE INFRARED CURTAIN ECTOR SIVE INFRARED CURTAIN ECTOR WALK THROUGH METAL DETECTOR CAM - CAMERA ER - ELECTRIC RELEASE CAM - CAMERA ER - ELECTRIC RELEASE CAM - CAMERA ER - ELECTRIC RELEASE CAM - CAMERA CAM - CA	A ON AUTO PANNING MOUNT A ON PAN & TILT MOUNT A ON AUTO PANNING IN PAQUE DOME COVER V CAMERA FIELD OF VIEW SIVE INFRARED CURTAIN	INFRARED BEAM TRANSMITTER AND RECEIVER INFRARED OR ULTRASONIC MOTION DETECTOR DOOR MONITOR - FLATLINE OF SYMBOL FACES ATTACK SIDE Image: Strategy of the symplection machine or letter/parcel bomb / explosive detector Image: Strategy of the symplection machine or letter/parcel bomb / explosive detector Image: Strategy of the symplection machine or letter/parcel bomb / explosive detector Image: Strategy of the symplection machine or letter/parcel bomb / explosive detector Image: Strategy of the symplection machine or letter/parcel bomb / explosive detector	P 220 VOLT POWER OUTLET FACILITY S SIGNAL OUTLET 2x4/4x4 FLUSH CONDUIT BOX. S SECURITY CONTROL PANEL/JUNCTION BOX Image: Control Co	EL – ELECTRIC LOCK/STRIKE MA – MOTION ALARM CR ACCESS CONTROL CARD READER CR POLE MOUNTED ACCESS CONTROL CARD READER VEHICLE BARRIER BOOM CONTROLLER AA – ACCESS CALARM AC – ACCESS CONTROL CR CARD READER EO – EXIT OVERRIDE AO – ALARM OVERRIDE	COMMUNICATION PANEL/JUNCTION BOX INTERCOM MASTER STATION INTERCOM SLAVE/SUBSTATION INTERCOM CALL PUSH BUTTON UNIT HORN/TRUMPET LOUDSPEAKER CEILING FLUSH MOUNTED LOUDSPEAKER WALL MOUNTED LOUDSPEAKER TALK-BACK WALL MOUNTED LOUDSPEAKER	COLUMN SPEAKER AT ATTENUATOR MICROPHONE INPUT JACK IN 100x100 CONDUIT BOX SJ SPEAKER OUTPUT JACK IN 100x100 CONDUIT BOX FM OR AM ANTENNA AS SPECIFIED SOUND EQUIPMENT - CABINET RACK	COM - BGM - COM -

This drawing is issued for Electrical purposes only, and should be read in conjunction with the Electrical Specification. Setting out of Electrical and Electronic accessories are to be as indicated on Architects details.

Refer to Architects and Structural Drawings for all building dimensions, latest building revisions and services.

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DRAWING NOTES:

0	05/07/23	СР	Original Issue		МК						
REV	DATE	BY	DESCRIPTION		CHK						
	REVISIONS										

PROJECT/SERVICES Newtown Conversion to Large Clinic

Electrical Installation

Ground Floor Access Control Layout

MICROPHONE RADIO MICROPHONE

ENGINEER:	DRAWN BY	DATE:		CHECKED	SCALE:			
MK	CP	05/0	7/23	MK	1.1	00		
					SIZE:	A1		
PROJECT No.	DRAWING N	lo.	SHEET	:	REV:			
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FILE:	LAYER	S:						

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90 deg. bend or 180 deg. total of slow bends. (3) - All unwired conduits to be provided with draw wires. These will be withdrawn and checked at random. (4) - Cast in conduits to be spaced 35mm. minimum. 100 deg. bend or 180 deg. total of slow bends. (3) - All unwired conduits to be provided with draw wires. These will be withdrawn and checked at random. (4) - Cast in conduits to be spaced 35mm. minimum. 100 deg. bend or 180 deg. total of slow bends. (3) - All unwired conduits to be provided with draw wires. These will be withdrawn and checked at random. (4) - Cast in conduits to be spaced 35mm. minimum. 100 stopped conducts 100 stopped conducts (4) - Cast in conduits to be spaced 35mm. minimum. (5) cable NUMBER - REFER CABLE SCHEDULE FOR DETAILS. 100 stopped conducts 160 sans 164-1 DUBLE SSO. (6) cable NUMBER - REFER CABLE SCHEDULE FOR DETAILS. (6) cable NUMBER - REFER CABLE SCHEDULE FOR DETAILS.													
Source carry size as the same carry size as t	90	deg. bend or 180 deg. total of slow b	ends. (3) - All un	wired conduits to be provided wi	ith draw	wires. These will be	withc	drawn and checked at rando	om.			(4) — Cast in conduits to	be spaced 35mm. minimum.
Image: Interprove Junction Box. Di 164 SANS 164-1 SSO ON PEDESTAL. Di 164 SANS 164-1 SSO ON PEDESTAL. Di 164 SANS 164-2 3 PIN SSO. Di 164 SANS 164-2 3 PIN SSO. Di 164 SANS 164-1 & 164-2 COMBINATION SSO. Di 164 SANS 164-1 & 164-2 COMBINATION SSO. Di 164 SANS 164-4 RED SSO (0' SHAVED EARTH PIN) Motion SENSOR Di SEcurity, etc. Junction Box. Di Stribution Board Position. Di Stribution Stribut	i.	SQUARE GALV. STEEL DRAW TRAY SIZE AS SHOWN. TELEPHONE JUNCTION BOX. DATA/COMMS JUNCTION BOX. SECURITY, ETC. JUNCTION BOX DISTRIBUTION BOARD POSITION. DB-1 BOARD DESIGNATION NUMBER.	 → 16A SANS 164-1 SWITCHED SOCKET OUTLET (SSO). → 16A SANS 164-1 DOUBLE SSO. → 16A SANS 164-1 SSO ON PEDESTAL. → 16A SANS 164-2 3 PIN SSO. → 16A SANS 164-4 & 164-2 COMBINATION SSO. → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-4 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN) → 16A SANS 164-7 RED SSO (0' SHAVED EARTH PIN)<	 GA SANS 164-3 U/S SOCKET OUTLET. SINGLE LEVER ONE WAY LIGHT SWITCH. INTERMEDIATE LIGHT SWITCH TWO WAY LIGHT SWITCH TWO WAY LIGHT SWITCH MOTION SENSOR E LIGHT SWITCH WITH MOTION SENSOR 	0 ⊕ ₽	LINEAR LUMINAIRE BULKHEAD/DOWNLIGHTER, ETC. WALL MOUNTED LUMINAIRES POLE MOUNTED LUMINAIRE.	$\triangle \Delta \Delta \overline{A} $	TELEPHONE POINT. TELEPHONE POINT ON PEDESTAL. DIRECT OUTSIDE LINE TELEPHONE POINT (CALL BOX). H TV OUTLET. DATA/COMMS OUTLET.	$P \oplus \oplus P_{p_{T}}^{\perp}$	BELL PUSH. BELL OUTLET. SIGN POINT. CLOCK OUTLET. PHOTOCELL	 3 2 4 #³⁴ 	REFERENCE TO QUANTITY i.e. 3No. REFERENCE TO A DETAIL i.e. DETAIL 2. REFERENCE TO AN ELECTRICAL NOTE i.e. NOTE 4. REFERENCE TO A STANDARD DRAWING i.e. STANDARD DRAWING No.34	$ \begin{array}{c} \hline 6 \\ \hline \\ \hline$

GENERAL NOTES

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DRAWING NOTES

1) Mechanical interlocking circuit breaker

0	7/9/23	CG	Original Issue	
REV	DATE	BY	DESCRIPTION	СНК
			REVISIONS	

ROJECT/SERVICES Newtown conversion to Large Clinic

Electrical Installation

Electrical Reticulation Schematic

ENGINEER:	DRAWN BY	DATE:		CHECKED	SCALE:	
M Kambaran	<u> </u>	6/0	/22		nt	S
M.Kallibarali	CG	6/9	/25		PAPER SIZE:	A1
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				DRAWING No.		SHEET:	APER SIZE: A3	REV.	DRAWING TITLE:		WESTVILLE, 3629 PO BOX 1469 WESTVILLE, 3630
(Original Issue	CG 10/7/21		23023-	-401	2 of 3	2	0	Main LV Board	"POWERING DEVELOPMENT"	TEL: +27 (031) 2667332
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WIRING

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