

C4.1: SITE INFORMATION

C4: SITE INFORMATION - JBCC 2000 PRINCIPAL BUILDING AGREEMENT (Edition 4.1 of March 2005)

Project title:	RENOVATIONS, REFURBISHMENTS AND UPGRADE OF EXISTING MUSEUM, OLIVE SCHREINER HOUSE, CRADOCK
Bid No:	AM:002-22/23

C4.1 Site Information

1. GENERAL

The site is located at 9 Cross Street, Cradock.

Bidders are requested to study the bid documents and inspect the premises in order to make themselves thoroughly acquainted with the nature and extent of the works to be executed, the conditions under which the work is to be carried out, the means of access to and exit from the site, the availability of or any limitations on working space, the size of the site, the location of the works, electricity and water supply, any restrictions imposed by other existing buildings, any limitations or restrictions imposed by local or other authorities in regard to access or any other aspect, and generally all circumstances and conditions under which the work under this contract has to be carried out and all matters which may in any way influence the cost, conduct or execution of the work and must allow in their quotation accordingly.

No claims arising from a bidder's failure to comply with the foregoing will be entertained.

The working areas available for site establishment and short-term storage of materials, access to the site, etc shall be limited to prescribed locations to be pointed out at the site inspection meeting.

The availability/provision of temporary services (water, electricity, etc) is described in the Contract Data.

The contractor shall take all appropriate measures necessary for the general security and safety of the Site of the Works, including the provision of any temporary fencing, hoardings, dust screens, temporary signs, etc is deemed necessary or are required by law, the cost of which shall be provided for in the Preliminaries Bill and no claims shall be entertained in this regard. Refer clause 12.1 of the Schedule of Variables, Section B, Preliminaries, forming part of C2.2: Bills of Quantities

Refer to the locality map annexed to this document (C5) for the location of the site.

C4.2: GEOTECHNICAL INFORMATION

GEOTECHNICAL ASSESSMENT REPORT

OLIVE SCHREINER HOUSE

FOR

AFRICOAST CONSULTING ENGINEERS (PTY) LTD

**TOSCALAB (Pty)
Ltd.**

CIVIL ENGINEERING MATERIALS LABORATORY
Reg.No. 2014/263692/07

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6001

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06 July 2022

TO WHOM IT MAY CONCERN

GEOTECHNICAL ASSESSMENT REPORT

OLIVE SCHREINER HOUSE

FOR

AFRICOAST CONSULTING ENGINEERS (PTY) LTD

Attached is the Geotechnical Assessment Report for the above contract.
The report was compiled by Tosca Lab (Pty) Ltd Civil Engineering Materials Laboratory.

Should you require any additional information, please do not hesitate to contact us.

Yours faithfully,



DEREK SOUTTER
CIVIL TECHNOLOGIST

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2. EXECUTIVE SUMMARY

Tosca Lab (Pty) Ltd was appointed by AfriCoast Consulting Engineers (Pty) Ltd (hereafter referred to as AfriCoast) to investigate and prepare a geotechnical assessment report for the proposed additions and renovations to the Olive Schreiner House museum in Cradock, in the Eastern Cape, South Africa.

The proposed site is located at 9 Cross Street, at the corner of Cross and Bree streets, Cradock. Access to the site is obtained via Cross Street. The site co-ordinates are approx. 32°10'24.93"S and 25°37'4.34"E. See Addendum B for locality plans and an aerial photograph.

The site contains the existing Olive Schreiner House building, with grassed garden areas and surrounded by trees along the erf perimeter.

Two test pit locations were supplied by AfriCoast. The test pits were excavated by a CAT 3CX TLB with an output of approximately 50kN. The intention was to excavate the test pits up to 2m depth, and no refusal was encountered.



All the test pits were profiled according to Jennings, Brink and Williams and two horizons of each of the test pits was tested, to establish a representative analysis across the site. When deciding which material to test, the selection was done endeavoring to identify the material in order for in-situ founding properties.

3 DCP tests (2m deep) were done from natural ground level.

The tests carried out on the material are the full range of Foundation Indicators, Modified AASHTO and CBR. The material has been classified by the Unified Soil Classification System, the TRH14 classification as well as the HRB Classification.

3. INTRODUCTION

3.1 Terms of Reference

This report presents the results of an engineering geological investigation for the proposed development of Olive Schreiner House, in Cradock. The aim of the investigation was to establish the surface and the subsurface engineering geological properties of the site.

3.2 Available Information

- a) Profile log's
- b) Foundation Indicator test results
- c) Dynamic Cone Penetrometer readings
- d) Geological Map : Chief Director of Surveys and Mapping: Scale 1:250 000

4. SITE DESCRIPTION

4.1 Location

The site is situated on Cross Street, between Bree and Hoof Streets, in Cradock, South Africa.

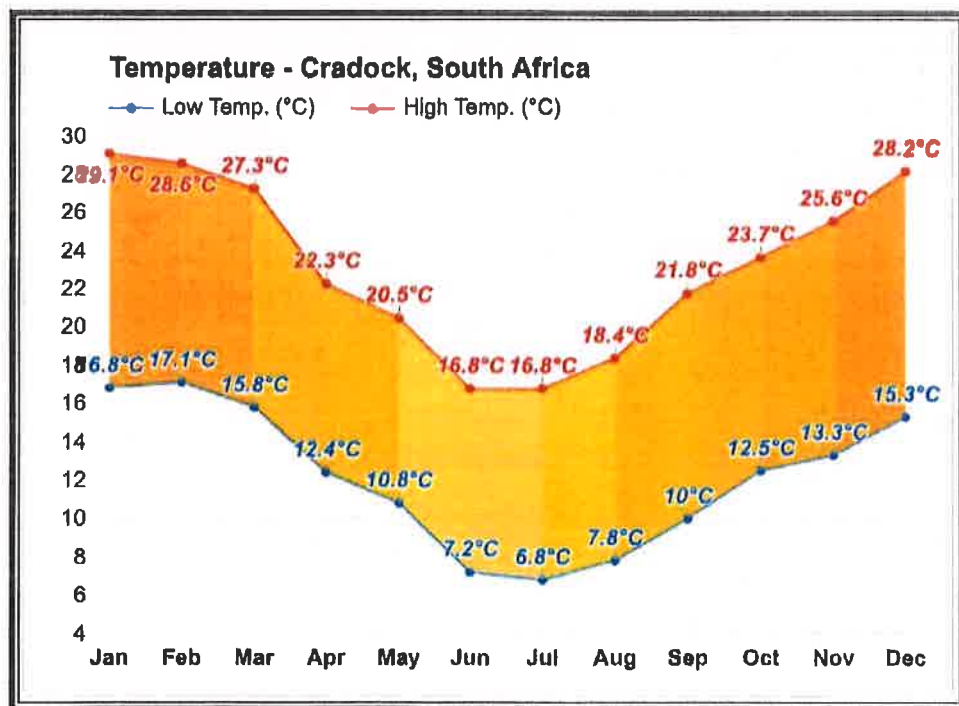
A locality plan is attached in Addendum B. The co-ordinates for the test pits and DCP's are noted on the profile logs.

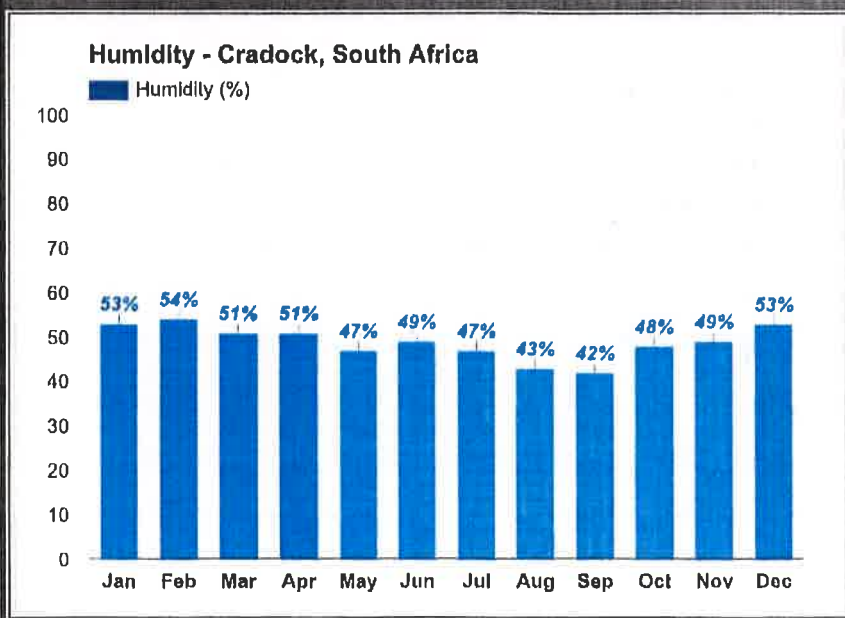
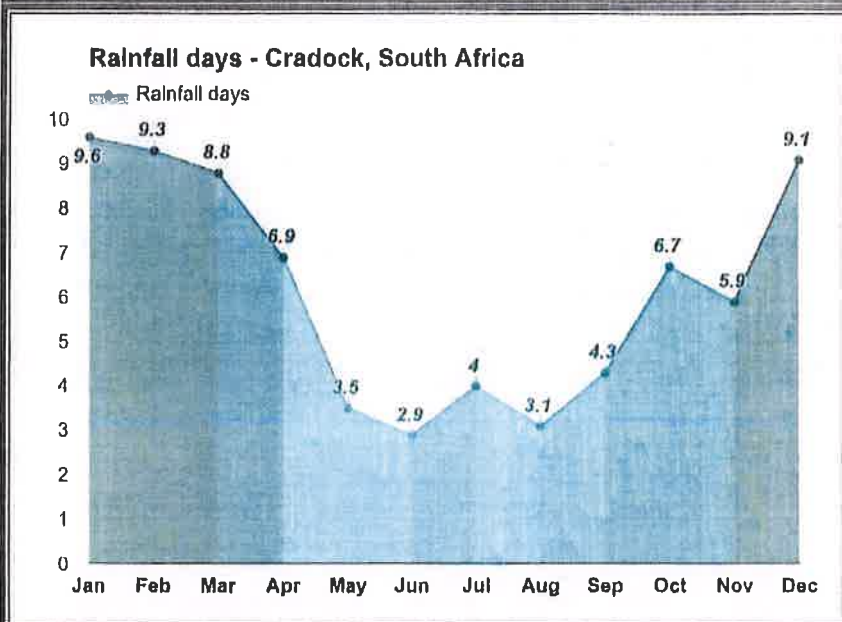
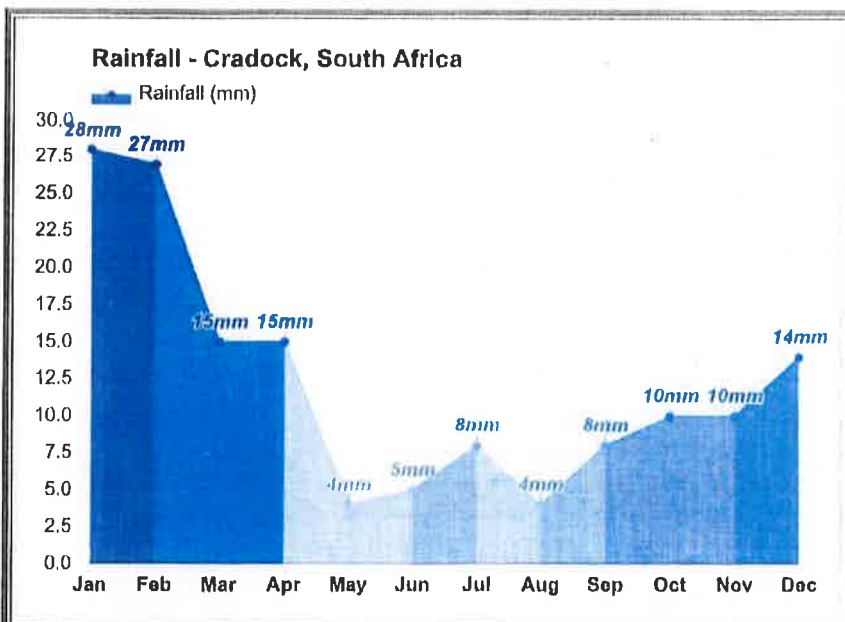
4.2 Vegetation

The site consists of grassed (lawn) garden areas, with trees/shrubs surrounding the perimeter of the property.

4.3 Climate

- The average temperature in Cradock, South Africa is 17.7 °C.
- The average temperature range is 11.1 °C.
- The highest monthly average high temperature is 29.1 °C in January.
- The lowest monthly average low temperature is 6.8 °C in July.
- Cradock's climate receives an average of 148 mm of rainfall per year, or 12 mm per month.
- The driest weather is in May when an average of 4 mm of rainfall (precipitation) occurs across 3 days.
- The wettest weather is in January when an average of 28 mm of rainfall (precipitation) occurs across 9 days.
- The average annual relative humidity is 49.0% and average monthly relative humidity ranges from 54% in February to 42% in September.
- The Köppen Climate Classification subtype for this climate is "BSk". (Tropical and Subtropical Steppe Climate).





5. GEOLOGY OF THE SITE

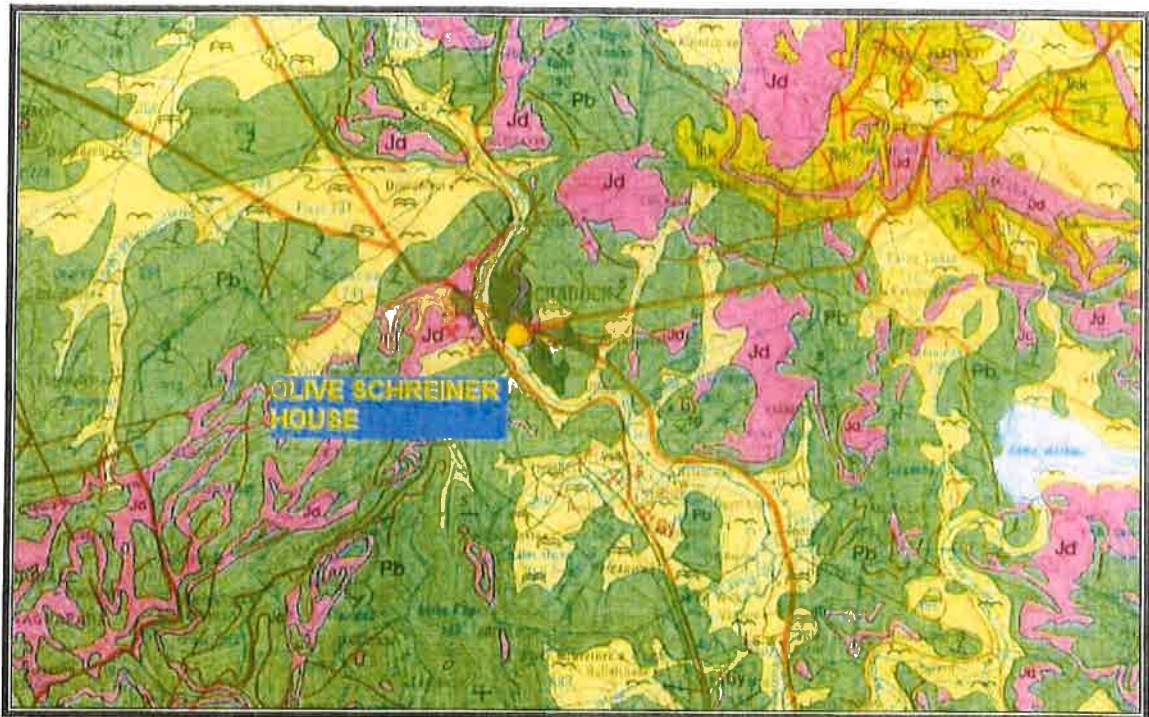


FIGURE 10-1

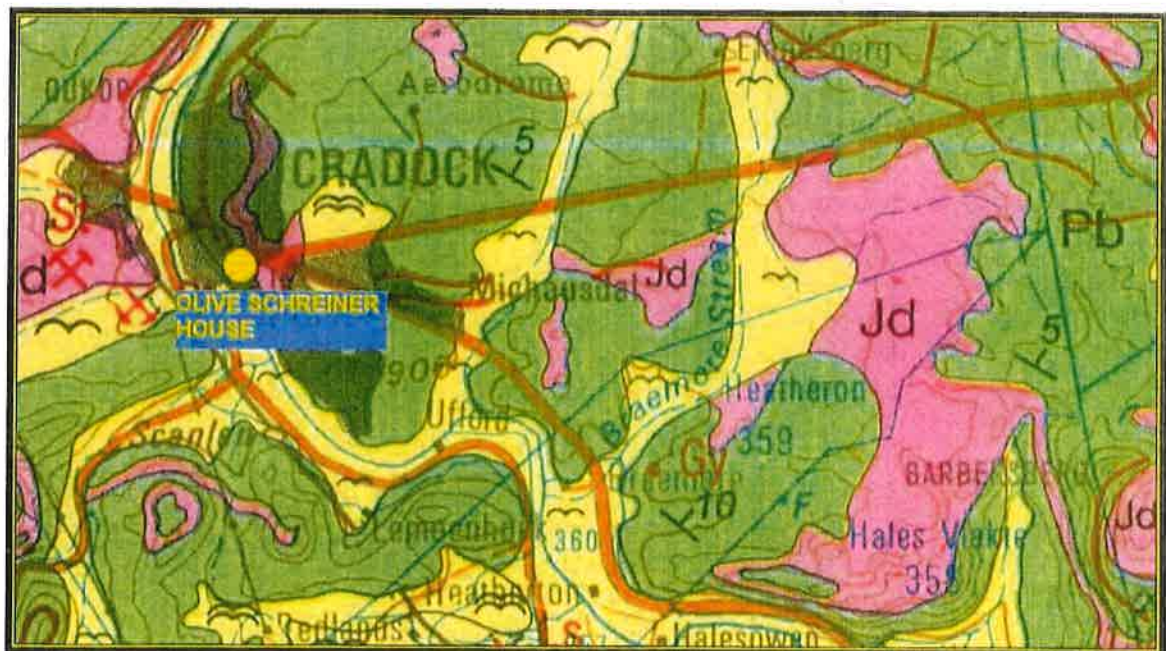


FIGURE 10-2

The geology of the study area is indicated in outline on the 1: 250 000 sheet 3224 Graaff Reinet (Figure 10-1), the relevant portion of which is shown above in Figure 10-2.

The site falls within the green Balfour formation of the Beaufort Group (Adelaide Subgroup), denoted on Figure 10-2 by "Pb", however Cradock has numerous Dolerite intrusions (marked in purple by "Jd"), Alluvium deposits along the river courses (~~~~) and calcrete outcrops (~~~~)

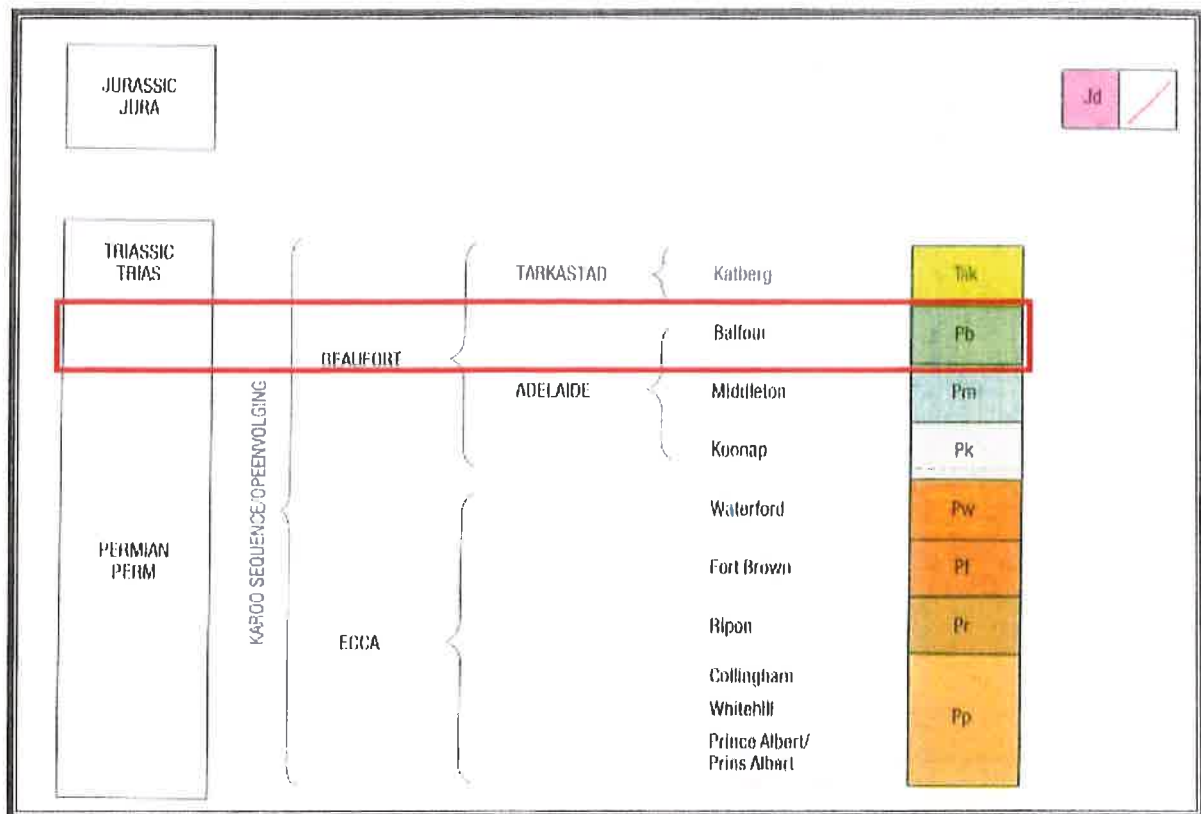


FIGURE 10-3

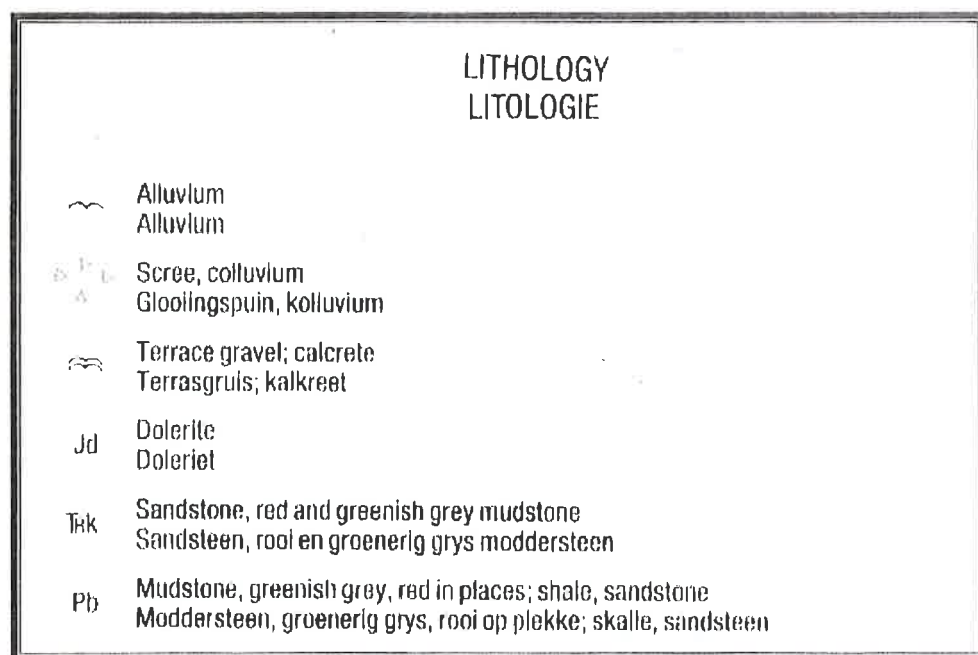


FIGURE 10-4

5.2 Balfour Formation – Adelaide Subgroup – Beaufort Group

The Balfour Formation is a geological formation that is found in the Beaufort Group, a major geological group that forms part of the greater Karoo Supergroup in South Africa. The Balfour Formation is the uppermost formation of the Adelaide Subgroup which contains all the Late Permian-aged biozones of the Beaufort Group. Outcrops and exposures of the Balfour Formation are found from east of 24 degrees in the highest mountainous escarpments between Beaufort West and Fraserburg, but most notably in the Winterberg and Sneeuweburg mountain ranges near Cradock, the Baviaanskloof river valley, Graaff-Reniet and Nieu Bethesda in the Eastern Cape, and in the southern Free State province.

The Balfour Formation overlies the Middleton Formation of the Adelaide Subgroup and underlies the Katberg Formation of the lower Tarkastad Subgroup, all comprising the greater Beaufort Group. The Balfour Formation is composed of five members which are listed below (from oldest to youngest):

- Oudeberg Member
- Daggaboersnek Member
- Ripplemead Member
- Elandsberg Member
- Palingkloof member

The rocks of the Balfour Formation also incorporate the entire *Daptocephalus* Assemblage Zone, the lowermost portion of the *Lystrosaurus* Assemblage Zone, and the uppermost rocks of the *Cistecephalus* Assemblage Zone. Up until the middle section of the Ripplemead Member, the Balfour Formation correlates with the near contemporaneous Teekloof Formation west of the 24 degrees from Beaufort West westwards, and to the Normadien Formation north of the Orange River. However, the Elandsberg and Palingkloof Members do not have any lateral correlates west of 24 degrees. This is either due to past erosion of the upper, unknown members of the Teekloof Formation or there was a sudden cessation of sedimentary deposition in the western section of the Karoo Basin.

The sedimentary rocks of this formation are composed predominantly of alternating greenish-grey, bluish-grey, and greyish red mudstone that often contain siltstone lenses. The mudstones are very fine-grained, massive and exhibit blocky weathering. Claystone successions are also found which, along with the mudstones, frequently contain desiccation cracks, raindrop impressions, and calcareous nodules or concretions are found throughout. Rhythmites are also found. Sandstones are less common, but some notable units have been studied in the Balfour Formation. In the lowermost section of the Balfour is a sandstone-rich unit known as the Oudeberg Member. The sandstones in this unit are very fine-grained and are rich in feldspar. Another sandstone unit in the middle of the Balfour Formation is the Daggaboersnek Member which contains thin, tabular sandstones, and ripple structures are common.

The presence of these rocks reveal much about the past environment that they were deposited in. The dominance of fine-grained mudstone and less common, fine-grained sandstones indicates that the rock sediments were deposited in a low-energy, fluvial environment, most likely one that had meandering rivers. At the time of sedimentary deposition, the Karoo retroarc foreland system was in an overfilled phase, and

purely terrestrial sediments occupied the Karoo Basin at this time. As this formation includes the rocks of both the Cistecephalus, Daptocephalus, Lystrosaurus Assemblage Zones, the Balfour Formation preserves the geological record for the end Permian extinction event. This is important as the end Permian extinction event was the largest mass extinction event in the Earth's history. This was followed by one of the worst biotic crises, which is reflected in the sudden and drastic sedimentary facies changes in the overlying Katberg Formation.

6. LABORATORY TESTING

Test Pit No.	Depth (mm)	Description	Indicator					In-Situ			Unified Soil Classification	TRH14 Classification	HRB Classification
			% PASSING			GM	PI	CBR	UCS	E-Moduli (MPa)			
			2.00	0.425	0.075			(%)	(kPa)				
TP 1	0-600	Dark Brown Silty Clayey Gravel	91	81.6	51.2	0.76	16	See Addendum D – DCP Reports			ML	<G9	A-6(4)
	600-1500	Light Brown Silty Clay	100	98.1	41.7	0.6	3	See Addendum D – DCP Reports			SM	G8	A-4(-1)
TP 2	800-1800	Light Brown Silty Clay	99	89.4	32.8	0.78	3	See Addendum D – DCP Reports			SM	G8	A-2-4(0)
	1800-2200	Light Orange Speckled Olive Silty Clayey Gravel	96	81.4	50.2	0.72	8	See Addendum D – DCP Reports			CL	<G9	A-4(1)

7. DISCUSSION

The material excavated and tested generally was of a fine grained nature of medium density, with good cohesiveness. The material in the upper layers have a relatively high plasticity index, with the material from the lower layers of a very fine grained nature, but with low to medium plasticity indices.

No ground water tables were encountered in any of the test pits.

8. CONCLUSION AND RECOMMENDATIONS

No adverse conditions totally prohibiting the proposed development were observed on site.

The general quality of materials tested was very poor (G8 and less than G9 quality) and is unsuitable for use as infills, in-situ layers, foundations or layer works, which should be imported from outside the site.

According to the SAICE Code of practice (Foundations and Superstructures for single story Residential Buildings and Masonry Construction) the site may be classed as "S" and is defined as fine grained soils (clayey silts and clayey sands of low plasticity), sands, sandy and gravelly soils.

Typical foundation recommendations are provided below based on the site classification. This however should be recommended by the Structural Engineer.

The foundation excavations should be inspected by a suitably qualified person prior to construction and attention must be given to proper site drainage.

TYPICAL FOUNDATION MATERIAL	CHARACTER OF FOUNING MATERIAL	EXPECTED RANGE OF TOTAL SOIL MOVEMENTS (mm)	ASSUMED DIFFERENTIAL MOVEMENT (% OF TOTAL)	SITE CLASS
Rock (excluding mud rocks which may exhibit swelling to some depth)	STABLE	NEGLIGIBLE	-	R
Fine grained soils with moderate to very high plasticity (clays, silty clays, clayey silts and sandy clays)	EXPANSIVE SOILS	<7,5 7,5-15 15-30 >30	50% 50% 50% 50%	H H1 H2 H3
Silty Sands, sands, sandy and gravelly soils	COMPRESSIBLE AND POTENTIALLY COLLAPSABLE SOILS	<5 5-10 >10	75% 75% 75%	C C1 C2
Fine Grained Soils (clayey silts and clayey sands of low plasticity), sands, sandy and gravelly soils	COMPRESSIBLE SOILS	<10 10-20 >20	50% 50% 50%	S S1 S2
Contaminated soils, Controlled fill, Dolomitic areas, Landslip, Landfill, Marshy areas, Mine waste fill, mining subsidence, Reclaimed areas, Uncontrolled fill, Very soft silts/silty clays	VARIABLE	VARIABLE		P

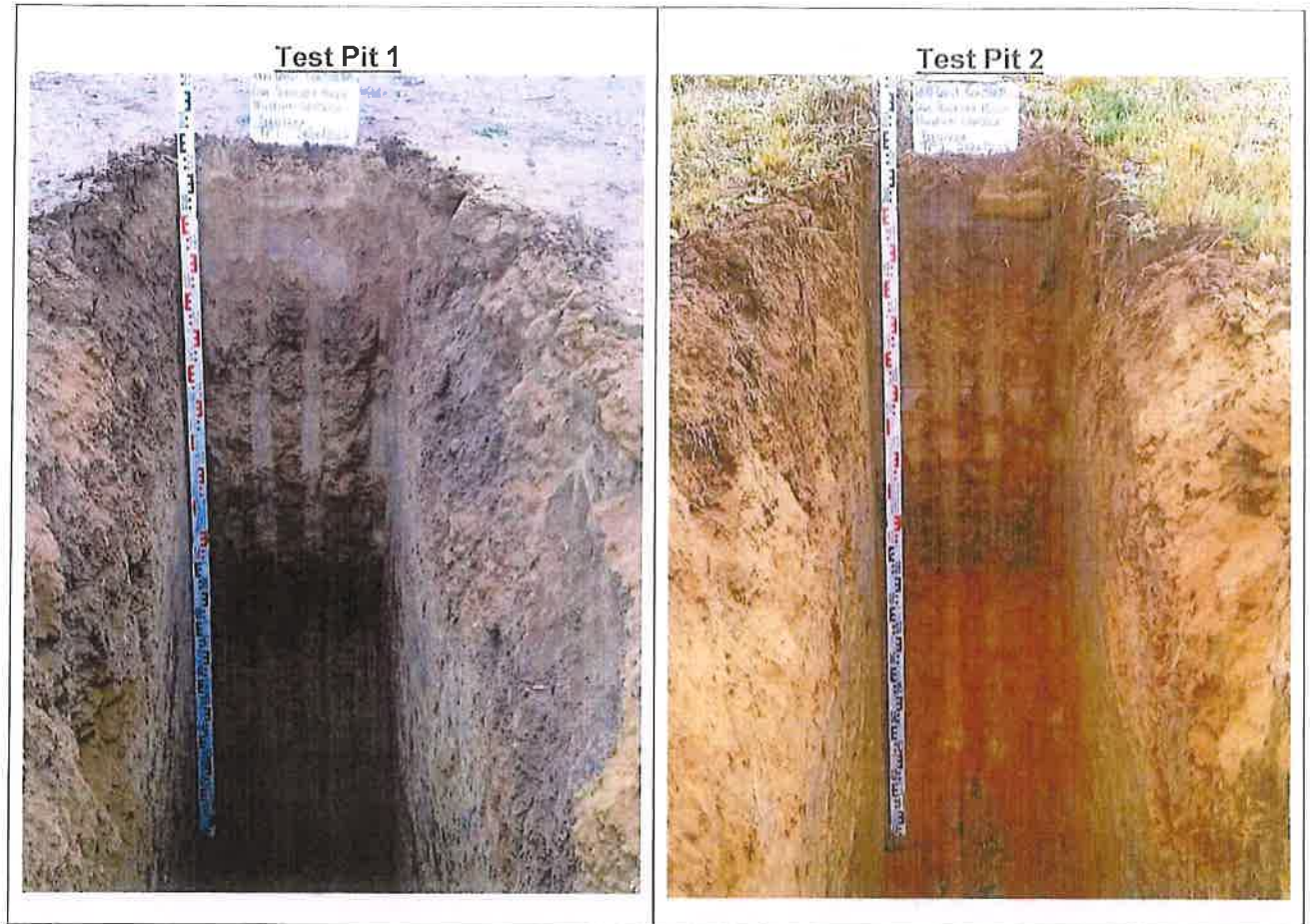
Foundation design, building procedures and precautionary measures

SITE CLASS	ESTIMATED TOTAL SETTLEMENT (mm)	CONSTRUCTION TYPE	FOUNDATION DESIGN AND BUILDING PROCEDURES (Expected damage limited to Category 1)
S	<10	Normal	<ul style="list-style-type: none"> * Normal construction (strip footing or slab-on-the ground) foundation. * Foundation bearing pressure not to exceed 50 kPa * Good site drainage.
S1	10-20	Modified normal	<ul style="list-style-type: none"> * Remove insitu material below foundations to a depth and width of 1,5 times the foundation width or to a competent horizon and replace with material compacted to 93% MOD AASHTO density at -1 % to + 2% of optimum moisture content. * Normal construction with lightly reinforced strip foundations and light reinforcement in masonry.
S1	10-20	Compaction of insitu soils below individual footings	<ul style="list-style-type: none"> * Remove insitu material below foundations to a depth and width of 1,5 times the foundation width or to a competent horizon and replace with material compacted to 93% MOD AASHTO density at -1 % to + 2% of optimum moisture content. * Normal construction with lightly reinforced strip foundation and light reinforcement in masonry.
S1	10-20	Deep strip foundations	<ul style="list-style-type: none"> * Normal construction with drainage precautions. * Founding on a competent horizon below the problem horizon.
S1	10-20	Soil raft	<ul style="list-style-type: none"> * Remove insitu material to 1,0 m beyond perimeter of building to a depth of 1,5 times the widest foundation or to a competent horizon and replace with material compacted to 93% MOD AASHTO density at -1 % to + 2% of optimum moisture content. * Normal construction with lightly reinforced strip footings and light reinforcement in masonry.
S2	>20	Stiffened strip footings, stiffened or cellular raft	<ul style="list-style-type: none"> * Stiffened strip footings or stiffened or cellular raft with lightly reinforced or articulated masonry. * Bearing pressure not to exceed 50 kPa. * Mesh reinforcement in floor slabs. * Site drainage and service/plumbing precautions.
S2	>20	Deep strip foundations	<ul style="list-style-type: none"> * As for S1 but with mesh reinforcement in floor slabs.
S2	>20	Compaction of insitu soils below individual footings	<ul style="list-style-type: none"> * As for S1.
S2	>20	Piled or pier foundations	<ul style="list-style-type: none"> * Reinforced concrete ground beams or solid slabs on piled or pier foundations. * Ground slabs with fabric reinforcement. * Good site drainage.
S2	>10	Soil raft	<ul style="list-style-type: none"> * As for S1.

9. REFERENCES

- Brink A B A. 1981. Engineering Geology of Southern Africa. Volume 2. Rocks of 2,000 to 300 million years in age.
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- Johnson, M.R.; Vuuren, C.J. Van; Visser, J.N.J.; Cole, D.I.; Wickens, H. De V.; Christie, A.D.M.; Roberts, D.L. (1997-01-01). Chapter 12 The foreland karoo basin, south africa. *Sedimentary Basins of the World*. Vol. 3. pp. 269–317.

10.ADDENDUM A – TEST PIT PHOTOS



11.ADDENDUM B – LOCALITY PLAN



AERIAL PHOTO



CUSTOMER : Africoast Engineers
P.O. Box 5104
Walmer
Port Elizabeth
6001

PROJECT : Olive Schreiner House - Cradock
DATE SAMPLED / RECEIVED : 24.06.2022
DATE : 05.07.2022
POSITION : S32°10'24.8" E25°37'05.3"
JOB CARD NUMBER : C30340
DESCRIPTION :

ATTENTION : Mr. Shulele Nowala

TEST HOLE 1

INDICATOR / CBR RESULT SUMMARY			
SAMPLE NUMBER	S11818	S11819	
DEPTH mm	0-600	600-1500	
HRB CLASSIFICATION			
TRH14 CLASSIFICATION	<G9	G8	
SIEVE ANALYSIS - SANS 3001 Test Method GR1			
106.0 mm			
75.0 mm			
63.0 mm			
50.0 mm			
37.5 mm			
28.0 mm			
20.0 mm	100		
14.0 mm	99		
5.00 mm	97		
2.00 mm	91	100	
0.425 mm	81.6	98.1	
0.075 mm	51.2	41.7	
0.060 mm	42.7	31.3	
0.006 mm	23.9	15.6	
0.0018 mm	14.5	6.3	
SOIL MORTAR ANALYSIS - SANS 3001 Test Method PR5			
COARSE SAND	10	2	
COARSE FINE SAND	7	5	
MEDIUM FINE SAND	11	21	
FINE FINE SAND	16	30	
PASSING 0.075mm	56	42	
GRADING MODULUS	0.76	0.6	
ATTERBERG LIMITS : SANS 3001 Test Method GR10			
LIQUID LIMIT	27	14	
PLASTICITY INDEX	16	3	
LINEAR SHRINKAGE	8.0	1.5	
C.B.R. : SANS 3001 Test Method GR30 - GR40			
MOD AASHTO (K _{at} m ³)	1855	2010	
O.M.C. (%)	15	12.2	
C.B.R. @ 100%	8	27	
C.B.R. @ 98%	7	22	
C.B.R. @ 95%	5	15	
C.B.R. @ 93%	4	13	
C.B.R. @ 90%	3	10	
SWELL (MASHTO) %	1.8	0.9	
The above test results are pertinent only to the samples received and tested at the laboratory. This report shall not be reproduced, except in full, without the prior consent of Tosca Lab (Pty) Ltd. * Indicate non-accredited tests			
2. The highlighted result is an interpretation of the direct comparison between the quoted specification and the single test sample result obtained.			
3. The results met/not met is based on an approximate 95% level of confidence with reference to ISO/IEC 98 - 4			
Environmental Conditions			



1. No ground water table.
2. No refusal.

[Signature]

Name: Frederik Eijbers
Technical Signatory

Revision 4

Tosca Lab TSF 159

13.07.2021

CUSTOMER : Africoast Engineers
P.O.Box 5104
Walmer
Port Elizabeth
6001

PROJECT : Olive Schreiner House - Cradock
DATE SAMPLED / RECEIVED: 24.06.2022
DATE : 05.07.2022
POSITION : S32°10'23.9" E25°37'06.1"
JOB CARD NUMBER: C30340
DESCRIPTION :

ATTENTION : Mr. Sbualele Nowala

TEST HOLE 2

INDICATOR / CBR RESULT SUMMARY				Depth (mm)	Profile
SAMPLE NUMBER	S11820	S11821			
DEPTH mm	800-1800	1800-2200			
HRB CLASSIFICATION	-	-			
TRH14 CLASSIFICATION	G8	<G9			
SIEVE ANALYSIS - SANS 3001 Test Method GR1					
106.0 mm					
75.0 mm					
63.0 mm					
50.0 mm					
37.5 mm					
28.0 mm					
20.0 mm					
14.0 mm					
5.00 mm	100	98			
2.00 mm	99	96			
0.425 mm	89.4	81.4			
0.075 mm	32.8	50.2			
0.060 mm	23.4	40.2			
0.006 mm	9.4	10.0			
0.0018 mm	3.7	5.0			
SOIL MORTAR ANALYSIS - SANS 3001 Test Method PR5					
COARSE SAND	10	15			
COARSE FINE SAND	5	4			
MEDIUM FINE SAND	21	11			
FINE FINE SAND	32	17			
PASSING 0.075mm	32	52			
GRADING MODULUS	0.78	0.72			
ATTERBERG LIMITS : SANS 3001 Test Method GR10					
LIQUID LIMIT	15	23			
PLASTICITY INDEX	3	8			
LINEAR SHRINKAGE	1.5	4.0			
C.B.R. : SANS 3001 Test Method GR30 - GR40					
MOD AASHTO (K _{ar} m ²)	1787	2003			
O.M.C. (%)	10.9	12.1			
C.B.R. @ 100%	28	9			
C.B.R. @ 98%	23	8			
C.B.R. @ 95%	16	7			
C.B.R. @ 93%	13	6			
C.B.R. @ 90%	9	3			
SWELL (AASHTO) %	1.0	0.8			

The above test results are pertinent only to the samples received and tested at the laboratory. This report shall not be reproduced, except in full, without the prior consent of Tosca Lab (Pty) Ltd. * Indicate non-accredited tests

- The highlighted result is an interpretation of the direct comparison between the quoted specification and the single test sample result obtained.
- The results met/not met is based on an approximate 95% level of confidence with reference to ISO/IEC 98 - 4

Environmental Conditions

Name: Frederik Eijbers
Technical Signatory

Revision 4

13.07.2021

Tosca Lab TSF 169

CLIENT: Africoast Engineers
P.O Box 5104
Walmer
Port Elizabeth, 6001
ATT: Mr. S. Nowala

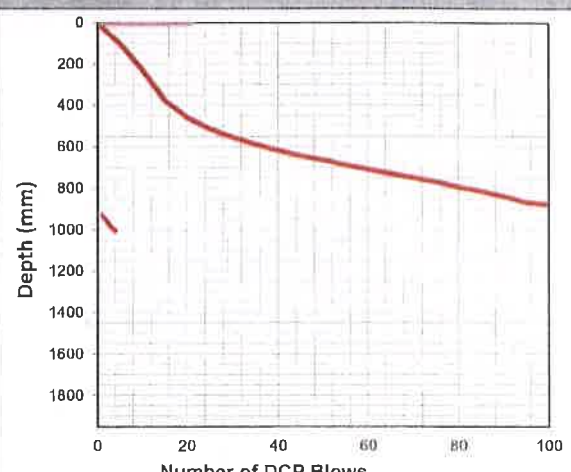
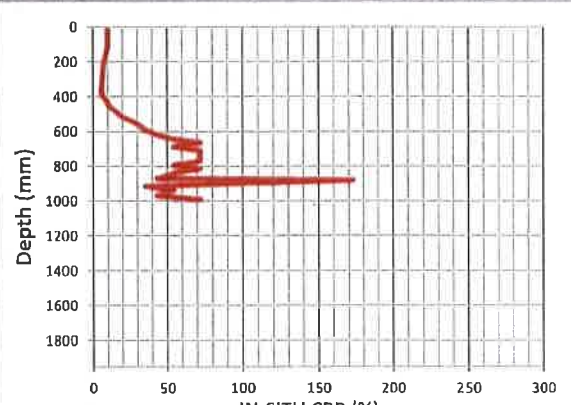
PROJECT : Olive Schreiner House - Cradock

Lab. Ref.: C30340 S11820

REF : C30340 : Pos.1 : S32°10'24.7" E25°37'05.2" @ NGL

DATE : 29.06.2022

DYNAMIC CONE PENETROMETER : METHOD ST6 : TMH 6

Field DATA										DCP Field Curve Profile									
Condition :		Sound			Moisture :		Optimum												
Other :																			
Depth (mm)	Cumulative No. Blows	Penetration Rate (mm)	Estimated Insitu CBR	Est. Insitu UCS (Kpa)	Depth (mm)	Cumulative No. Blows	Penetration Rate (mm)	Estimated Insitu CBR	Est. Insitu UCS (Kpa)										
15																			
110	5	19.0	10	114															
235	10	25.0	7	84															
385	15	30.0	6	69															
470	20	17.0	12	130															
525	25	11.0	20	210															
565	30	8.0	30	299															
600	35	7.0	36	347															
630	40	6.0	43	412															
655	45	5.0	54	505															
675	50	4.0	72	647															
700	55	5.0	54	505															
720	60	4.0	72	647															
740	65	4.0	72	647															
760	70	4.0	72	647															
780	75	4.0	72	647															
805	80	5.0	54	505															
825	85	4.0	72	647															
850	90	5.0	54	505															
880	95	6.0	43	412															
890	100	2.0	173	1397															
925	105	7.0	36	347															
950	110	5.0	54	505															
980	115	6.0	43	412															
1000	120	4.0	72	647															

The above test results are pertinent only to the samples received and tested by the laboratory. This report may not be reproduced, except in full, without the prior consent of Tosca Lab (Pty) Ltd. * Indicate non-accredited tests

Name : Frederik Eijbers
Position : Technical Signatory

CLIENT: Africoast Engineers
P.O Box 5104
Walmer
Port Elizabeth, 6001
ATT: Mr. S. Nowala

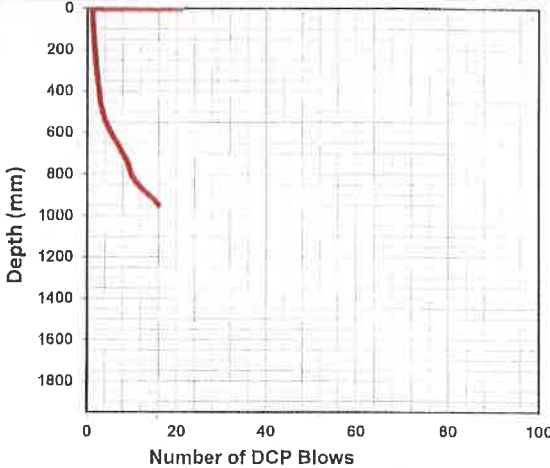
PROJECT: Olive Schreiner House - Cradock

Lab. Ref.: C30340 S11821

REF: C30340 : Pos.2 : S32°10'24.0" E25°37'06.4" @ NGL

DATE: 29.06.2022

DYNAMIC CONE PENETROMETER : METHOD ST6 : TMH 6

Field DATA										DCP Field Curve Profile
Condition :		Sound			Moisture :		Optimum			
Other :										
Depth (mm)	Cumulative No. Blows	Penetration Rate (mm)	Estimated Insitu CBR	Est. Insitu UCS (Kpa)	Depth (mm)	Cumulative No. Blows	Penetration Rate (mm)	Estimated Insitu CBR	Est. Insitu UCS (Kpa)	
50										
325	5	55.0	3	35						
505	10	36.0	4	56						
585	15	16.0	13	139						
630	20	9.0	26	263						
670	25	8.0	30	299						
705	30	7.0	36	347						
745	35	8.0	30	299						
785	40	8.0	30	299						
855	45	14.0	15	161						
885	50	6.0	43	412						
910	55	5.0	54	505						
930	60	4.0	72	647						
950	65	4.0	72	647						
970	70	4.0	72	647						
995	75	5.0	54	505						
	</									

The above test results are pertinent only to the samples received and tested by the laboratory. This report may not be reproduced, except in full, without the prior consent of Tosca Lab (Pty) Ltd. * Indicate non-accredited tests

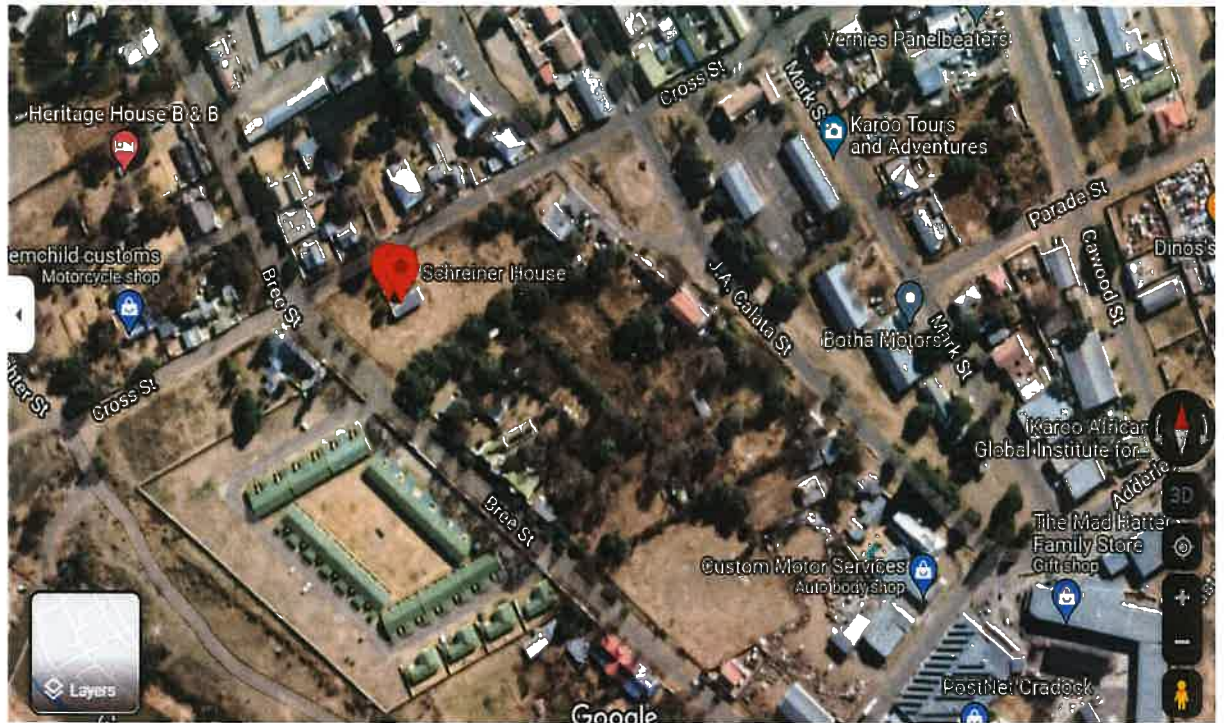
Signature PP

Name : Frederik Eijbers
Position : Technical Signatory

PART 4: APPENDICES

C5: LOCALITY MAP

C5: LOCALITY MAP



3 Cross Street, Cradock

C6: LAYOUT DRAWINGS

Floor Plans, Sections and Elevations 3 x A3

Position of new parapet shall fall on or within this wall.

201.4 Top of parapet

201.5 Ceiling level

0.00 F.F.L.

Old roofline

New roofline

Diagram illustrating the construction of a parapet wall. The wall is built up on an existing side wall. The diagram shows the parapet wall, the existing roof, and the existing side wall. Labels include: "New one brick parapet wall built up on existing side wall", "Parapet & base", "Use of existing roof", "Use of existing roof", "Parapet levels", "Ceiling level", and "Roof".

Architectural section drawing of a building facade showing a parapet wall and two windows. The drawing includes dimensions for the parapet wall (3536, 2173, 2099, 1792) and the ceiling level (3260). It also shows the positions of beams for a new roof structure. The drawing is labeled "New one brick parapet wall built up on existing side wall" and "Positions of beams of new Roofshtp to be constructed under later phases which are to be cantilevered over parapet wall". The drawing is dated 01/00 and includes a scale bar.

Existing front parapet

Line of new parapet

New galvanised sheetmetal flashing

New corrugated iron roof sheeting

75 x 50 S.A Fine purlins fixed @ max 900 cc fixed through screed into timber structure with hoop iron straps to DETAIL

Line of existing roof finish

75mm Lightweight concrete bed to specification

Min 250 micron plastic membrane to be folded up against all parapet walls to min 150 mm above boarding level and stapled / or otherwise fixed to the wall along the upper edge

50 x 70 x 75 Precast lightweight concrete spacer block under purlin

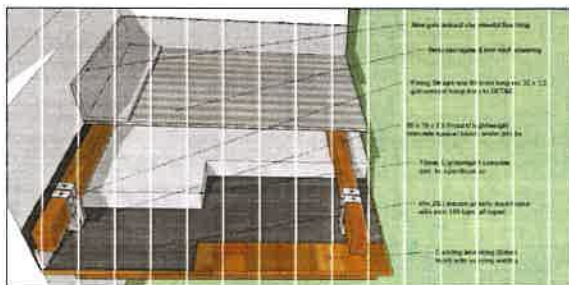
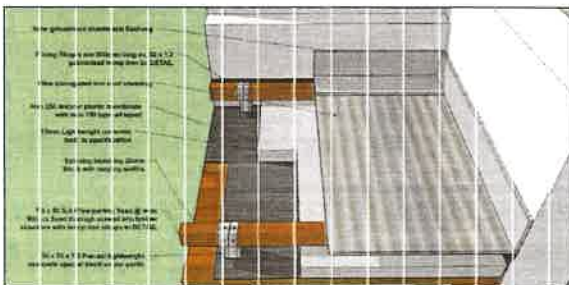
Existing boarding 20mm thick with varying widths

Existing timber joists of varying sections but generally 200 x 100 but 100 x 50 in Room 4

32 x 1,2mm galvanised hoop iron straps for fixing of purlins to be securely screwed through boarding into beams below - straps min centres 900mm - strap against front parapet may also be fixed into the inside face of the wall

Fixing Straps min 600mm long ex 32 x 1,2 galvanised hoop iron to DETAIL

Figure 1: Development length of reinforcement bars. The diagram shows a longitudinal section of a reinforced concrete beam with a total length of 600. It illustrates the placement of reinforcement bars (circles) and the development length (dashed lines) for a bar passing through a 'Spacer block'. Key labels include 'Side of purlin', 'Top of purlin', 'Side of purlin', 'Bottom of Spacer block', 'Side of purlin', 'Top of purlin', and 'Side of purlin'. The development length is indicated by dashed lines extending from the bar ends, with a 5-degree angle shown for the top and bottom bars.

[illegible]

GROUND PLAN
Scale 1:75

Legend:

- Wall marked thus represents position of proposed one brick plastered parapet to be raised above existing roof level to retain roof covering of proposed extension. HEIGHT OF PROPOSED PARAPET INDICATED BY SPHERE.
- Flashings marked thus
- - - - - And new barge flashings marked thus
- PORTION OF BUILDING MARKED SUCH INDICATES MINIMUM AREA TO BE REROOFED.

Notes:

- Allow for removal of existing roof sheathing and supporting gables. The provision of 250 micron DPM 70mm thick lightweight (Perlite / Vermiculite) screed to specification. The provision of new 75 x 50 purlins fixed through screed with hogg iron ties. New corrugated Iron Abzac 0.5mm AZ 106 on reflective underlay.
- RE-ROOF TO: Ceiling: Return existing Vapourbar ceiling Floor: Remove existing gables, make good surface bed apply self leveling screed and New resilient floor finish as per finishing schedule

Area Details:

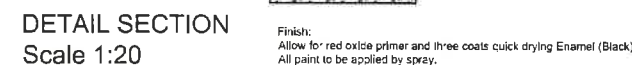
- Area 1: 23 m². Ceiling: Existing beam & board Floor: Existing board
- Area 2: 7 m². Extension of existing basement reduced with single waterproofed floor-slab to match existing
- Area 3: 27 m². Ceiling: Existing beam & board Floor: Existing board
- Area 4: 25 m². Ceiling: Existing beam & board Floor: Existing board
- Area 5: 16 m². Ceiling: Existing beam & board Floor: Existing board
- Area 6: 5 m². Ceiling: Rough existing Vapourbar ceiling Floor: Polished concrete floor
- Area 7: 10 m²
- Area 8: 5 m². Ceiling: Existing beam & board Floor: Existing board

Other Annotations:

- Existing Flagstone to be retained
- Existing Flagstone across
- Tree to be retained
- Tree to be removed
- Replace existing parapet with new parapet with 75 x 75 x 3 m³ Steel posts to DETAIL. See drawing no. W004. Height to suit.
- Replace decking of bridge with additional timber deck over existing structure (approx. area 2.5 m²)
- Allow for new kerbside wall 1200 x 200 x 75
- DRIVEWAY Existing flagstone paving to be retained
- STOEP
- W1, W2, W3, W4, W5, W6, W7, W8, W9, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19, W20, W21, W22, W23, W24, W25, W26, W27, W28, W29, W30, W31, W32, W33, W34, W35, W36, W37, W38, W39, W40, W41, W42, W43, W44, W45, W46, W47, W48, W49, W50, W51, W52, W53, W54, W55, W56, W57, W58, W59, W60, W61, W62, W63, W64, W65, W66, W67, W68, W69, W70, W71, W72, W73, W74, W75, W76, W77, W78, W79, W80, W81, W82, W83, W84, W85, W86, W87, W88, W89, W90, W91, W92, W93, W94, W95, W96, W97, W98, W99, W100, W101, W102, W103, W104, W105, W106, W107, W108, W109, W110, W111, W112, W113, W114, W115, W116, W117, W118, W119, W120, W121, W122, W123, W124, W125, W126, W127, W128, W129, W130, W131, W132, W133, W134, W135, W136, W137, W138, W139, W140, W141, W142, W143, W144, W145, W146, W147, W148, W149, W150, W151, W152, W153, W154, W155, W156, W157, W158, W159, W160, W161, W162, W163, W164, W165, W166, W167, W168, W169, W170, W171, W172, W173, W174, W175, W176, W177, W178, W179, W180, W181, W182, W183, W184, W185, W186, W187, W188, W189, W190, W191, W192, W193, W194, W195, W196, W197, W198, W199, W200, W201, W202, W203, W204, W205, W206, W207, W208, W209, W210, W211, W212, W213, W214, W215, W216, W217, W218, W219, W220, W221, W222, W223, W224, W225, W226, W227, W228, W229, W230, W231, W232, W233, W234, W235, W236, W237, W238, W239, W240, W241, W242, W243, W244, W245, W246, W247, W248, W249, W250, W251, W252, W253, W254, W255, W256, W257, W258, W259, W260, W261, W262, W263, W264, W265, W266, W267, W268, W269, W270, W271, W272, W273, W274, W275, W276, W277, W278, W279, W280, W281, W282, W283, W284, W285, W286, W287, W288, W289, W290, W291, W292, W293, W294, W295, W296, W297, W298, W299, W300, W301, W302, W303, W304, W305, W306, W307, W308, W309, W310, W311, W312, W313, W314, W315, W316, W317, W318, W319, W320, W321, W322, W323, W324, W325, W326, W327, W328, W329, W330, W331, W332, W333, W334, W335, W336, W337, W338, W339, W340, W341, W342, W343, W344, W345, W346, W347, W348, W349, W350, W351, W352, W353, W354, W355, W356, W357, W358, W359, W360, W361, W362, W363, W364, W365, W366, W367, W368, W369, W370, W371, W372, W373, W374, W375, W376, W377, W378, W379, W380, W381, W382, W383, W384, W385, W386, W387, W388, W389, W390, W391, W392, W393, W394, W395, W396, W397, W398, W399, W400, W401, W402, W403, W404, W405, W406, W407, W408, W409, W410, W411, W412, W413, W414, W415, W416, W417, W418, W419, W420, W421, W422, W423, W424, W425, W426, W427, W428, W429, W430, W431, W432, W433, W434, W435, W436, W437, W438, W439, W440, W441, W442, W443, W444, W445, W446, W447, W448, W449, W450, W451, W452, W453, W454, W455, W456, W457, W458, W459, W460, W461, W462, W463, W464, W465, W466, W467, W468, W469, W470, W471, W472, W473, W474, W475, W476, W477, W478, W479, W480, W481, W482, W483, W484, W485, W486, W487, W488, W489, W490, W491, W492, W493, W494, W495, W496, W497, W498, W499, W500, W501, W502, W503, W504, W505, W506, W507, W508, W509, W510, W511, W512, W513, W514, W515, W516, W517, W518, W519, W520, W521, W522, W523, W524, W525, W526, W527, W528, W529, W530, W531, W532, W533, W534, W535, W536, W537, W538, W539, W540, W541, W542, W543, W544, W545, W546, W547, W548, W549, W550, W551, W552, W553, W554, W555, W556, W557, W558, W559, W560, W561, W562, W563, W564, W565, W566, W567, W568, W569, W570, W571, W572, W573, W574, W575, W576, W577, W578, W579, W580, W581, W582, W583, W584, W585, W586, W587, W588, W589, W590, W591, W592, W593, W594, W595, W596, W597, W598, W599, W600, W601, W602, W603, W604, W605, W606, W607, W608, W609, W610, W611, W612, W613, W614, W615, W616, W617, W618, W619, W620, W621, W622, W623, W624, W625, W626, W627, W628, W629, W630, W631, W632, W633, W634, W635, W636, W637, W638, W639, W640, W641, W642, W643, W644, W645, W646, W647, W648, W649, W650, W651, W652, W653, W654, W655, W656, W657, W658, W659, W660, W661, W662, W663, W664, W665, W666, W667, W668, W669, W670, W671, W672, W673, W674, W67

[illegible]

Revision A - 22/07/2022
1. Drawing updated according to Structural Engineers design and specification.



100 x 55 IPE profile cut supports at end of rectangular tube beams

Bulking through beam

Form b-tube cap

15.5 x 15.5 x 1.6 A15 tube supports welded between beams @ 450 centres.

100 x 100 x 5 A160 steel rectangular tube beams

Form b-tube cap

CAPITAL

PCST

75 x 50 x 6 M.S. angle

15 x 15 M.S. square bar collar

40 x 6 M.S. flat bar collar

75 x 75 x 3 M.S. (square tube cap)

100 x 55 x 2 M.S. rectangular tube beams

End of rectangular tube to be closed with a steel plate to receive IPE support

15.5 x 15.5 x 1.6 A15 tube supports welded between beams @ 450 centres

100 x 55 IPE profile cut supports

Form b-tube cap

CAPITAL

75 x 50 x 6 M.S. angle

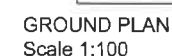
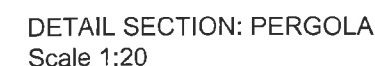
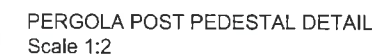
15 x 15 M.S. square bar collar

40 x 6 M.S. flat bar collar

75 x 75 x 3 M.S. (square tube cap)

ELEVATIONAL SECTION THROUGH BEARER
Scale 1:5

DETAIL ELEVATION: BEARER
Scale 1:5



GENERAL NOTES:
Copyright of this design and drawings are reserved.
Suggested dimensions are to be completed by client.
All dimensions & levels to be verified on site prior to commencement of work.
Discrepancies to be reported immediately.
All building work to be in compliance with National Building Regulations, South African National Standards and Local Authority By-laws.

CLIENT
AMAZWI S.A Museum of Literature

INFORMATION

TOWNSHIP	CRADOCK
ADDRESS	9 CROSS STREET
ERF NUMBER	2701 & 3654
ERF m²	

ALLOWED COVERAGE m^2
EXISTING m^2
ADDITIONAL m^2
TOTAL m^2
TOTAL COVERAGE %

Date	APRIL 2022
Designed	n/a
Drawn	JJ
Checked	PW _____ A-11lect
Scale	As Indicated on A1
Issued For:	DESIGN / COSTING INFORMATION

Project no.	GR14/03/02 (1)
Drawing no.	WD04
Revision	A

REVISIONS

Revision A - 07/06/2022

1. Additional Toilet (Room 6a) to be inserted into Store (Room E)
2. Inclusion of additional fibb door (D13).
3. Provision of steel pergola over back stoep between existing building and proposed outbuildings.
4. Provide new door & opening (D3a) to pattern of existing D3 between rooms 1 & 2b.
5. Provide new Hardwood door (D14) in position of window W6. Door to be pattern of existing D4 but without sidelights and with fanlight.

Revision B - 15/06/2022

1. Provision of new Section D - D

Revision C - 30/06/2022

1. Provision of new dwarf wall with wrought iron fence and gate between proposed new buildings.

Revision D - 22/07/2022

1. Provision of Door & Window types.
2. Drawing updated according to Structural Engineers design and specification.
3. Realignment of D5a & D7a
4. Indication of re-use of existing bookshop shelving Rooms 1 & 2a and kitchen layout in Room 2b.

NOTES

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SERVICE

PROPOSED ALTERATIONS
OLIVE SCHREINER HOUSE
PHASE 1

CLIENT

AMAZWI S.A Museum of Literature

DRAWING TITLE

WORKING DRAWING:
IKHAMANGA HALL
GROUND PLAN, SECTIONS & ELEVATIONS

INFORMATION

TOWNSHIP: CRADOCK
ADDRESS: 9 CROSS STREET
ERF NUMBER: 2701 & 3654
ERF m²:
ZONING:

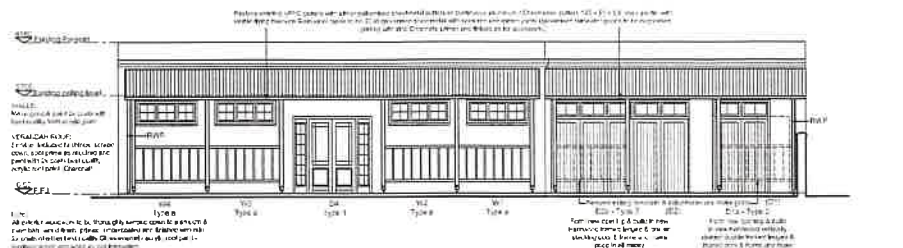
COVERAGE

ALLOWED COVERAGE %:
EXISTING m²:
ADDITIONAL m²:
TOTAL m²:
TOTAL COVERAGE %:

DRAWING INFORMATION

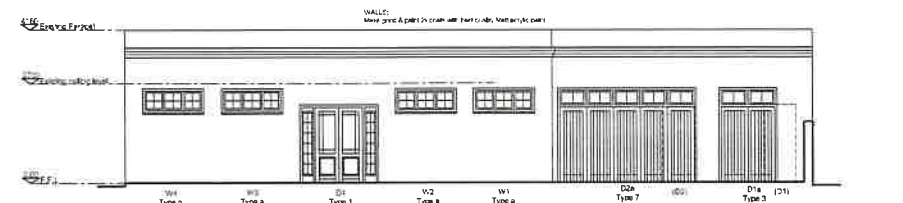
Date: APRIL 2022
Designed: n/a
Drawn: JJ
Checked: P/W
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Issued For: DESIGN / COSTING INFORMATION

Project no.: GR14/03/02 (1)
Drawing no.: WD03
Revision: A B C D



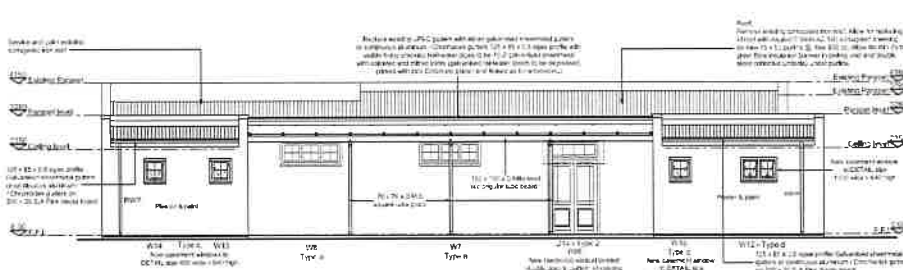
NORTH ELEVATION (With Verandah)

Scale 1:100



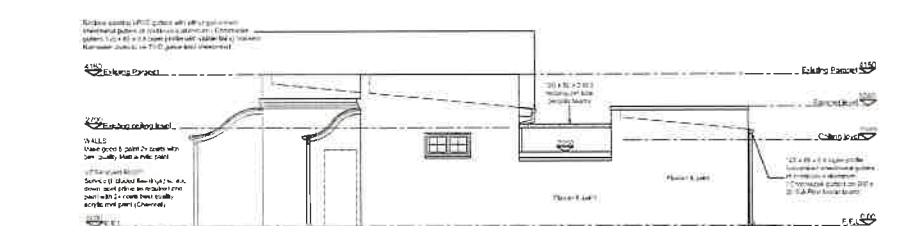
NORTH ELEVATION (Without Verandah)

Scale 1:100



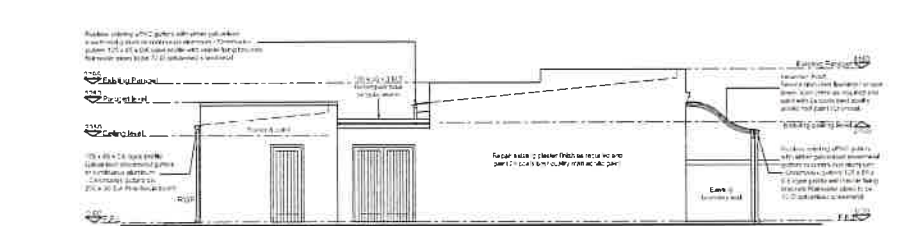
SOUTH ELEVATION

Scale 1:100



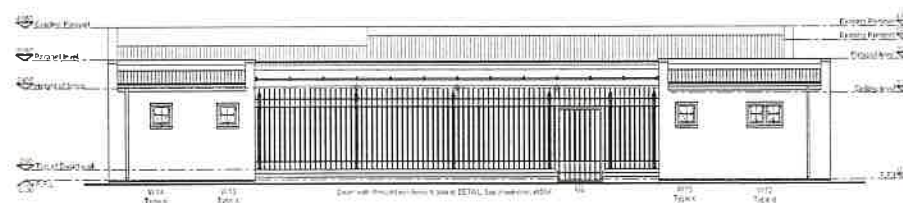
WEST ELEVATION

Scale 1:100



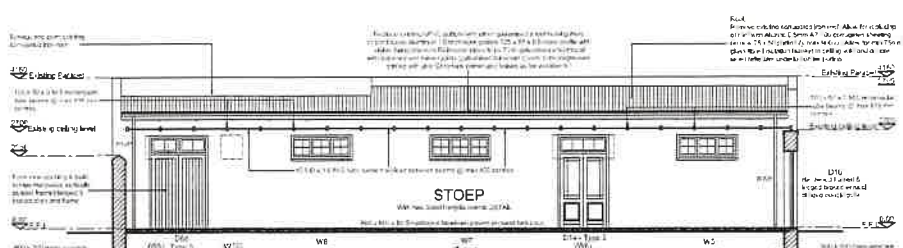
EAST ELEVATION

Scale 1:100



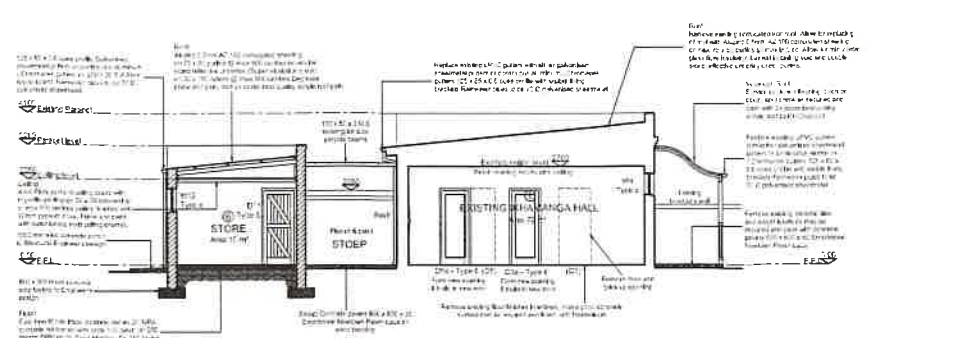
SOUTH ELEVATION With Wrought Iron Fence

Scale 1:100



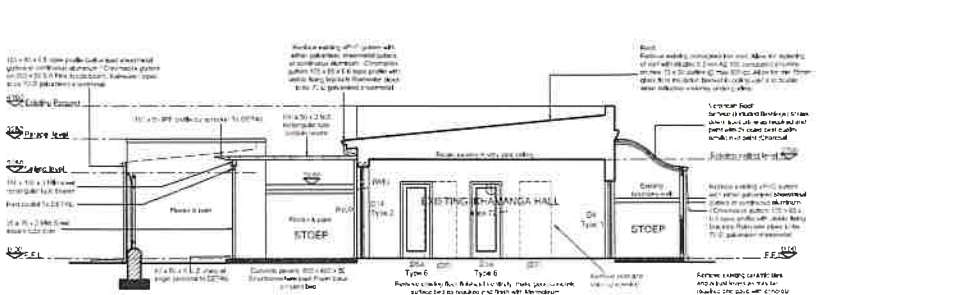
SECTIONAL SOUTH ELEVATION D - D

Scale 1:100



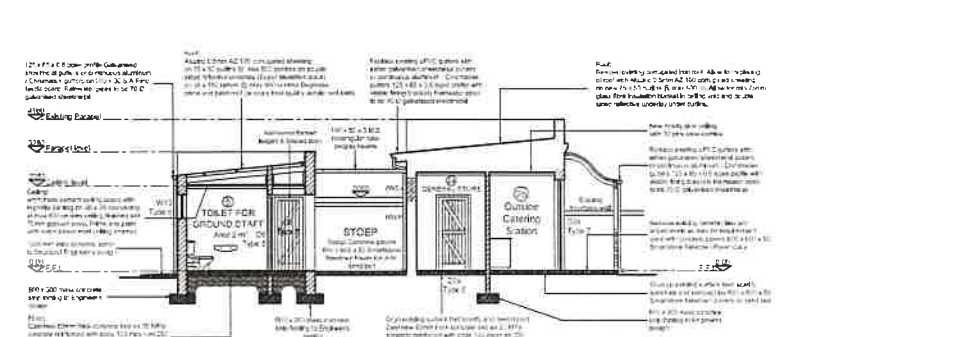
SECTION A - A

Scale 1:100



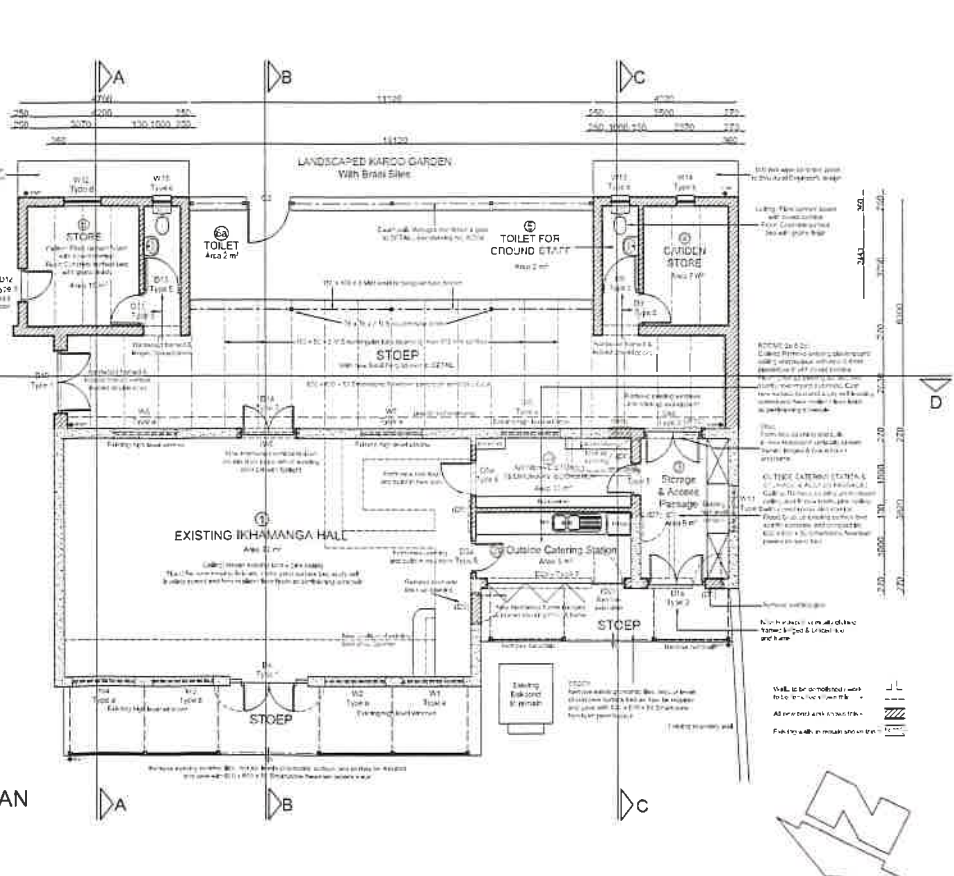
SECTION B - B

Scale 1:100



SECTION C - C

Scale 1:100



GROUND PLAN

Scale 1:100

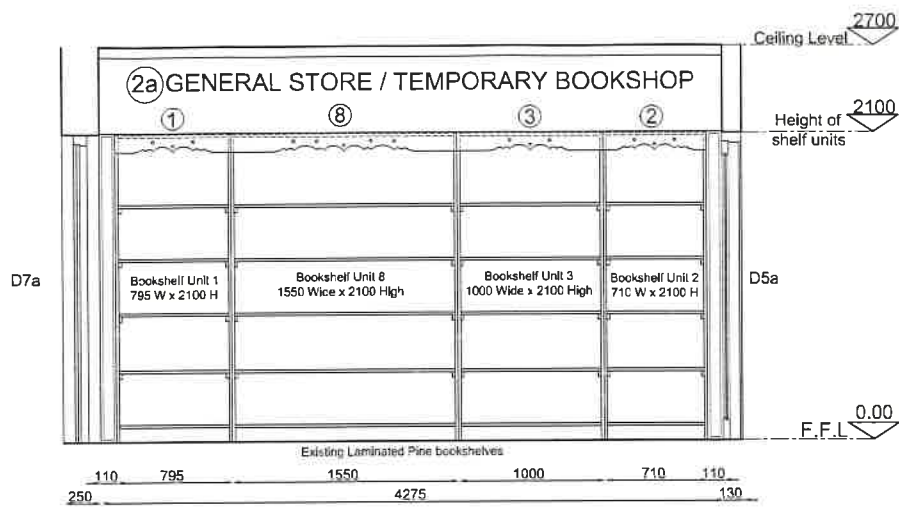
C7: DETAIL DRAWINGS

Joinery Schedule	-	2 x A3
Windows, Doors and Gate Schedule	-	3 x A3
Existing Gate Detail	-	2 x A4
Pergola Post Detail	-	1 x A4

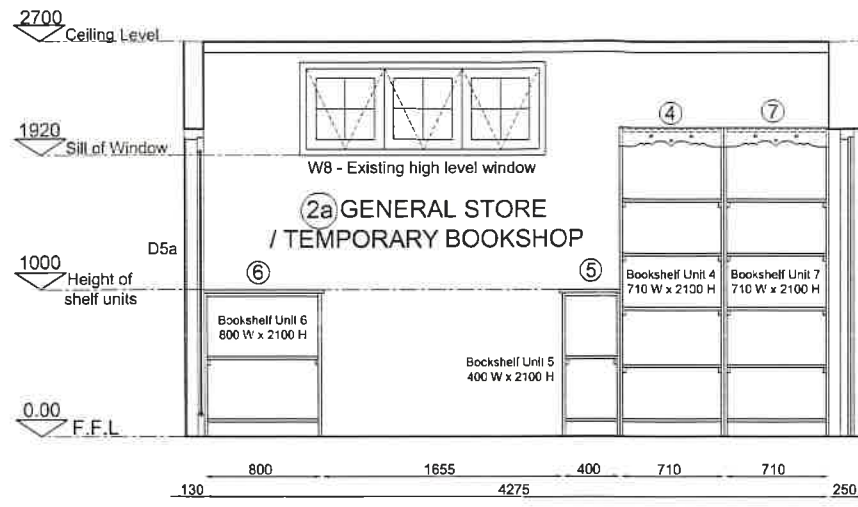
Plumbing and Drainage Details:

Sewer and Water Supply Details	-	1 x A3
Sewer Manholes	-	2 x A3

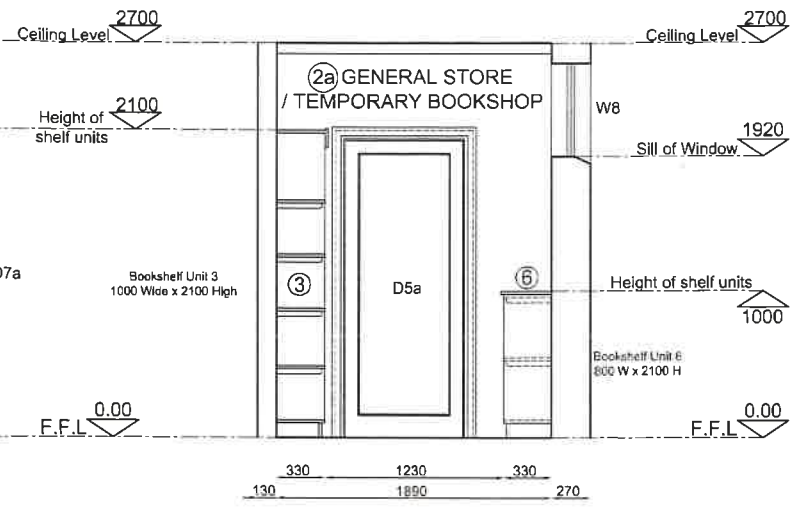
Joinery Schedule



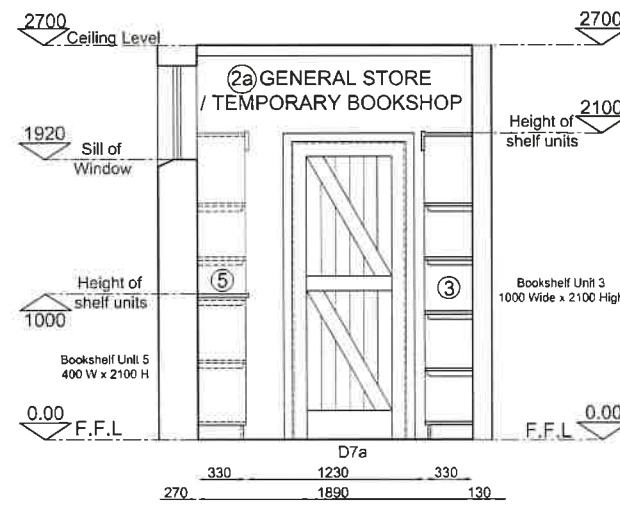
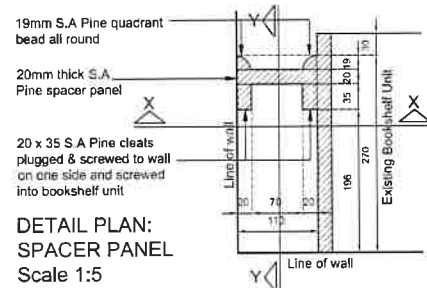
ELEVATION A
Scale 1:25



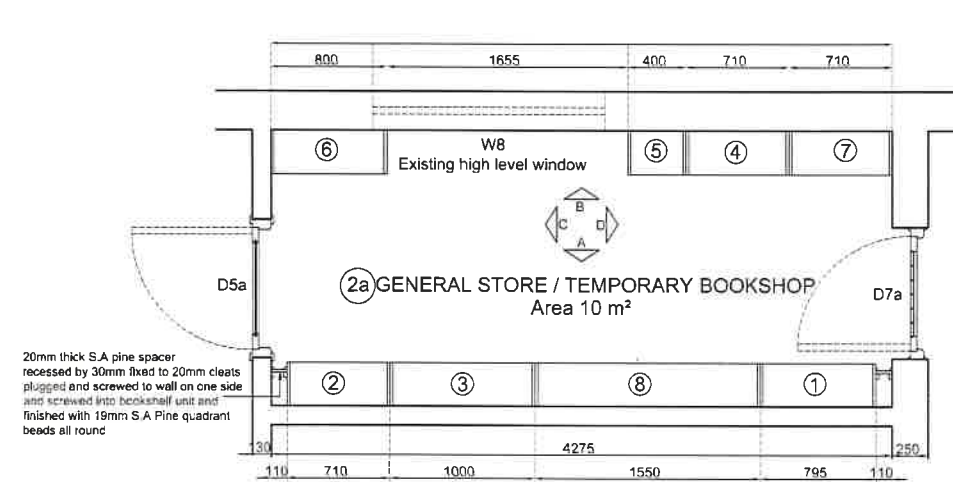
ELEVATION B
Scale 1:25



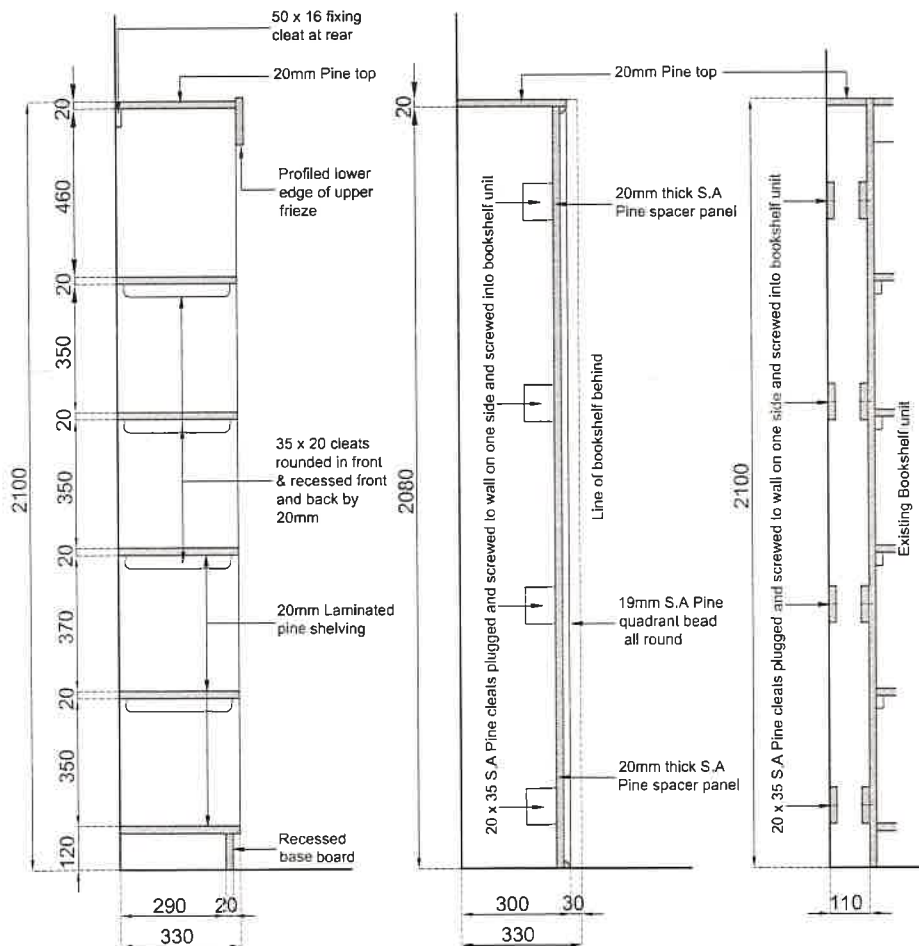
ELEVATION C
Scale 1:25



ELEVATION D
Scale 1:25



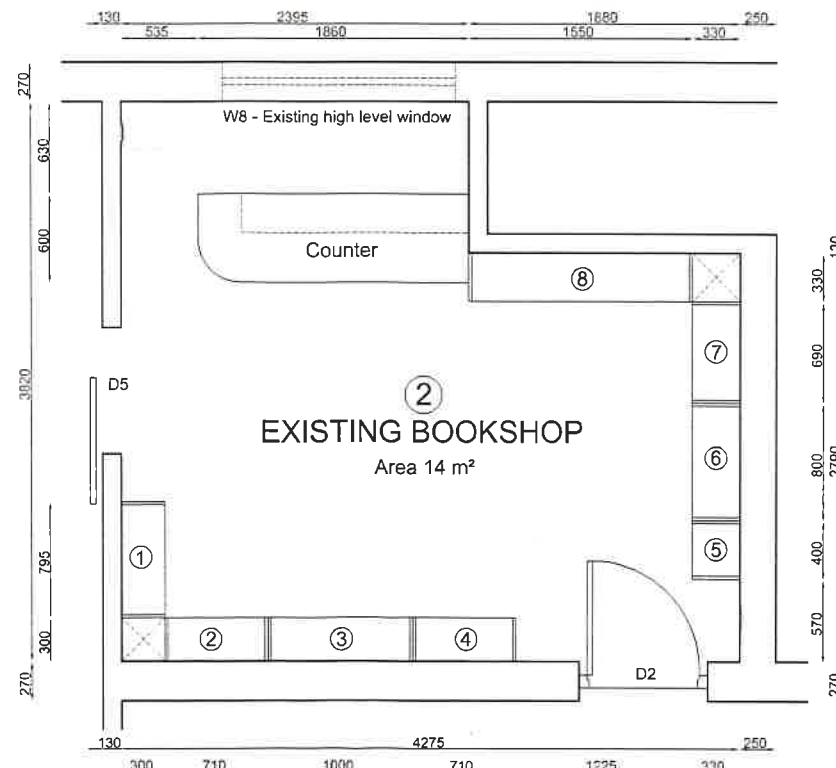
PLAN: PROPOSED BOOKSHOP LAYOUT
Scale 1:25



TYPICAL SECTION:
BOOK SHELF UNIT
Scale 1:10

SECTION Y - Y
SPACER PANEL
Scale 1:10

SECTION X - X
SPACER PANEL
Scale 1:10



PLAN: EXISTING BOOKSHOP LAYOUT
Scale 1:25

NOTES

FINISH:
Mali Units down and finish with 2 x coats best quality semi-gloss Polyurethane varnish



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SERVICE

PROPOSED ALTERATIONS
OLIVE SCHREINER HOUSE
PHASE 1

CLIENT

AMAZWI S.A Museum of Literature

DRAWING TITLE

WORKING DRAWING:
GENERAL STORE: TEMPORARY BOOKSHOP (ROOM 2)
DETAIL RE-USE OF EXISTING BOOKSHELVES

INFORMATION

TOWNSHIP: CRADOCK
ADDRESS: MURDOCH STREET
ERF NUMBER: 2701 & 2654
ERF m²:
ZONING:

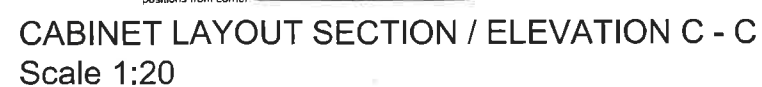
COVERAGE

ALLOWED COVERAGE %:
EXISTING m²:
ADDITIONAL m²:
TOTAL m²:
TOTAL COVERAGE %:

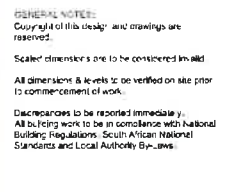
DRAWING INFORMATION

Date: JULY 2012
Designed: JJ
Drawn: JJ
Checked: PW
Scale: A1 - 1:10, 1:25
Issued For: DESIGN / COSTING INFORMATION

Project no.	GR14/03/02 (1)
Drawing no.	WDJ04
Revision	



1. Cabinet Carcassing:
 - 1.1. Concealed sides internal divisions, shelves etc. to be best quality 16mm thick white melamine faced particle board (MelaWood c.e.a.).
All visible edges to be finished with white high impact edging.
 - 1.2. Visible sides to consist of 16mm best quality melamine faced MDF with gloss finish (MelaWood SupaGloss c.e.a.). All visible edges to be finished with high impact edging of matching finish and colour.
2. Doors & Drawer-fronts:
 - 2.1. Doors and drawer-fronts to consist of 16mm best quality melamine faced MDF with white gloss finish (MelaWood SupaGloss c.e.a.). All visible edges to be finished with high impact edging of matching finish and colour.
3. Tops:
 - 3.1. Tops to be 30mm thick black granite – (selection in order of priority: Zimbabwe Black, Silver Star, Rustenburg Black or Star Galaxy Granite
4. Fills / Kicks/boars:
 - 4.1. To be 22mm thick hardwood to heights indicated on drawings.
 - 4.2. Allow for sanding down to even surface apply 2 coats best quality semi-gloss polyurethane varnish
5. Ironmongery & Fittings:
 - 5.1. Hinges to be best quality all metal concealed hinges with min. opening angle of 110°.
Hinge requirements as follows:
Doors less than 800mm high: 2 hinges
Doors between: 900mm and 1600mm high: 3 hinges
Doors between: 1600mm and 2000mm high: 4 hinges
Doors between: 2000mm and 2500mm high: 5 hinges
 - 5.2. Drawer runners to be best quality all metal ball bearing runners.
 - 5.3. Locks, where specified, to be best quality cabinet mortice cylinder locks.
 - 5.4. Drawer pulls and cupboard handles to be:
Roco Hanger handle no RF5361601281L – 15 Handles in total
Roco Hanger handle no RF5361602561L – 3 Handles in total



SERVICE

PROPOSED ALTERATIONS OLIVE SCHREINER HOUSE PHASE 1

CLIENT
AMAZWI S.A Museum of Literature

DRAWING TITLE
WORKING DRAWING:
OUTSIDE CATERING STATION (ROOM 2b)
CUPBOARD LAYOUT

INFORMATION

TOWNSHIP	CRADOCK
ADDRESS	9 CROSS STREET
ERF NUMBER	2701 & 3654
ERF m²	
ZONING	

COVERAGE

ALLOWED COVERAGE %	
EXISTING m ²	
ADDITIONAL m ²	
TOTAL m ²	
TOTAL COVERAGE %	

DRAWING INFORMATION

Date	JULY 2022
Designed	na
Drawn	JJ
Checked	FW _____ Architect
Scale	A1 - 1:25
Issued For:	DESIGN / COSTING INFORMATION

Project no.	GR14/03/02 (1)
Drawing no.	WDJ05
Revision	

Windows, Doors and Gate Schedule

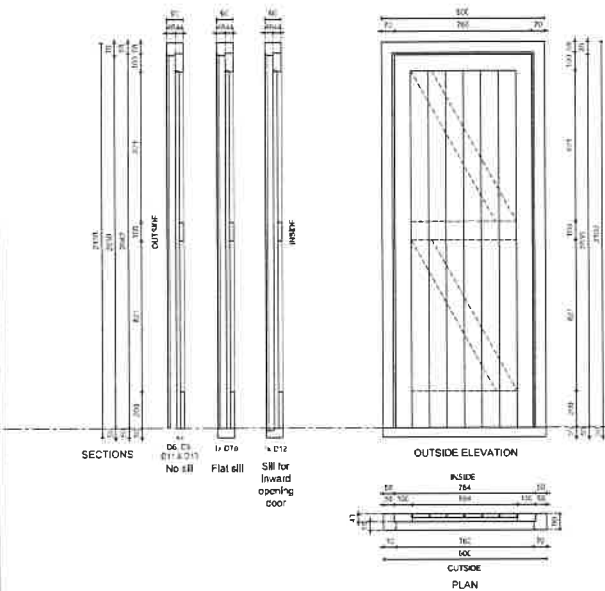
Type 1	1x	Position	D4 (Existing)
		Frame	Existing frame to be retained in existing position Renovate / repair as may be required / instructed.
		Door	Existing door to be retained. Renovate / repair as may be required or instructed
		Sidelights	Existing sidelights to be retained. Renovate / repair as may be required or instructed.
		Trim	19mm Meranti quadrant bead at wall and frame interface both internally and externally.
		Finish	Internally: Matt down timber and apply 2 x coats best quality semi-gloss polyurethane varnish. Externally: Sand down timber to remove varnish residue Apply primer, 1x coat universal undercoat and 2x coats best quality gloss enamel or best quality acrylic roof paint.
Scale 1:20	F.F.L	Ironmongery	Fit new lock: Union L - 2209-78 SS Commercial grade Euro-cylinder lock with Double cylinder 2x18SCMKD (KA with D14) Union 2900SS rebate set Door Furniture: Union SS-00-06SS Eagle lever handle on rose Union SS 5375 -24SS escutcheon plate All other ironmongery to be retained.
		Glazing	Renovate / repair glazing and fixing as may be required / instructed.

Type 2	1x	Position	D14
		Frame	70 x 90 Meranti frame with 50 x 90 Meranti sill for outward opening door.
		Door	Meranti Vertically divided double (Happy) door with 44 x 100 top rail and stiles, meeting stiles to be 44 x 112 to accommodate rebate, 44 x 150 lock rail, 44 x 200 bottom rail with cushion panel set in lower part of door. 44 x 20 glazing bars
		Fanlight Fixed	Meranti fanlight with 20 x 50 top rail & stiles 30 x 70 bottom rail & 30 x 20 glazing bars
		Trim	19mm Meranti quadrant bead at wall and frame interface both internally and externally.
		Finish	Internally: Sand to a smooth and even surface and apply 2 x coats best quality semi-gloss polyurethane varnish. Externally: Sand to a smooth and even surface, prime apply 1x universal undercoat and 2x coats best quality gloss enamel or best quality acrylic roof paint.
Scale 1:20	F.F.L	Ironmongery	Hinges: 2 pairs best quality Stainless steel projection / parliament hinges to suit. Lock: Union L - 2209-78 SS commercial grade Euro-cylinder lock with Union 2 x 18SCMKD (KA with D1) Double cylinder Union 2900SS rebate set Barrel bolts: 2 x best quality approved stainless steel flush bolts. Lower bolt to have dust excluding keeps set in floors Cabin Hooks: 2 x Best quality approved solid brass satin chrome 150mm cabin hooks fixed to hardwood blocks plugged and screwed into walls Door Furniture: Union SS-00-06SS Eagle lever handle on rose Union SS 5375 -24SS escutcheon plate
		Glazing	Door: 6mm laminated safety glass set in putty Fanlight: 3mm clear float glass set in putty

Type 3	2x	Position	D1a, D6a
		Frame	70 x 90 Meranti frame with 50 x 70 Meranti sill for inward opening door.
		Door	Meranti Vertically divided double framed ledged and braced batten door with 44 x 100 top rail and stiles, bottom rail 22 x 200, 22 x 100 brace and intermediate rail and 22 x 100 mm V-jointed t & g battens (nominal)
		Fanlight Outward Opening	Meranti fanlight with 30 x 50 top rail & stiles 30 x 70 bottom rail & 30 x 20 glazing bars
		Trim	19mm Meranti quadrant bead at wall and frame interface both internally and externally.
		Finish	Internally: Sand to a smooth and even surface and apply 2 x coats best quality semi-gloss polyurethane varnish. Externally: Sand to a smooth and even surface, prime apply 1x universal undercoat and 2x coats best quality gloss enamel or best quality acrylic roof paint.
Scale 1:20	F.F.L	Ironmongery Door	Hinges: Two pairs best quality 100 x 75 Stainless steel butt hinges with double steel washers. Doorslop: 2 x Union 8700 1 SS Lock: Union L-2209-78 SS commercial grade Euro-Cylinder lock with Union 2 x 18 SCMKD double cylinder Union 2900 SS rebate set. Door Furniture: Union SS-00-06SS Eagle lever handle on rose Union SS 5375 -24SS escutcheon plate Barrel bolts: 2 x 150mm approved Solid brass barrel bolts with satin chrome finish. With lower bolt to have dust excluding keep set in floor
		Ironmongery Fanlight	Hinges: 2 x best quality approved friction hinges. Fanlight Slays: 300mm best quality solid brass fanlight stay with satin chrome finish.
		Glazing	Fanlight: 3mm clear float glass set in putty

Type 4	1x	Position	D10
		Frame	70 x 90 Meranti frame without sill
		Door	Meranti Vertically divided double framed ledged and braced batten door with 44 x 100 top rail and stiles, bottom rail 22 x 200, 22 x 100 brace and intermediate rail and 22 x 100 mm V-jointed t & g battens (nominal)
		Fanlight	NONE
		Trim	19mm Meranti quadrant bead at wall and frame interface both internally and externally
		Finish	Sand to a smooth and even surface, prime. Apply 1x undercoat and 2x coats best quality gloss enamel or best quality acrylic roof paint. timber sealer internally and externally.
Scale 1:20	F.F.L	Ironmongery	Hinges: Two pairs best quality 75 x 100 stainless steel butt hinges with double steel washers. Cabin Hooks: 2 x Approved best quality 250mm solid brass cabin hooks (satin chrome finish) fixed to hardwood blocks plugged and screwed into walls. Lock: Union L-2209-78 SS commercial grade Euro-Cylinder lock with Union 2 x 18 SCMKD double cylinder Union 2900 SS rebate set. Door Furniture: Union SS-00-06SS Eagle lever handle on rose Union SS 5375 -24SS escutcheon plate Barrel bolts: 2 x 300mm approved galvanised monkey tail bolts.
		Glazing	NONE

Type 5

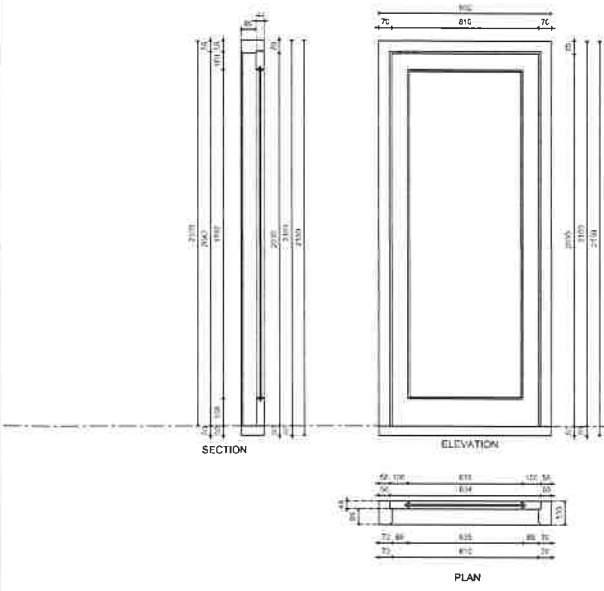


Scale 1:20

6x

Position	IKHAMANGA HALL
Frame	D7a, D8, D9, D11, D12 & D13 70 x 90 Meranti frame with 50 x 90 Meranti sill for inward opening door for D12 only. D7a to receive a 50 x 90 Meranti flat sill for internal doors. All other frames to be without sills.
Door	Meranti Framed ledged and braced batten door with 44 x 100 top rail and stiles 22 x 200 Bottom rail and 22 x 100 legde and braces 22 x 100 V-jointed t & g battens (nominal)
Fanlight	NONE
Trim	19mm Meranti quadrant beads on both sides when set in one brick wall. 19mm quadrant bead on outside and 60 x 19 bullnose architrave on inside when set in half brick wall.
Finish	Internally: Sand to a smooth and even surface & apply 2 x coats best quality semi-gloss polyurethane varnish. Externally: Sand to a smooth and even surface, prime apply 1x universal undercoat and 2x coats best quality gloss enamel or best quality acrylic roof paint.
Ironmongery	Hinges: One pair best quality 100 x 75 Stainless steel butt hinges with double steel washers. Doorstop: Union 87001 SS Lock: All doors to receive Union L-2209-78SS commercial grade Euro-cylinder locks. Cylinders: D7a: 2 x 18 SCMKD (KA with D5a) D11 & D12: 2 x 18 SCMKD / KA double cylinder D9 & D13: 2 x 19 SCMKD cylinder with knob internally D8: 2 x 20 SCMKD single cylinder Door Furniture: Union SS-00-06SS Eagle lever handle on rose Union SS 5375 -24SS escutcheon plate
Glazing	NONE

Type 6

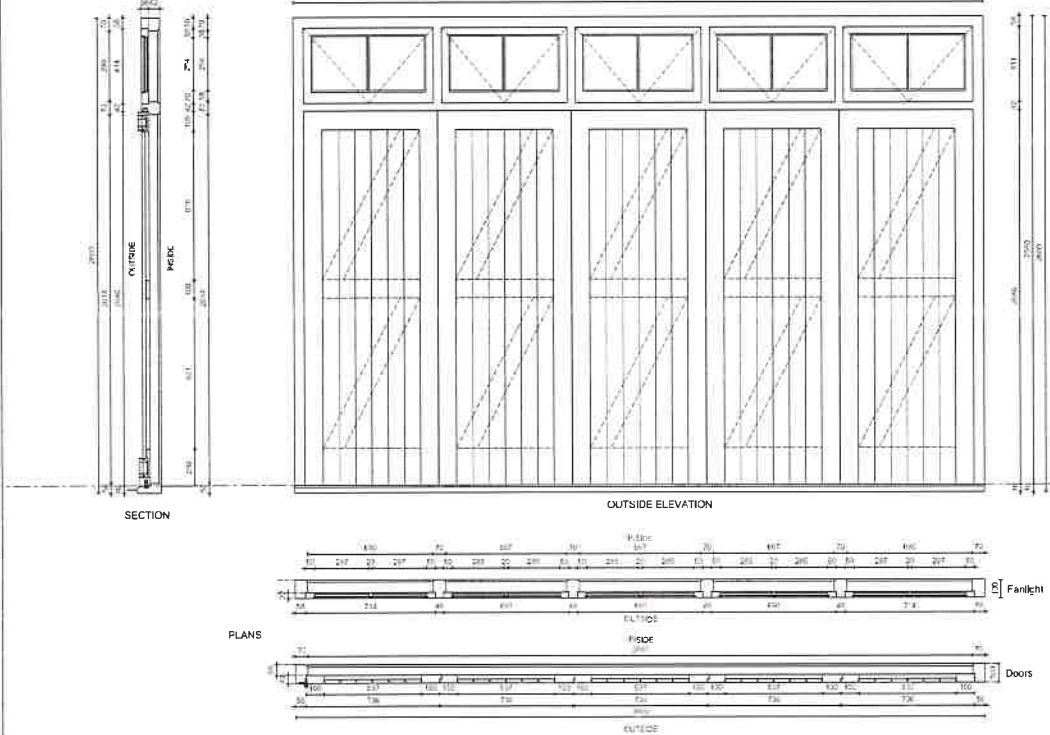


Scale 1:20

2x

Position	IKHAMANGA HALL
Frame	Stiles & head: 70 x 130 Meranti Sill: 50 x 130 Meranti for internal door (Flat sill)
Door	Top rail & stiles : 44 x 100 Bottom rail : 44 x 150 Panels to be flat and recessed on both sides All in Meranti
Fanlight	NONE
Trim	19 x 60 Bullnosed Meranti architraves on both sides.
Finish	Sand to a smooth and even surface and apply two coats best quality semi-gloss polyurethane varnish on both sides.
Ironmongery	Hinges: 1 pair best quality 100 x 75 Stainless steel butt hinges with double steel washers. Door stop (D3a): Union 87001 SS Door holder (D5a): Best quality solid brass floor mounted sprung door holder with Satin chrome finish Locks: Union L-2209-78SS comercial grade Euro cylinder locks. Cylinders: 2 x 18 SCMKD double cylinder (D5a KA with D7a) & (D3a KA with D4) Door Furniture: Union SS-00-06SS Eagle lever handle on rose Union SS 5375 -24SS escutcheon plate
Glazing	NONE

Type 7

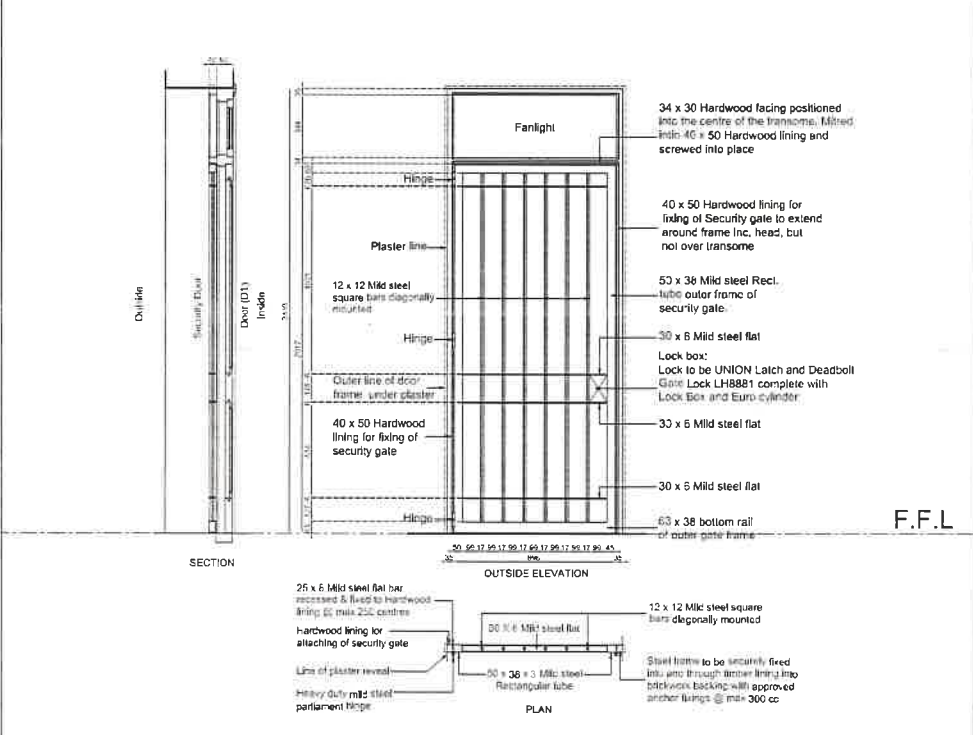


Scale 1:20

1x

Position	IKHAMANGA HALL
Frame	Meranti frame for 5 leaf folding / sliding door Stiles and head: 70 x 100, Transome: 70 x 100 Mullions: 70 x 100 Sill: 60 x 100 to suit outward opening folding / sliding door.
Fanlight	5 leaf folding / sliding framed ledged & braced batten door Stile and top rails: 44 x 100 Rebated stiles: 44 x 112 Intermediate rails: 22 x 100 Bottom rails: 22 x 200 22 x 100 braces & 22 x 100 V-jointed t & g battens (nominal). All in Meranti
Trim	Meranti fanlight with 30 x 50 top rail & stiles 30 x 70 bottom rail and 30 x 20 vertical glazing bars
Finish	19mm Meranti quadrant beads on both sides Internally: Sand to a smooth and even surface and apply 2 x coats best quality semi-gloss polyurethane varnish. Externally: Sand to a smooth and even surface, prime apply 1x universal undercoat and 2x coats best quality gloss enamel or best quality acrylic roof paint.
Ironmongery Door	Door Gear: Hillaldam 866SK (o.e.a) folding sliding door gear suitable for 5 linked leaves inc. hinges, gear and rails complete (finish: aluminium & natural anodised) Bolts: 150mm anodised flush bolts (488 x6) Hillaldam o.e.a lower bolts with dust excluding keeps Handles: 111 x 50 natural anodised aluminium flush handles Hillaldam 503 o.e.a. (3x) Lock: Union L-2209-78 SS Euro-cylinder commercial grade lock With 2 x 18 SCMKD (KA with D3a) double cylinder
Ironmongery Fanlight	Hinges: 2 x best quality approved friction hinges. Fanlight Stays: 300mm best quality solid brass fanlight stay with satin chrome finish
Glazing	Fanlight: 3mm clear float glass set in putty

Type 8



Scale 1:20

1x

Security Gate (D1) Olive Schreiner House

NOTE:
All screw holes in timber lining to be recessed and neatly pilled. Gate and Hardwood trim to be primed with respective primers for steel and wood, undercoated and finished as for front door.



GENERAL NOTES:
Copyright of this design and drawings are reserved.
Scaled dimensions are to be considered invalid.
All dimensions & levels to be verified on site prior to commencement of work.

Discrepancies to be reported immediately.
All building work to be in compliance with National Building Regulations, South African National Standards and Local Authority By-Laws.

REVISIONS

Revision A - 26/07/2022
1. Provision of new door type (Type 8) Security gate for front door (D1) of Olive Schreiner House.

NOTES

SERVICE

PROPOSED ALTERATIONS
OLIVE SCHREINER HOUSE
PHASE 1

CLIENT

AMAZWI S.A Museum of Literature

DRAWING TITLE

WORKING DRAWING:
DOOR SCHEDULES 2

INFORMATION

TOWNSHIP: CRADOCK
ADDRESS: 9 CROSS STREET
ERF NUMBER: 2701 & 3554
ERF n°:
ZONING:

COVERAGE

ALLOWED COVERAGE %
EXISTING m²
ADDITIONAL m²
TOTAL m²
TOTAL COVERAGE %

DRAWING INFORMATION

Date: JULY 2022
Designed: n/a
Drawn: JJ
Checked: PW
Scale: A1 - 1:20
Issued For: DESIGN / COSTING INFORMATION

Project no.	GR14/03/02 (1)
Drawing no.	WDJ02
Revision	A

Existing Gate Detail

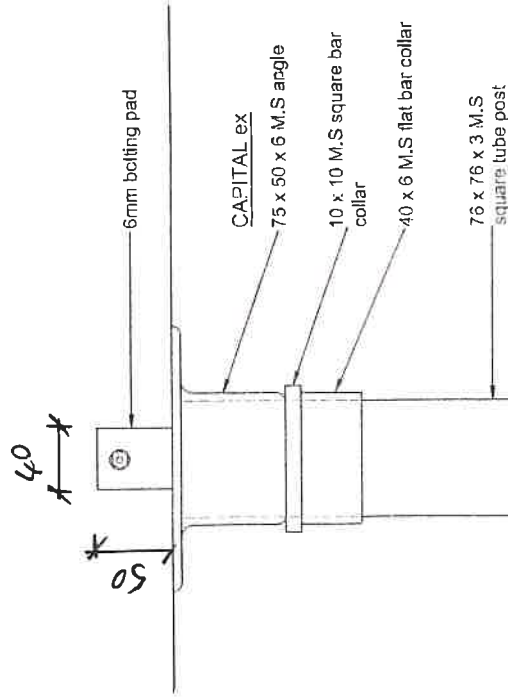


Existing Gate Detail



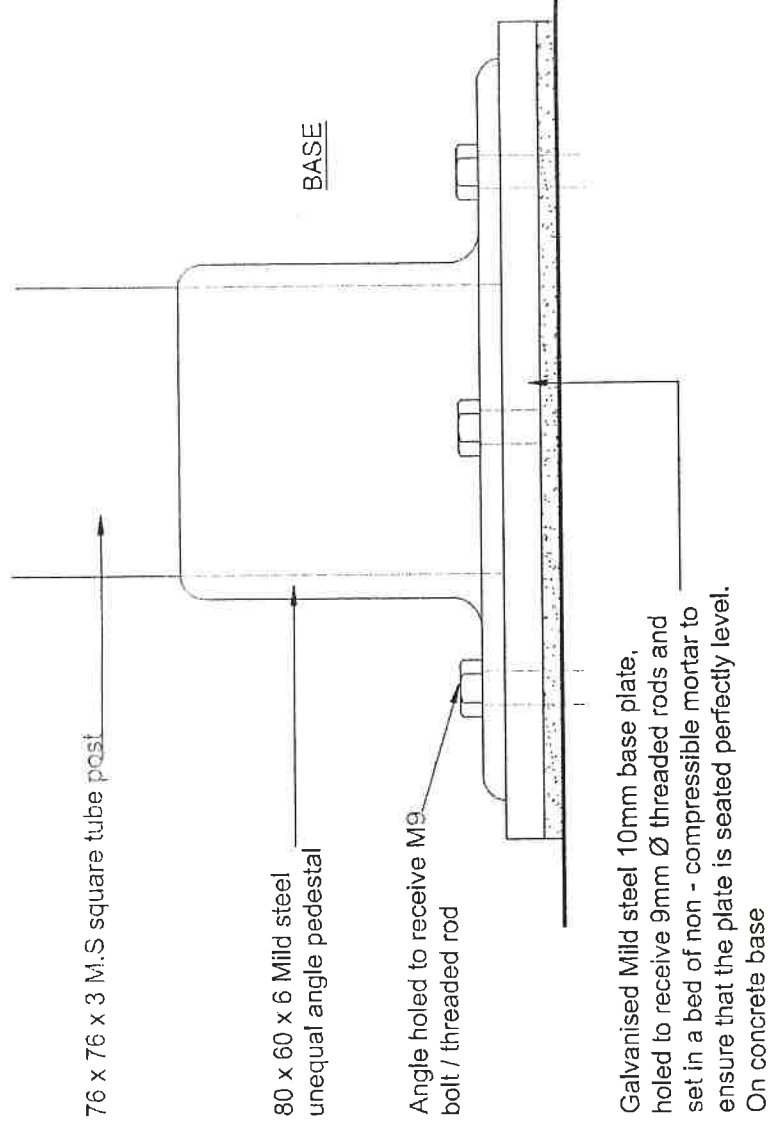
Pergola Post Detail

PERGOLA POST DETAIL



DETAIL ELEVATION: BEARER

Scale 1:5

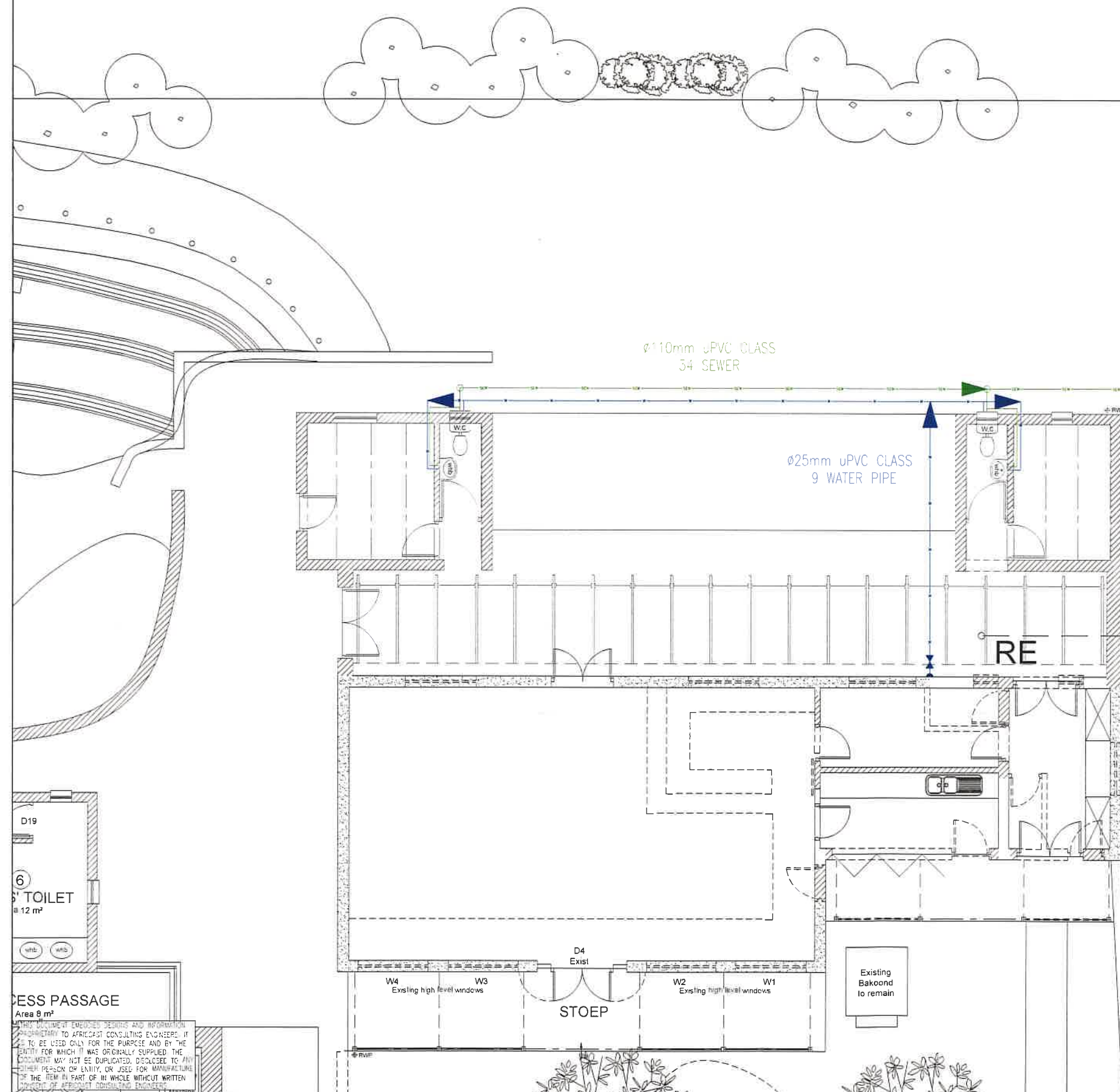


PERGOLA POST PEDESTAL DETAIL

Scale 1:2

Sewer and Water Supply Details

ALL WATER PIPES TO BE PLACED A MINIMUM OF 1m BELOW GROUND LEVEL.



- GENERAL NOTES
1. INVERT LEVELS AND EXACT POSITION OF SERVICES TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS.
 2. WATER CONNECTIONS/METERS TO BE CONFIRMED ON SITE (NO SURVEY DATA AVAILABLE).
 3. SEWER AND WATER CONNECTIONS TO MAINS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS.
 4. EXACT POSITIONS OF EXISTING RETICULATION SERVICES TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT ON SITE.
 5. ALL WATER PIPES TO BE PLACED A MINIMUM OF 1m BELOW GROUND LEVEL.

LEGEND

NEW VALVES
NEW WATER RETICULATION
NEW SEWER RETICULATION



DRAWING NUMBER CODES

DISCIPLINE	SYMBOL	STATUS	REVISION
WATER	LS	LONG SECTION	REVISION
SEWER	SC	CROSS SECTION	REVISION
STORM WATER	ST	DETAILS	REVISION
ELECTRICAL	EL	GENERAL	REVISION
STRUCTURAL	ST	STRUCTURE	REVISION

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PLOT SCALE: 1:1
PAPER SIZE: A1

NO.	DATE	DESCRIPTION	BY	DATE
01	05/07/2022	PRELIMINARY	00	05/07/2022
02				
03				
04				
05				
06				
07				
08				
09				
10				

PROJECT DIRECTOR

PROJECT MANAGER

DATE

DATE

14 Mowbray Street
Heath Park, Cape Town: 7700
P.O. Box 5104
Mowbray, 7701

10: +27 (0) 21 519-7000
11: +27 (0) 21 519-7001
12: +27 (0) 21 519-7002

CLIENT

AMAZWI SOUTH AFRICAN MUSEUM OF LITERATURE (AMAZWI MUSEUM).

PROJECT

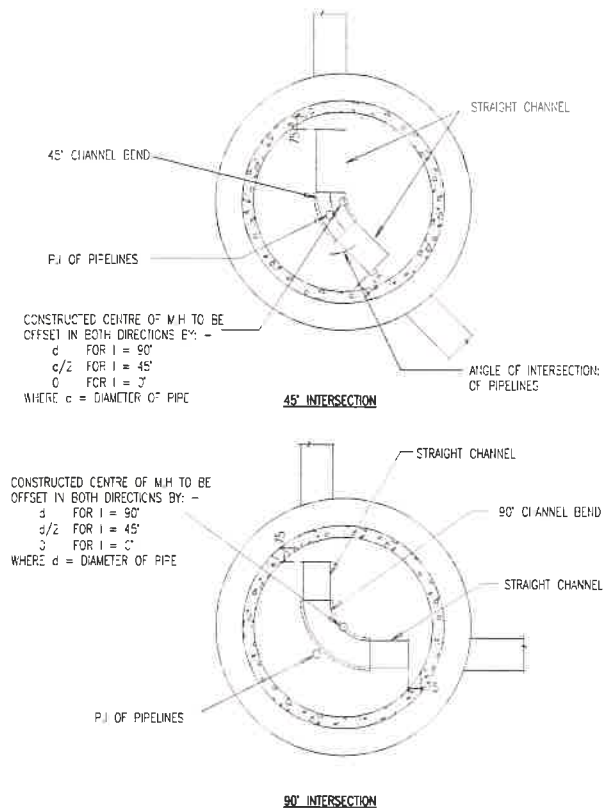
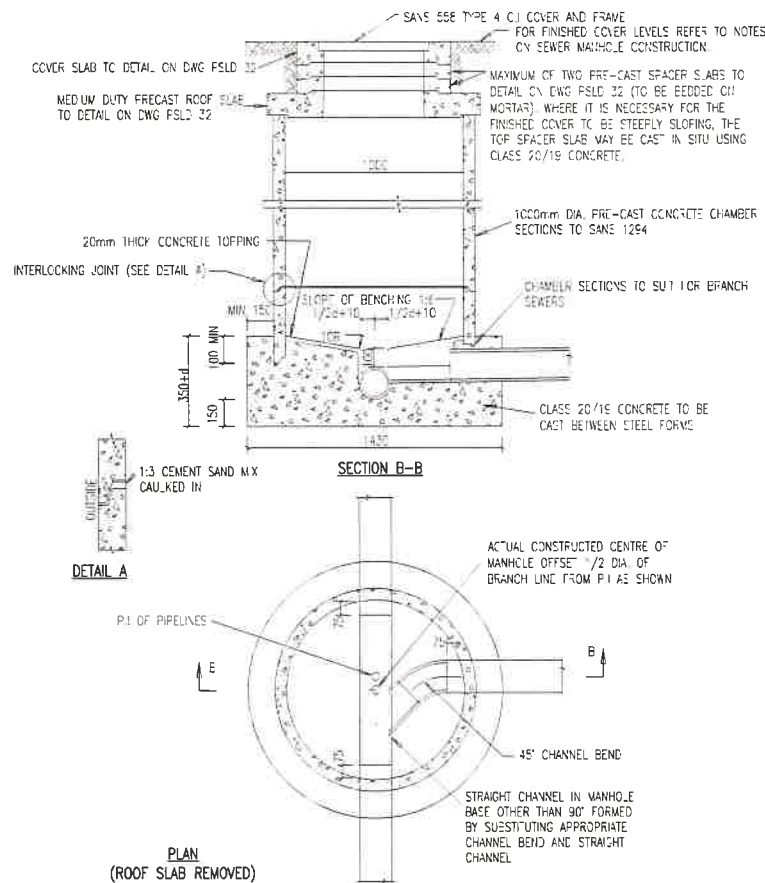
AMAZWI MUSEUM EXTENSION OF MUSEUM (OLIVE SHREIDER HOUSE) CRADOCK.

TITLE

WATER & SEWER LAYOUT.

DRAWING NUMBER : AFR1220-SEW-DET-01 PRE-00

Sewer Manholes



DRAWING NUMBER CODES			
DISCIPLINE	SUB-DISCIPLINE	STATUS	
WAT = WATER	LS = LINDSEY	TEL = TENDER	
RD = ROADS	XS = CROSS SECTION	PREL = PRELIMINARY	
SW = STORM WATER	DET = DETAILS	CON = CONSTRUCTION	
ELE = ELECTRICAL	CA = CENTRAL ARRANGEMENT	ASB = AS BUILT	
STR = STRUCTURAL			

FILE NAME: AFR1220-SEW-DET-02-03-CON-A.dwg
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 PLOT SCALE: 1:1
 PAPER SIZE: A1

09			
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02			
01	PRELIMINARY	02	05/07/2022
NO	DRAWN	DESCRIPTION	REV DATE
DRAWN	S NOWALA		05/07/2022
DESIGNED	S NOWALA		05/07/2022
CHECKED	J BLIGNAULT		05/07/2022

PROJECT DIRECTOR: _____ DATE: _____

PROJECT MANAGER: _____ DATE: _____

AFRICOAST CONSULTING ENGINEERS
 34 Maropeng Street, Maropeng Park, Centurion 0001
 PO Box 5104, Midrand 2008
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CLIENT: **AMAZWI SOUTH AFRICAN MUSEUM OF LITERATURE (AMAZWI MUSEUM).**

PROJECT: **AMAZWI MUSEUM EXTENSION OF MUSEUM (OLIVE SHREIDER HOUSE) CRADOCK.**

TITLE: **SEWER DETAILS 1**

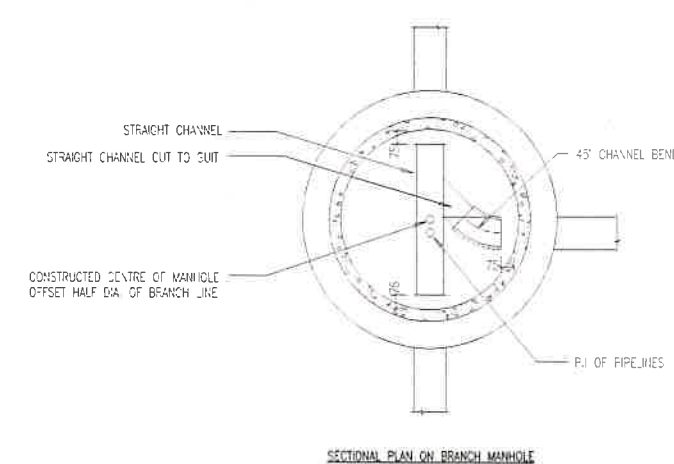
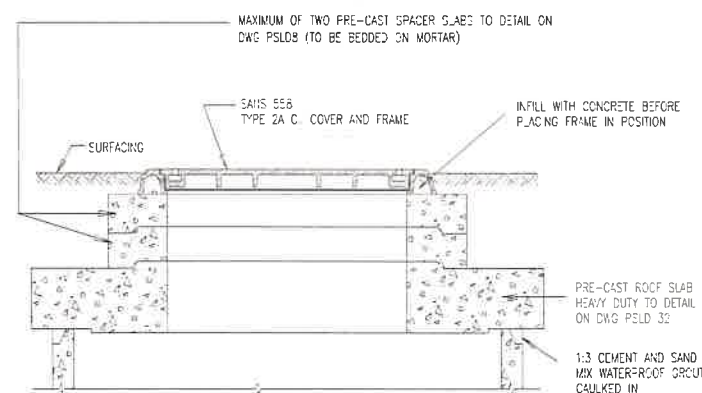
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AFR1220-SEW-DET-02		PRE-00
PROJECT No:	DISCIPLINE	DATE
STATUS	REVISION	

NOTES ON SEWER MANHOLE CONSTRUCTION

THIS SPECIFICATION MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS: SANS 1200LD: SEWERS

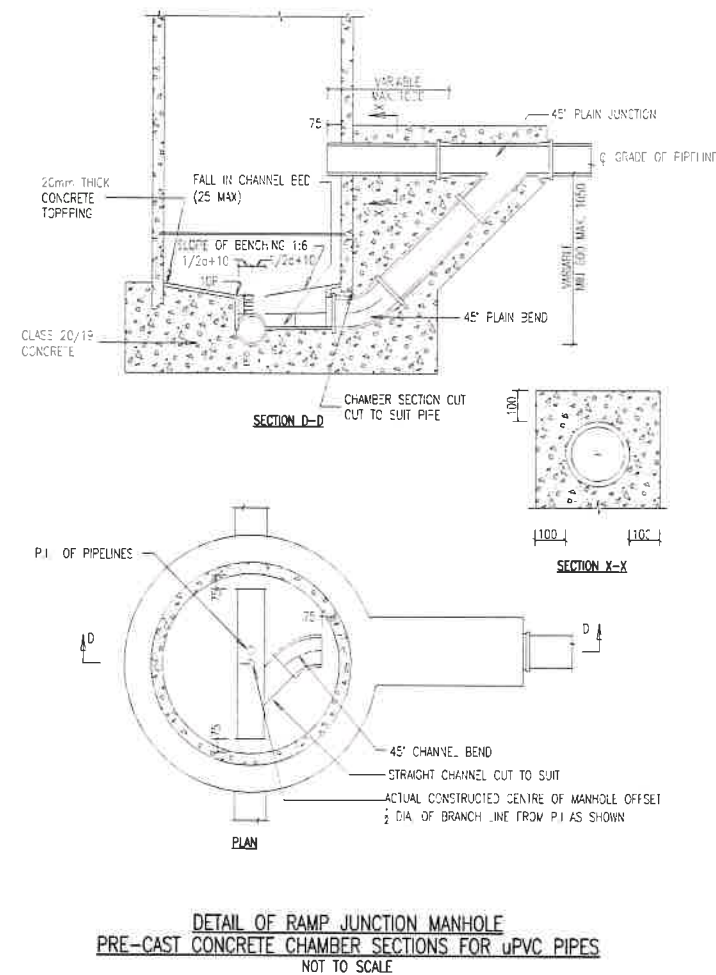
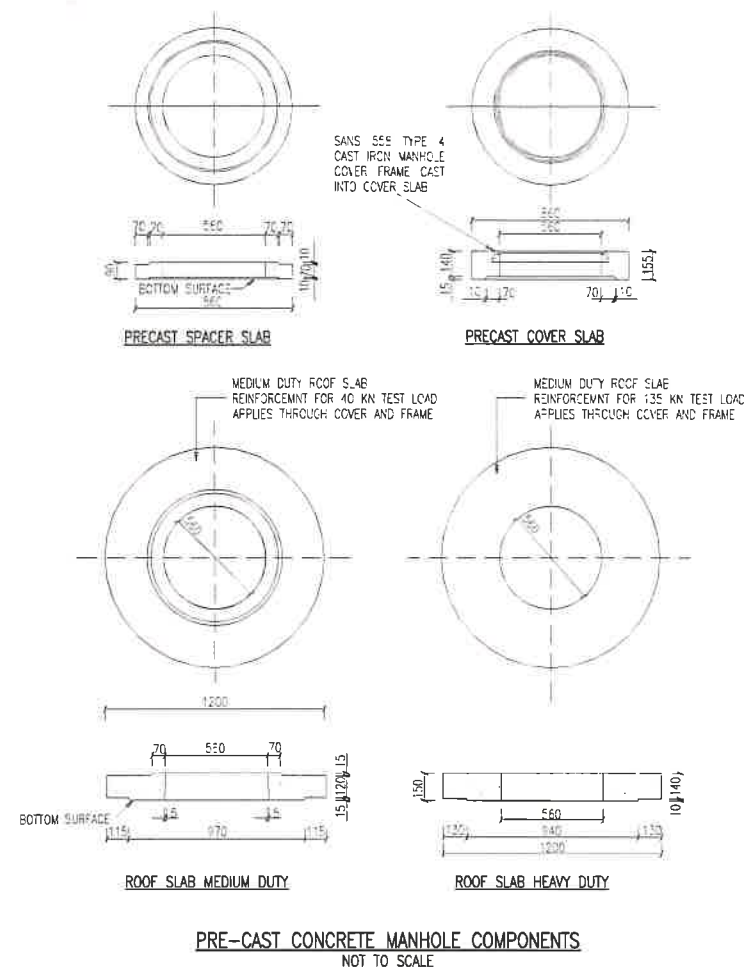
- THESE DRAWINGS SHOW TYPICAL DETAILS WHICH APPLY WHEN USING uPVC SEWER UNDERGROUND PIPES UP TO A MAX. DIAMETER OF 200mm.
- ALL UNDERGROUND/BURIED uPVC SEWER PIPES SHALL COMPLY WITH SANS 1501 - TYPE WITH PIPE STIFFNESS OF 400kPa AND SMOOTH INNER AND OUTER WALLS, COMPLETE WITH INTEGRAL SOCKETS, JOINTS AND RUBBER SEAL RINGS.
- ALL UNDERGROUND/BURIED uPVC SEWER PIPE FITTINGS SHALL COMPLY WITH SANS 791 WITH SMOOTH INNER AND OUTER WALLS.
- IN PRE-CAST CONCRETE MANHOLES, THE LOWEST PRE-CAST SECTION OF SHAFT USED IN THE CONSTRUCTION OF THE MANHOLE SHALL BE AT LEAST 250mm IN HEIGHT AND THIS SHALL BE BEDDED 100mm INTO THE CONCRETE BASE SUPPORTED INITIALLY AT THREE PLACES BY BRICKS. THE HEIGHT OF SECTIONS ABOVE THIS SHALL BE ARRANGED TO ENSURE THAT A MINIMUM NUMBER OF JOINTS OCCUR.
- JOINTS BETWEEN PRE-CAST CONCRETE MANHOLE RINGS SHALL BE EFFECTIVELY CAULKED FROM THE INSIDE WITH 3:1 SAND CEMENT MORTAR OR OTHER SEALING METHOD AS APPROVED BY THE DIRECTOR: WATER AND SANITATION.
- STEP-IRONS ARE NOT REQUIRED.
- THE CONCRETE BASES SHALL BE CAST WITHIN STEEL FORMWORK OR OTHER APPROVED ALTERNATIVE FORWORK. ALL CONCRETE TO BE ADEQUATELY VIBRATED. 20MPa CONCRETE SHALL BE USED, WITH A RECOMMENDED MAX. SIZE OF STONE AGGREGATE OF 19mm.
- FOR ANGLES OF INTERSECTION EXCEEDING 10°, STANDARD CHANNEL BENDS, CUT TO SUIT WHERE NECESSARY, SHALL BE USED. BELOW 10° TWO STRAIGHT SECTIONS SHALL BE USED, CUT AND WITTED TO SUIT.
- CONCRETE TOPPING FOR THE 20mm THICK LAYER TO THE BENCHING SHALL CONSIST OF 1:2:3 PARTS OF CEMENT, SAND 7mm CONCRETE STONE, BY MASS.
- A PROTOTYPE MANHOLE, COMPLETE WITH CHANNELS SHALL BE CONSTRUCTED AT THE START OF EACH NEW SEWERAGE RETICULATION SCHEME, AND WHEN APPROVED SHALL BE USED AS A STANDARD TO BE MAINTAINED FOR ALL MANHOLES IN THE SCHEME.
- ALL MANHOLE CHANNELS MUST BE BEDDED INTO CONCRETE BASE WHILE IT IS BEING CAST.
- APPROVED CONCRETE COVERS AND SLABS (ROCKLA ADMIN. COVERS AND FRAMES) MAY BE USED ON MANHOLES CONSTRUCTED OUTSIDE ROAD RESERVES (e.g. MIDDLEBLOCK POSITIONS AND SERVICE LINES ETC.) SUBJECT TO THE APPROVAL OF THE DIRECTOR: WATER AND SANITATION.
- FINISHED COVER LEVELS:

- CARRIAGEWAYS - COVER TO BE FLUSH WITH THE FINISHED ROAD SURFACE
- ROAD RESERVES/SERVICE LINES - COVER TO BE 50mm ABOVE THE FINISHED GROUND LEVEL
- MIDDLEBLOCK - COVER TO BE 250mm ABOVE THE FINISHED GROUND LEVEL
- OPEN SPACES - COVER TO BE 500mm ABOVE THE FINISHED GROUND LEVEL



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DRAWING NUMBER CODES			
DISCIPLINE	SUBDISCIPLINE No	STATUS	
WD = WATER	LS = LOWSECTION	TDN = TENDER	
RD = ROADS	RS = CROSS SECTION	PSE = PRELIMINARY	
SW = STORM WATER	DET = DETAILS	CON = CONSTRUCTION	
ELE = ELECTRICAL	CA = CABLE ARRANGEMENT	ASB = AS BUILT	
STR = STRUCTURAL			

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 PLOT SCALE: 1:1
 PAPER SIZE: A1

NO	DATE	DESCRIPTION	REV	DATE
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02				
03				
04				
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08				
09				
10				
11				
12				

PROJECT DIRECTOR: _____ DATE: _____

PROJECT MANAGER: _____ DATE: _____

24 Mungel Street
 Newton Park, Grahamstown 6000
 PC Box 5164
 6000
AFRICOAST CONSULTING ENGINEERS
 Tel: +27 (0)3 205-1800
 Fax: +27 (0)3 205-1801
 Email: info@afri.co.za

PROJECT: AMAZWI SOUTH AFRICAN MUSEUM OF LITERATURE (AMAZWI MUSEUM).

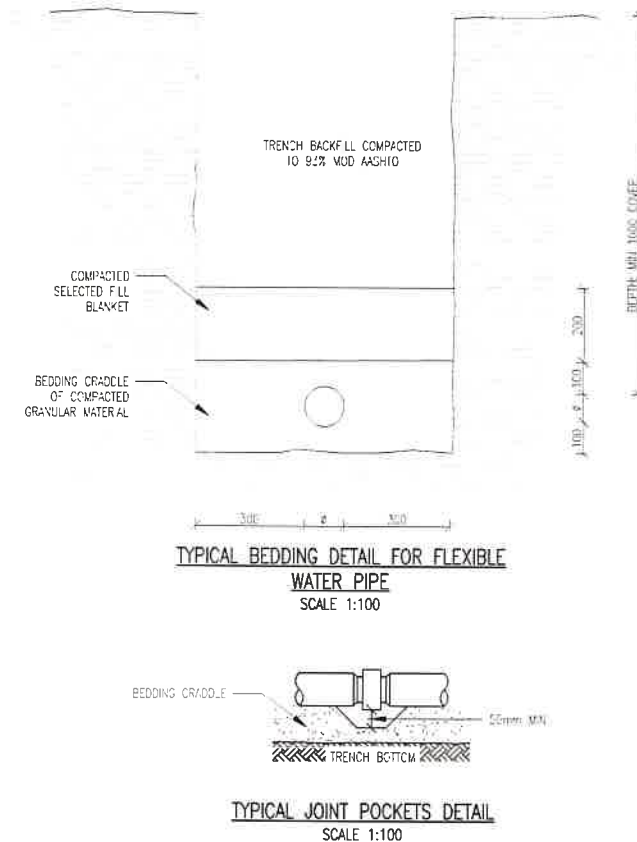
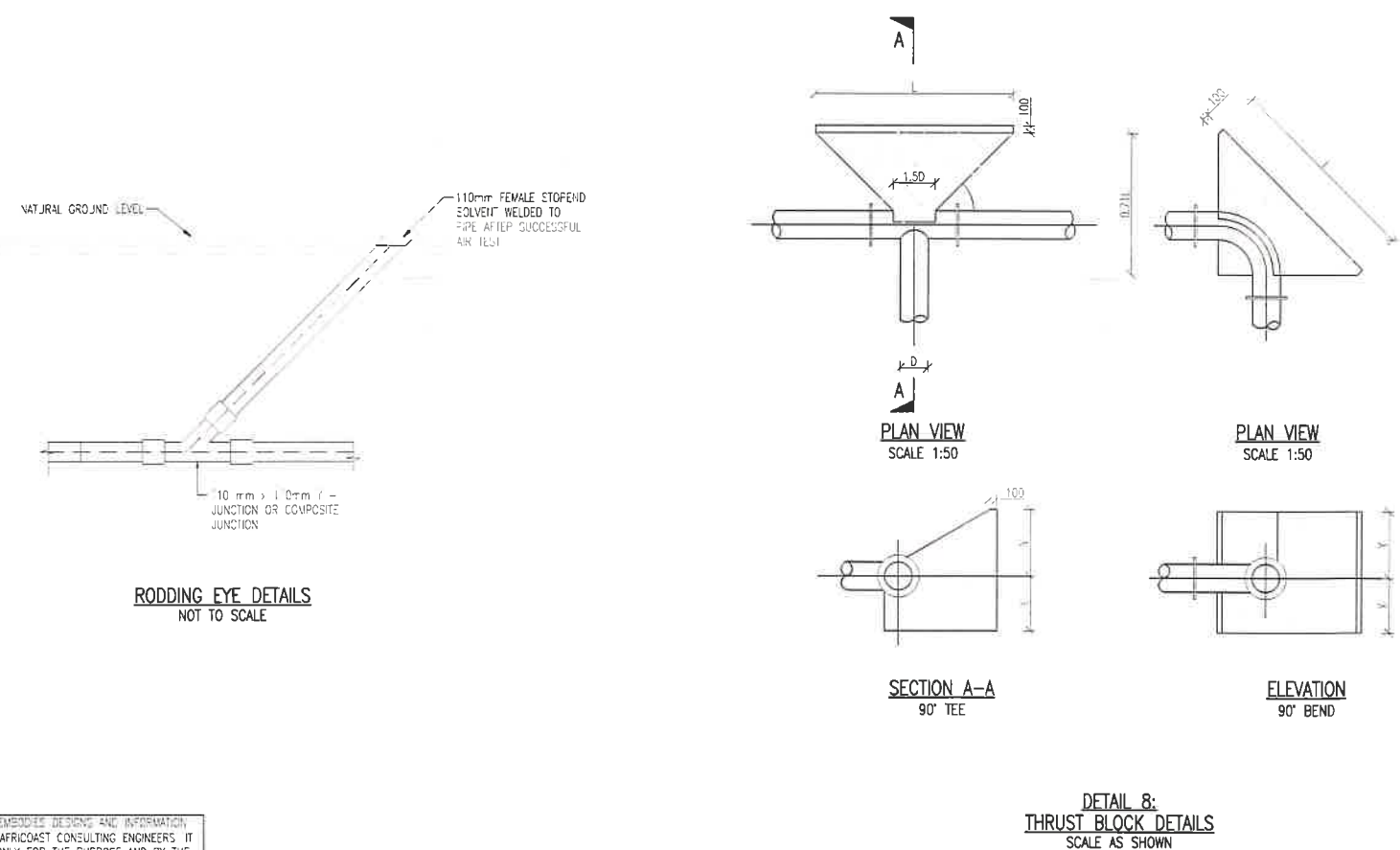
PROJECT: AMAZWI MUSEUM EXTENSION OF MUSEUM (OLIVE SHREIDER HOUSE) CRADOCK.

TITLE: SEWER DETAILS 2

DRAWING NUMBER: AFR1220-SEW-DET-03

PROJECT No: DISCIPLINE: SUB No: DWE No: STATUS: PRE - 00

PROJECT No: DISCIPLINE: SUB No: DWE No: STATUS: PRE - 00



DETAIL 6: BEDDING DETAILS
SCALE AS SHOWN

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