KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

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

ANNEXURE 9

Geotechnical Investigation Report

Consulting Engineering Geologists, Geotechnical Engineers, Geotechnicians & Geotechnical Quality Assurance Specialists

GEOSURE (Pty) Ltd

- Geotechnical Engineering Services
- Engineering Geology
- Environmental and Groundwater
- Pile Integrity Testing
- SANAS Accredited Soil & Rock Laboratory
- Earthworks/Materials Supervision & Control
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- Project Management

Report to Ukuza Consulting (Pty) Ltd on the Results of a Shallow Geotechnical Investigation for the Proposed Conversion of Newtown A Community Health Centre to a Large Clinic on Erven 2746 and 2833 Inanda A at Corner of Bhekezulu Drive and Nhlwathi Crescent, Inanda, eThekwini Municipality, KwaZulu-Natal

Reference: 047-23.R01 Revision 0

Date: 03 May 2023

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Report Title	Report to Ukuza Consulting (Pty) Ltd on the Results of a Shallow Geotechnical Investigation for the Proposed Conversion of Newtown A Community Health Centre to a Large Clinic on Erven 2746 and 2833 Inanda A at Corner of Bhekezulu Drive and Nhlwathi Crescent, Inanda, eThekwini Municipality, KwaZulu-Natal		
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Rev	Date	Revision Details / Status	Author	Reviewer
0	03 May 2023	Geotechnical Report with Recommendations	D. Govender	F. Smith

APPROVAL

Author Signature		Reviewer Signature	
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Title	Engineering Technologist	Title	Associate

Report to Ukuza Consulting (Pty) Ltd on the Results of a Shallow Geotechnical Investigation for the Proposed Conversion of Newtown A Community Health Centre to a Large Clinic on Erven 2746 and 2833 Inanda A at Corner of Bhekezulu Drive and Nhlwathi Crescent, Inanda, eThekwini Municipality, KwaZulu-Natal

Reference: 047-23.R01 Revision 0 **Date: 03 May 2023**

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Abbreviations and Expansions

Abbreviation	Expansion		
AASHTO	American Association of State Highway and Transportation		
CBR	California Bearing Ratio		
CFA	Continuous Flight Auger		
COLTO	Committee of Land and Transport Officials		
COTO	Committee of Transport Officials		
Client	Ukuza Consulting (Pty) Ltd		
DCI	Driven Cast Insitu		
DCP	Dynamic Cone Penetrometer		
E	east		
EGL	existing ground level		
Geosure	Geosure (Pty) Ltd		
GM	grading modulus		
GSI	Geological Strength Index		
h	horizontal		
IMC	insitu moisture content		
IP	Inspection Pit/s		
km	kilometre(s)		
kN/m³	kilonewton per metre cube		
kPa	kilopascal		
KZN	KwaZulu Natal		
LHS	Left Hand Side		
LL	liquid limit		
LS	linear shrinkage		
m	metre (s)		
MDD	maximum dry density		
mm	millimetre(s)		
NGL	natural ground level		
No.	number		
NP	non plastic		
OHS	Occupational Health and Safety		
OMC	Optimum Moisture Content		
PI	plasticity index		
SANS	South African National Standards		
S	south		
SP	slightly plastic		
USCS	Unified Soil Classification System		
v	vertical		
>G9	Worse than G9 in terms of COLTO		
USCS Symbols			
SM	Silty sands, sand-silt mixtures	**GP**	Clean gravel – poorly graded

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Reference: 047-23.R01 Revision 0 **Date: 03 May 2023**

1. TERMS OF REFERENCE

Geosure was requested by Ms J. Pillay representing Ukuza Consulting (Pty) Ltd to provide a proposal and cost estimate to carry out a Shallow Geotechnical Investigation for the Proposed Conversion of Newtown A Community Health Centre to a Large Clinic on Erven 2746 and 2833 Inanda A at Corner of Bhekezulu Drive and Nhlwathi Crescent, Inanda, eThekwini Municipality, KwaZulu-Natal.

Accordingly, Geosure provided Ukuza Consulting (Pty) Ltd with a proposal and cost estimate in a letter referenced p103-23 (Clinic Conversion)/mb and dated 3 March 2023.

Subsequently, Geosure was authorised by Ukuza Consulting (Pty) Ltd, hereafter referred to as the Client, to carry out the geotechnical investigation via a letter of appointment, referenced *"DOH/N-CHC/GE/001"* and dated 7 March 2023.

2. PURPOSE AND SCOPE OF REPORT

This report details the results of a Shallow Geotechnical Investigation for the Proposed Conversion of Newtown A Community Health Centre to a Large Clinic on Erven 2746 and 2833 Inanda A at Corner of Bhekezulu Drive and Nhlwathi Crescent, Inanda, eThekwini Municipality, KwaZulu-Natal, and hereafter referred to as the site.

The purpose of this investigation is to evaluate subsurface conditions at the site to facilitate development of geotechnical criteria for design and construction. Accordingly, this report provides the following:

i. Description of the site and subsurface conditions encountered;
ii. Discussion of the field exploration and laboratory testing programs;
iii. Summary of laboratory test data;
iv. Evaluation of anticipated subsurface conditions during construction;
v. Recommendations for earthworks and material excavation;
vi. Evaluation and recommendations for materials usage, subgrade treatment for roads, foundation solutions, drainage and quality assurance for the proposed development; and
vii. Summary of major findings and conclusions.

3. PROPOSED DEVELOPMENT

Based on conceptual architectural information received by Geosure, it is understood that the proposed conversion of Newtown A Community Health Centre to a large Clinic will comprise either single storey building structures (as shown in architectural "Option 1A"), or, single and

double storey building structures (as shown in four conceptual architectural options), together with internal hard standing for driveways and parking bays, where applicable.

Foundation design loads for the proposed development were not confirmed with Geosure at the time of preparation of this report, however, light to moderate foundation design loads relating to the single and double storey building structures, respectively, have been assumed for the provision of foundation recommendations given in this report.

4. GUIDELINES FOR METHODOLOGY OF INVESTIGATION

The fieldwork and report for the investigation was carried out according to guidelines relevant to geotechnical investigations of this nature, in particular the "*Site Investigation Code of Practice, 1st Edition*", prepared by the South African Institution of Civil Engineering - Geotechnical Division, dated January 2010 refers.

The formation and weathering of geological materials are discontinuous processes and unexpected variations in soil, rock and groundwater regimes may occur even on sites where the conditions seem to be uniform or consistent. Variations in what is reported here may become evident during construction. It is thus imperative that an appropriately qualified and experienced Competent Person inspects all critical stages of development including, but not limited to, excavations to assess the conditions encountered and to assist in the interpretation of observations at variance with the information supplied in this report.

This report was prepared for use by the Client and their professional team for the purpose stated and should not be relied upon for any other purpose.

5. INFORMATION SUPPLIED

The following information was utilised to assist with the investigation and reporting:

i. Digital files (.dwg and .pdf) of architectural concept layouts prepared by the Client, showing four sets of development options, namely "*Option 1A*", "*Option 1B*", "*Option 2*", and "*Option 3*". The files are referenced UKU-A-3000-0 and titled *"Newtown A CHC: CHC To Large Clinic Conversion"*. Included are Locality Plans, Site Plans, Below Ground Floor Plans (where applicable), Ground Floor Plans (single storey designs), First Floor Plans (double storey designs), 3Ds, Sections and Elevations, and Parking Floor Plans (where applicable).

ii. Digital copy (.dwg) of a tacheometric survey of the site dated March 2023 (File 1/71) by Ronil Singh & Associates and titled *"Detail Topographical Survey Erven 2746 and 2833 Inanda A Newtown A Community Health Centre"* with contours at intervals of 0.5m to scale 1:200.

iii. Google Earth (.kml) file, depicting the proposed site.

iv. Digital (.pdf) copy of an unreferenced drawing titled "*Underground Services Detection Survey*", dated 22 March 2023 and prepared by Modena (Pty) Ltd.

v. Digital (.pdf) copy of an unreferenced and undated report titled "*Underground Services Detection Report*", prepared by Modena (Pty) Ltd.

vi. GIS geohazard records of eThekwini Municipality.

vii. Regional geological sheet titled *"2930 Durban"*, dated 1988, prepared by Council for Geoscience to scale 1: 250 000.

6. SITE DESCRIPTION

The proposed development is located within the premises of the existing Newtown clinic approximately 5km north west of the KwaMashu area, and is accessible via King Bhekuzulu Drive and Nhlwathi Crescent.

The approximate latitude and longitude coordinates at the midpoint of the site are 29.711948° South and 30.941668° East, respectively.

The clinic comprises single storey buildings and containers being used as offices and patient care rooms, driveways, and a parking area with asphalt wearing surface.

In terms of topography, the site is located on a hillside which slopes moderately to the southwest and which has been terraced. The site is surrounded by residential dwellings and the vegetal cover generally comprises shrubs, grass and occasional trees.

The current regional and local contexts of the site are given in Figure 1 (Plan 1 and Plan 2, respectively) included in Appendix A of this report.

The general layout of the site is given in Figure 2 included in Appendix A of this report.

General views of the site are shown in Plate 1 and Plate 6 below.

Plate 1: General view of the site

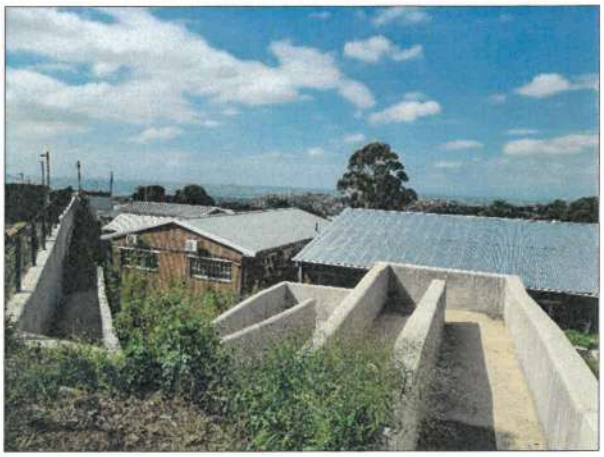

Plate 2: General view of the site

Plate 3: General view of the site

Plate 4: General view of the site

Plate 5: General view of the site

Plate 6: General view of the site

7. FIELDWORK

Fieldwork for the investigation was carried out over the period 27 March 2023 to 28 March 2023 and 11 April 2023 and comprised the following:

i. Inspection Pits; and
ii. Dynamic Cone Penetrometer Tests.

Due to several buried services, such as stormwater pipelines and electric cables, Modena (Pty) Ltd was subcontracted by Geosure to carry out an underground service detection survey prior to carrying out the geotechnical investigation.

Based on the above assessment, the fieldwork positions were then selected.

7.1 Inspection Pits

Twenty inspection pits, designated IP1 to IP20, were excavated using hand implements at the approximate positions given in Figure 2. The inspection pits were advanced to final/refusal depths in the range 0.30m (IP10) to 2.5m (IP12, IP13 and IP18) below EGL.

The inspection pits were profiled in accordance with the South African Geoterminology Guidelines (Brink & Bruin, Guidelines for Soil and Rock Logging in South Africa, 2002), sampled and reinstated on completion.

Detailed inspection pit profiles and photographs of the inspection pits are given in Appendix B of this report.

7.2 Dynamic Cone Penetrometer (DCP) Tests

Twenty DCP tests, designated DC1 to DC20, were carried out at the positions given in Figure 2.

The DCP tests were advanced to final / refusal depths in the range 0.2m (DC10) to 3.0m (DC6 and DC13) below EGL.

The results of the DCP tests comprising plots of blow counts versus depth are given in Appendix C.

8. GEOLOGY AND ANTICIPATED SUBSURFACE CONDITIONS

Reference to regional geological sheet titled *"2930 Durban"*, (Council for Geoscience, 1988) prepared to a scale of 1:250 000, indicates that the site is underlain by sandstone rock and derived soils of the Natal Group. Ecca Group Tillite occurs to the east and south of the site. An inferred geological fault is shown to define the boundary between the Natal and Dwyka Groups

An extract of the above geological map is given in Figure 3 included in Appendix A of this report.

At the inspection pit positions, the following units were generally observed:

i. Asphalt surfacing.
ii. Interlocking paving bricks (80mm thick).
iii. Bedding sand for interlocking paving bricks.
iv. Unit 1: Fill (Imported) – Basecourse.
v. Unit 2: Fill (Imported) - Subbase
vi. Unit 3: Fill (General).
vii. Unit 4: Fill (Uncontrolled).
viii. Unit 5: Colluvium (fine hillwash).
ix. Unit 6: Residual Sandstone (fully decomposed former sandstone rock).
x. Unit 7: Weathered Sandstone Rock.

The occurrences of these units and general soil descriptions are summarised below.

Asphalt surfacing was encountered in inspection pits IP4 and IP5.

Interlocking paving bricks / paving tiles and bedding sand was encountered in inspection pits IP7 through to IP11, IP13 and IP18.

Unit 1 to Unit 7 were observed to underlie the abovementioned surfacing and are generally described below:

Unit 1 - Fill (Imported Basecourse) – These soils can be described as slightly moist to moist, light greyish brown speckled white and bluish grey, dense, fine to medium grained, slightly sandy GRAVEL. Fill was observed to extend to depths in the range approximately 0.15m (IP5) to 0.19m (IP4) below EGL.

Unit 2 - Fill (Imported Subbase) – These soils can be described as moist, dark orange brown / medium brown speckled orange, medium dense to dense / dense, fine to medium grained, slightly silty GRAVELLY SAND / gravelly silty SAND. Fill was observed to extend to a depth of 0.31m (IP4 and IP5) below EGL.

Unit 3 - Fill (General) – These soils can be described as slightly moist to moist / moist to very moist, light greyish brown / medium brown speckled orange / dark brown speckled orange, soft to firm / stiff / loose to medium dense / medium dense / dense, intact / fine to medium grained, slightly clayey SANDY GRAVEL / slightly clayey gravelly SAND / slightly clayey silty SAND / clayey gravelly SAND / clayey SAND to sandy CLAY / slightly silty SANDY CLAY containing builders rubble / fine roots. Fill was observed to extend to depths in the range approximately 0.33m (IP1 and IP20) to 1.04m (IP15) below EGL.

Unit 4 - Fill (Uncontrolled) – These soils can be described as slightly moist to moist, greyish brown / dark greyish brown / medium brown / dark brown / orange brown, soft to firm / loose to medium dense / medium dense to dense, intact / fine to medium grained, slightly clayey gravelly SAND / slightly clayey SANDY GRAVEL / gravelly SANDY CLAY / clayey SAND / slightly silty clayey SAND / clayey GRAVELLY SAND containing builder's rubble and / or domestic waste and / or roots. Fill of this nature was observed to extend to depths in the range approximately 0.10m (IP1) to 1.64m (IP6) below EGL.

Unit 5 - Colluvium – These soils can be described as moist, dark greyish brown, firm, intact, sandy CLAY containing fine roots. Colluvium was observed only in IP2 to a depth of 0.52m below EGL.

Unit 6 - Residual Sandstone – These soils can be described as moist / moist to very moist, dark brown speckled orange and white / orange brown mottled dark grey / medium brown / light orange brown, firm to stiff / medium dense to dense, intact / fine to medium grained, slightly clayey SAND / slightly silty gravelly SAND / clayey SAND / silty SAND / slightly gravelly SANDY CLAY. Residual sandstone was observed to extend to depths in the range approximately 0.29m (IP10) to 2.50m (IP12, IP13 and IP18) below EGL.

Unit 7 - Weathered Sandstone Rock – The rock encountered can be described as orange brown / orange brown mottled yellow, highly to completely weathered, highly to very highly fractured, fine to medium grained, friable, very soft rock. Weathered sandstone rock was observed at depths in the range 0.29m (IP10) to 1.65m (IP7) below EGL.

Plate 7 and Plate 10 below provides views of the soil profiles observed during the investigation.

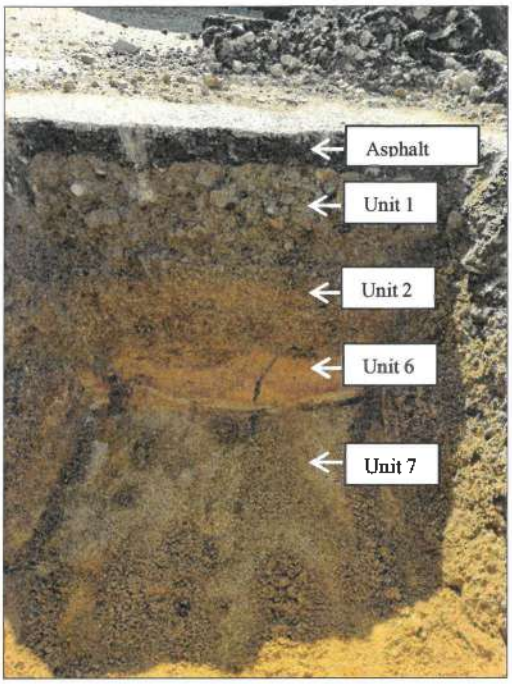

Plate 7: Soil & Rock Profile at IP2

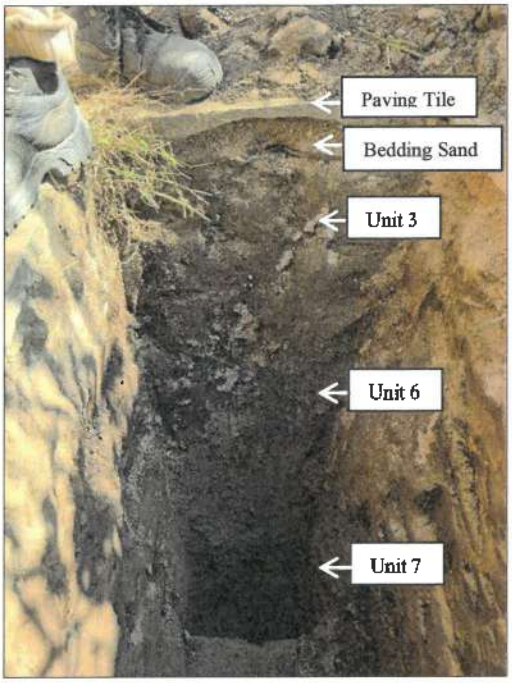

Plate 8: Soil & Rock Profile at IP7

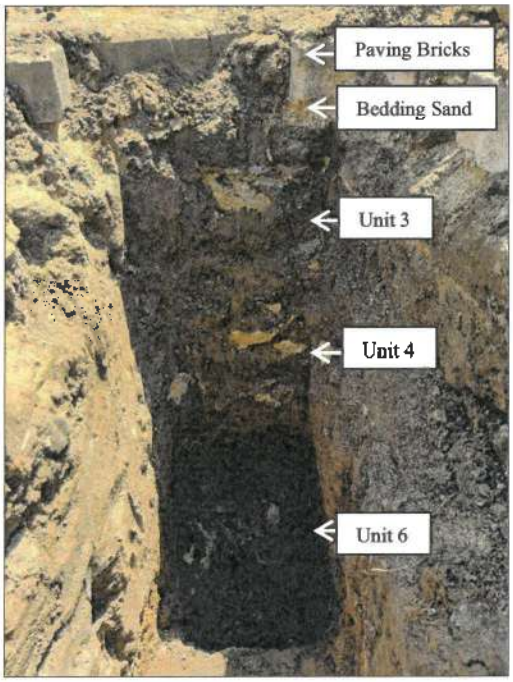

Plate 9: Soil Profile at IP13

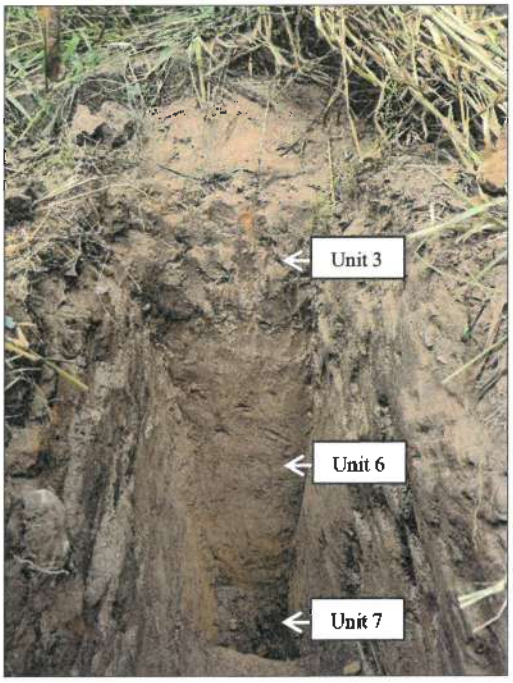

Plate 10: Soil and Rock Profile at IP19

9. GROUNDWATER

Groundwater seepage was not observed in any of the inspection pits.

Mottled soil and rock profiles synonymous with periodic concentrations of groundwater, however, have been identified.

It is considered, therefore, that a perched intermittent groundwater condition may develop during the typical rainfall months of spring and summer and after heavy rains during other times of the year, resulting in perched groundwater conditions.

The incidence of intermittent groundwater concentrations and the need for suitable mitigation measures to engineer's detail should be addressed during design and implementation of this project in consultation with a geotechnical professional such as Geosure.

10. LABORATORY TESTING

The following laboratory tests were carried out on disturbed soil samples retrieved from site:

i. Grading Analysis to 0.075mm sieve with Atterberg Limit Determination;
ii. California Bearing Ratio (CBR);
iii. Modified AASHTO;
iv. Hydrometer Analysis; and
v. Insitu Moisture Content.

The results of the laboratory tests are given in Appendix D and summarised in Table 1 below.

Table 1: Summary of Particle Size Distribution, Maximum Dry Density, Atterberg Limits, California Bearing Ratio and Material Classifications

TP No.	Depth (m)	Description	Particle Size %				Atterberg Limits %			OMC (%)	IMC (%)	GM	MDD kg/m3	CBR Values			Swell %	Material Code & Classification
			Clay	Silt	Sand	Gravel	LL	PI	LS					Compaction MDD % 90	93	95		
UNIT 1 (FILL – IMPORTED BASECOURSE)																		
TP4	0.04-0.19	Light greyish brown speckled white and bluish grey sandy GRAVEL	9		18	73	20	5	2.5	2.6	-	2.47	2268	11.1	19	27.1	0	A-1-a (0) GP-?? G6
UNIT 3 (FILL – GENERAL)																		
TP11	0.12-0.65	Dark brown speckled orange slightly clayey GRAVELLY SAND	17		63	20	SP	SP	1	-	-	1.51	-	-	-	-	-	A-2-4 (0) SM
UNIT 6 (RESIDUAL SANDSTONE)																		
TP7	0.72-1.65	Light orange brown silty SAND	21		77	2	NP	NP	0	6.1	-	1.03	1997	4.9	9.6	14.9	0	A-2-4 (0) SM G9
TP13	0.88-2.50	Dark brown slightly silty SAND	5	12	80	3	NP	NP	0	-	8.3	1.15	-	-	-	-	-	A-2-4 (0) SM *Low
TP20	0.77-1.70	Orange brown speckled white silty SAND	5	13	63	19	SP	SP	0.5	-	9	1.29	-	-	-	-	-	A-2-4 (0) SM *Low
TP20	0.77-1.70	Orange brown speckled white silty SAND	22		59	19	SP	SP	0.5	7.5	-	1.29	2045	5.3	9.4	13.8	0.3	A-2-4 (0) SM G9

Key:

LL	-	Liquid Limit	OMC	-	Optimum Moisture Content	MDD	-	Maximum Dry Density
LS	-	Linear Shrinkage	G9	-	Classification in Terms of COLTO	A-1-a (0)	-	AASHTO Classification
P	-	Plasticity Index	SM; GP	-	Unified Soil Classification	GM	-	Grading Modulus
IMC	-	Insitu Moisture Content	*Low	-	Potential Expansiveness (van der Merwe (1964))			

11. DISCUSSION

11.1 General Global Stability and Suitability of the Site for Proposed Development

Reference to GIS geohazard records of eThekwini Municipality indicate that the site is located within an area classified with satisfactory regional inferred slope stability where unstable and / or potentially unstable terrain is not indicated.

The generally silty sandy and clayey sandy soils observed on site are considered highly susceptible to rapid erosion by uncontrolled stormwater runoff. Furthermore, vertical sidewalls excavated within the fill materials occurring on site may display rapid sidewall collapse.

Based on the results of the fieldwork undertaken during this investigation, it is considered that this site is generally stable and suitable for the proposed development provided the recommendations given in this report are adhered to. These measures amount to no more than sound development controls appropriate to the site conditions expected and the nature of the development proposals confirmed with Geosure at the time of preparation of this report.

11.2 Material Classification and Recommendations for Usage

The materials encountered on site have been classified in terms of COLTO, USCS and visual assessments made on site, to provide a general assessment of these materials for consideration to use during construction.

The characteristics of the materials and their suitability is summarised in Table 2 below.

Table 2: Summary of Material Classifications

Geology / Unit	General Description	Classification Details	Recommended Use
Unit 1 (Fill – Basecourse)	Sandy GRAVEL	GM = 2.47 PI = 5 CBR @ 93% = 19 UNIFIED = GP AASHTO = A-1-a (0) COLTO = G6	This unit was only encountered in inspection pits IP4 and IP5. Suitable for use as in selected fill and underlying layers.
Unit 2 (Fill – Subbase)	Slightly silty GRAVELLY SAND / gravelly silty SAND	Not tested	Suitable for use as general/bulk. Potentially suitable for use as selected fill and underlying layers subject to laboratory testing.
Unit 3 (Fill – General)	Slightly clayey gravelly SAND / / clayey SAND / SANDY CLAY	GM = 1.51 PI = SP UNIFIED = SM AASHTO = A-2-4 (0)	These soils are considered suitable for use in bulk / general fills. Soils containing abundant builder's rubble may need to be spoiled.
Unit 3 (Fill – Uncontrolled)	Gravelly SAND / gravelly SANDY CLAY / clayey SAND	Not tested	These soils are considered suitable for use in bulk / general fills subject to screening large rubble inclusions. Soils containing abundant domestic waste may need to be spoiled.
Unit 3 (Colluvium)	Sandy CLAY	Not tested	Unsuitable for use in fill due to a generally high organics content associated with such materials. Material should be set aside for topsoiling where necessary.
Unit 6 (Residual Sandstone)	Silty SAND / slightly silty gravelly SAND / clayey SAND	GM = 1.03 to 1.29 PI = NP to SP CBR @ 93% = 9.4 to 9.6 UNIFIED = SM AASHTO = A-2-4 (0) COLTO = G9	Clayey variants are considered to be suitable for bulk earthworks and topsoiling where necessary. Granular variants can be considered for use in bulk fills or subgrade and lower select fills.

Geology / Unit	General Description	Classification Details	Recommended Use
Unit 7 (Weathered Sandstone Rock)	Highly to completely weathered, very soft friable rock	Not tested	Materials could potentially be used in bulk / general fills subject to laboratory verification during construction.

The classification of materials encountered on the site should be confirmed by laboratory verification testing during construction, as part of process and acceptance control monitoring, prior to the material being considered for use in construction.

11.3 Excavation Classification

It is considered that soft excavation in terms of SANS 1200 can be anticipated to depths in the range of approximately 0.29m (IP10) to 1.65m (IP7) below EGL. The soils and very soft sandstone rock observed in the inspection pits are likely to classify as *soft* excavation.

With depth, the sandstone rock is likely to be less weathered and therefore increase in strength, resulting in possibly *intermediate* to *hard* excavation.

It is therefore recommended that an allowance for *soft, intermediate* and *hard* excavation be allowed for in the contract document.

Builder's rubble and domestic waste left in place may result in slower excavation rates.

11.4 General Earthworks

All earthworks should be carried out in a manner to promote stable development of the site. It is recommended that earthworks be carried out along the guidelines given in SANS 1200 (current version).

Guidelines for earthworks are provided below:

i. Where natural ground slopes are steeper than 1 vertical to 6 horizontal (6 degrees), the fill must be benched into the slope. Benches should be 0.5m deep and 2.0m wide.

ii. Placement of fill layers should be undertaken in layers not exceeding 200mm thick when placed loose and compacted using suitable compaction plant to achieve 93% of Modified AASHTO maximum dry density within 1 – 2 percent (wet / dry) of OMC.

iii. Prior to commencement of earthworks, all vegetation should be cleared, and topsoil grubbed.

iv. Terraces should be graded to direct water away from all structures.

v. Density control of placed fill material should be undertaken at regular intervals during fill construction.

vi. Boulders or builder's rubble larger than 200mm diameter or $^2/_3$ of the layer thickness when loose should be removed from the fill material as these could complicate the compaction works, and also cause piping within fills.

vii. Furthermore, large boulders or builder's rubble in fills could cause later problems during construction of foundations.

viii. Cut and fill embankments formed in soil may be formed to batters not steeper than 1 vertical to 2 horizontal (≤ 26°) and to a height not greater than approximately 2m.

ix. Cut slopes in weathered rock should be formed to batters of 1 vertical to 0.5 horizontal (63°) providing there are no day-lighting bedding planes and to a height not exceeding approximately 3m.

x. Steeper batters will require lateral support.

xi. Cut and fill slopes greater than 2m and 3m, respectively, in height will require further detailed assessment by a geotechnical professional.

xii. Workers should not enter any excavations deeper than 1.5m that is not shored or battered back as described above.

xiii. Should excavations intersect groundwater seepage then excavation sidewalls may need to be temporarily shored to engineer's detail or battered to a flatter slope than recommended above to promote stability.

All excavations are to be inspected on a daily basis by a competent person to confirm stability and these inspections should be recorded. However, it remains the responsibility of the contractor to ensure compliance with the current Occupational Health and Safety (OHS) Act.

11.5 Subgrade Treatment for Internal Roads and Parking Areas

The following is recommended:

i. Where good quality sandy and/or gravelly material i.e. classifying with a minimum rating of G9 (COLTO) is encountered, these materials will be suitable for use as the lower selected subgrade and general fill layers.

ii. These materials should be ripped to the depths specified by the engineer and re-compacted to 93% (general fill) of Modified AASHTO maximum dry density within approximately 1 – 2 percent (wet / dry) of OMC.

iii. Conversely, where poor subgrade is exposed, undercutting into the unsuitable materials (depending on the formation levels) by the depth specified by the engineer is required to accommodate a select layer comprising material of at least G8 quality and compacted to at least 93% of Modified AASHTO maximum dry density within 1 – 2% (wet / dry) of OMC.

iv. Provided the above recommendations are followed, a design CBR of 10 can be adopted.

The pavement formation layer for the proposed driveway and parking areas should be designed taking into account anticipated traffic loads, volumes and design life of the parking area and roads.

11.6 Anticipated Founding Conditions

The following major founding conditions are anticipated to characterise the site at the positions investigated:

i. Presence of variable fill material with the general fill (Unit 4) containing builder's rubble, domestic waste, and occasional organic content.

ii. Presence of loose through to dense consistencies in the fill materials to depths in the range of approximately 0.10m (IP1) to 1.64m (IP6) below EGL.

iii. Presence of "loose" to "medium dense" consistencies in the residual soils (Unit 6), inferred from DCP tests to depths in the range of approximately 0.29m (IP10) to 2.50m (IP12, IP13 and IP18) below EGL.

iv. Generally low bearing capacities are associated with the insitu soil cover encountered. These soils are also considered highly compressible under foundation loads.

v. The weakly cohesive fill and insitu soils are capable of exhibiting a collapse settlement potential in response to a significant increase in moisture content under constant load.

vi. Shallow weathered sandstone rock (Unit 7) is considered a good founding horizon for proposed foundation loads, and was observed in inspection pits at depths in the range 0.29m (IP10) to 1.65m (IP7) below EGL. Inferring from the refusal depths of the DCP tests, depths to rock are in the range 0.29m (DC10) to 2.9m (DC12) below EGL.

vii. Trench / excavation sidewalls excavated into the loosely consolidated soils are likely to be unstable and require shoring / battering back to engineer's detail.

11.7 Founding Recommendations

Relatively light to moderate foundation design loads have been assumed for the proposed development.

The following founding solutions are considered applicable for the site conditions:

i. Strip / Spread Footings;
ii. Raft Foundations; and
iii. Composite Foundation Comprising Footings and Piles.

11.7.1 Strip / Spread Footings

It is recommended that all footing foundations be taken down through the fill, colluvial and residual soils and be placed on weathered rock of at least very soft rock strength, where a net allowable bearing pressure of 250kN/m^2 is considered applicable. Total settlement of footings placed on weathered sandstone of this nature rock is likely to be less than 10mm with differential settlement taken as 50% of total settlement.

Weathered sandstone rock was observed at depths in the range of 0.29m (IP10) to 1.65m (IP7) below EGL. Inferring from the refusal depths of the DCP tests, depths to rock are in the range 0.29m (DC10) to 2.9m (DC12) below EGL.

Spread footings should not be less than 1500mm in width and should be nominally reinforced to accommodate any soft zones that may occur in the rock.

Alternatively, consideration could be given to founding on the residual soils of at least firm to stiff consistency where a net allowable bearing pressure of 100kN/m^2 is considered applicable. Total approximate settlement of foundations is likely to be in the range 10mm to 15mm. Differential settlements of foundations placed on residual soils can be taken as 50% of total settlement.

11.7.2 Raft Foundations

Consideration could be given to supporting building loads by means of a reinforced concrete raft with stiffened edge beams developed on structural fill.

The structural fill provides for support and distribution of structural foundation loads in a controlled manner, thereby minimising the potential for excessive total and differential foundation settlements.

The option of a purpose-designed raft must address the anticipated soil conditions described in this report. In this regard, design should accommodate expected deflections due to consolidations of fill and/or compressible insitu ground up to 20mm per metre of compressible soil. A proprietary raft such as a cellular / "Waffle" Raft design would be suitable under these circumstances.

At a nominal bearing pressure of 15kN/m^2, the concrete raft is likely to experience total settlements of approximately 5mm to 10 mm, with differential settlement taken as 50% of total settlement.

Some cracking may develop but could be controlled by the use of brickforce and reinforced concrete ring beams and / or articulation movement joints to engineer's detail within the top structure.

The raft foundation must be designed by a structural engineer to tolerate the anticipated differential movement.

An approved damp proof plastic should be provided below the entire raft, and the slab and beams should be cast as a single unit.

11.7.3 Composite Foundation Comprising Footings and Piles

Where the founding depth to rock is greater than about 2.5m (e.g. at inspection pit positions IP6, IP12 and IP13), the use of (strip and spread) footings is generally considered impractical and uneconomical, and consideration may need to be given to adopting a piled foundation solution in order to found in rock.

The depth to rock in the general vicinity of the abovementioned inspection pit positions (and potentially other areas with similar levels to suitable founding media) will need to be proven in order confirm the pile recommendations and to allow a detailed pile design to be carried out.

It is considered that the pressure grouted Continuous Flight Auger (CFA) piles are suitable for use on the site. Piles must be designed to transfer axial loads into the weathered bedrock and should be socketed into the rock. Pile diameters should also be adequate to displace cobble and small boulder inclusions anticipated within the existing fill materials.

As a guideline, allowable loads for the various diameters of CFA piles are given in **Table 3** below.

Table 3: Typical Allowable Pile Working Loads for CFA Piles

Pile Type	Pile Diameter (mm)	Allowable Axial Working Pile Load (kN)
CFA	300	350
	350	450

*Pile working loads are calculated using a shaft stress of 5MPa

A detailed pile design must be carried out taking into account actual pile loads. The pile installation must also be supervised to ensure that the piles are adequately founded.

It is recommended that prior to piling, a number of trial holes be carried out using an auger piling rig to identify "unforeseen" problematic ground conditions and to confirm the depths to rock before the main piling contract commences.

The depth to rock is anticipated to increase in areas of existing / proposed fill. By carefully monitoring the foundation depths of the spread footings, it will become evident when the foundation depths become sufficiently deep to warrant the use of a piled foundation.

Movement joints to engineer's detail must be allowed for between the parts of the building founded on different foundation systems to accommodate differential settlement.

11.8 General

The construction of a 1m wide concrete apron around the structure is recommended in order to minimize seasonal subsurface moisture fluctuations beneath the structure that could lead to collapse settlement movements.

The surrounding ground should also be graded away from the structure to limit infiltration of water into the soils immediately beneath the building.

A provision for possible movements between floors and walls should be allowed for in the design e.g. provision of construction joints and use of appropriate softboard between walls and floors as per structural engineer's detail.

All brickwork and foundations will need to be reinforced. The use of movement joints should also be considered.

All foundations should be backfilled with well compacted soil to a density of not less than 95% of Modified AASHTO to prevent the ingress of water into the material beneath the foundations.

The following precautions should also be taken to prevent the existing fill and insitu soils from wetting up and causing collapse:

i. Gardens which are located near the structures should not be excessively watered;
ii. Leaks in plumbing associated damage should be repaired immediately;
iii. No plumbing and drainage to be placed under floor slabs;
iv. 1.0m^2 concrete aprons to be provided at all downpipes; and
v. No large shrubs and trees being planted within 1.5m of structures.

11.9 Drainage and Erosion Controls

One of the critical factors in the stable development of the site is the control and removal of both surface and groundwater from the site.

The fill materials and insitu soils observed on site are considered susceptible to rapid erosion due to uncontrolled / channelled runoff. As such, it is imperative that earthworks and drainage measures be designed in such a way as to prevent ponding of, or high concentrations of, stormwater or groundwater anywhere on the site, both during and after the development.

Stormwater from roofed and surface areas is to be reticulated off site into the nearest municipal stormwater connection facility allowing for attenuation and erosion controls to engineer's detail.

The terraces should be shaped to a gradient to prevent water ponding on the surface and should be graded to direct water away from the structures.

It is recommended that contingencies be made in the Bill of Quantities to allow for the above measures.

11.10 Quality Assurance during Construction

Regular process control and acceptance control testing must be carried out during construction.

Any loose or remoulded soft material must be removed from foundation trenches prior to the casting of concrete.

Geosure should be appointed to carry out regular inspections of foundation excavations in order to confirm allowable bearing pressures of the soils.

Blinding should be cast as soon as foundations have been inspected and approved by Geosure.

Depth to rock should be confirmed by Geosure once the earthworks phase has been completed in order to advise on an appropriate founding solution.

11.11 Additional Geotechnical Investigation

The findings and recommendations of this report are based upon a shallow investigation and reference to conceptual architectural layouts.

Additional investigation is recommended once architectural layouts are finalised, to inform the proposed earthworks and foundation solutions.

Allowance should be made for a deep study by means of either mechanical auger or drilling rig in the event that a piled foundation solution is to be adopted. In this regard, it is recommended that prior to piling, a number of trial holes be carried out using an auger piling rig to identify "unforeseen" problematic ground conditions and to confirm the depths to rock before the main piling contract commences.

12. SUMMARY OF FINDINGS AND RECOMMENDATIONS

i. This report details the results of a Shallow Geotechnical Investigation for the Proposed Conversion of Newtown A Community Health Centre to a Large Clinic on Erven 2746 and 2833 Inanda A at Corner of Bhekezulu Drive and Nhlwathi Crescent, Inanda, eThekwini Municipality, KwaZulu-Natal, and referred in this report as the site.

ii. The site was observed to be underlain by imported fill, general fill, uncontrolled fill, colluvium, residual sandstone and weathered sandstone rock of the Natal Group.

iii. Groundwater seepage was not observed in any of the inspection pits excavated. The risk of a perched groundwater table is considered likely during and after periods of rainfall.

iv. The weakly cohesive sandy soils observed at the site are considered highly susceptible to rapid erosion by uncontrolled stormwater runoff.

v. The fill basecourse layer classified as G6 according to COLTO. The residual soils classified as G9 according to COLTO.

vi. Where good quality material i.e. classifying with a minimum rating of G9 is encountered, these materials will be suitable for use as the lower selected subgrade and general fill layers.

vii. The soils and very soft sandstone rock observed in the inspection pits are likely to classify as soft excavation. The sandstone rock is likely to be less weathered and therefore increase in strength with depth resulting in possibly intermediate to hard excavation.

viii. It is recommended that earthworks be carried out along the guidelines given in COLTO / SANS 1200 (current version) and in accordance with current requirements of the OHS Act.

ix. Where poor subgrade is exposed, undercutting into the unsuitable materials (depending on the formation levels) by the depth specified by the engineer is required to accommodate a select layer comprising material of at least G8 quality.

x. Variable founding characters are anticipated as discussed in Section 11.6 of this report.

xi. Consideration should be given to the following foundation solutions discussed in Section 11.7 of this report:

   a. Strip / Spread Footings;
   b. Raft Foundations; and
   c. Composite Foundation Comprising Footings and Piles.

xii. Depth to rock should be confirmed by Geosure once the earthworks phase has been completed in order to advise on an appropriate founding solution.

xiii. Additional geotechnical investigation to inform detailed earthworks and foundation recommendations including a piled foundation solution is advised.

13. LIMITATIONS

The conclusions, recommendations and discussions presented in this report are (1) based upon an evaluation and interpretation of the findings of the field and laboratory programs, (2) based upon an interpolation of subsurface conditions between and beyond the explorations, (3) subject to confirmation of the actual conditions encountered during construction, and (4) based upon the assumption that sufficient observation and testing will be provided by Geosure during construction.

The conclusions in this report are based on interpolation and extrapolation of subsurface conditions encountered at the field test locations. The actual subsurface conditions at unexplored locations may be different.

Consequently, the findings and recommendations in this report may require re-evaluation if subsurface conditions different than stated herein are encountered. Inherent in most projects performed in the heterogeneous subsurface environment, continuing subsurface investigations and analyses may reveal conditions that are different than those presented herein. This facet of the geotechnical profession should be considered when formulating professional opinions on the limited data collected on this project.

The findings and recommendations contained in this report were developed in accordance with generally accepted current professional principles and practice ordinarily exercised, under similar circumstances, by geotechnical engineers and geologists practicing in this locality. No other warranty, express or implied, is made.

14. BIBLIOGRAPHY

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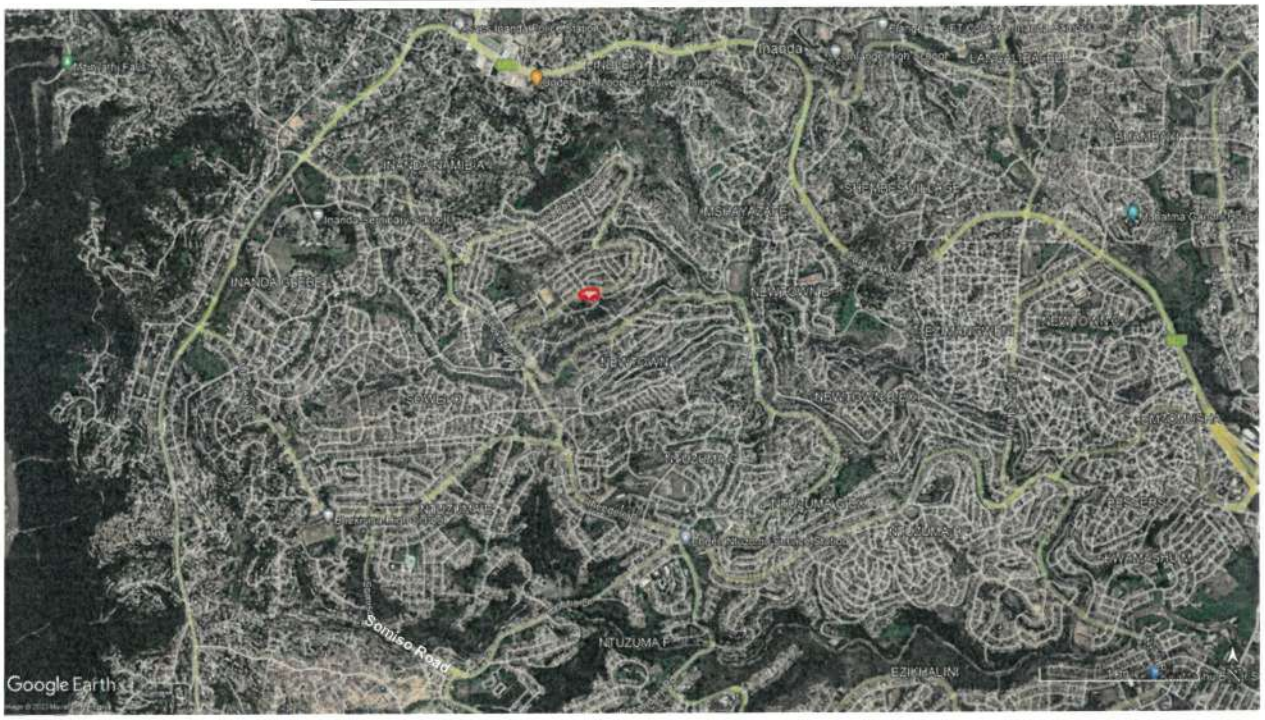
APPENDIX A

FIGURE 1 – REGIONAL AND LOCAL CONTEXTS OF SITE

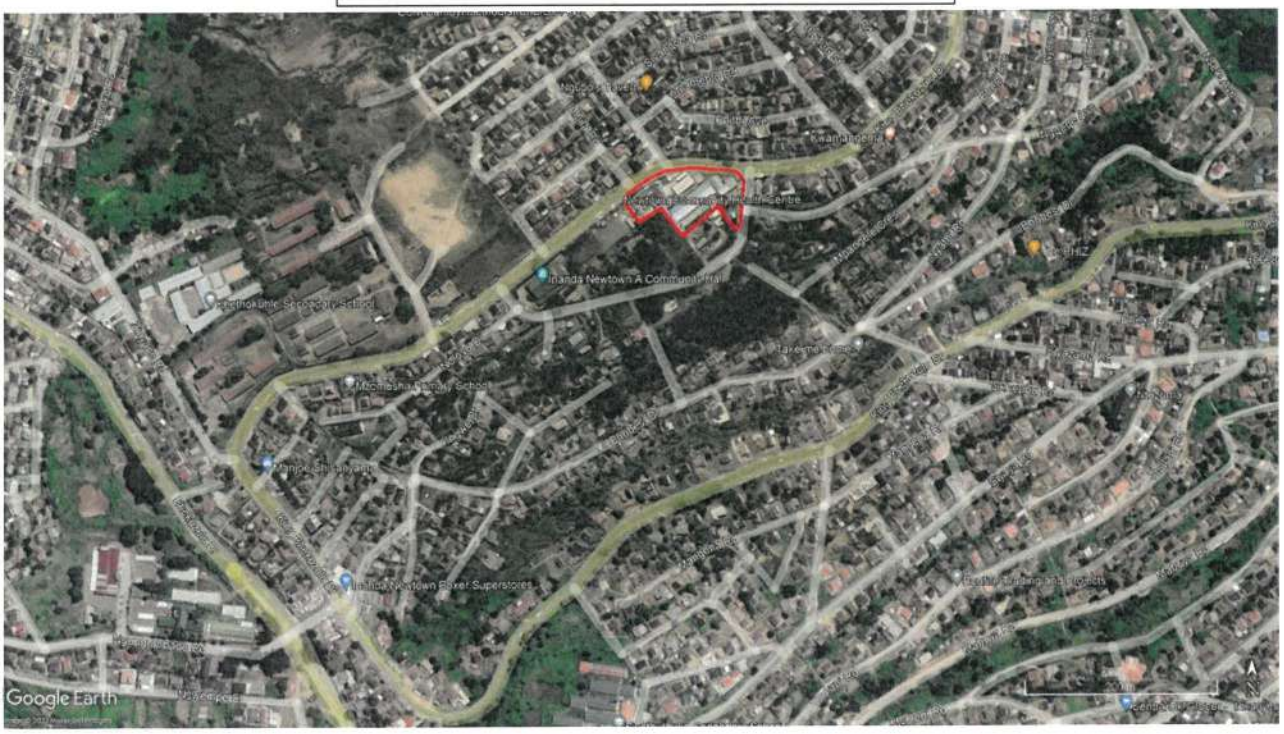
FIGURE 2 – SITE PLAN

FIGURE 3 – GEOLOGICAL PLAN

Plan 1: Aerial View of Site – Regional Plan



Plan 2: Aerial View of Site – Locality Plan



Ukuza Consulting (Pty) Ltd

Geotechnical Investigation for the Conversion of Newtown A CHC to a Large Clinic, Erven 2746 and 2833, Inanda A, eThekwini Municipality

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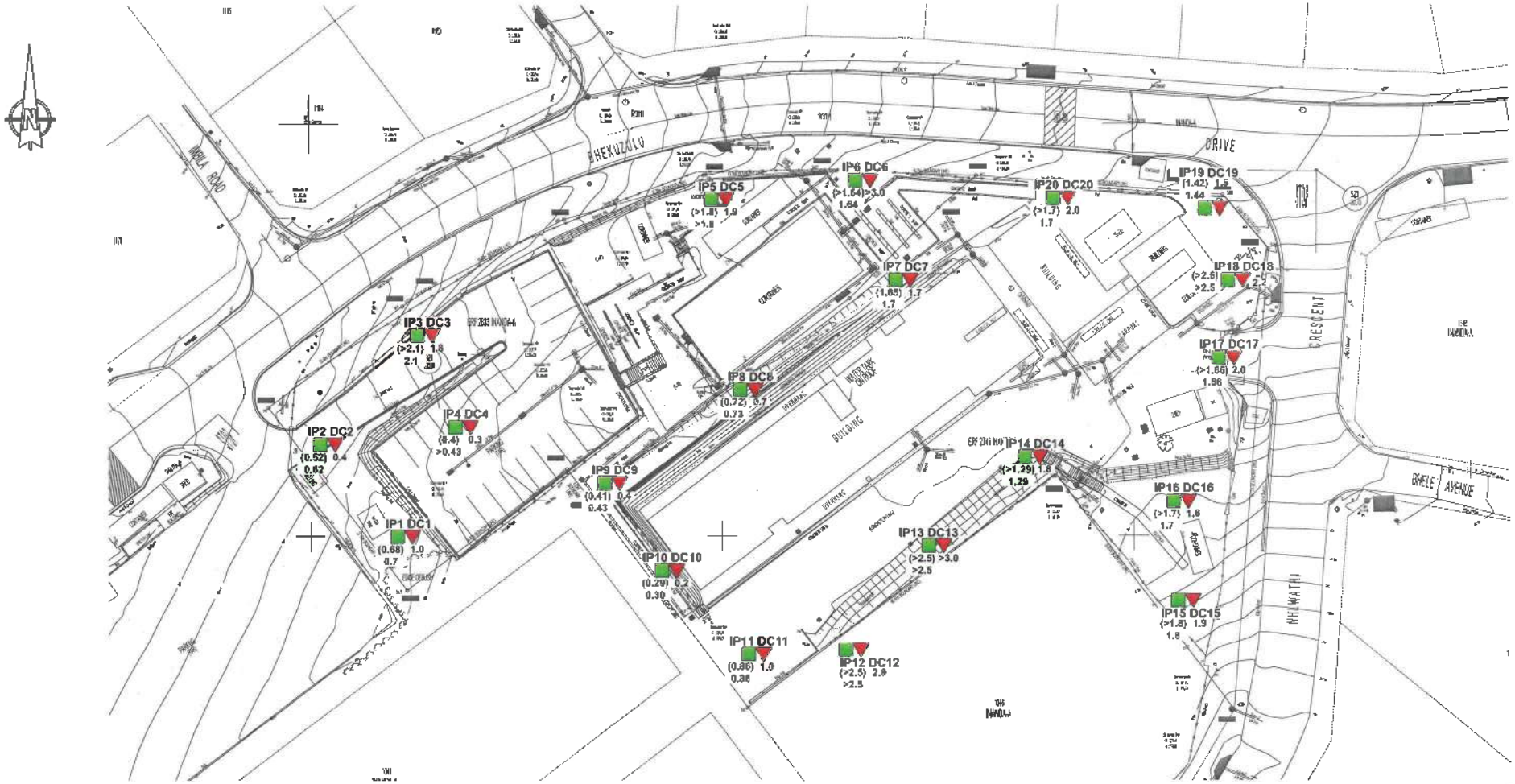
Tel: +27 031 265 0458, Fax: +27 086 689 5506, Cell. 082 784 0544

DATE	28-04-2023
DRAWN	V.G
CHECK	F.S
REFERENCE No.	047-23

Figure 1



KEY:

IP1 (0.68) 0.7 — Approximate position of Inspection Pit showing depth to rock () and depth to refusal in metres below existing ground level.

DC1 1.0 — Approximate position of Dynamic Cone Penetrometer Test showing depth to refusal in metres below existing ground level.

Site plan showing approximate positions of:

Inspection Pits; and
Dynamic Cone Penetrometer (DCP) Tests.

SCALE 1:500

0 5 10
Metres

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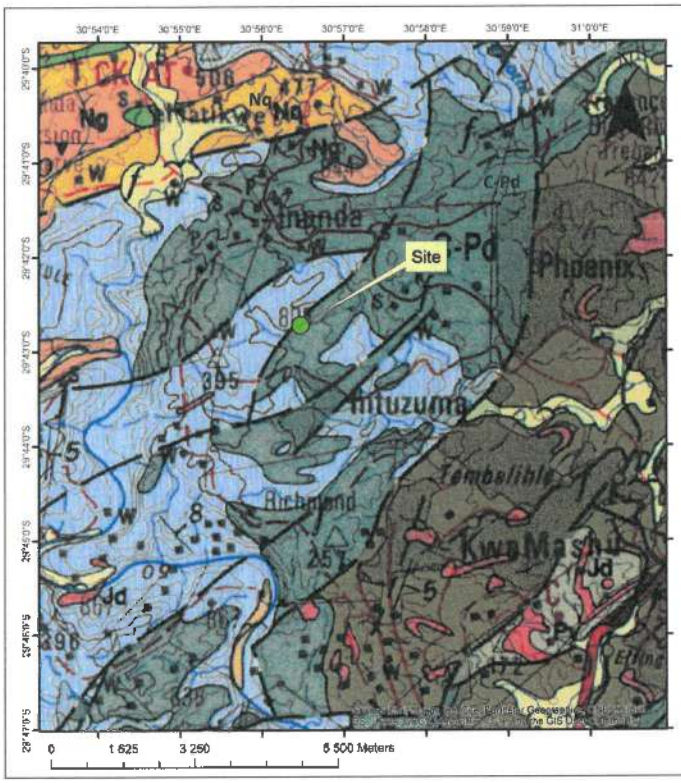
Consulting Engineering Geologists Geotechnical Engineers, Geoscientists and Geotechnical Quality Assurance Specialists

Date:	13-04-2023
Drawn by:	V.G.
Checked by:	F.S.
Reference No.	047-23
Drawing No.	Figure 2
Rev. No.	0

Extract of Geological Map 2930 Durban



KEY:

- Alluvium. Quaternary Age.
- Jd — Dolerite. Jurassic Age.
- C-Pd — Tillite; subordinate varved shale and boulder shale. Dwyka Group.
- D-Sn — Red brown coarse grained arkosic to subarkosic sandstone; quartz arenite, micaceous sandstone, small pebble conglomerate; subordinate siltstone and mudstone. Natal Group.
- Ng — Megacrystic biotite granite. Namibian Age.
- Nq — Pink leucocratic gneiss, subordinate quartzite and sillimanite quartzite. Namibian Age.
- Inferred geological contact.
- Inferred geological fault.

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n for the Conversion of
e Clinic, Erven 2746 and
2833, Inanda A, eThekwini Municipality

DATE	28-04-2023
DRAWN	V.G
CHECK	F.S
REFERENCE No.	047-23

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Figure 3

APPENDIX B

INSPECTION PIT PROFILES AND PHOTOGRAPHS

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www.geosure.co.za

Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda KwaZulu Natal

HOLE No: IP1
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15

0.00	Slightly moist, greyish brown, medium dense to dense, fine to medium grained, slightly clayey gravelly SAND, containing roots and domestic waste. FILL.
0.10	Slightly moist to moist, light greyish brown, dense, fine to medium grained, slightly clayey SANDY GRAVEL, containing roots. FILL.
0.33	Moist, dark brown speckled orange and white, firm to stiff, intact, slightly gravelly SANDY CLAY. Residual Sandstone.
0.68	Orange brown speckled white, highly to very highly weathered, fine to medium grained, highly to completely fractured, very soft to soft rock. SANDSTONE (Natal Group).
0.70	

NOTES

1) No groundwater seepage observed.

2) Sample taken at:
S1 0,10--0,33 (2 x Bulk)

3) Refusal depth at 0.70m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'28.34"E
Y-COORD : 29 42'43.49"S

HOLE No: IP1

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Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda KwaZulu Natal

HOLE No: IP2
Sheet 1 of 1

JOB NUMBER: 047-23

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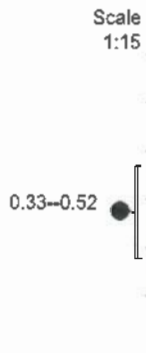

0.00	Slightly moist, greyish brown, medium dense to dense, fine to medium grained, slightly clayey gravelly SAND, containing roots and domestic waste. FILL.
0.11	Moist, dark greyish brown, firm, intact, sandy CLAY, containing fine roots. Colluvium.
0.33	Moist, orange brown mottled dark grey, dense, fine to medium grained, slightly clayey SAND. Residual Sandstone.
0.52	Orange brown speckled white, highly to completely weathered, fine to medium grained, highly to very highly fractured, very soft rock. SANDSTONE (Natal Group).
0.62	

NOTES

1) No groundwater seepage observed.

2) Sample taken at:
S1 0,33--0,52 (2 x Ind)

3) Refusal depth at 0.62m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'28.08"E
Y-COORD : 29 42'43.17"S

HOLE No: IP2

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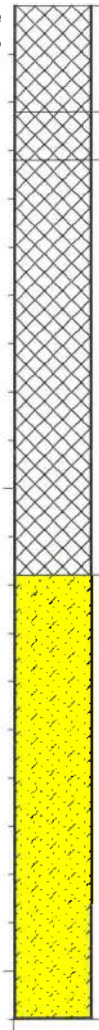
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda KwaZulu Natal

HOLE No: IP3
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00 Slightly moist, greyish brown, medium dense to dense, fine to medium grained, slightly clayey SANDY GRAVEL, containing domestic waste. FILL (Uncontrolled).

0.22 Slightly moist, light brown, dense, fine to medium grained, slightly clayey GRAVELLY SAND, containing domestic waste. FILL (Uncontrolled).

0.32 Moist, light greyish brown to dark greyish brown, soft to firm, intact, gravelly SANDY CLAY, containing domestic waste. FILL (Uncontrolled).

1.18 Moist, orange brown mottled dark grey, dense, fine to medium grained, slightly clayey SAND. Residual Sandstone.

2.10

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.50m.

3) Refusal depth at 2.10m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'28.44"E
Y-COORD : 29 42'42.76"S

HOLE No: IP3

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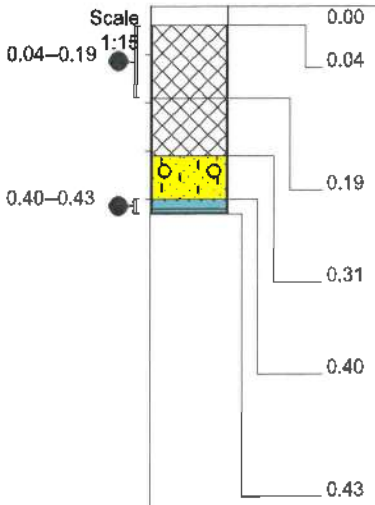
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP4
Sheet 1 of 1

JOB NUMBER: 047-23



0.00 – 0.04	Asphalt Surfacing.
0.04 – 0.19	Slightly moist to moist, light greyish brown speckled white and bluish grey, dense, fine to medium grained, sandy GRAVEL. Base FILL. (G6). Hydrochloric Acid - Positive, Phenolphthalein - Negative
0.19 – 0.31	Moist, dark orange brown, dense, fine to medium grained, slightly silty GRAVELLY SAND. Sub-base FILL. Hydrochloric Acid - Negative, Phenolphthalein - Negative
0.31 – 0.40	Moist, orange brown speckled white, dense, fine to medium grained, slightly silty gravelly SAND. Residual Sandstone. Hydrochloric Acid - Negative, Phenolphthalein û Negative.
0.40 – 0.43	Orange brown mottled yellow, highly to completely weathered, highly to very highly fractured, friable, very soft rock. SANDSTONE (Natal Group). Hydrochloric Acid û Negative, Phenolphthalein û Negative.

NOTES

1) No groundwater seepage observed.

2) Samples taken at:
S1 0,04--0,19 (2 x Bulk)
S2 0,40--0,43 (2 x Ind)

3) Final depth at 0.43m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'28.86"E
Y-COORD : 29 42'42.83"S

HOLE No: IP4

Consulting Engineering Geologists, Geotechnical Engineers, Geotechnicians & Geotechnical Quality Assurance Specialists

GEOSURE (Pty) Ltd

CLIENT:	Ukuza Consulting (Pty) Ltd
PROJECT:	Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda, KwaZulu Natal
REFERENCE NO.:	047-23
FIELD No.:	**IP 1 to IP 4**
DEPTH:	Refer to Log

IP1

IP2

IP3

IP4

GEOSURE (Pty) Ltd
P O Box 1461, Westville, 3630, South Africa
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Geotechnical, Environmental & Groundwater Engineering
Pile Integrity Testing & Civil Engineering Laboratory

Fax: 086 689-5506
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Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP5
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15

0.00 – 0.04	Asphalt Surfacing .
0.04 – 0.15	Slightly moist to moist, light greyish brown speckled orange and white, dense, fine to medium grained, sandy GRAVEL. Base FILL.
0.15 – 0.31	Moist, medium brown speckled orange, medium dense to dense, fine to medium grained, gravelly silty SAND, containing domestic waste. FILL (Uncontrolled).
0.31 – 0.56	Moist to very moist, medium brown, medium dense to dense, fine to medium grained, clayey SAND. Residual Sandstone.
0.56 – 1.80	Moist to very moist, medium brown to orange brown, medium dense, fine to medium grained, silty SAND. Residual Sandstone.
1.80	

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.40m.

3) Sample taken at:
S1 0,56--1,80 (2 x Ind)

4) Final depth at 1.80m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender

TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023

DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'29.78"E
Y-COORD : 29 42'42.19"S

HOLE No: IP5

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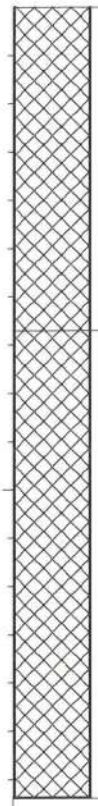
Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda KwaZulu Natal
Parking Area

HOLE No: IP6
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00 Slightly moist, medium greyish brown, medium dense, fine to medium grained, slightly clayey gravelly SAND, containing domestic waste. FILL (Uncontrolled).

0.67 Slightly moist to moist, medium brown to dark brown, soft to firm, intact, clayey SAND to sandy CLAY, containing domestic waste and boulders. FILL (Uncontrolled).

1.64

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.50m.

3) Refusal depth at 1.64m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'30.48"E
Y-COORD : 29 42'42.16"S

HOLE No: IP6

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Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP7
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15

0.00	Block Paving.
0.05	Bedding Sand.
0.09	Moist, light greyish brown, loose to medium dense, fine to medium grained, slightly clayey gravelly SAND, containing builder's rubble. **FILL** (Uncontrolled).
0.72	Moist to very moist, light orange brown, medium dense to dense, fine to medium grained, silty SAND. Residual Sandstone.
1.65	Orange brown speckled white mottled dark brown, highly weathered, highly fractured, friable, very soft rock. SANDSTONE (Natal Group).
1.70	

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.50m.

3) Sample taken at:
S1 0,72--1,65 (2 x Bulk)

4) Refusal depth at 1.70m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'30.59"E
Y-COORD : 29 42'42.55"S

HOLE No: IP7

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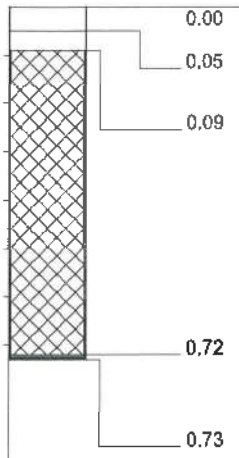
Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP8
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00	Block Paving.
0.05	Bedding Sand.
0.09	Moist to very moist, medium brown speckled orange, loose to medium dense, fine to medium grained, slightly clayey silty SAND, containing builder's rubble and cobbles. FILL (Uncontrolled).
0.72	Orange brown speckled white mottled dark brown, highly weathered, highly fractured, friable, very soft rock. SANDSTONE (Natal Group).
0.73	

NOTES

1) No groundwater seepage observed.

2) Refusal depth at 0.73m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'30.09"E
Y-COORD : 29 42'42.96"S

HOLE No: IP8

Consulting Engineering Geologists, Geotechnical Engineers, Geotechnicians & Geotechnical Quality Assurance Specialists

GEOSURE (Pty) Ltd

CLIENT:	Ukuza Consulting (Pty) Ltd
PROJECT:	Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda, KwaZulu Natal
REFERENCE NO.:	047-23
FIELD No.:	**IP 5 to IP 8**
DEPTH:	Refer to Log

IP5

IP6

IP7

IP8

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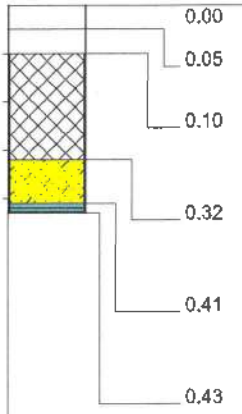
Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP9
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00	Block Paving.
0.05	Bedding Sand.
0.10	Moist to very moist, dark brown, loose, fine to medium grained, silty clayey SAND, containing domestic waste and roots. FILL (Uncontrolled).
0.32	Moist to very moist, orange brown mottled dark brown, loose to medium dense, intact, slightly clayey SAND. Residual Sandstone.
0.41	Orange brown speckled white mottled dark brown, highly weathered, highly fractured, friable, very soft rock. SANDSTONE (Natal Group).
0.43	

NOTES

1) No groundwater seepage observed.

2) Refusal depth at 0.43m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'29.36"E
Y-COORD : 29 42'43.33"S

HOLE No: IP9

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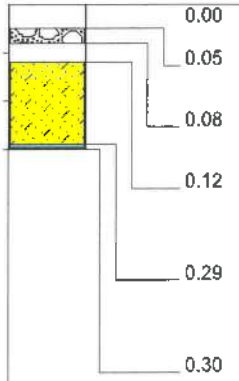
Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP10
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00	Block Paving.
0.05	Concrete (Low strenght).
0.08	Bedding Sand.
0.12	Moist to very moist, dark brown speckled orange and white, loose to medium dense, intact, clayey SAND. Residual Sandstone.
0.29	Orange brown speckled white mottled dark brown, highly weathered, highly fractured, friable, very soft rock. SANDSTONE (Natal Group).
0.30	

NOTES

1) No groundwater seepage observed.

2) Refusal depth at 0.30m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'29.64"E
Y-COORD : 29 42'43.70"S

HOLE No: IP10

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Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP11
Sheet 1 of 1

JOB NUMBER: 047-23

0.00	Block Paving.
0.08	Bedding Sand.
0.12	Moist, dark brown speckled orange, medium dense, fine to medium grained, slightly clayey GRAVELLY SAND, containing builder's rubble and domestic waste. FILL (Uncontrolled).
0.65	Moist to very moist, dark brown speckled orange, loose to medium dense, intact, clayey SAND. Residual Sandstone.
0.86	Orange brown speckled white mottled dark brown, highly weathered, highly fractured, friable, very soft rock. SANDSTONE (Natal Group).
0.88	

NOTES

1) No groundwater seepage observed.

2) Sample taken at:
S1 0,12--0,65 (2 x Bulk)

3) Refusal depth at 0.88m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'29.90"E
Y-COORD : 29 42'43.85"S

HOLE No: IP11

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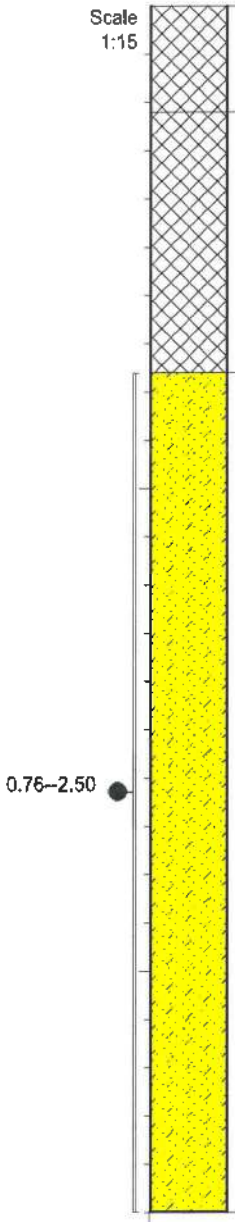
Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda KwaZulu Natal
Parking Area

HOLE No: IP12
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.76–2.50

0.00	Slightly moist to moist, medium greyish brown, medium dense, fine to medium grained, slightly silty clayey SAND, containing domestic waste. FILL (Uncontrolled).
0.22	Moist, medium brown, soft to firm, intact, slightly gravelly clayey SAND to sandy CLAY, containing domestic waste. FILL (Uncontrolled).
0.76	Very moist, dark brown, medium dense, fine to medium grained, slightly clayey SAND. Residual Sandstone.
2.50	

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.50m.

3) Sample taken at:
S1 0,76--2,50 (2 x Ind)

4) Final depth at 2.50m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender

TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023

DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'30.32"E
Y-COORD : 29 42'43.75"S

HOLE No: IP12

Consulting Engineering Geologists, Geotechnical Engineers, Geotechnicians & Geotechnical Quality Assurance Specialists

GEOSURE (Pty) Ltd

CLIENT:	Ukuza Consulting (Pty) Ltd
PROJECT:	Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda, KwaZulu Natal
REFERENCE NO.:	047-23
FIELD No.:	**IP 9 to IP 12**
DEPTH:	Refer to Log

IP9

IP10

IP11

IP12

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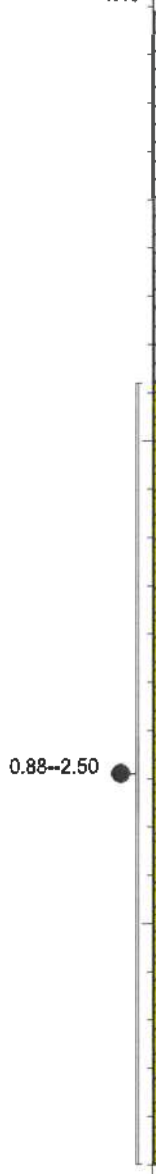
Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP13
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00	Block Paving.
0.08	Bedding Sand.
0.11	Moist, dark brown speckled orange and white, medium dense to dense, fine to medium grained, clayey gravelly SAND, containing builder's rubble, fine roots and cobbles up to 20cm - 30cm in diameter. FILL (Uncontrolled).
0.72	Moist to very moist, orange brown, medium dense, fine to medium grained, slightly clayey gravelly SAND, containing domestic waste. FILL (Uncontrolled).
0.88	Moist to very moist, dark brown, stiff, intact, slightly clayey SAND, containing cobbles up to 15cm - 20cm. Residual Sandstone.
2.50	

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.50m.

3) Sample taken at:
S1 0,88--2,50 (2 x Ind)

4) Final depth at 2.50m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender

TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023

DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'30.72"E
Y-COORD : 29 42'43.70"S

HOLE No: IP13

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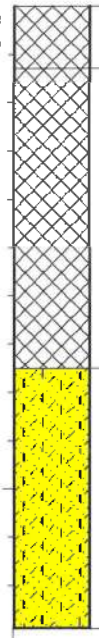
Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP14
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00	Slightly moist, medium greyish brown, medium dense, fine to medium grained, slightly silty clayey SAND, containing roots and domestic waste. FILL (Uncontrolled).
0.13	Moist, medium brown speckled white, soft to firm, intact, clayey SAND to sandy CLAY, containing fine roots and cobbles. FILL (Uncontrolled).
0.75	Moist to very moist, dark brown speckled orange and white, medium dense, fine to medium grained, slightly clayey silty SAND, containing cobbles and boulders. Residual Sandstone.
1.29	

NOTES

1) No groundwater seepage observed.

2) Refusal depth at 1.29m on boulders.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'31.11"E
Y-COORD : 29 42'43.19"S

HOLE No: IP14

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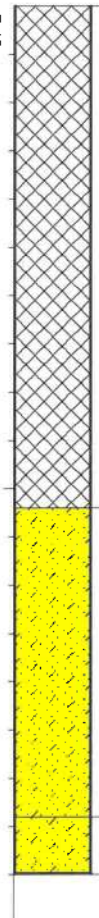
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP15
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00 — Slightly moist to moist, dark brown, loose to medium dense, fine to medium grained, slightly gravelly clayey SAND, containing builder's rubble and domestic waste. FILL (Uncontrolled).

1.04 — Moist to very moist, dark brown, medium dense, fine to medium grained, slightly clayey SAND, containing cobbles and boulders. Residual Sandstone.

1.68 — Moist to very moist, orange brown mottled dark brown, dense, fine to medium grained, slightly clayey SAND. Residual Sandstone.

1.80

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.50m.

3) Refusal depth at 1.80m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender

TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023

DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'31.90"E
Y-COORD : 29 42'43.79"S

HOLE No: IP15

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Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP16
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15

0.00 — Slightly moist to moist, medium greyish brown, medium dense, fine to medium grained, slightly silty clayey SAND, containing domestic waste. FILL (Uncontrolled).

0.31 — Moist, medium brown, soft to firm, intact, slightly gravelly clayey SAND to sandy CLAY, containing domestic waste. FILL (Uncontrolled).

0.63 — Moist, dark brown, medium dense, fine to medium grained, slightly clayey SAND. Residual Sandstone.

1.70

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.40m.

3) Sample taken at:
S1 0,01--0,31 (2 x Bulk)

4) Refusal depth at 1.70m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'31.83"E
Y-COORD : 29 42'43.39"S

HOLE No: IP16

Consulting Engineering Geologists, Geotechnical Engineers, Geotechnicians & Geotechnical Quality Assurance Specialists

GEOSURE (Pty) Ltd

CLIENT:	Ukuza Consulting (Pty) Ltd
PROJECT:	Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda, KwaZulu Natal
REFERENCE NO.:	047-23
FIELD No.:	**IP 13 to IP 16**
DEPTH:	Refer to Log

IP13

IP14

IP15

IP16

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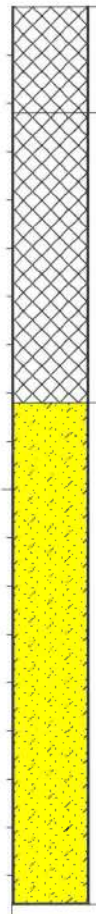
Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP17
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00	Slightly moist, medium brown, medium dense, fine to medium grained, SANDY GRAVEL, containing builder's rubble and domestic waste. FILL (Uncontrolled).
0.22	Moist, dark brown, medium dense, fine to medium grained, clayey GRAVELLY SAND, containing builder's rubble and domestic waste. FILL (Uncontrolled).
0.82	Moist, dark brown, medium dense, fine to medium grained, slightly clayey SAND. Residual Sandstone.
1.86	

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.50m.

3) Refusal depth at 1.86m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender

TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023

DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'32.11"E
Y-COORD : 29 42'42.82"S

HOLE No: IP17

GEOSURE (Pty) Ltd
P O Box 1461, Westville, 3630, South Africa
Tel: (031) 266-0458
email: geosure@ iafrica.com

Geotechnical, Environmental & Groundwater Engineering
Pile Integrity Testing & Civil Engineering Laboratory

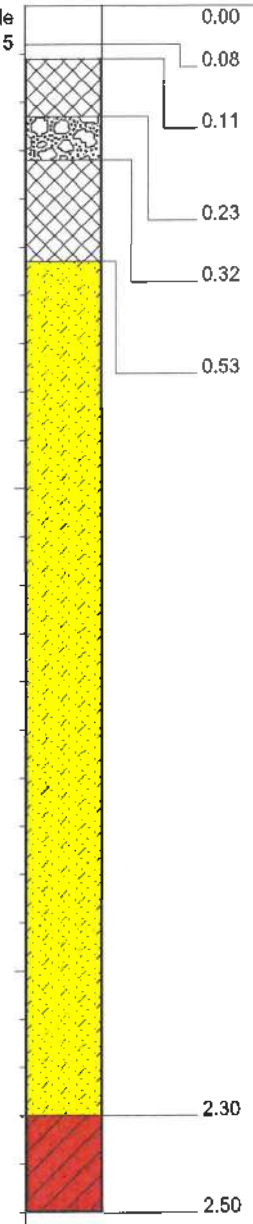
Fax: 086 689-5506
www.geosure.co.za

Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP18
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00	Block Paving.
0.08	Bedding Sand.
0.11	Moist, greyish brown, loose to medium dense, fine to medium grained, gravelly clayey SAND, containing builder's rubble and domestic waste. FILL (Uncontrolled).
0.23	Concrete (Low strength).
0.32	Moist to very moist, dark brown speckled orange, soft to firm, intact, clayey SAND to sandy CLAY. FILL.
0.53	Moist to very moist, dark brown, soft to firm, intact, clayey SAND to sandy CLAY. Residual Sandstone.
2.30	Moist to very moist, orange brown mottled dark brown, soft to firm, intact, SANDY CLAY. Residual Sandstone.
2.50	

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.50m.

3) Final depth at 2.50m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'32.17"E
Y-COORD : 29 42'42.55"S

HOLE No: IP18

GEOSURE (Pty) Ltd
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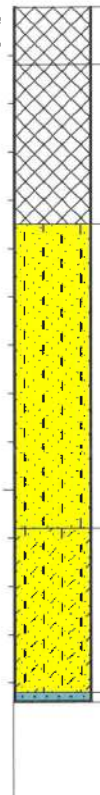
Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP19
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15



0.00	Slightly moist, light greyish brown speckled red, loose to medium dense, fine to medium grained, slightly clayey GRAVELLY SAND, containing builder's rubble and roots. FILL (Uncontrolled).
0.12	Moist, dark greyish brown, stiff, intact, slightly silty SANDY CLAY. FILL.
0.45	Moist to very moist, light brown speckled white, medium dense, fine to medium grained, silty SAND. Residual Sandstone.
1.08	Moist to very moist, orange brown speckled white, loose to medium dense, intact, clayey silty SAND. Residual Sandstone.
1.42	Orange brown speckled white mottled dark brown, highly weathered, highly fractured, friable, very soft rock. SANDSTONE (Natal Group).
1.44	

NOTES

1) No groundwater seepage observed.

2) Refusal depth at 1.44m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender
TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023
DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION : -
X-COORD : 30 56'31.94"E
Y-COORD : 29 42'42.21"S

HOLE No: IP19

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Ukuza Consulting (Pty) Ltd
Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
KwaZulu Natal
Parking Area

HOLE No: IP20
Sheet 1 of 1

JOB NUMBER: 047-23

Scale 1:15

0.00	Slightly moist, light greyish brown speckled red, loose to medium dense, fine to medium grained, slightly clayey GRAVELLY SAND, containing builder's rubble and roots. FILL (Uncontrolled).
0.33	Moist, dark greyish brown, stiff, intact, slightly silty SANDY CLAY. FILL.
0.46	Moist to very moist, light brown speckled white, medium dense, fine to medium grained, silty SAND. Residual Sandstone.
0.77	Moist to very moist, orange brown speckled white, loose to medium dense, intact, clayey SAND. Residual Sandstone.
1.70	

NOTES

1) No groundwater seepage observed.

2) Inspection pit extended using hand auger from 1.40m.

3) Sample taken at:
S1 0,77--1,70 (2 x Bulk)

4) Refusal depth at 1.70m.

CONTRACTOR :
MACHINE : By hand
DRILLED BY :
PROFILED BY : D.Govender

TYPE SET BY : K.Kistasamy
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE : 27 March 2023
DATE : 28 March 2023

DATE : 08/05/23 09:32
TEXT : ..C:\LOGS\PITS.TXT

ELEVATION :
X-COORD : 30 56'31.47"E
Y-COORD : 29 42'42.24"S

HOLE No: IP20

Consulting Engineering Geologists, Geotechnical Engineers, Geotechnicians & Geotechnical Quality Assurance Specialists

GEOSURE (Pty) Ltd

CLIENT:	Ukuza Consulting (Pty) Ltd
PROJECT:	Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda, KwaZulu Natal
REFERENCE NO.:	047-23
FIELD No.:	**IP 17 to IP 20**
DEPTH:	Refer to Log

IP17

NO PHOTO AVAILABLE

IP18

IP19

IP20

APPENDIX C

RESULTS OF DYNAMIC CONE PENETROMETER TESTS

GEOSURE (PTY) LTD.

Geotechnical Engineering Consultants

Tel: (031) 266 0458 Fax: 086 689 5506 Email: info@geosure.co.za

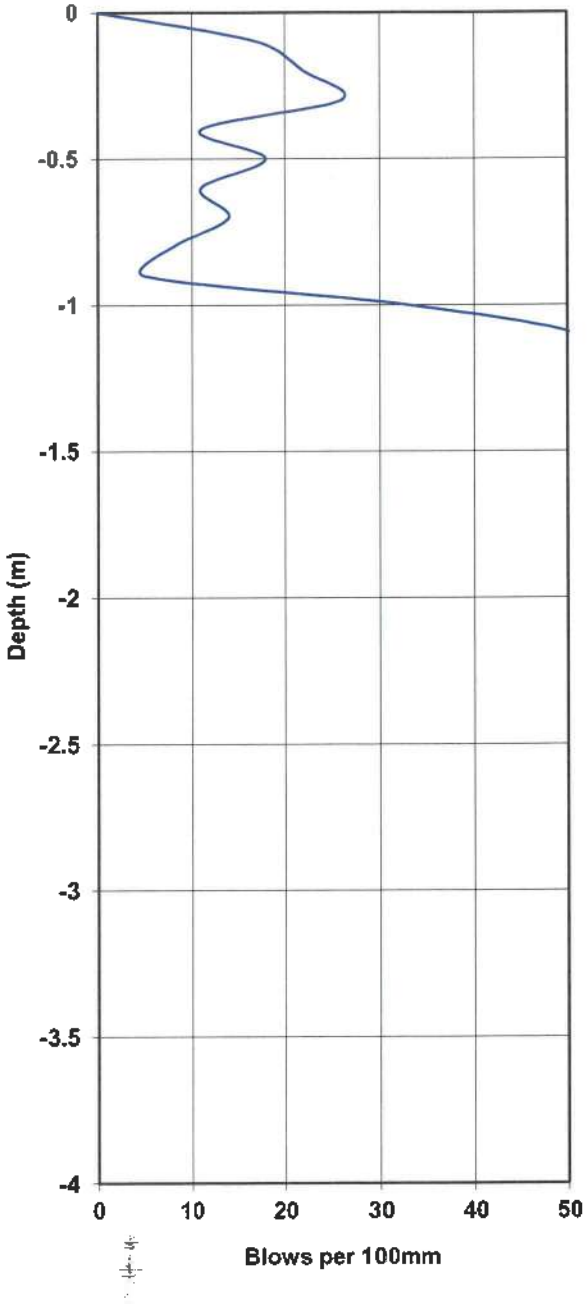
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 1

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	17	Dense	37 deg	31
0.2	22	Dense	38 deg	42
0.3	26	Very Dense	>38 deg	51
0.4	11	Stiff	90 kPa	19
0.5	18	Stiff	150 kPa	33
0.6	11	Stiff	90 kPa	19
0.7	14	Stiff	115 kPa	25
0.8	8	Med.Dense	35 deg	14
0.9	5	Med.Dense	32 deg	8
1	33	Very Dense	>38 deg	>55
	Refusal			



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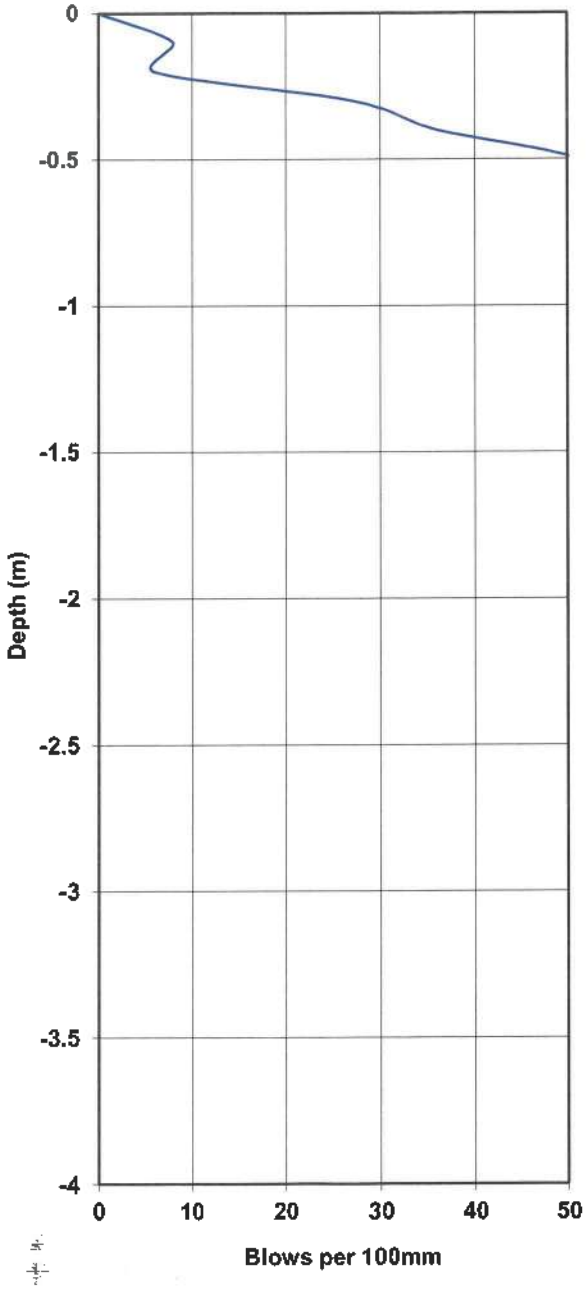
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 2

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	8	Med.Dense	35 deg	14
0.2	6	Med.Dense	33 deg	10
0.3	27	Very Dense	>38 deg	54
0.4	36	Very Stiff	>150 kPa	>55
	Refusal			



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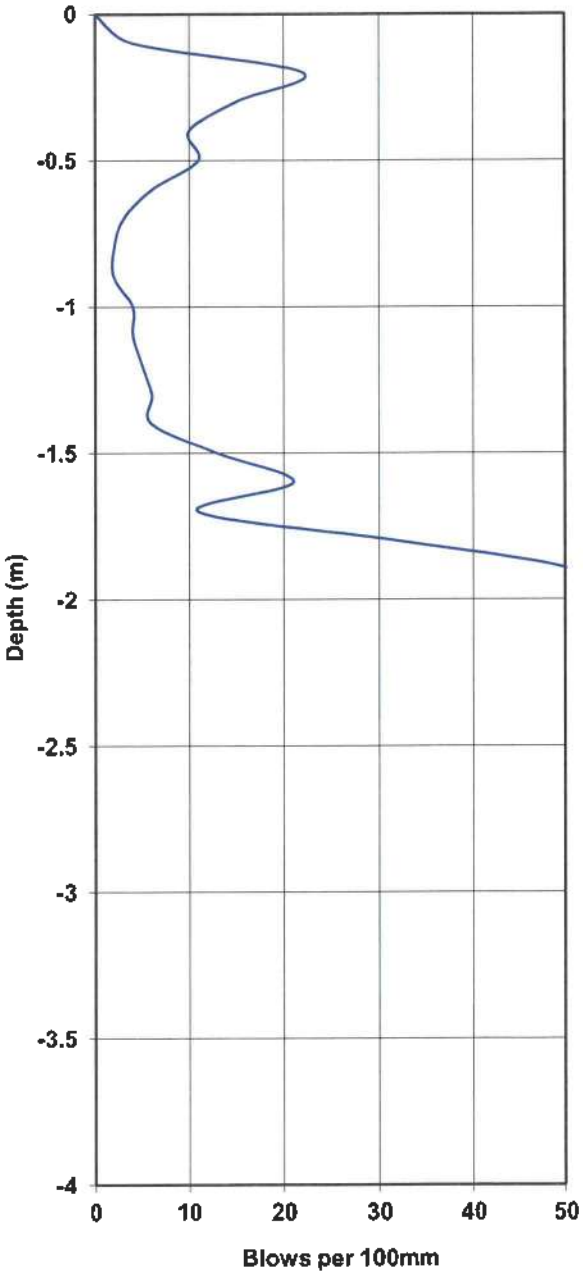
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 3

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	4	Med.Dense	30 deg	7
0.2	22	Dense	38 deg	42
0.3	15	Stiff	125 kPa	27
0.4	10	Stiff	85 kPa	17
0.5	11	Stiff	90 kPa	19
0.6	6	Firm	50 kPa	10
0.7	3	Soft	25 kPa	5
0.8	2	Soft	20 kPa	3
0.9	2	Soft	20 kPa	3
1	4	Soft	35 kPa	7
1.1	4	Soft	35 kPa	7
1.2	5	Firm	40 kPa	8
1.3	6	Med.Dense	33 deg	10
1.4	6	Med.Dense	33 deg	10
1.5	13	Dense	37 deg	23
1.6	21	Dense	38 deg	40
1.7	11	Dense	36 deg	19
1.8	32	Very Dense	>38 deg	>55
	Refusal			



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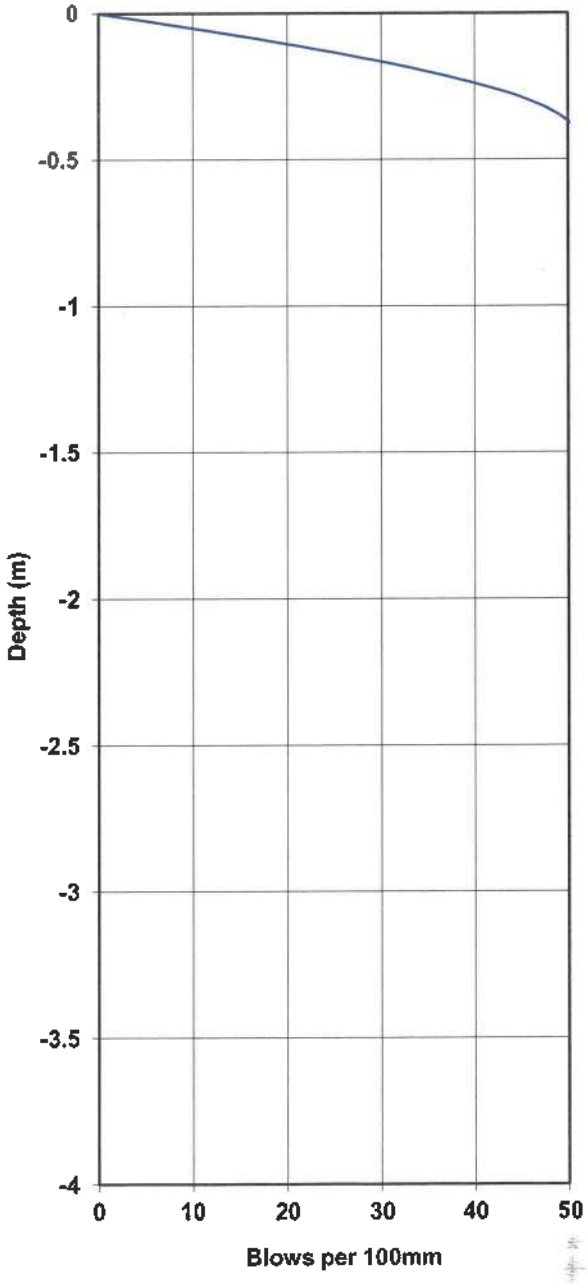
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 4

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	19	Dense	37 deg	35
0.2	35	Very Dense	>38 deg	>55
0.3	46	Very Dense	>38 deg	>55
	Refusal			



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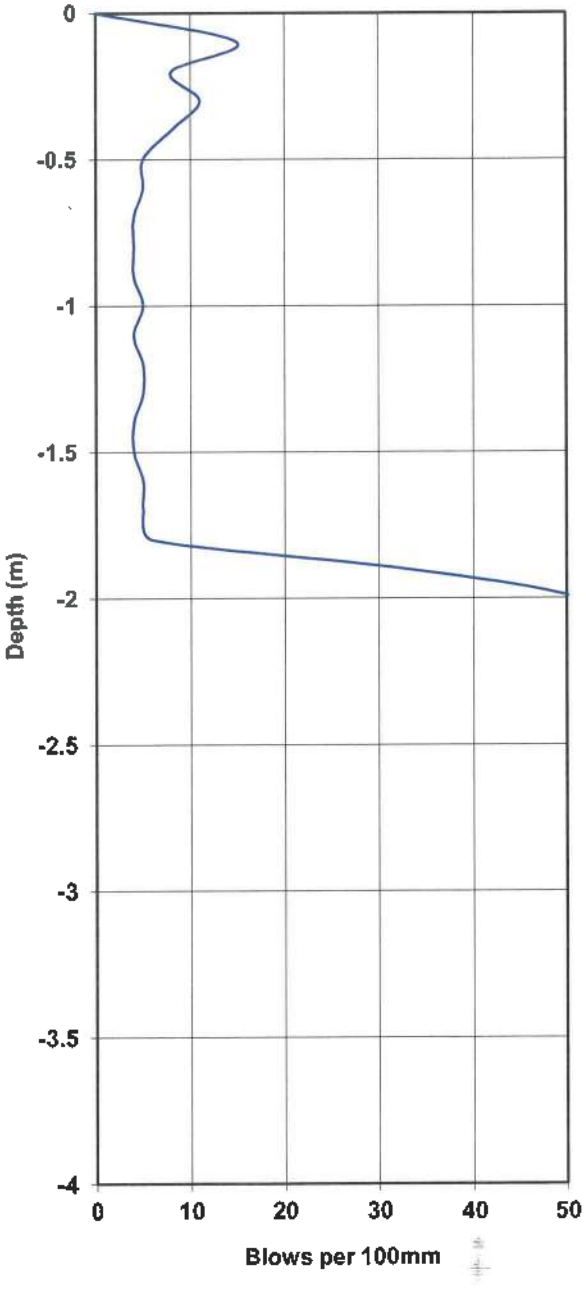
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 5

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	15	Dense	37 deg	27
0.2	8	Med.Dense	35 deg	14
0.3	11	Dense	36 deg	19
0.4	8	Med.Dense	35 deg	14
0.5	5	Med.Dense	32 deg	8
0.6	5	Med.Dense	32 deg	8
0.7	4	Med.Dense	30 deg	7
0.8	4	Med.Dense	30 deg	7
0.9	4	Med.Dense	30 deg	7
1	5	Med.Dense	32 deg	8
1.1	4	Med.Dense	30 deg	7
1.2	5	Med.Dense	32 deg	8
1.3	5	Med.Dense	32 deg	8
1.4	4	Med.Dense	30 deg	7
1.5	4	Med.Dense	30 deg	7
1.6	5	Med.Dense	32 deg	8
1.7	5	Med.Dense	32 deg	8
1.8	6	Med.Dense	33 deg	10
1.9	33	Very Dense	>38 deg	>55
	Refusal			



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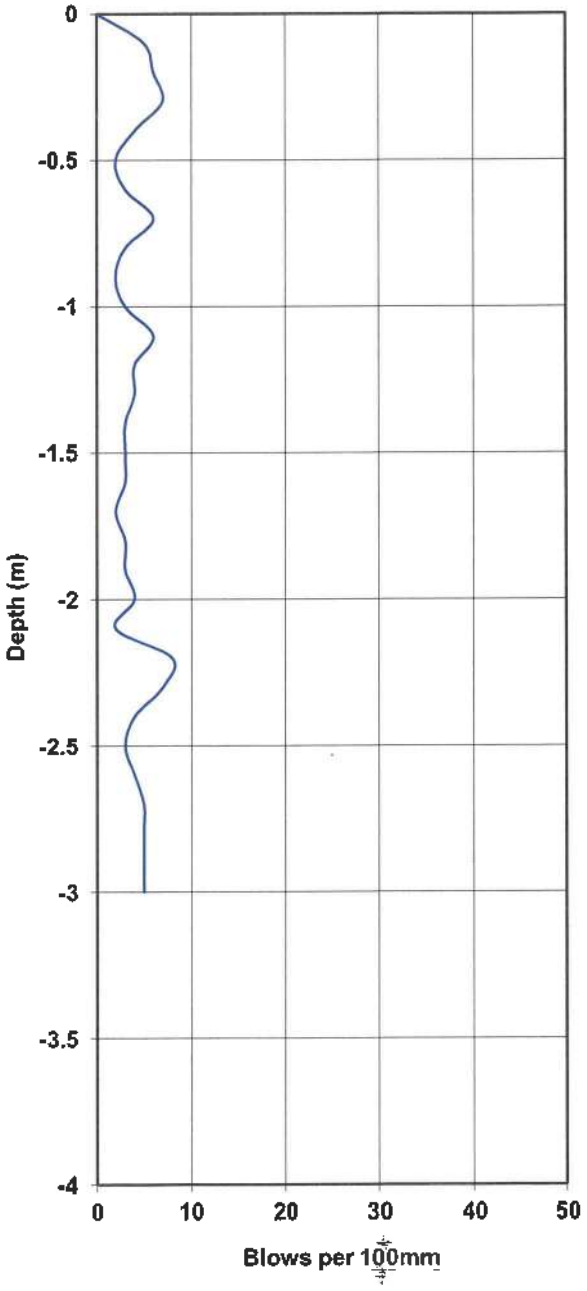
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 6

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	5	Med.Dense	32 deg	8
0.2	6	Med.Dense	33 deg	10
0.3	7	Med.Dense	34 deg	12
0.4	4	Med.Dense	30 deg	7
0.5	2	Loose	<30 deg	3
0.6	3	Loose	<30 deg	5
0.7	6	Firm	50 kPa	10
0.8	3	Soft	25 kPa	5
0.9	2	Soft	20 kPa	3
1	3	Soft	25 kPa	5
1.1	6	Firm	50 kPa	10
1.2	4	Soft	35 kPa	7
1.3	4	Soft	35 kPa	7
1.4	3	Soft	25 kPa	5
1.5	3	Soft	25 kPa	5
1.6	3	Soft	25 kPa	5
1.7	2	Loose	<30 deg	3
1.8	3	Loose	<30 deg	5
1.9	3	Loose	<30 deg	5
2	4	Med.Dense	30 deg	7
2.1	2	Loose	<30 deg	3
2.2	8	Med.Dense	35 deg	14
2.3	7	Med.Dense	34 deg	12
2.4	4	Med.Dense	30 deg	7
2.5	3	Loose	<30 deg	5
2.6	4	Med.Dense	30 deg	7
2.7	5	Med.Dense	32 deg	8
2.8	5	Med.Dense	32 deg	8
2.9	5	Med.Dense	32 deg	8
3	5	Med.Dense	32 deg	8
	End			



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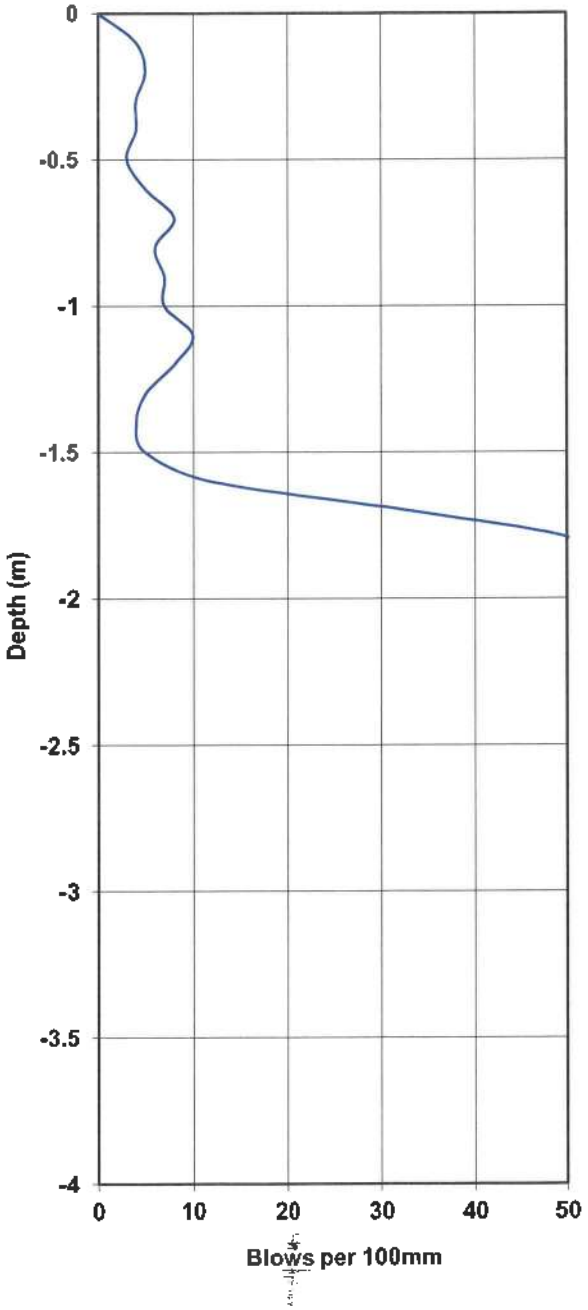
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 7

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	4	Med.Dense	30 deg	7
0.2	5	Med.Dense	32 deg	8
0.3	4	Med.Dense	30 deg	7
0.4	4	Med.Dense	30 deg	7
0.5	3	Loose	<30 deg	5
0.6	5	Med.Dense	32 deg	8
0.7	8	Med.Dense	35 deg	14
0.8	6	Med.Dense	33 deg	10
0.9	7	Med.Dense	34 deg	12
1	7	Med.Dense	34 deg	12
1.1	10	Med.Dense	36 deg	17
1.2	8	Med.Dense	35 deg	14
1.3	5	Med.Dense	32 deg	8
1.4	4	Med.Dense	30 deg	7
1.5	5	Med.Dense	32 deg	8
1.6	12	Dense	36 deg	21
1.7	33	Very Dense	>38 deg	>55
	Refusal			



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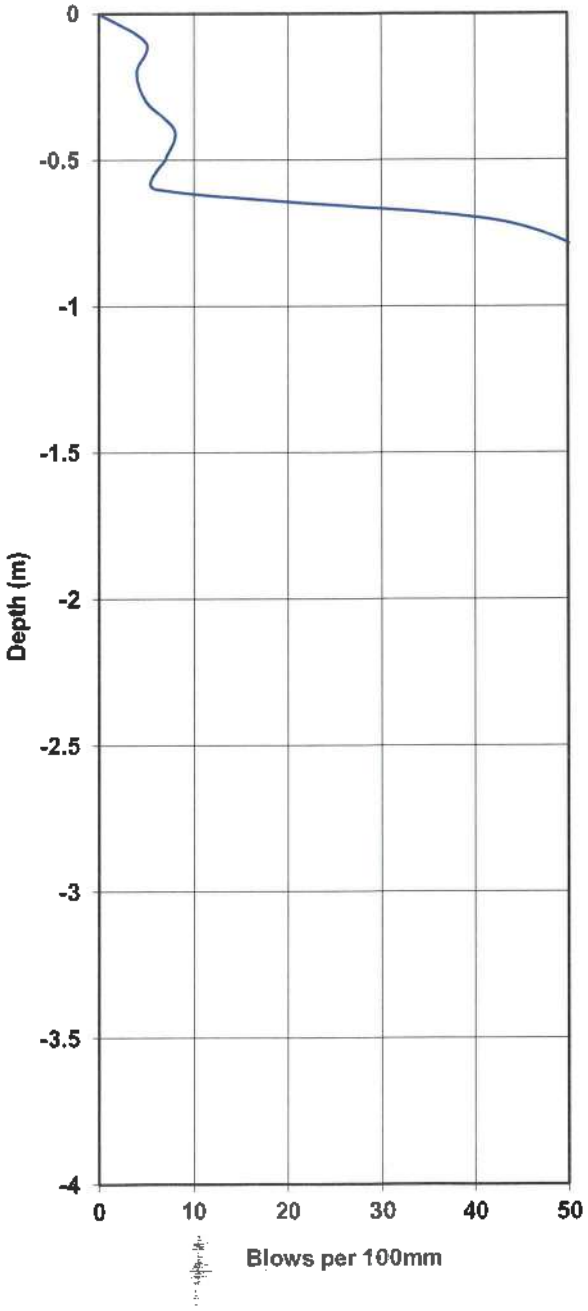
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 8

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	5	Med.Dense	32 deg	8
0.2	4	Med.Dense	30 deg	7
0.3	5	Med.Dense	32 deg	8
0.4	8	Med.Dense	35 deg	14
0.5	7	Med.Dense	34 deg	12
0.6	6	Med.Dense	33 deg	10
0.7	41	Very Dense	>38 deg	>55
	Refusal			



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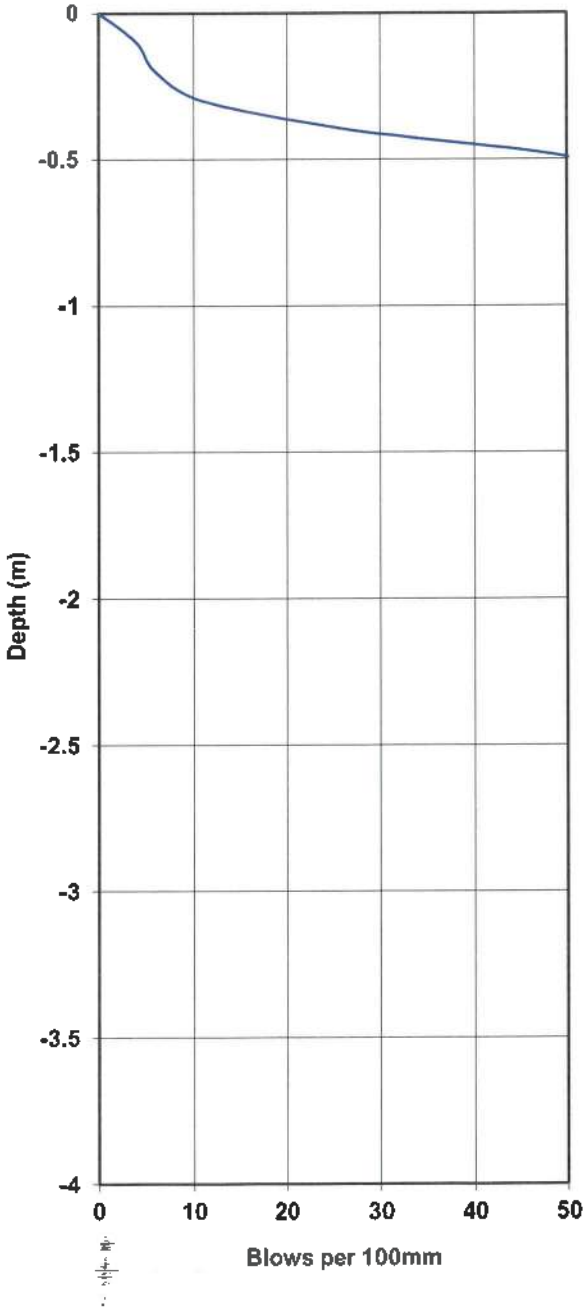
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 9

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	4	Med.Dense	30 deg	7
0.2	6	Med.Dense	33 deg	10
0.3	11	Stiff	90 kPa	19
0.4	27	Very Dense	>38 deg	54
	Refusal			



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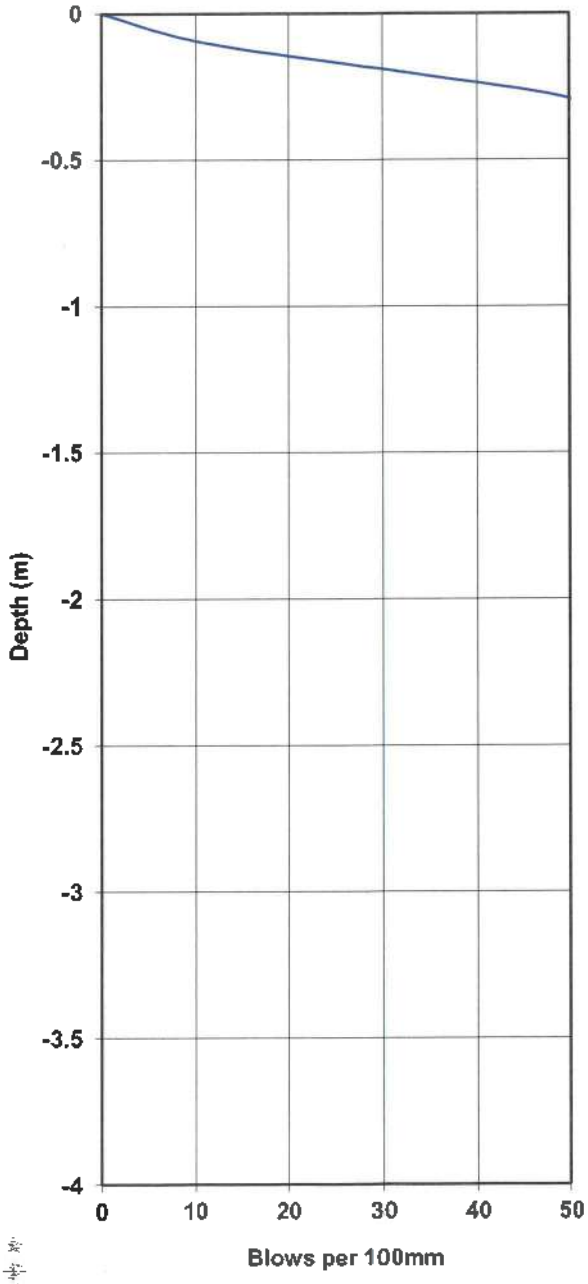
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 10

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	11	Dense	36 deg	19
0.2	32	Very Dense	>38 deg	>55
	Refusal			



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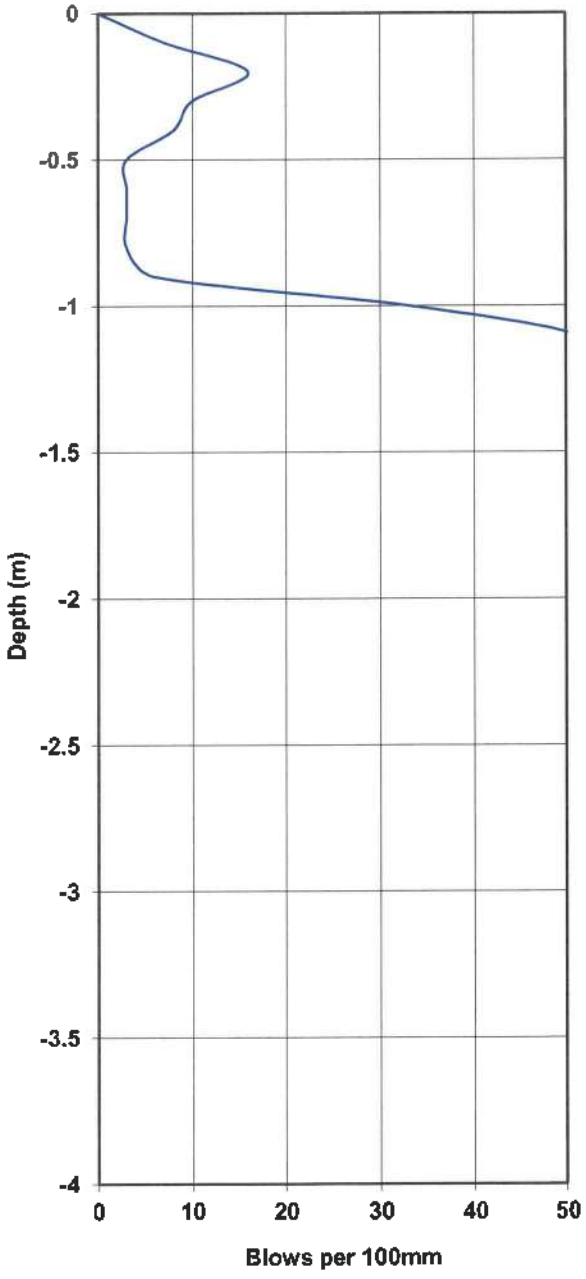
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 11

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	7	Med.Dense	34 deg	12
0.2	16	Dense	37 deg	29
0.3	10	Med.Dense	36 deg	17
0.4	8	Med.Dense	35 deg	14
0.5	3	Loose	<30 deg	5
0.6	3	Loose	<30 deg	5
0.7	3	Loose	<30 deg	5
0.8	3	Loose	<30 deg	5
0.9	6	Med.Dense	33 deg	10
1	33	Very Dense	>38 deg	>55
	Refusal			



GEOSURE (PTY) LTD.

Geotechnical Engineering Consultants

Tel: (031) 266 0458 Fax: 086 689 5506 Email: info@geosure.co.za

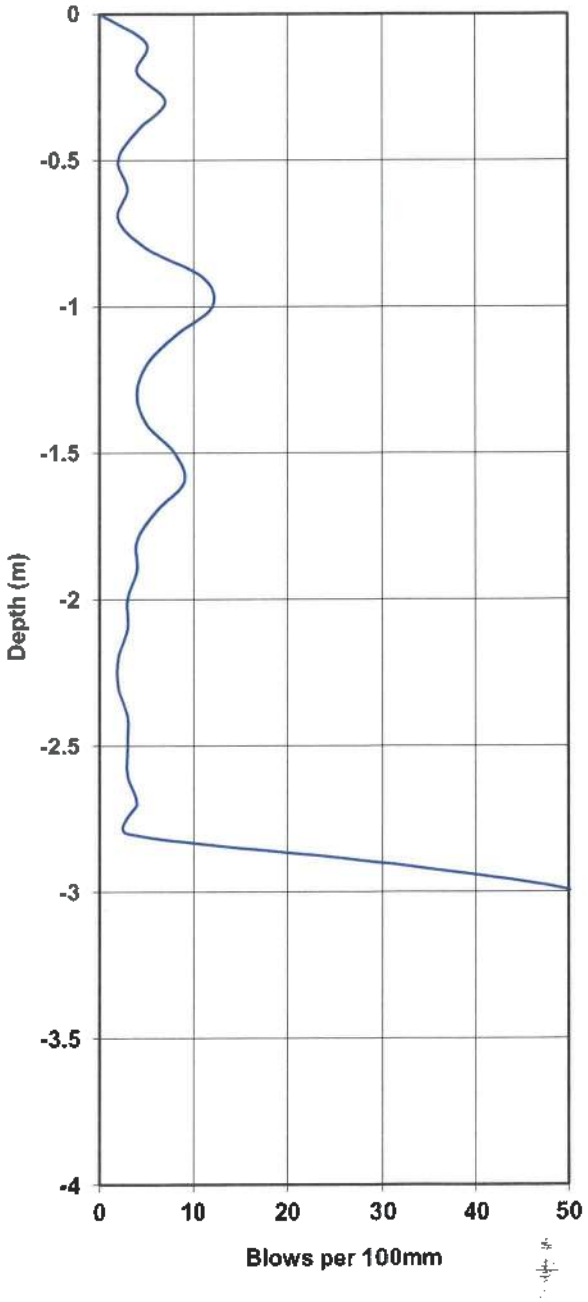
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 12

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	5	Med.Dense	32 deg	8
0.2	4	Soft	35 kPa	7
0.3	7	Firm	60 kPa	12
0.4	4	Soft	35 kPa	7
0.5	2	Soft	20 kPa	3
0.6	3	Soft	25 kPa	5
0.7	2	Soft	20 kPa	3
0.8	5	Med.Dense	32 deg	8
0.9	11	Dense	36 deg	19
1	12	Dense	36 deg	21
1.1	8	Med.Dense	35 deg	14
1.2	5	Med.Dense	32 deg	8
1.3	4	Med.Dense	30 deg	7
1.4	5	Med.Dense	32 deg	8
1.5	8	Med.Dense	35 deg	14
1.6	9	Med.Dense	35 deg	15
1.7	6	Med.Dense	33 deg	10
1.8	4	Med.Dense	30 deg	7
1.9	4	Med.Dense	30 deg	7
2	3	Loose	<30 deg	5
2.1	3	Loose	<30 deg	5
2.2	2	Loose	<30 deg	3
2.3	2	Loose	<30 deg	3
2.4	3	Loose	<30 deg	5
2.5	3	Loose	<30 deg	5
2.6	3	Loose	<30 deg	5
2.7	4	Med.Dense	30 deg	7
2.8	3	Loose	<30 deg	5
2.9	30	Very Dense	>38 deg	>55
	Refusal			



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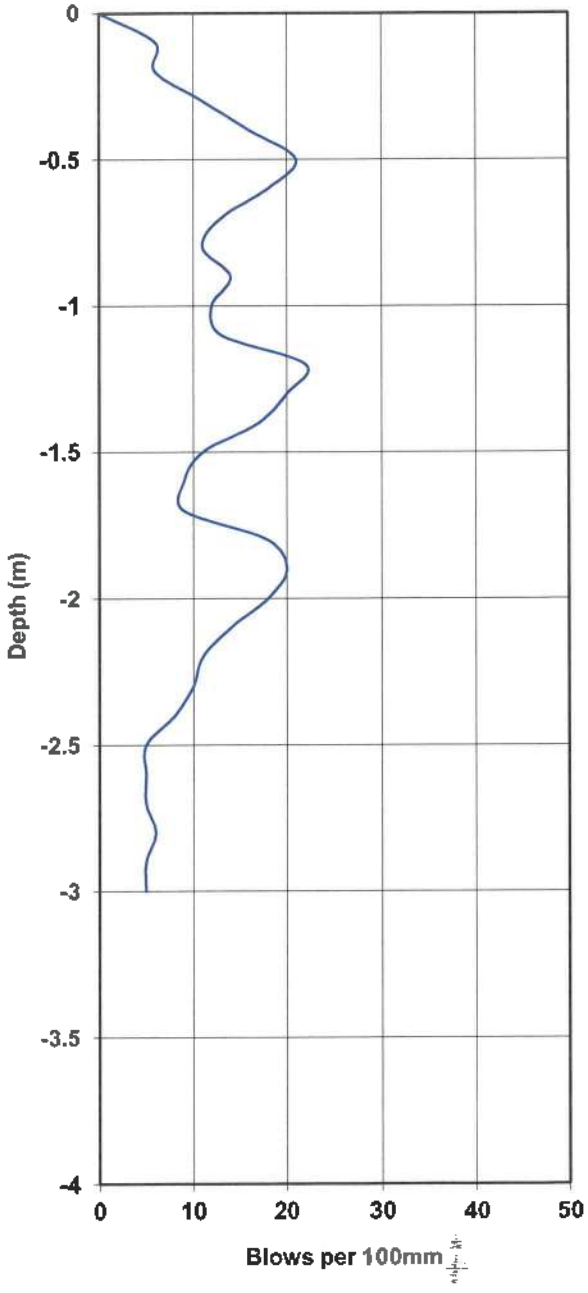
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 13

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	6	Med.Dense	33 deg	10
0.2	6	Med.Dense	33 deg	10
0.3	11	Dense	36 deg	19
0.4	16	Dense	37 deg	29
0.5	21	Dense	38 deg	40
0.6	18	Dense	37 deg	33
0.7	13	Dense	37 deg	23
0.8	11	Dense	36 deg	19
0.9	14	Dense	37 deg	25
1	12	Dense	36 deg	21
1.1	13	Dense	37 deg	23
1.2	22	Dense	38 deg	42
1.3	20	Dense	38 deg	37
1.4	17	Dense	37 deg	31
1.5	11	Dense	36 deg	19
1.6	9	Med.Dense	35 deg	15
1.7	9	Med.Dense	35 deg	15
1.8	18	Dense	37 deg	33
1.9	20	Dense	38 deg	37
2	18	Dense	37 deg	33
2.1	14	Dense	37 deg	25
2.2	11	Dense	36 deg	19
2.3	10	Med.Dense	36 deg	17
2.4	8	Med.Dense	35 deg	14
2.5	5	Med.Dense	32 deg	8
2.6	5	Med.Dense	32 deg	8
2.7	5	Med.Dense	32 deg	8
2.8	6	Med.Dense	33 deg	10
2.9	5	Med.Dense	32 deg	8
3	5	Med.Dense	32 deg	8
	End			



GEOSURE (PTY) LTD.

Geotechnical Engineering Consultants

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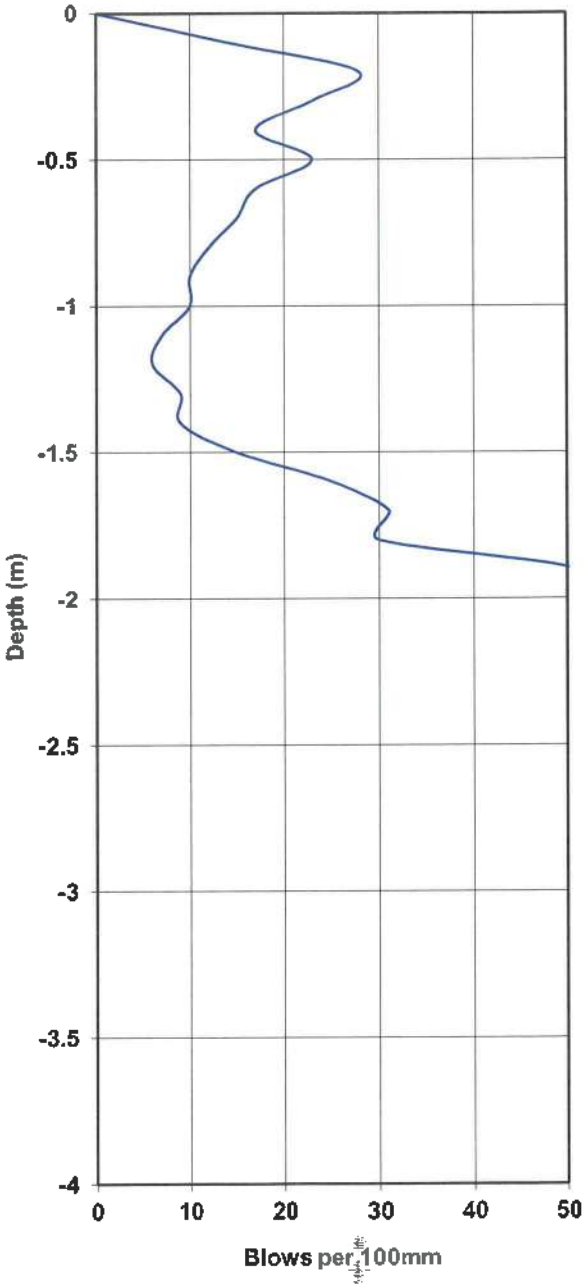
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 14

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	14	Dense	37 deg	25
0.2	28	Very Stiff	>150 kPa	>55
0.3	23	Very Stiff	>150 kPa	44
0.4	17	Stiff	140 kPa	31
0.5	23	Very Stiff	>150 kPa	44
0.6	17	Stiff	140 kPa	31
0.7	15	Stiff	125 kPa	27
0.8	12	Dense	36 deg	21
0.9	10	Med.Dense	36 deg	17
1	10	Med.Dense	36 deg	17
1.1	7	Med.Dense	34 deg	12
1.2	6	Med.Dense	33 deg	10
1.3	9	Med.Dense	35 deg	15
1.4	9	Med.Dense	35 deg	15
1.5	15	Dense	37 deg	27
1.6	25	Dense	38 deg	49
1.7	31	Very Dense	>38 deg	>55
1.8	30	Very Dense	>38 deg	>55
	Refusal			



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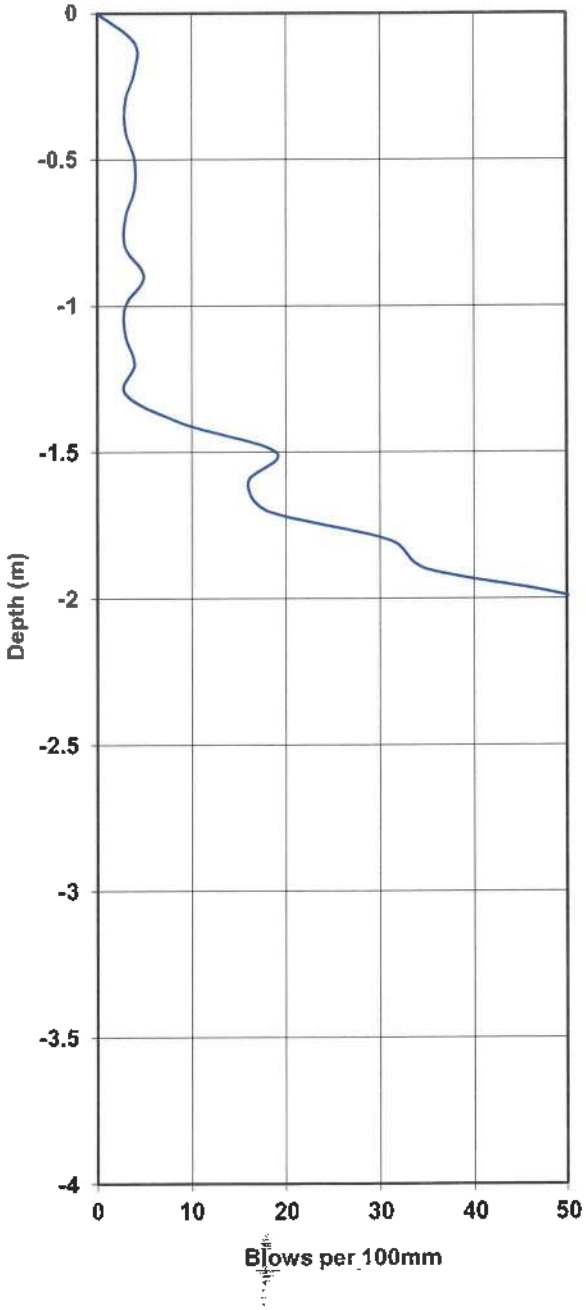
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 15

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	4	Med.Dense	30 deg	7
0.2	4	Med.Dense	30 deg	7
0.3	3	Loose	<30 deg	5
0.4	3	Loose	<30 deg	5
0.5	4	Med.Dense	30 deg	7
0.6	4	Med.Dense	30 deg	7
0.7	3	Loose	<30 deg	5
0.8	3	Loose	<30 deg	5
0.9	5	Med.Dense	32 deg	8
1	3	Loose	<30 deg	5
1.1	3	Loose	<30 deg	5
1.2	4	Med.Dense	30 deg	7
1.3	3	Loose	<30 deg	5
1.4	9	Med.Dense	35 deg	15
1.5	19	Dense	37 deg	35
1.6	16	Dense	37 deg	29
1.7	18	Dense	37 deg	33
1.8	31	Very Dense	>38 deg	>55
1.9	35	Very Dense	>38 deg	>55
	Refusal			



Z:\2023\047-23 (Clinic Conversion)\DCP\DCP (15)2023/05/02

GEOSURE (PTY) LTD.

Geotechnical Engineering Consultants

Tel: (031) 266 0458 Fax: 086 689 5506 Email: info@geosure.co.za

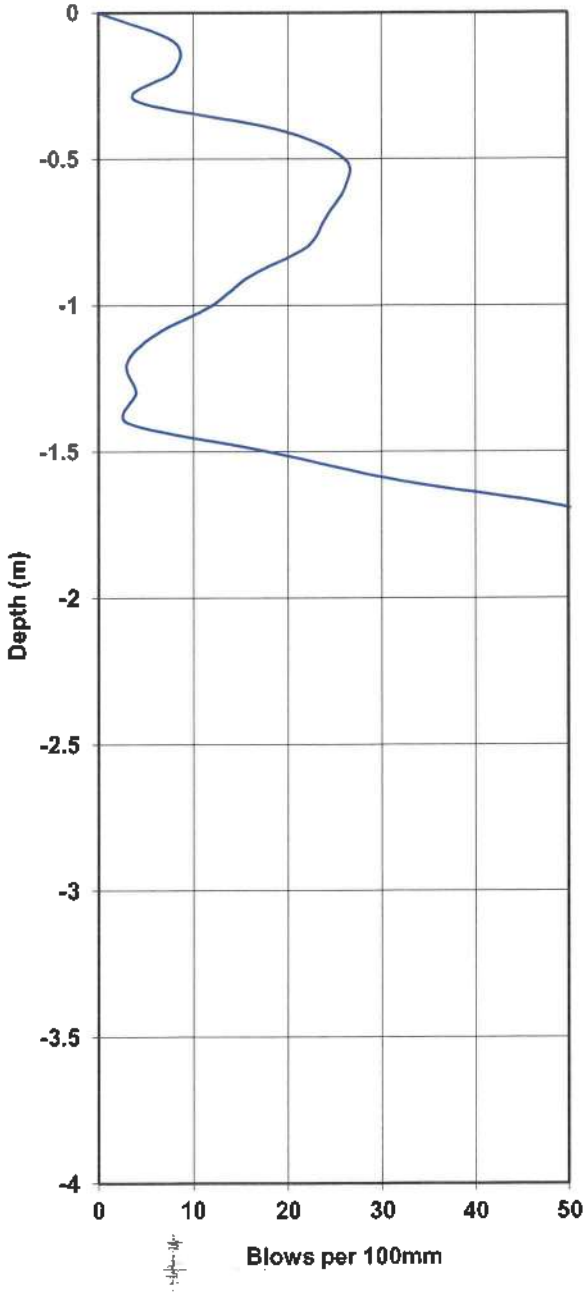
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 16

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	8	Med.Dense	35 deg	14
0.2	8	Med.Dense	35 deg	14
0.3	4	Soft	35 kPa	7
0.4	19	Very Stiff	>150 kPa	35
0.5	26	Very Stiff	>150 kPa	51
0.6	26	Very Stiff	>150 kPa	51
0.7	24	Dense	38 deg	47
0.8	22	Dense	38 deg	42
0.9	16	Dense	37 deg	29
1	12	Dense	36 deg	21
1.1	6	Med.Dense	33 deg	10
1.2	3	Loose	<30 deg	5
1.3	4	Med.Dense	30 deg	7
1.4	3	Loose	<30 deg	5
1.5	18	Dense	37 deg	33
1.6	32	Very Dense	>38 deg	>55
	Refusal			



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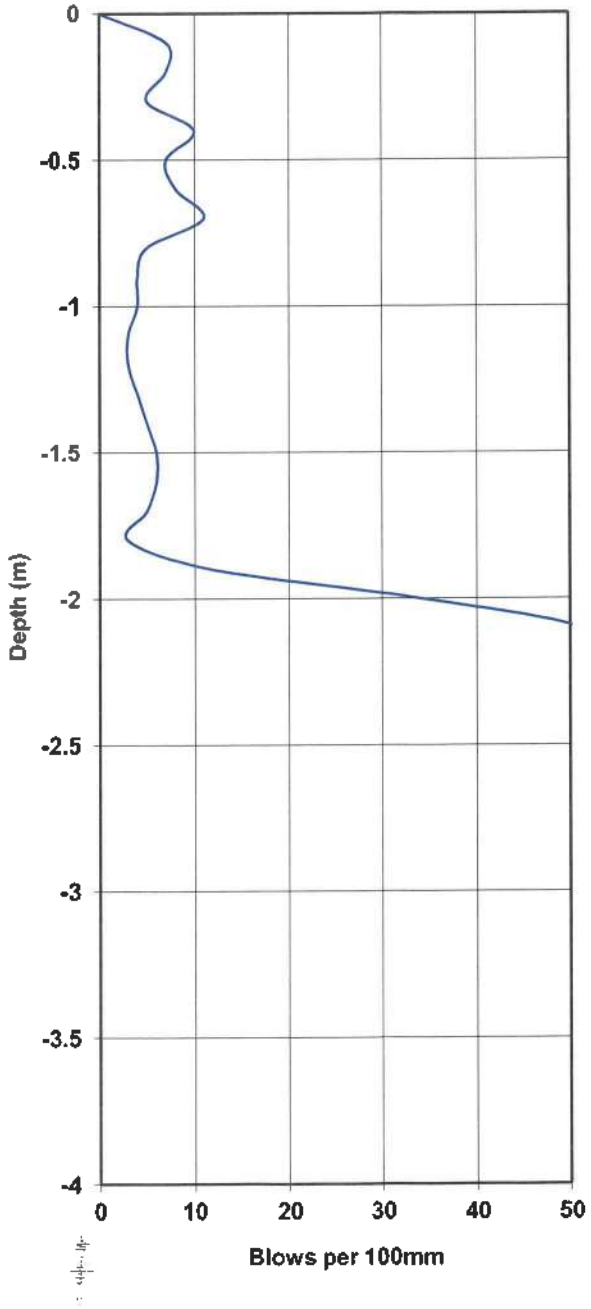
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 17

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	7	Med.Dense	34 deg	12
0.2	7	Med.Dense	34 deg	12
0.3	5	Med.Dense	32 deg	8
0.4	10	Med.Dense	36 deg	17
0.5	7	Med.Dense	34 deg	12
0.6	8	Med.Dense	35 deg	14
0.7	11	Dense	36 deg	19
0.8	5	Med.Dense	32 deg	8
0.9	4	Med.Dense	30 deg	7
1	4	Med.Dense	30 deg	7
1.1	3	Loose	<30 deg	5
1.2	3	Loose	<30 deg	5
1.3	4	Med.Dense	30 deg	7
1.4	5	Med.Dense	32 deg	8
1.5	6	Med.Dense	33 deg	10
1.6	6	Med.Dense	33 deg	10
1.7	5	Med.Dense	32 deg	8
1.8	3	Loose	<30 deg	5
1.9	12	Dense	36 deg	21
2	34	Very Dense	>38 deg	>55
	Refusal			



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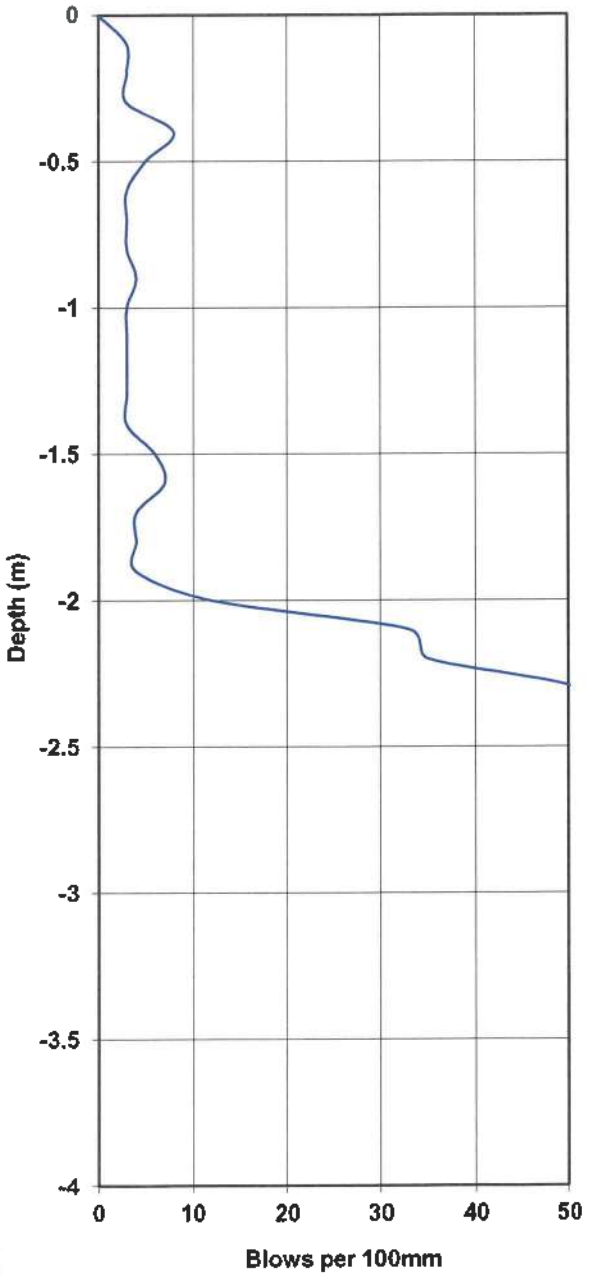
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 18

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	3	Loose	<30 deg	5
0.2	3	Loose	<30 deg	5
0.3	3	Soft	25 kPa	5
0.4	8	Firm	65 kPa	14
0.5	5	Firm	40 kPa	8
0.6	3	Soft	25 kPa	5
0.7	3	Soft	25 kPa	5
0.8	3	Soft	25 kPa	5
0.9	4	Soft	35 kPa	7
1	3	Soft	25 kPa	5
1.1	3	Soft	25 kPa	5
1.2	3	Soft	25 kPa	5
1.3	3	Soft	25 kPa	5
1.4	3	Soft	25 kPa	5
1.5	6	Firm	50 kPa	10
1.6	7	Firm	60 kPa	12
1.7	4	Soft	35 kPa	7
1.8	4	Soft	35 kPa	7
1.9	4	Soft	35 kPa	7
2	12	Stiff	100 kPa	21
2.1	33	Very Stiff	>150 kPa	>55
2.2	35	Very Stiff	>150 kPa	>55
	Refusal			



GEOSURE (PTY) LTD.

Geotechnical Engineering Consultants

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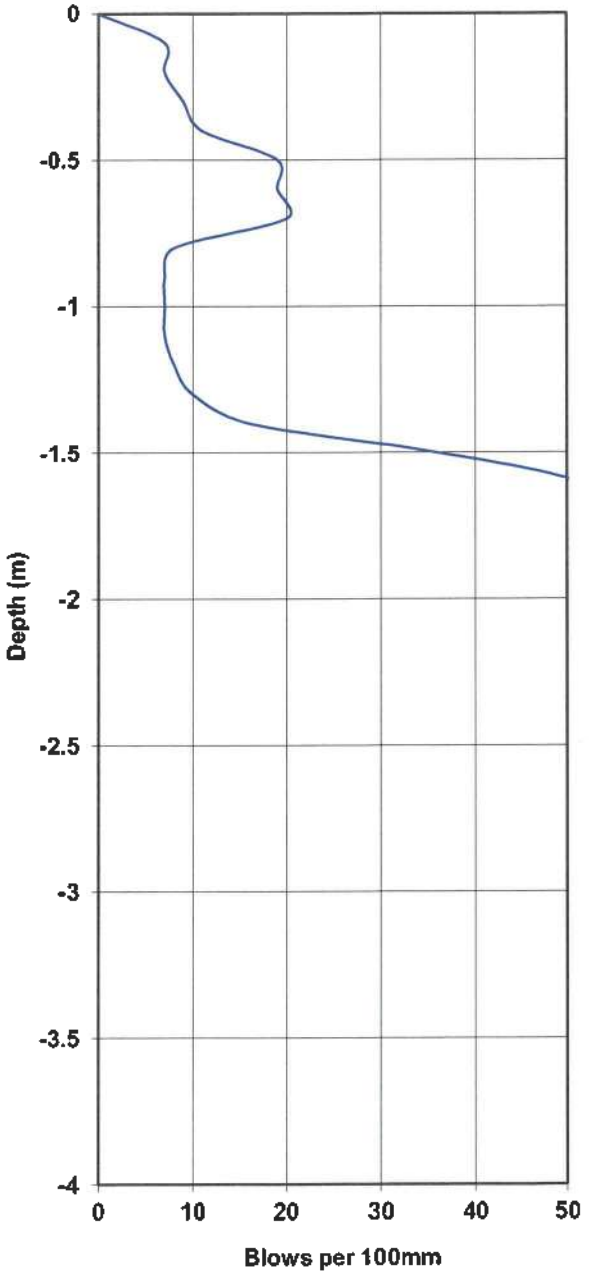
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 19

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	7	Med.Dense	34 deg	12
0.2	7	Firm	60 kPa	12
0.3	9	Stiff	75 kPa	15
0.4	11	Stiff	90 kPa	19
0.5	19	Dense	37 deg	35
0.6	19	Dense	37 deg	35
0.7	20	Dense	38 deg	37
0.8	8	Med.Dense	35 deg	14
0.9	7	Med.Dense	34 deg	12
1	7	Med.Dense	34 deg	12
1.1	7	Med.Dense	34 deg	12
1.2	8	Med.Dense	35 deg	14
1.3	10	Med.Dense	36 deg	17
1.4	16	Dense	37 deg	29
1.5	36	Very Dense	>38 deg	>55
	Refusal			



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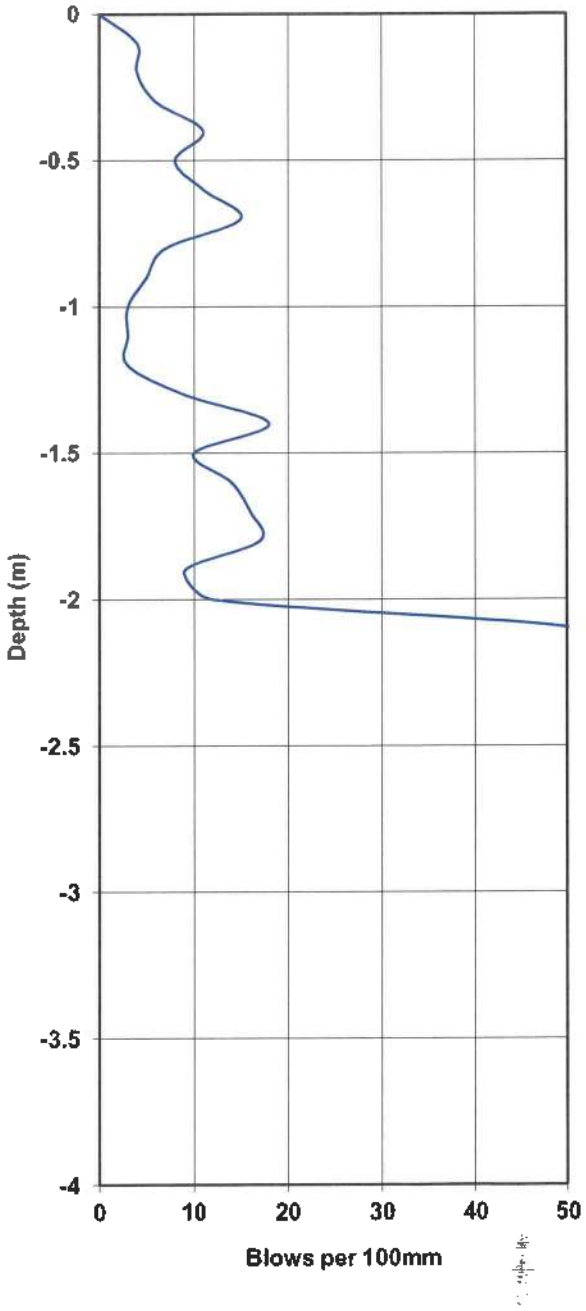
Client: Ukuza Consulting (Pty) Ltd
Project: Proposed Conversion of Newtown Clinic A CHC to a Large Clinic, near Inanda
Section: KwaZulu Natal

Ref.No. 047-23
Date: 27-28.03.2023
Operator: D.Govender

CBR Penetrometer Probe ---------- Test No. DC 20

THE STRENGTH AND CBR VALUES ARE EMPIRICAL AND DEPEND ON FACTORS SUCH AS MOISTURE CONTENT WHICH HAVE NOT BEEN DETERMINED. THEY ARE THEREFORE INDICATIVE ONLY AND SHOULD BE VERIFIED BY TEST OR OBSERVATION

Depth (m)	Blows/ 100mm	Inferred Consistency	Shear Strength	CBR %
0				
0.1	4	Med.Dense	30 deg	7
0.2	4	Med.Dense	30 deg	7
0.3	6	Firm	50 kPa	10
0.4	11	Dense	36 deg	19
0.5	8	Med.Dense	35 deg	14
0.6	11	Dense	36 deg	19
0.7	15	Dense	37 deg	27
0.8	7	Med.Dense	34 deg	12
0.9	5	Med.Dense	32 deg	8
1	3	Loose	<30 deg	5
1.1	3	Loose	<30 deg	5
1.2	3	Loose	<30 deg	5
1.3	9	Med.Dense	35 deg	15
1.4	18	Dense	37 deg	33
1.5	10	Med.Dense	36 deg	17
1.6	14	Dense	37 deg	25
1.7	16	Dense	37 deg	29
1.8	17	Dense	37 deg	31
1.9	9	Med.Dense	35 deg	15
2	12	Dense	36 deg	21
	Refusal			



APPENDIX D

LABORATORY TEST RESULTS

Consulting Engineering Geologists, Geotechnical Engineers, Geotechnicians & Geotechnical Quality Assurance Specialists

GEOSURE (Pty) Ltd

sanas Testing Laboratory T0483

CLIENT : Geosure (Pty) Ltd
PHYSICAL ADDRESS : 122 Intersite Avenue, Springfield Park, Umgeni Durban, 4001
ATTENTION : Mr D. Naidoo
PROJECT : Newtown Clinic Conversion

TEST REPORT REFERENCE NUMBER: 66115

Dear Sir/Madam,
Enclosed herewith, please find the original reports pertaining to the above-mentioned project.

Date Received	**12.04.2023**		
Date Tested	17.04.2023 to 21.04.2023		
Sample Location	Refer to Report		
Sampling Method	N/A		
Sample Condition	Good		
Sampling Environmental Condition	N/A		
Sampler(s) Name	Client		
Total Number of Pages	12		
	Test Carried Out		
SANS3001 GR1	✓	SANS3001 AG1	
SANS3001 GR10, GR12	✓	TMH1 Method C4a	
SANS3001 GR30	✓	TMH1 Method B6	
SANS3001 GR40	✓	Hydrometer Analysis - ASTM D422	✓
SANS3001 GR20		SANS3001 GR20	✓
SANS3001 GR50, GR53		BS1377: Part 1 & 5:1990	
SANS3001 GR50, GR54		SANS 5860, 5861-1, 5861-2, 5861-3	
SANS3001 GR58		TMH1 Method B9	

✓ - Tick denotes tests that were carried out. #Denotes non accredited tests

We would like to take this opportunity of thanking you for your continued support.
Should you have any queries please do not hesitate to contact me.
Refer to Appendix A for Uncertainty of Measurement and notes on the Decision Rule
Yours faithfully

Technical Signatory,
Dheeran Ramcharan for Geosure (Pty) Ltd.

Head Office
122 Intersite Avenue, Umgeni Business Park, Durban 4091, South Africa
PO Box 1461, Westville, 3630, South Africa
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PO Box 1461, Westville, 3630, South Africa
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Gauteng Branch
P. O. Box 32381, Kyalami 1684
Tel.: 0861 GEOSURE / 0861 436 7873
Fax: 086 689 8327
Mobile: 083 377 6559
Email: gauteng@geosure.co.za

GEOSURE (Pty) Ltd

Reg.No.: 92/03145/07

LABORATORY AND HEAD OFFICE ADDRESS: 122 Intersite Avenue, Umgeni Business Park, Durban, 4091

LABORATORY CONTACT INFO.: Tel.: +27(0) 31 701 9732 Fax: 086 684 9785
Mobile: +27(0) 72 870 2621 e-mail: lab@geosure.co.za

HEAD OFFICE CONTACT INFO.: Tel.: +27(0) 31 266 0458 Fax: 086 689 5506
Mobile: +27(0) 82 784 0544 e-mail:geosure@iafrica.com

WEBSITE: www.geosure.co.za

Client : Geosure (Pty) Ltd
Project : Newtown Clinic Conversion
Attention : Mr D. Naidoo

Our Ref. : 66115
Your Ref. : 047-23
Date Tested : 19.04.2023 to 21.04.2023
Date Reported : 25.04.2023

Sample No.			T45972	T45973			
Field No.			IP13	IP20			
Position in Field			Layer 5	Layer 4			
Depth (m)			0.88-2.50	0.77-1.70			
Material Description			Dark brown slightly silty SAND to sandy CLAY. Residual Sandstone	Orange brown speckled white silty clayey SAND to sandy CLAY. Residual Sandstone			
Sieve Analysis (Wet Preparation) - SANS3001 GR 1 - Percent Passing Sieve Size							
% Passing	100.0	mm	100	100			
	75.0	mm	100	100			
	63.0	mm	100	97			
	50.0	mm	100	97			
	37.5	mm	100	97			
	28.0	mm	100	97			
	20.0	mm	100	96			
	14.0	mm	100	95			
	5.00	mm	99	88			
	2.00	mm	97	81			
	0.425	mm	67	67			
	0.250	mm	45	54			
	0.150	mm	31	37			
	0.075	mm	21	22			
Hydrometer Analysis - ASTM - D422 - Percent Passing Particle Diameter (<0.425mm)							
% Passing	0.060	mm	19	20			
	0.050	mm	17	18			
	0.040	mm	16	16			
	0.026	mm	14	14			
	0.015	mm	12	11			
	0.010	mm	10	9			
	0.0074	mm	8	9			
	0.0036	mm	6	6			
	0.0020	mm	5	5			
	0.0015	mm	4	5			
Mechanical analysis - SANS3001 GR1 - Percent of Soil Mortar (<2 mm) for Grain Size range							
Coarse Sand		%	31	17			
Coarse Fine Sand		%	22	17			
Medium Fine Sand		%	14	21			
Fine Fine Sand		%	11	18			
Silt & Clay		%	22	27			
Grading Modulus			1.15	1.29			
Atterberg Limits - SANS3001 GR10, GR12 (<0.425mm)							
Liquid Limit		%	NP	SP			
Plasticity Index		%	NP	SP			
Linear Shrinkage		%	0.0	0.5			
AASHTO Classification (Group Index)*			A-2-4 (0)	A-2-4 (0)			
Unified Classification*			SM	SM			
Moisture Content		%	8.3	9.0			

Remarks: Date Received: 12.04.2023
Sampled by Client.
*Opinions expressed herein fall outside the scope of SANAS accreditation.

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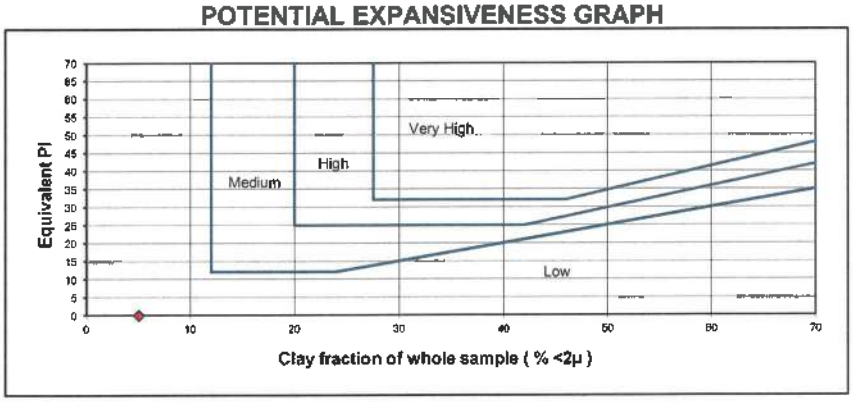
WEBSITE: www.geosure.co.za

Client : Geosure (Pty) Ltd
Project : Newtown Clinic Conversion
Attention : Mr D. Naidoo

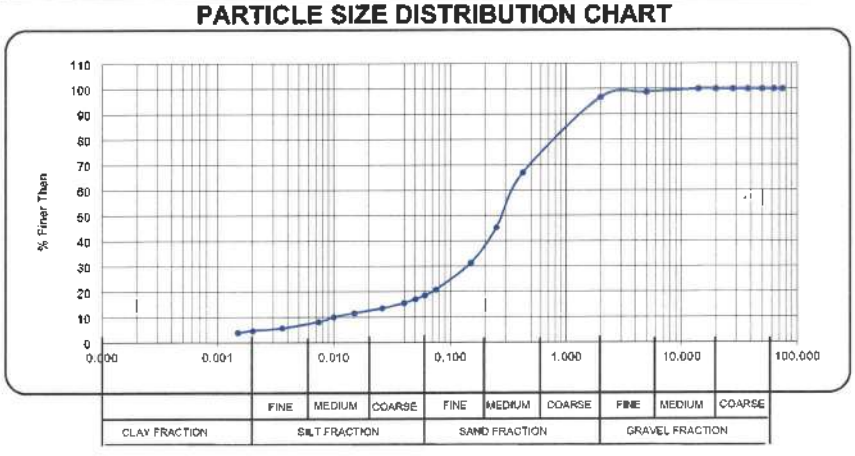
Job No. : 66115
Your Ref.No. : 047-23
Date Tested : 19.04.2023 to 21.04.2023
Date Reported : 25.04.2023

Sample Number : T45972
Field No. : IP13
Sample Description : Dark brown slightly silty SAND to sandy CLAY. Residual Sandstone
Equivalent PI : NP **Clay fraction of whole sample (% <2μ)** : 5

POTENTIAL EXPANSIVENESS GRAPH



PARTICLE SIZE DISTRIBUTION CHART



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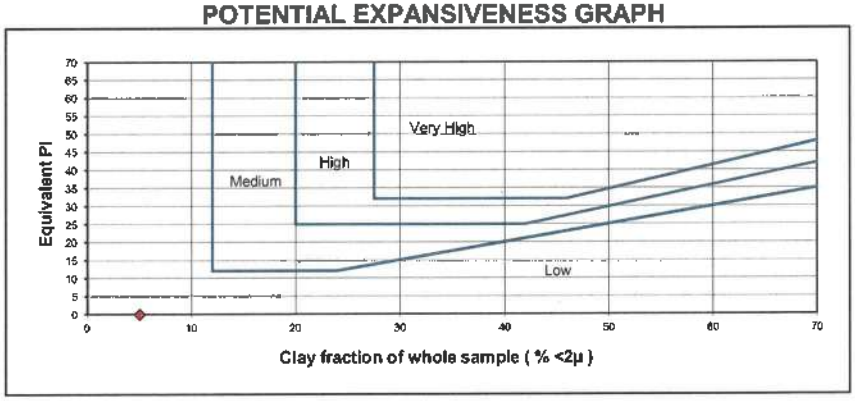
Client : Geosure (Pty) Ltd
Project : Newtown Clinic Conversion
Attention : Mr D. Naidoo

Job No. : 66115
Your Ref.No. : 047-23
Date Tested : 19.04.2023 to 21.04.2023
Date Reported : 25.04.2023

Sample Number : T45973
Field No. : IP20
Sample Description : Orange brown speckled white silty clayey SAND to sandy CLAY. Residual Sandstone
Equivalent PI : [ ] **Clay fraction of whole sample (% <2μ)** : [5]

POTENTIAL EXPANSIVENESS GRAPH



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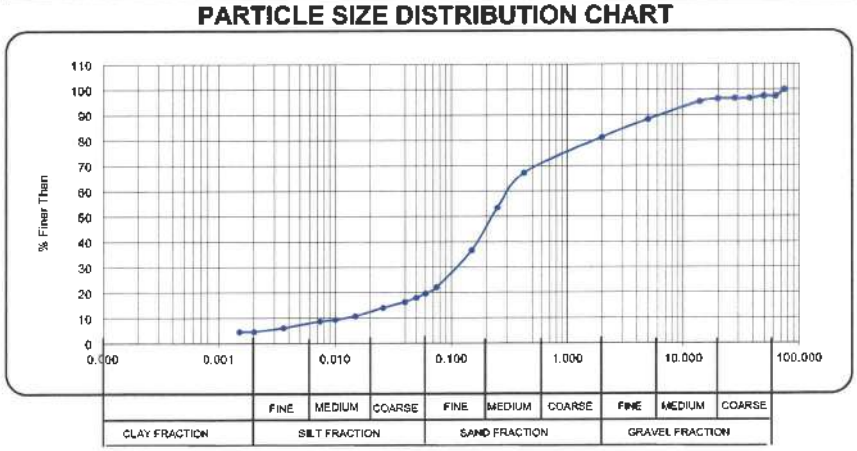

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Client : Geosure (Pty) Ltd
Project : Newtown Clinic Conversion
Attention : Mr D. Naidoo

Your Ref No. : 047-23
Our Ref No. : 66115
Date Reported : 25/04/2023

Test Report - SANS 3001

Sample No.	T45969	T45970	T45971	T45973	
Field No.	IP4	IP7	IP11	IP20	
Position	Layer 2	Layer 4	Layer 3	Layer 4	
Depth (m)	0.04-0.19	0.72-1.65	0.12-0.65	0.77-1.70	
Method of Preparation	N/A	N/A		Scalped	
Material Description	Light greyish brown speckled white and bluish grey sandy GRAVEL. Fill	Light orange brown silty SAND. Residual Sandstone	Dark brown speckled orange clayey SAND to sandy CLAY. Fill	Orange brown speckled white silty clayey SAND to sandy CLAY. Residual Sandstone	

Sieve Analysis - Percent Passing Sieve Size						
Sieve Aperture (mm)	100.00					
	75.00				100	
	63.00				97	
	53.00			100	97	
	50.00			96	97	
	37.50	100		93	97	
	28.00	96		92	97	
	26.50	96		92	97	
	20.00	78		92	96	
	19.00	78		92	96	
	14.00	65		89	95	
	13.20	65	100	89	95	
	5.00	41	99	85	88	
	4.750	41	99	85	88	
	2.000	27	98	80	81	
	0.425	18	78	52	67	
	0.075	9	21	17	22	
Grading Modulus		2.47	1.03	1.51	1.28	
Mechanical analysis - Percent of Soil Mortar (<2 mm) for Grain Size range						
Coarse Sand	2.000 - 0.425	35	20	35	17	
Coarse-Fine Sand	0.425 - 0.250	11	24	22	17	
Medium-Fine Sand	0.250 - 0.150	10	19	12	21	
Fine-Fine Sand	0.150 - 0.075	12	16	10	18	
Silt and Clay	< 0.075	31	21	21	27	
Atterberg Limits SANS 3001 on <0.425 mm fraction						
Liquid Limit	% or symbol	20	NP	SP	SP	
Plasticity Index	% or symbol	5	NP	SP	SP	
Linear Shrinkage	%	2.5	0.0	1.0	0.5	
Maximum Dry Density and Optimum Moisture Content						
Maximum Dry Density (kg/m³)		2268	1997		2045	
Optimum moisture content (%)		2.6	6.1		7.5	
California Bearing Ratio						
CBR @100% Compaction	%	66	46		36	
CBR @ 98% Compaction	%	46	29		25	
CBR @ 97% Compaction	%	39	23		20	
CBR @ 95% Compaction	%	27	15		14	
CBR @ 93% Compaction	%	19	9.6		9.4	
CBR @ 90% Compaction	%	11	4.9		5.3	
Swell @100% Compaction	%	0.0	0.0		0.3	
COLTO Classification (1998)†**		G6 (#)	G9 (#)	Cannot be Determined	G9 (#)	
TRH 14 Classification (1985)**		G7	G10	Cannot be Determined	G10	
AASHTO Classification (Group Index)**		A-1-a (0)	A-2-4 (0)	A-2-4 (0)	A-2-4 (0)	
Unified Classification **		GP-??	SM	SM	SM	

Remarks: ***Subject to further testing as required by TRH14.**

† Subject to further testing as required by COLTO. COLTO above uses only: Atterberg Limits (<0.425 mm fraction; not arithmetic mean), Nominal Max Size, Grading Curve, Coarse Sand Ratio, Grading Modulus, Strength (CBR), and Swell.

Check that Max Size <= 2/3 of compacted layer thickness.

** Opinions and interpretations expressed herein are outside the scope of SANAS accreditation

Version 5.05 - 14 February 2018

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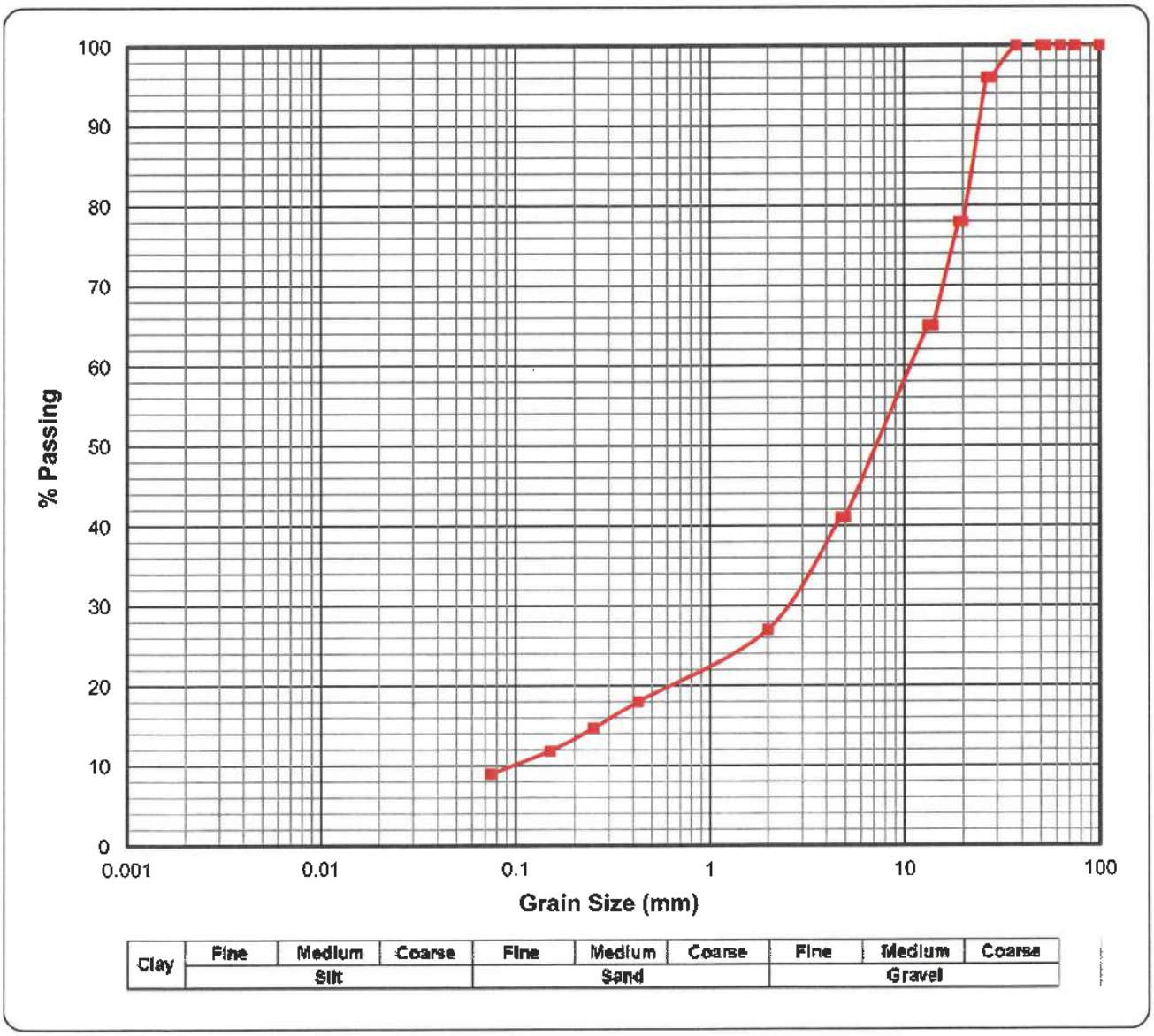
Client : Geosure (Pty) Ltd
Project : Newtown Clinic Conversion
Attention : Mr D. Naidoo

Your Ref No.: 047-23
Our Ref No. : 66115
Date Reported : 25/04/2023

Grading Curve for Sample T45969 – SANS 3001



Thick Red Line is the Grading Curve (COLTO Classification = G6 (#)) (TRH 14 Classification = G7)

Sieve Aperture Size	0.075	0.150	0.250	0.425	2.00	4.75	5.00	13.20	14.00	19.00	20.00	26.50	28.0	37.5	50.0	53.0	63	75	100
Percentage Passing	9%	12%	15%	18%	27%	41%	41%	65%	65%	78%	78%	96%	96%	100%	100%	100%	100%	100%	100%

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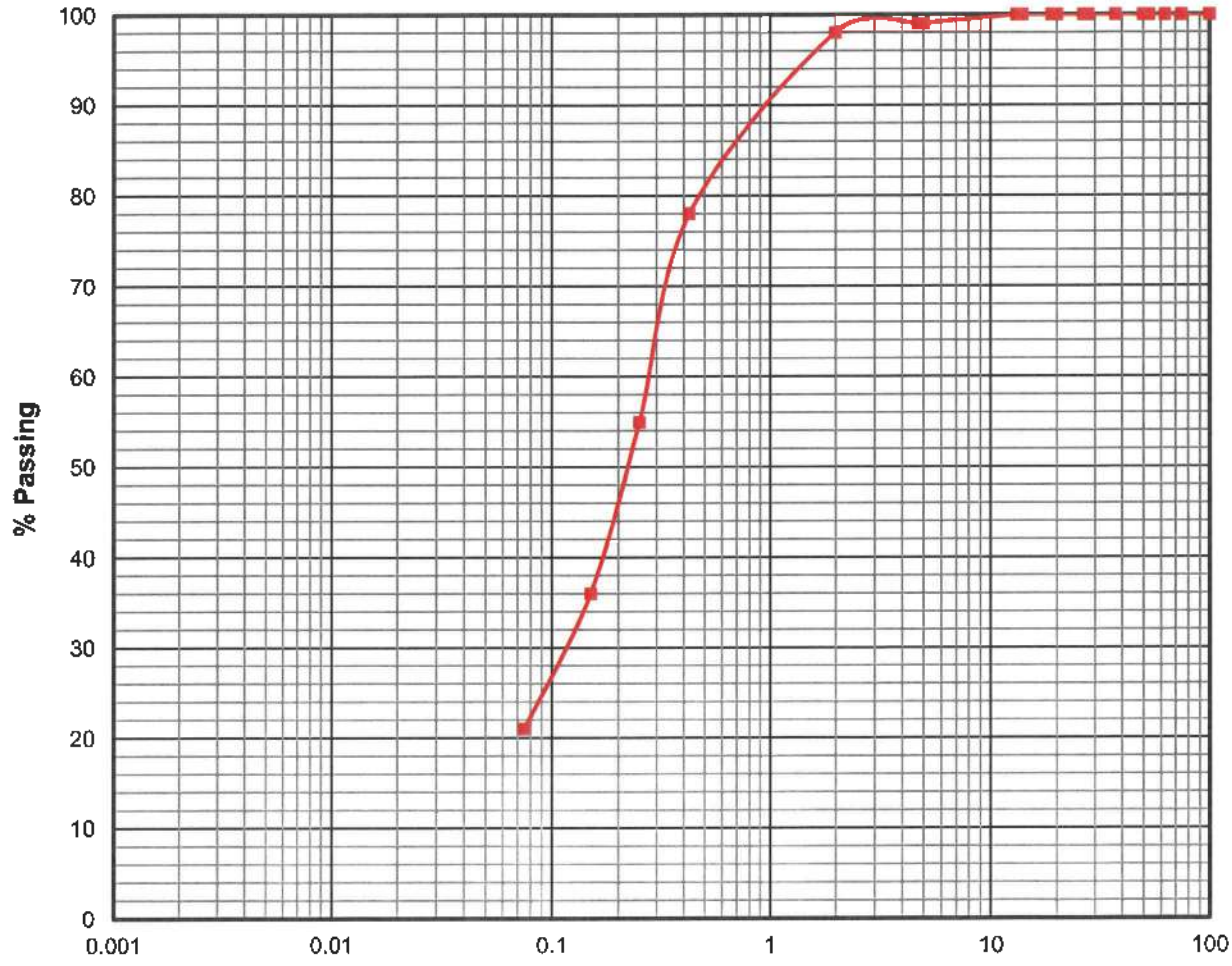
Our Ref No. : 66115
Date Reported : 25/04/2023

Grading Curve for Sample T45970 – SANS 3001



Thick Red Line is the Grading Curve (COLTO Classification = G9 (#)) (TRH 14 Classification = G10)

Sieve Aperture Size	0.075	0.150	0.015	0.026	0.05	0.06	5.00	13.20	14.00	19.00	20.00	26.50	28.0	37.5	50.0	53.0	63	75	100
Percentage Passing	21%	36%	55%	78%	98%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

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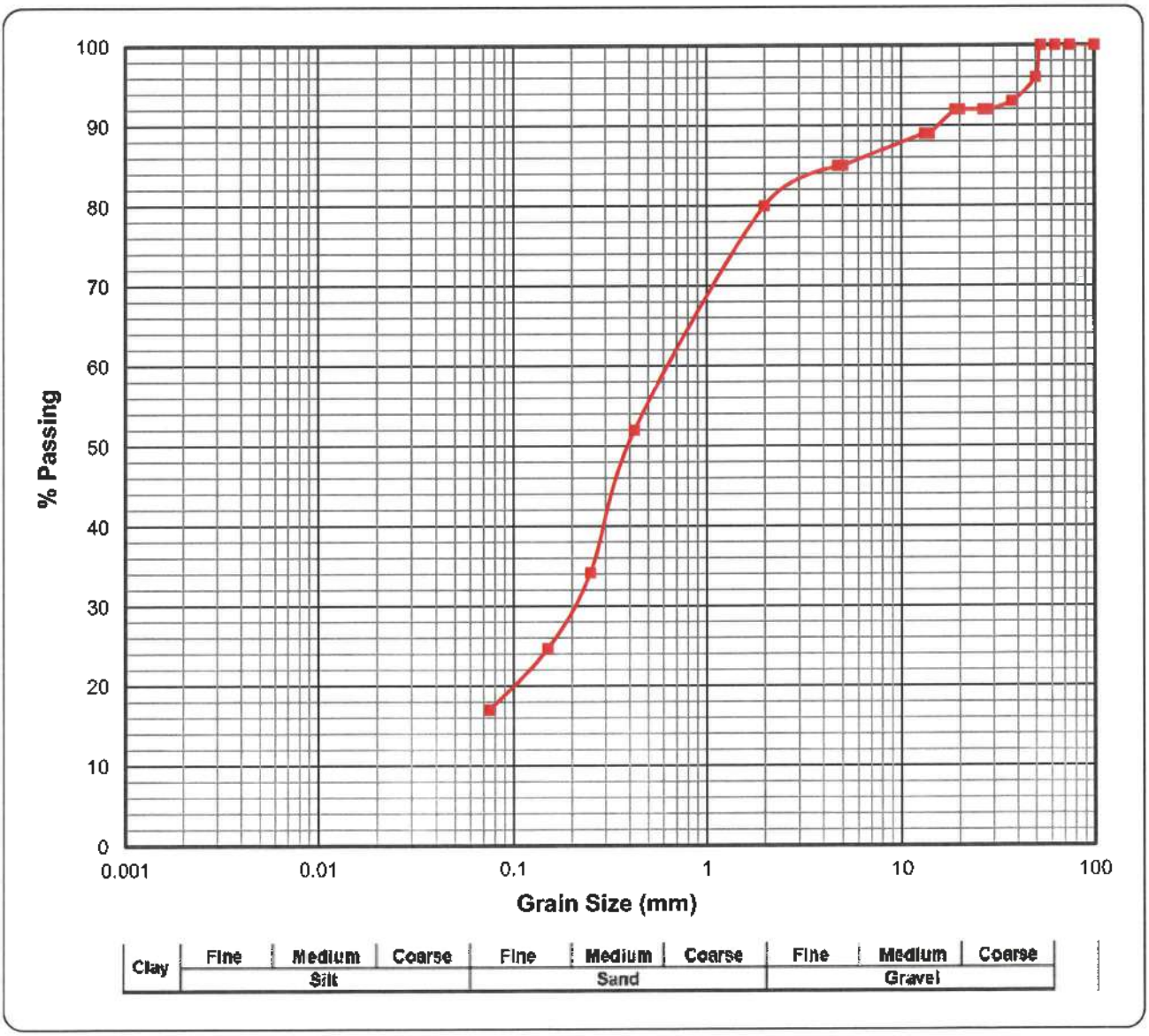
Attention : Mr D. Naidoo

Your Ref No.: 047-23
Our Ref No. : 66115
Date Reported : 25/04/2023

Grading Curve for Sample T45971 – SANS 3001



Red Line is the Grading Curve (COLTO Classification = Cannot be Determined) (TRH 14 Classification = Cannot be Determ

Sieve Aperture Size	0.075	0.150	0.250	0.425	2.00	4.75	5.00	13.20	14.00	19.00	20.00	26.50	28.0	37.5	50.0	53.0	63	75	100
Percentage Passing	17%	25%	34%	52%	80%	85%	85%	89%	89%	92%	92%	92%	92%	93%	96%	100%	100%	100%	100%

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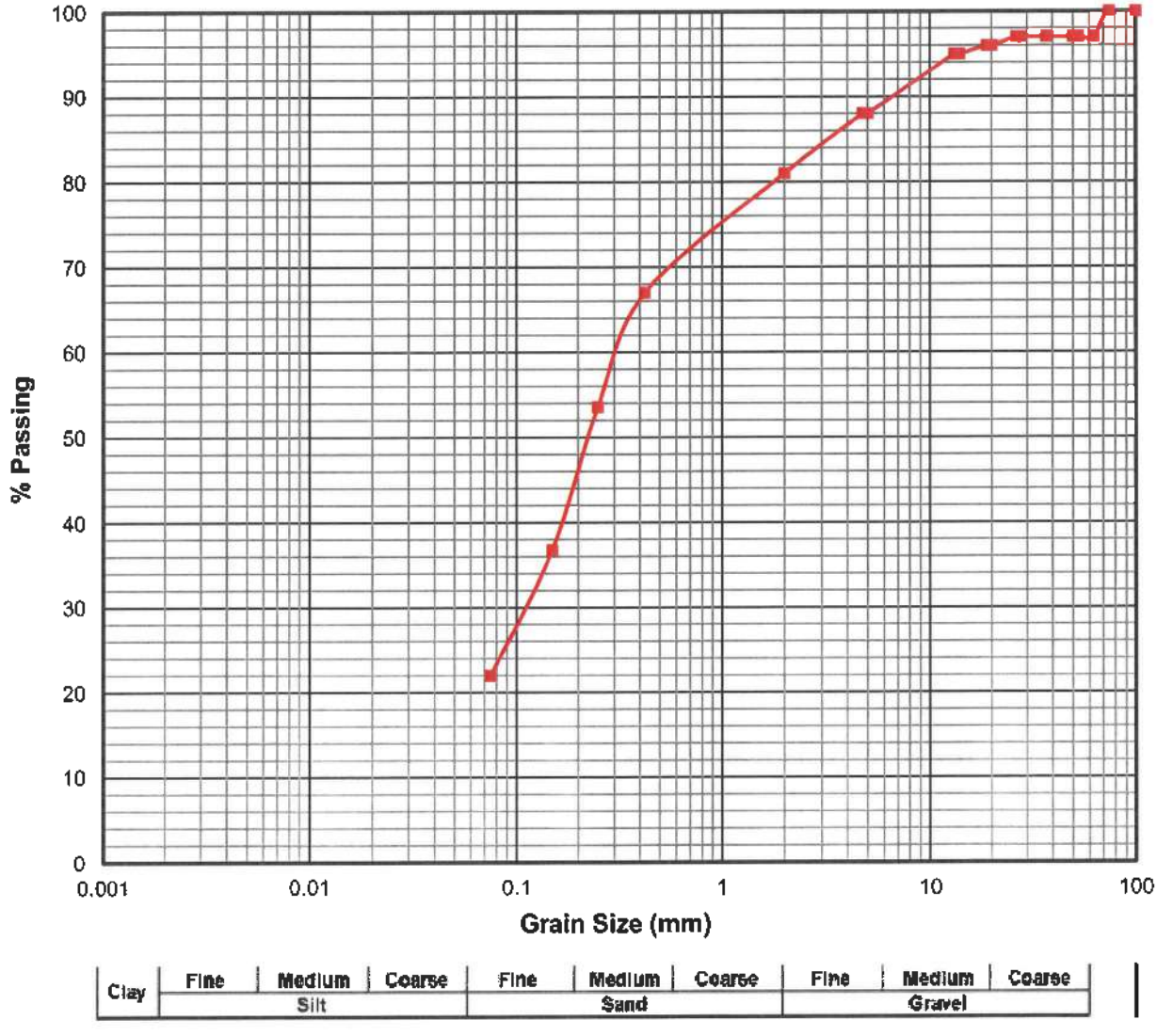
Client : Geosure (Pty) Ltd
Project : Newtown Clinic Conversion
Attention : Mr D. Naidoo

Your Ref No.: 047-23
Our Ref No. : 66115
Date Reported : 25/04/2023

Grading Curve for Sample T45973 – SANS 3001



Thick Red Line is the Grading Curve (COLTO Classification = G9 (#)) (TRH 14 Classification = G10)

Sieve Aperture Size	0.075	0.150	0.250	0.425	2.00	4.75	5.00	13.20	14.00	19.00	20.00	26.50	28.0	37.5	50.0	53.0	63	75	100
Percentage Passing	22%	37%	54%	67%	81%	88%	88%	95%	95%	96%	96%	97%	97%	97%	97%	97%	97%	100%	100%

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email: geosure@iafrica.com www.geosure.co.za

Client	**: Geosure (Pty) Ltd**	**Your Ref No.**	**: 047-23**
Project	**: Newtown Clinic Conversion**	**Our Ref No.**	**: 66115**
Attention	**: Mr D. Naidoo**	**Date Reported**	**: 24.04.2023**

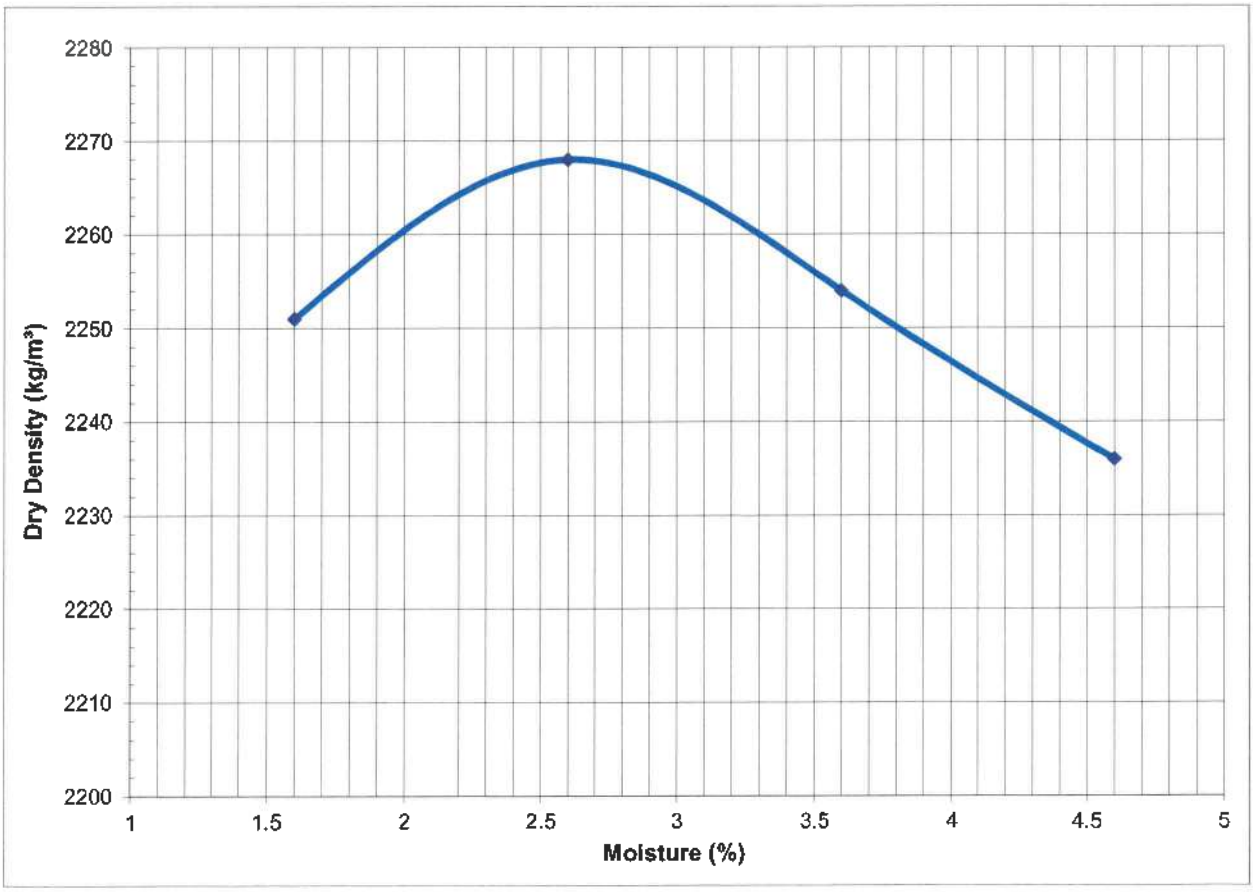
SANS 3001 Moisture/Density Relationship

Sample No.	: T45969	Field No.	: IP4
Method of preparation	: N/A	Depth (m)	: 0.04-0.19
Natural/Stabilised	: Natural	Origin	: Layer 2
Material Description	: Lt.Gr.Br.Spec.Wht.Bl.Gr.sandy GRAVEL. Fill	Compaction Effort	: Mod AASHTO

Maximum Dry Density (kg/m³) **2268** **Optimum Moisture Content (%)** **2.6**

Plotted Values:

Moisture (%)	1.6	2.6	3.6	4.6
Dry Density (kg/m³)	2251	2268	2254	2236



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Client : **Geosure (Pty) Ltd**
Project : **Newtown Clinic Conversion**
Attention : **Mr D. Naidoo**

Your Ref No. : **047-23**
Our Ref No. : **66115**
Date Reported : **24.04.2023**

SANS 3001 Moisture/Density Relationship

Sample No. : T45970
Method of preparation : N/A
Natural/Stabilised : Natural
Material Description : Lt.Or.Br.silty SAND. Res. S/Stone

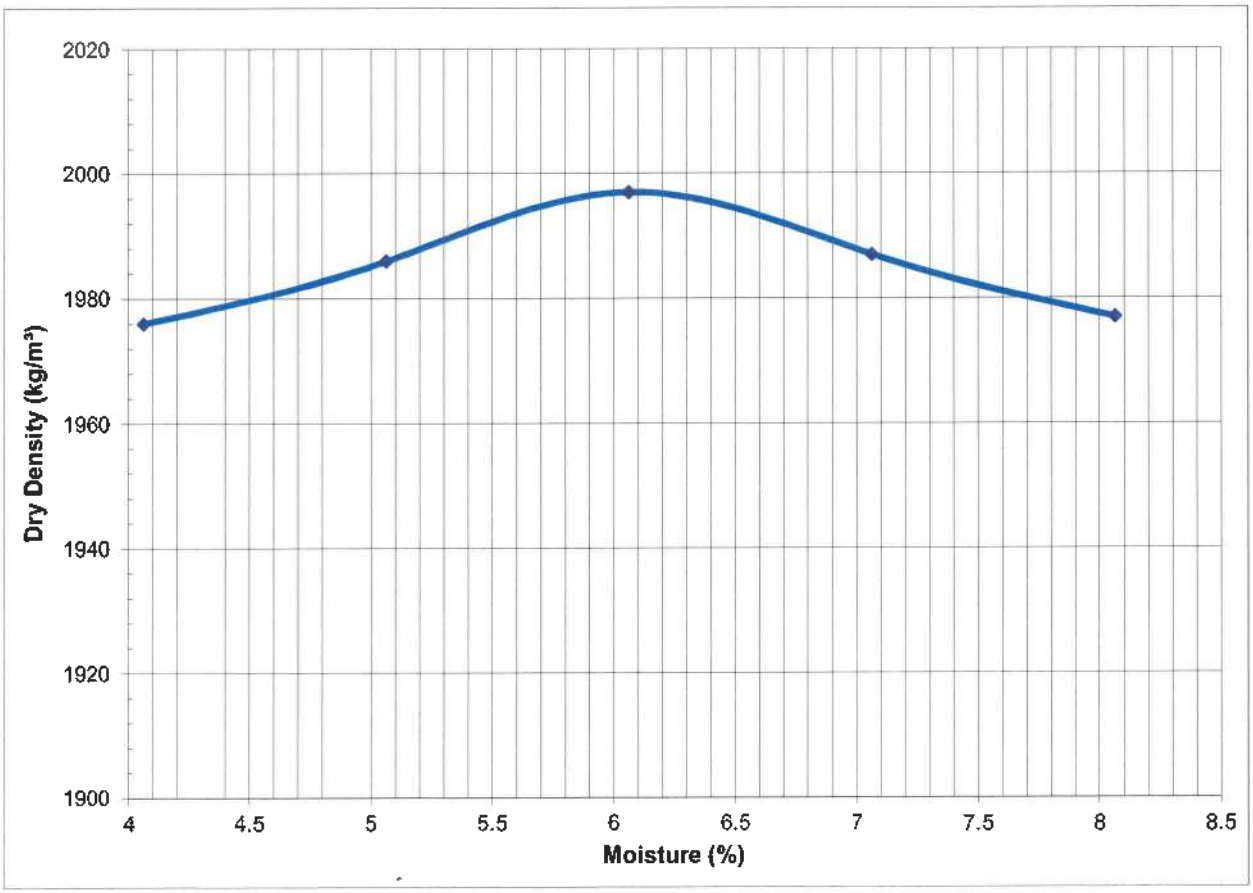
Field No. : IP7
Depth (m) : 0.72-1.65
Origin : Layer 4
Compaction Effort : Mod AASHTO

Maximum Dry Density (kg/m³) **1997**

Optimum Moisture Content (%) **6.1**

Plotted Values:

Moisture (%)	4.1	5.1	6.1	7.1	8.1
Dry Density (kg/m³)	1976	1986	1997	1987	1977



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Attention : **Mr D. Naidoo**

Your Ref No. : **047-23**
Our Ref No. : **66115**
Date Reported : **24.04.2023**

SANS 3001 Moisture/Density Relationship

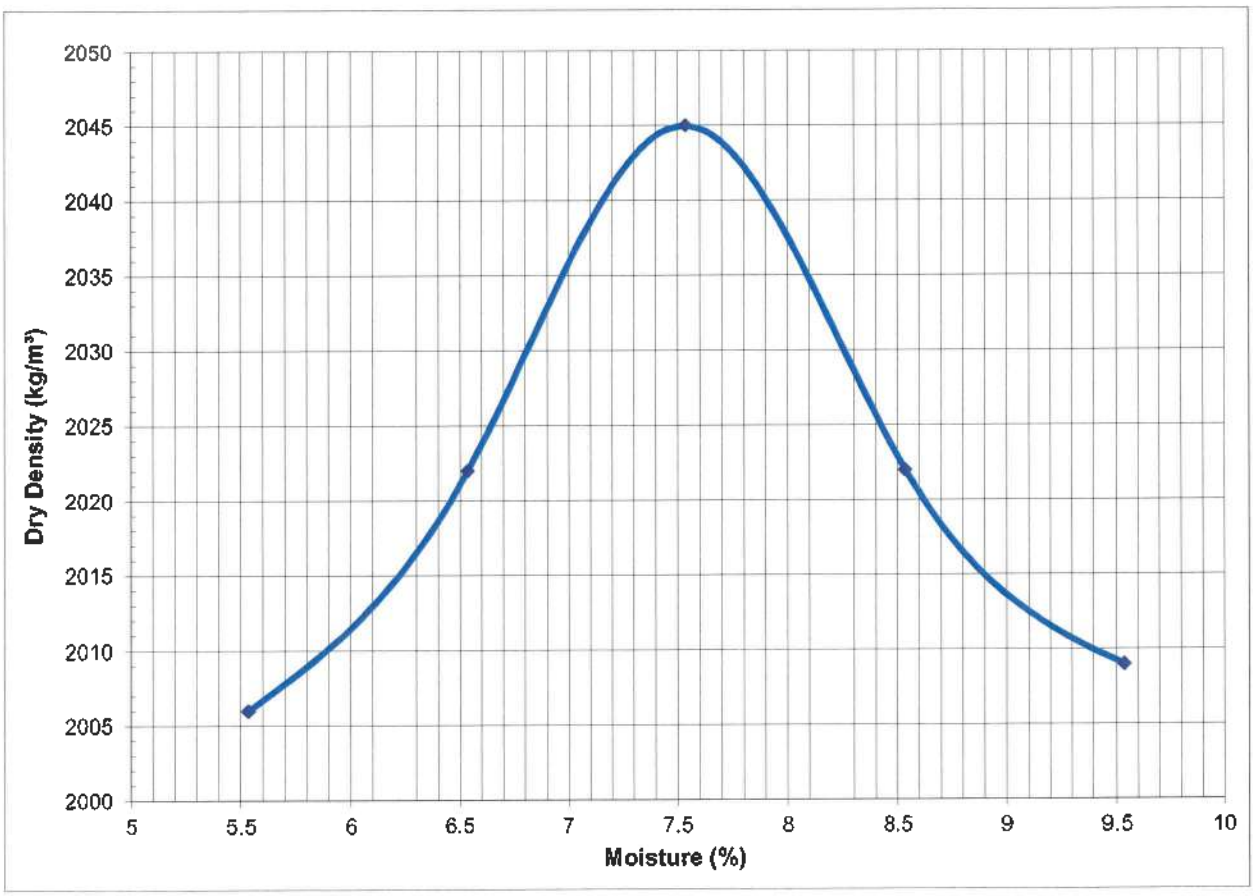
Sample No.	: T45973	Field No.	: IP20
Method of preparation	: Scalped	Depth (m)	: 0.77-1.70
Natural/Stabilised	: Natural	Origin	: Layer 4
Material Description	: Or.Br.Spec.Wht.silty clayey SAND to sandy CLAY.	Compaction Effort	: Mod AASHTO

Maximum Dry Density (kg/m³) **2045**

Optimum Moisture Content (%) **7.5**

Plotted Values:

Moisture (%)	5.5	6.5	7.5	8.5	9.5
Dry Density (kg/m³)	2006	2022	2045	2022	2009



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APPENDIX A

UNCERTAINTY OF MEASUREMENT AND DECISION RULE

Notes on Uncertainty:

1. ABBREVIATIONS: UoM = Uncertainty of Measurement; E.UoM = Expanded Uncertainty of Measurement
2. UoM for gravels, sands, cohesive materials and asphalt was determined from a reproducibility study
2. UoM for aggregates and concrete was determined from a repeatability study

Notes on Decision Rule:

1. The decision rule employed by this laboratory is based on ILAC-G9:03/2009
2. Decision rules are only applicable to classification of gravels, sands and cohesive materials
3. Contact GEOSURE for further information related to the decision rule

MATERIAL TYPE		GRAVELS AND CRUSHED STONE (G1 - G5)	SANDS (G8-G9)	COHESIVE MATERIALS (G5 - G9)
PROPERTY		E.UoM (K=2)	E.UoM (K=2)	E.UoM (K=2)
% Passing Sieve Aperture	100.0 mm	0.00	0.00	0.00
	75.0 mm	0.00	0.00	2.56
	63.0 mm	0.00	0.00	1.48
	50.0 mm	0.00	0.00	1.56
	37.5 mm	0.36	0.00	1.32
	28.0 mm	2.08	0.00	0.98
	20.0 mm	0.78	0.00	0.98
	14.0 mm	0.38	0.00	1.82
	5.00 mm	1.94	0.44	1.10
	2.00 mm	2.44	0.56	0.90
	0.425 mm	1.42	1.40	1.42
	0.075 mm	0.38	0.72	0.98
Mechanical Analysis (%)	CS	1.32	1.08	0.98
	CFS	1.32	0.66	0.00
	MFS	0.00	1.56	0.00
	FFS	0.74	0.92	1.02
	S+C	1.36	0.36	0.00
Grading Modulus		0.04	0.02	0.06
Atterberg Limits (%)	LL	0.00	0.00	1.60
	PI	0.00	0.00	0.64
	LS	0.00	0.00	0.22
CBR (%)	100% Comp.	18.36	8.24	2.70
	98% Comp.	9.24	7.50	1.10
	97% Comp	5.84	6.82	0.62
	95% Comp	1.32	3.04	0.40
	93% Comp.	1.94	2.44	0.66
	90% Comp.	3.54	1.50	0.66
	Swell @ 100%	0.04	0.00	0.92
MOD	MDD (kg/m^3)	5.74	3.42	7.76
	O.M.C (%)	0.08	0.12	0.50

AGGREGATE (SINGLE SIZED CRUSHED STONE)		
PROPERTY		E.UoM (K=2)
% Passing Sieve Aperture	100.0 mm	0.00
	75.0 mm	0.00
	63.0 mm	0.00
	50.0 mm	0.00
	37.5 mm	0.00
	28.0 mm	0.00
	20.0 mm	0.16
	14.0 mm	0.14
	10.0 mm	0.32
	7.1 mm	0.18
	5.0 mm	0.20
	2.0 mm	0.08
	1.0 mm	0.18
	0.600 mm	0.20
	0.425 mm	0.20
	0.300 mm	0.16
	0.150 mm	0.04
	0.075 mm	0.12
	Fineness Mod.	0.00
Flak. Index	%	0.22
ALD	mm	0.12
ALD Comp.	mm	0.10
Sand Equiv		0.54
ACV (AG10)	%	0.10
10% FACT(AG10)	kN	1.08
ACV (AG15)	%	0.00
10% FACT(AG15)	kN	1.00
BD (AG20)	kg/m^3	0.38
AD (AG20)	kg/m^3	0.44
WA (AG20)	%	0.00
BD (AG21)	kg/m^3	22.76
AG (AG21)	kg/m^3	27.04
WA (AG21)	%	0.00
ARD (AG22)	kg/m^3	1.92
RD (AG23)	kg/m^3	2.04
PD (AG23)	kg/m^3	0.00

Nuclear Density	
Property	E.UoM (K=2)
Wet Density (kg/m^3)	8.88
Dry Density (kg/m^3)	11.36
Moisture Content (%)	0.38

ASPHALT		
PROPERTY		E.UoM (K=2)
% Passing Sieve Aperture	37.5 mm	0.00
	28.0 mm	0.00
	20.0 mm	0.00
	14.0 mm	0.13
	10.0 mm	0.46
	7.1 mm	1.53
	5.00 mm	1.31
	2.00 mm	1.08
	1.00 mm	0.76
	0.600 mm	0.53
	0.425 mm	0.51
	0.300 mm	0.48
	0.150 mm	0.36
	0.075 mm	0.41
Binder Cont.	%	0.15
Fineness Mod		0.04
BD	kg/m^3	4.22
Stability	kN	0.74
Flow	mm	0.09
MVD	kg/m^3	4.84

CONCRETE	
AGE	E.UoM (K=2)
7 Day Results	
Strength(MPa)	2.30
28 Day Results	
Strength(MPa)	1.26

Company	Contact	Email	Number	Response
Palace Shopfitters	Meloshnie Reddy	melo@palaceshopfitters.co.za	Cel: 083 227 9759	
Trust Shopfitters	Kara	karas@trustshopfitters.co.za	Tel: 031 700 9095	
PDT Interiors	Trevor Naicker	trevor@pdtinteriors.co.za	Tel: 031 500 2282	
Technique Shopfitters	Roy	technique@techniqueshopfitters.co.za	Tel: 031 205 9759	
Carrington Shopfitters	Mathew	matthewcarrington89@icloud.com	Tel: 063 274 8097	
Siyaphambili Shopfitters			Tel: 031 463 2481	

KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

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

ANNEXURE 10

EPWP - Additional Specification

ADDITIONAL SPECIFICATION - EPWP

SL **EMPLOYMENT AND TRAINING OF EPWP BENEFICIARY ON THE EXPANDED PUBLIC WORKS PROGRAMME (EPWP) Infrastructure Projects:**

CONTENTS

SL 01 SCOPE

This project is part of the Expanded Public Works Programme aims to train young people and provide them with practical work experience as part of this programme. Youth aged between 18 and 35 will be recruited and trained in skills relevant to the work to be done on this project. These youth will have to be employed by the contractor as part of this project so that they can gain their work experience on these projects. The training of the youth will be coordinated and implemented by a separate service provider. This service provider will provide the contractor with a list of all the youth and the training each of these youth have received. The Contractor will be required to employ all of these youth for a minimum period of 6 months. Furthermore the Contractor will be required to supervise these youth to ensure that the work they perform is of the required standard. If necessary the contractor's staff will be required to assist and mentor the youth to ensure that they are able to perform the type of work they need to do to the satisfactory standards required. The contractor will not be required to employ all youth in the programme at the same time, but may rotate the youth on the project, as long as all youth are employed for the minimum duration stated earlier.

This specification contains the standard terms and conditions for workers employed in elementary occupations and trained on a Expanded Public Works Programme (EPWP) for the Infrastructure Programme.

SL 02 TERMINOLOGY AND DEFINITIONS

SL 02.01 TERMINOLOGY

(a) EPWP The Code of Good Practice for Expanded Public Works Programmes, which has been gazetted by the Department of Labour, and which provides for special conditions of employment for these EPWP projects. In terms of the Code of Good Practice, the workers on these projects are entitled to formal training, which will be provided by training providers appointed (and funded) by the Department of Labour. For projects of up to six months in duration, this training will cover life-skills and information about other education, training and employment opportunities.

(b) EPWP Expanded Public Works Programme, a National Programme of the government of South Africa, approved by Cabinet.

(c) UYF Umsobumvu Youth Fund.

(d) DOL Department of Labour.

SL 02.02 DEFINITIONS

(a) "employer" means the contractor or any party employing the worker / beneficiary under the EPWP Programme.

(b) "client" means the Department of Public Works.

(c) " worker / trainee" means any person working or training in an elementary occupation on a EPWP.

SL 03 APPLICABLE LABOUR LAWS

In line with the Expanded Public Works Programme (EPWP) policies, the Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of labour in government Notice No. R63 of 25 January 2002, of which extracts have been reproduced below in clauses SL 04 shall apply to works described in the scope of work and which are undertaken by unskilled or semi-skilled workers. The Code of Good Practise for Employment and Conditions of Work for Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No. R64 of 25 January 2002 shall apply to works described in the scope of work and which unskilled or semi-skilled workers undertake.

SI 04 EXTRACTS FROM MINISTERIAL DETERMINATION REGARDING EPWP

(g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;

(h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;

(i) "time-rated worker" means a worker paid on the basis of the length of time worked

(j) "Service Provider" means the consultant appointed by Department to coordinate and arrange the employment and training of labour on EPWP infrastructure projects.

SL 04.02 TERMS OF WORK

(a) Workers on a EPWP are employed on a temporary basis.

(b) A worker may NOT be employed for longer than 24 months in any five-year cycle on a EPWP.

(c) Employment on a EPWP does not qualify as employment and a worker so employed does not have to register as a contributor for the purposes of the Unemployment Insurance Act

SL 04.03 NORMAL HOURS OF WORK

(a) An employer may not set tasks or hours of work that require a worker to work–

(i) more than forty hours in any week
(ii) on more than five days in any week; and
(iii) for more than eight hours on any day.

(b) An employer and a worker may agree that the worker will work four days per week. The worker may then work up to ten hours per day.

(c) A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks (based on a 40-hour week) allocated to him.

Every work is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

SL 04.04 MEAL BREAKS

(a) A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

(b) An employer and worker may agree on longer meal breaks.

(c) A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

SL 04.05 SPECIAL CONDITIONS FOR SECURITY GUARDS

(a) A security guard may work up to 55 hours per week and up to eleven hours per day.

(b) A security guard who works more than ten hours per day must have a meal break of at least one hour duration or two breaks of at least 30 minutes duration each.

SL 04.06 DAILY REST PERIOD

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

SL 04.07 WEEKLY REST PERIOD

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

SL 04.08 WORK ON SUNDAYS AND PUBLIC HOLIDAYS

(a) A worker may only work on a Sunday or public holiday to perform emergency or security work.

(b) Work on Sundays is paid at the ordinary rate of pay.

(c) A task-rated worker who works on a public holiday must be paid –

(i) the worker's daily task rate, if the worker works for less than four hours;

(ii) double the worker's daily task rate, if the worker works for more than four hours.

(d) A time-rated worker who works on a public holiday must be paid –

(i) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;

(ii) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

SL 04.09 SICK LEAVE

(a) Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.

(b) A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.

(c) A worker may accumulate a maximum of twelve days' sick leave in a year.

(d) Accumulated sick-leave may not be transferred from one contract to another contract.

(e) An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.

(f) An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.

(g) An employer must pay a worker sick pay on the worker's usual payday.

(h) Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –

(i) absent from work for more than two consecutive days; or

(ii) absent from work on more than two occasions in any eight-week period.

(i) A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.

(j) A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

SL 04.10 MATERNITY LEAVE

(a) A worker may take up to four consecutive months' unpaid maternity leave.

(b) A worker is not entitled to any payment or employment-related benefits during maternity leave.

(c) A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.

(d) A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.

(e) A worker may begin maternity leave –

(i) four weeks before the expected date of birth; or

(ii) on an earlier date –

(1) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or

(2) if agreed to between employer and worker; or

(iii) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.

(f) A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

(g) A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the EPWP on which she was employed has ended.

SL 04.11 FAMILY RESPONSIBILITY LEAVE

(a) Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -

(i) when the employee's child is born;

(ii) when the employee's child is sick;

(iii) in the event of the death of –

(1) the employee's spouse or life partner

(2) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling

SL 04.12 STATEMENT OF CONDITIONS

(a) An employer must give a worker a statement containing the following details at the start of employment –

(i) the employer's name and address and the name of the EPWP;

(ii) the tasks or job that the worker is to perform;

(iii) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;

(iv) the worker's rate of pay and how this is to be calculated;

(v) the training that the worker may be entitled to receive during the EPWP.

(b) An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.

(c) An employer must supply each worker with a copy of the relevant conditions of employment contained in this specification.

(d) An employer must enter into a formal contract of employment with each employee. A copy of a pro-forma is attached at the end of this specification.

SL 04.13 KEEPING RECORDS

(a) Every employer must keep a written record of at least the following –

(i) the worker's name and position;

(ii) in the case of a task-rated worker, the number of tasks completed by the worker;

(iii) in the case of a time-rated worker, the time worked by the worker;

(iv) payments made to each worker.

(b) The employer must keep this record for a period of at least three years after the completion of the EPWP.

SL 04.14 PAYMENT

(a) A task-rated worker will only be paid for tasks that have been completed.

(b) An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer. Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

(c) A time-rated worker will be paid at the end of each month and payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

(d) Payment in cash or by cheque must take place –

(i) at the workplace or at a place agreed to by at least 75% of the workers; and

(ii) during the worker's working hours or within fifteen minutes of the start or finish of work;

(e) All payments must be enclosed in a sealed envelope which becomes the property of the worker.

(f) An employer must give a worker the following information in writing –

(i) the period for which payment is made;

(ii) the number of tasks completed or hours worked;

(iii) the worker's earnings;

(iv) any money deducted from the payment;

(v) the actual amount paid to the worker.

(g) If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.

(h) If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

SL 04.15 DEDUCTIONS

(a) An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

(b) An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

(c) An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

(d) An employer may not require or allow a worker to –

(i) repay any payment except an overpayment previously made by the employer by mistake;

(ii) state that the worker received a greater amount of money than the employer actually paid to the worker; or

(iii) pay the employer or any other person for having been employed.

SL 04.16 HEALTH AND SAFETY

(a) Employers must take all reasonable steps to ensure that the working environment is healthy and safe and that all legal requirements regarding health and safety are strictly adhered to.

(b) A worker must:

(i) work in a way that does not endanger his/her health and safety or that of any other person;

(ii) obey any health and safety instruction;

(iii) obey all health and safety rules;

(iv) use any personal protective equipment or clothing issued by the employer;

(v) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

SL 04.17 COMPENSATION FOR INJURIES AND DISEASES

(a) It is the responsibility of employers to arrange for all persons employed on a EPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.

(b) A worker must report any work-related injury or occupational disease to their employer or manager.

(c) The employer must report the accident or disease to the Compensation Commissioner.

(d) An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

SL 04.18 TERMINATION

(a) The employer may terminate the employment of a worker provided he has a valid reason and after following existing termination procedures.

(b) A worker will not receive severance pay on termination.

(c) A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

(d) A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

(e) A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

SL 04.19 CERTIFICATE OF SERVICE

(a) On termination of employment, a worker is entitled to a certificate stating –

(i) the worker's full name;
(ii) the name and address of the employer;
(iii) the SPWP on which the worker worked;
(iv) the work performed by the worker;
(v) any training received by the worker as part of the EPWP;
(vi) the period for which the worker worked on the EPWP;
(vii) any other information agreed on by the employer and worker.

SL 05 EMPLOYER'S RESPONSIBILITIES

The employer shall adhere to the conditions of employment as stipulated in the *Code of Good Practice for Employment and Conditions of Work for Expanded Public Works Programmes*. Over and above the conditions stipulated above, he shall be responsible to:

(a) formulate and design a contract between himself/ herself and each of the recruited EPWP beneficiary, ensuring that the contract does not contravene any of the Acts stipulated in South African Law, e.g. Basic Conditions of Employment Act, etc. (A copy of a pro-forma contract is attached at the end of this specification);

(b) screen and select suitable candidates for employment from the priority list of EPWP beneficiary provided by the Umsobumvu Youth Fund (UYF);

(c) ensure that the recruited EPWP beneficiary are made available to receive basic life skills training which will be conducted and paid for by the Umsobumvu Youth Fund;

(d) ensure that all EPWP beneficiary receive instruction on safety on site prior to them commencing with work on site;

(e) ensure that all EPWP beneficiary are covered under workmen's compensation for as long as they are contracted to the contractor. Payment to the Compensation Commissioner shall be the responsibility of the contractor;

(f) assist in the identification and assessment of potential EPWP beneficiary to undergo advanced technical training in respective trades;

(g) test and implement strict quality control and to ensure that the health and safety regulations are adhered to;

(h) provide all EPWP beneficiary with the necessary protective clothing as required by law for the specific trades that they are involved in.

(i) provide overall supervision and day-to-day management of EPWP beneficiary and/or sub-contractors; and

(j) ensure that all EPWP beneficiary are paid their wages on time through a pre-agreed payment method as stipulated in the contract with the EPWP beneficiary.

SL 06 PLACEMENT OF RECRUITED EPWP BENEFICIARY

Employers will be contractually obliged to:

(a) employ EPWP beneficiary from targeted social groups from the priority list provided by the Service Provider/ Umsobumvu Youth Fund.

(b) facilitate on-the-job training and skills development programmes for the EPWP beneficiary;

(c) achieve the following minimum employment targets:

(i) 55% people between the ages of 18 and 35

(ii) 55% women;

(iii) 2% people with disabilities.

(d) brief EPWP beneficiary on the conditions of employment as specified in sub clause SL 04.09 above;

(e) enter into a contract with each EPWP beneficiary, which contract will form part of the Employment Agreement;

(f) allow EPWP beneficiary the opportunity to attend life skills training through DOL. This shall be arranged at the beginning of the contract;

(g) ensure that payments to EPWP beneficiary are made as set out in sub clauses SL 04.14 and SL 04.15 above.

(h) set up of personal profile files as prescribed by EPWP beneficiary and as set out in sub clause SL 04.13 above.

(i) in addition to (h)
- a copy of the I.D;
- qualifications;
- career progress;
- EPWP Employment Agreement, and
- list of small trade tools;

must be included in the EPWP beneficiary's personal profile file.

SL 07 TRAINING OF EPWP BENEFICIARY

Three types of training are applicable, namely

· Life skills;

· On the job training and

· Technical Skills training.

Training will be implemented by training instructors accredited by DOL and/or CETA :

· EPWP beneficiary shall be employed on the projects for an average of 6 months.

· EPWP beneficiary shall be deployed on projects in the vicinity of their homes. The same arrangements as for other workers regarding accommodation, subsistence and travel shall be applicable to EPWP beneficiary.

(a) Life skills training

All EPWP beneficiary are entitled to undergo life skills training. Training of this module will be flexible enough to meet the needs of the employer. Training should take place immediately after site hand-over and during the period of site establishment and pre-planning before actual construction starts, alternatively this will be spread over the duration of the contract period. The contractor will be required to work closely with the person to schedule the training sessions so that the timing of the training is aligned with the contractors work schedule and his demand for workers.

(b) On-the job training

The Employer shall provide EPWP beneficiary with on-the-job training to enable them to fulfil their employment requirements. The employer shall also be expected to closely monitor the job performance of EPWP beneficiary and shall identify potential EPWP beneficiary for skills development programmes.

(c) Technical skills training

The Employer shall assist in identifying EPWP beneficiary for further training. These EPWP beneficiary will undergo further technical training to prepare them for opportunities as semi-skilled labourers.

Such training will comprise of an off-site theoretical component and practical training on-site. The contractor will be responsible for on-site practical work under his supervision. EPWP beneficiary who graduate from the first phase of the training programme will be identified and given opportunities to register for skills development programmes. These can ultimately result in a accredited qualification. The programme will consist of theoretical instruction away from the construction site as well as on-site practical work under the supervision of the employer. Candidates will be entitled to employment to complete all training modules.

SL 08 BENEFICIARY (EPWP BENEFICIARY) SELECTION CRITERIA

SL 08.01 PREAMBLE

The *Code of Good Practise for Employment and Conditions of Work for Expanded Public Works Programmes* encourages:

- optimal use of locally-based labour in a Expanded Public Works Programme (EPWP);
- a focus on targeted groups which consist of namely youth, consisting of women, female-headed households, disabled and households coping with HIV/AIDS; and
- the empowerment of individuals and communities engaged in a SPWP through the provision of training.

SL 08.02 BENEFICIARY (EPWP BENEFICIARY) SELECTION CRITERIA

(a) The EPWP beneficiary of the programmes should preferably be non-working individuals from the most vulnerable sections of disadvantaged communities who do not receive any social security pension income. The local community must, through all structures available, be informed of and consulted about the establishment of any EPWP

(b) In order to spread the benefit as broadly as possible in the community, a maximum of one person per household should be employed, taking local circumstances into account.

(c) Skilled artisans from other areas may be employed if they have skills that are required for a project and there are not enough persons in the local communities who have those skills or who could undergo appropriate skills training. However, this should not result in more than 20% of persons working on a programme not being from local communities.

(d) Programmes should set participation targets for employment with respect to youth, single male- and female-headed households, women, people with disabilities, households coping with HIV/AIDS, people who have never worked, and those in long-term unemployment.

(e) The proposed targets as set out in sub clause SL 06 (c)

- 55% youth from 18 to 35 years of age;
- 55% women;
- 2% disabled.

SL 09 CONTRACTUAL OBLIGATIONS IN RELATION TO YOUTH LABOUR

The EPWP beneficiary to be employed in the programme (EPWP) shall be directly contracted to the employer. Over and above the construction and project management responsibilities, the employer will be expected to perform the tasks and responsibilities as set out in clause SL 05 above.

SL 10 PROVINCIAL RATES OF PAY

It is stipulated that youth workers on the EPWP receive a minimum of R 1 000 per month whilst working and R 600 per month whilst on training in ALL provinces. Should EPWP beneficiary be attending training whilst employed by the contractor, the contractor will still be responsible for payment to the EPWP beneficiary whilst at training.

SL 11 MEASUREMENTS AND PAYMENT

The number of EPWP beneficiary specified for this contract that will receive life skills training is 50 and technical training is 50

SL 11.01 PAYMENT FOR TRAINING OF EPWP BENEFICIARY (TARGET:- 50 EPWP BENEFICIARY)

SL 11.01.01 Skills development and Technical training for EPWP beneficiary for an average of 10 days ……(Prov.Sum)……..…..Unit: R/EPWP beneficiary

The above item is only applicable if DoL does not fund the Technical Training PRIOR to site handover.

SL 11.01.02 Penalty due to not meeting the target as in SL 11.01.01…..……..Unit: EPWP beneficiary

LESS R 2000 per EPWP beneficiary

SL 11.02 PAYMENT FOR TRAVELLING AND ACCOMMODATION DURING OFF-SITE TRAINING

SL 11.02.01 Life skills training for 26 days:

01 Travelling (based on 50 km/EPWP beneficiary) …….Unit: km

02 Accommodation……..(Prov.Sum)…..Unit: R/EPWP beneficiary

03 Profit and attendance…… Unit: %

SL 11.02.02 Skilled development and Technical training:

01 Travelling (based on 50 km/EPWP beneficiary)……...Unit: km

02 Accommodation…….(Prov.Sum)….Unit: R/EPWP beneficiary

03 Profit and attendance …….. Unit: %

The units of measurement for sub items SL 11.02.01 (01) and SL 11.02.02 (01) above shall be the distance travelled in km by the EPWP beneficiary trained off site. The tendered rate shall include full compensation to safely transport the youth workers to and from the training venue/s.

The unit of measurement for sub items SL 11.02.01 (02) and SL 11.02.02 (02) above shall be the amounts in Rand expended for accommodation and daily meal allowances for the EPWP beneficiary trained off site that must be arranged by the contractor. Amounts quoted shall be corrected according to re-measurement based on actual invoices.

The tendered percentages under sub items SL 11.02.01 (03) and SL 11.02.02 (03) will be paid to the contractor on the value of each payment pertaining to the accommodation and advance meal allowances to cover his expenses in this regard.

SL 11.03 ALTERNATIVE WORKERS FOR THE PERIOD OF OFF-SITE TRAINING

SL 11.03.01 Life skills training for 26 days …… Unit: worker-days

SL 11.03.02 Skilled development and Technical training for EPWP beneficiary for (…….) days…….. Unit: worker-days

The unit of measurement shall be the number of EPWP beneficiary replaced while in training multiplied by the number of days absent from the site.

The rates tendered shall include full compensation for additional replacement labour during periods of off-site training.

SL 11.04 EMPLOYMENT OF EPWP BENEFICIARY

SL 11.04.01 Employment of EPWP beneficiary……...(Prov.Sum)¼.Unit: R/ worker-month

SL 11.04.02 Employment of EPWP beneficiary……...(Prov.Sum)¼.Unit: R/ worker-month

The unit of measurement shall be the number of EPWP beneficiary at the statutory labour rates of R ……. multiplied by the period employed in months and the rate tendered shall include full compensation for all costs associated with the employment of EPWP beneficiary and for complying with the conditions of contract. The cost for the training shall be excluded from this item. This item is based on 6 months appointment for EPWP beneficiary.

SL 11.05 PROVISION OF EPWP DESIGNED OVERALLS TO EPWP BENEFICIARY

SL 11.05.01 Supply EPWP designed overalls to EPWP beneficiary …….. (Prov.Sum)……Unit: R

EPWP beneficiary overalls should be orange (top and bottom) as per EPWP specification with the exception of Correctional Services contracts where the EPWP beneficiary top would be blue and the bottom orange.

SL 11.05.02 Profit and attendance…….. Unit: %

An amount has been provided in the Schedule of Quantities under sub item SL 10.05.01 for the supply of EPWP designed overalls, as per the specification provided by the EPWP unit, arranged by the Service Provider. The Engineer will have sole authority to spend the amounts or part thereof. The tendered percentage under sub items SL 10.05.02 will be paid to the contractor on the value of each payment pertaining to the supply of overalls to cover his expenses in this regard.

SL 11.06 PROVISION OF SMALL TOOLS FOR EPWP BENEFICIARY

SL 11.06.01 Provide all EPWP beneficiary with prescribed tools for their respective trades. Specification for the mentioned tools to be provided by the EPWP Service Provider. These tools will become the property of the EPWP beneficiary after the completion of the programme.....(Prov.Sum)….Unit: **R 500-00** /youth worker

SL 11.06.02 Profit and attendance…….. Unit: %

SL 11.07 APPOINTMENT OF EPWP BENEFICIARY TEAM LEADER/S

SL 11.07.01 Appointment of (_____) EPWP beneficiary team leader/s for the duration of the contract…….(Prov.Sum)…….... Unit: R / EPWP beneficiary team leader

The EPWP beneficiary Team Leader will act as CLO/PLO to facilitate the project work between the EPWP beneficiary and the contractor. Umsobumvu Youth Fund can assist with the sourcing of EPWP beneficiary Team Leader for employment by the contractor.

SL 11.08 LIAISON WITH SERVICE PROVIDER …….Unit: hours

The tendered rate shall include full compensation for the cost of liaising with the Service Provider and Social Facilitators on all issues regarding the works.

KWAZULU-NATAL PROVINCE
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Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic

ANNEXURE 11

EPWP Scope of Works

SCOPE OF WORKS IN RESPECT OF WORK RELATING TO THE EXTENDEND PUBLIC WORKS PROGRAMME (EPWP)

Project title:	**Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic**		
Tender Number	**ZNB 5522/2023-H**	EPWP NO:	**N/A**

Introductory notes:

1. The works, or parts of the works will be constructed using labour-intensive methods only in terms of this specification. The use of plant to provide such works, other than plant specifically provided for in the scope of work, is a variation to the contract. The items marked with the letters **LI** are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.

2. Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.

DESCRIPTION OF THE WORKS

Employer's objectives

The employer's objectives are to deliver public infrastructure using labour-intensive methods in accordance with EPWP Guidelines.

Labour-intensive works

Labour-intensive works comprise the activities described in the Labour-Intensive Specification. Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of work.

LABOUR-INTENSIVE COMPETENCIES OF SUPERVISORY AND MANAGEMENT STAFF

Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF level 4 "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/ Manager at NQF level 5 "Manage Labour-Intensive Construction Processes" or equivalent QCTO qualifications (See Appendix C). at NQF outlined in Table 1. (See GUIDELINES FOR THE IMPLEMENTATION OF LABOUR-INTENSIVE INFRASTRUCTURE PROJECTS UNDER THE EXPANDED Health PROGRAMME (EPWP) -THIRD EDITION 2015)

Emerging contractors shall have personally completed, or be registered on a skills programme for the NQF level 2 unit standard. All other site supervisory staff in the employ of emerging contractors must have completed, or be registered on a skills programme for the NQF level 2 unit standards or NQF level 4 unit standards. Table 1: Skills programme for supervisory and management staff.

Table 1: Skills programme for supervisory and management staff

Personnel	NQF level	Unit standard titles	Skills programme description
Team leader / supervisor	2	Apply Labour-Intensive Construction Systems and Techniques to Work Activities	This unit standard must be completed, and
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Storm water Drainage	any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain structures	

Personnel	NQF level	Unit standard titles	Skills programme description
Foreman/supervisor	4	Implement Labour-Intensive Construction Systems and Techniques	This unit standard must be completed, and
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Storm water Drainage	any one of these 3 unit standards
Details of these skills programmes may be obtained from the CETA ETQA manager (e-mail :gerard@ceta.co.za , tel: 011-265 5900)			

EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR-INTENSIVE WORKS

1.1 Requirements for the sourcing and engagement of labour.

1.1.1 Unskilled and semi-skilled labour required for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

1.1.2 The rate of pay set for the SPWP per task or per day will be an acceptable rate determined by the Department of Labour.

1.1.3 Tasks established by the contractor must be such that:

a) the average worker completes 5 tasks per week in 40 hours or less; and

b) the weakest worker completes 5 tasks per week in 55 hours or less.

1.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.1.3.

1.1.5 The Contractor shall, through all available community structures, inform the local community of the labour-intensive

a) where the head of the household has less than a primary school education;

b) that have less than one full time person earning an income;

c) where subsistence-agriculture is the source of income.

d) that who are not in receipt of any social security pension income

1.1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of unskilled and semi-skilled workers is in the following proportions:

a) 55% women;

b) 55% youth who are between the ages of 18 and 35; and

c) 2% on persons with disabilities.

1.2 Specific provisions pertaining to SANS 1914-5

1.2.1 Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

1.2.2 Contract participation goals

1.2.2.1 There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.

1.2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

1.2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

1.2.4 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

1.2.5 Variations to SANS 1914-5

1.2.5.1 The definition for net amount shall be amended as follows:

Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

1.2.5.2 The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

1.3 Training of targeted labour

1.3.1 The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.

1.3.2 The cost of the formal training of targeted labour, will be funded by the local office of the Department of Labour. This training will take place as close to the project site as practically possible. The contractor must access this training by informing the relevant regional office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The Employer and the Department of Health (Fax: 012 3258625/ EPWP Unit, Private Bag X65, Pretoria 0001) must be furnished with a copy of this request.

1.3.3 The contractor shall do nothing to dissuade targeted labour from participating in training programmes and shall take all reasonable steps to ensure that each beneficiary is provided with two days of formal training for every 22 days worked.

1.3.4 An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of the above.

1.3.5 Proof of compliance with the above requirements must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

GENERIC LABOUR-INTENSIVE SPECIFICATION

1 Scope

This specification establishes general requirements for activities which are to be executed by hand involving the following:

a) trenches having a depth of less than 1.5 metres
b) storm water drainage
c) low-volume roads and sidewalks

2 Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

3 Hand excavatable material

Hand excavatable material is material:

a) Granular materials:

i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or

ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b) Cohesive materials:

i) whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or

ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note: 1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.

2) A dynamic cone penetrometer is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of. 60 degrees with respect to the horizontal) into the material being used.

Table 2: Consistency of materials when profiled

GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	**DESCRIPTION**	**CONSISTENCY**	**DESCRIPTION**
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in upto 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	Very high resistance to penetration by the sharp end of a geological pick; requires many blows for excavation.	stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumb-nail' with difficulty; slight indentation produced by blow of a geological pick point.

4 Trench excavation

All hand excavatable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

5 Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers

a) to 90% Proctor density;

b) such that in excess of 5 blows of a dynamic cone penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or

c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

6 Excavation

All hand excavatable material including topsoil classified as hand excavatable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand.

The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

7 Clearing and grubbing

Grass and small bushes shall be cleared by hand.

8 Shaping

All shaping shall be undertaken by hand.

9 Loading

All loading shall be done by hand, regardless of the method of haulage.

10 Haul

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150 m.

11 Offloading

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilised for haulage.

12 Spreading

All material shall be spread by hand.

13 Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved.

14 Grassing

All grassing shall be undertaking by sprigging, sodding, or seeding by hand.

15 Stone pitching and rubble concrete masonry

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

16 Manufactured Elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition, the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper handhold on them.

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ANNEXURE 12

EPWP Employment Contract

(Insert Your Company Logo)

(This shall serve as the cover page on employment contracts for local labour)

EMPLOYMENT AGREEMENT

BETWEEN

[CONTRACTOR NAME].....

AND

[WORKER NAME].....

1. PARTIES

And

1.2. Mr / Me: _____

[worker's name]

2. DEFINITIONS AND INTERPRETATION

2.1. In this Agreement and any Annexure thereto, unless inconsistent with or otherwise indicated by the context-

"Agreement"	means the contents of this Agreement.
"Company"	means the company that employs the worker
"Department"	means the Department of Public Works
"Worker"	is a person that performs a specific or necessary task or who completes tasks in a certain way
"EPWP"	The Expanded Public Works Programme is a government programme aimed at the alleviation of poverty and unemployment. The programme ensures the full engagement on Labour Intensive Methods of Construction (LIC) to contractors for skills development. The EPWP focuses at reducing unemployment by increasing economic growth by means of improving skills levels through education and training and improving the enabling environment for the industry to flourish.

3. PURPOSE

The purpose of this agreement is to:-

Ensure that the agreement is binding to both the Worker and the Employer.

4. TERMS AND CONDITIONS

- The worker will have no entitlement to the benefits of a full time employee, namely;

_____

_____

- The worker should not have the expectation that this contract will be renewed or extended.
- The worker will be subject to all laws, rules, policies, codes and procedures applicable to the;

_____

- The worker must meet the standards and requirements of the contractor
- The worker must render his/her services during normal working hours of minimum of forty to fifty five hours in any week; which comprise of an eight-hour working day in a five-day week.

5. REMUNERATION

The worker will receive compensation to the amount of R_____00 which must be paid by the 25th or on the last day of each month.

6. ROLES AND RESPONSIBILITIES

6.1 Employer / Worker

- Work for _____ in terms of the period as specified in the employment agreement contract.
- Be available for and participate in all learning and work experience required by the company.
- Comply with workplace policies and procedures.
- Complete any attendance or any written assessment tools supplied by the contractor to record relevant workplace experience.
- Demonstrate willingness to grow and learn through work experience.

  Provide the following documentation to the employer,

  - Certified identity document not longer than 3 months
  - ID size photos
  - Sign employment contract

6.2 Employer

- Employ the worker for a period specified in the agreement.
- Provide the worker with appropriate work based experience in the work environment.
- Facilitate payments of wages / stipends.
- Keep accurate records of workers.
- Where a worker/ learner is disabled, the employer will have to provide in the additional needs e.g. special materials, learning aids and in some cases physical or professional support (such aids remain the property of the employer).
- Keep up to date records of learning and discuss progress with the intern on a regular basis.
- Apply fair disciplinary, grievance and dispute resolution procedures to the worker.
- Prepare an orientation/ induction course to introduce worker/ learner to the workplace and specific workplace requirements.
- Ensure the daily attendance register is signed by the worker.

7. DURATION.

This agreement commences on: _____

and

expires on: _____

8. BREACH.

If either party commits any breach of the terms of this contract (and fails to rectify it within 30 days of receipt of a written notice calling it to do so, then) the other party shall be entitled to terminate the contract or to claim specific performance without prejudice to any of its other legal rights, including its rights to claim damages.

9. CONDITIONS OF EMPLOYMENT

9.1. Meal Breaks

9.1.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

9.1.2 An employer and worker may agree on longer meal breaks.

9.1.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

9.1.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

9.2. Special Conditions for Security Guards (Only applicable to security Guards)

9.2.1 A security guard may work up to 55 hours per week and up to eleven hours per day.

9.2.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

9.3. Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

9.4. Work on Sundays and Public Holidays

9.4.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.

9.4.2 Work on Sundays is paid at the ordinary rate of pay.

9.4.3 A task-rated worker who works on a public holiday must be paid;

(a) the worker's daily task rate, if the worker works for less than four hours;

(b) double the worker's daily task rate, if the worker works for more than four hours.

9.4.4 A time-rated worker who works on a public holiday must be paid

(a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;

(b) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

9,5 Sick leave

9.5.1 Only workers who work more than 24 hours per month have the right to claim sick-pay in terms of this clause.

9.5.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.

9.5.3 A worker may accumulate a maximum of twelve days' sick leave in a year.

9.5.4 Accumulated sick-leave may not be transferred from one contract to another contract.

9.5.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.

9.5.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.

9.5.7 An employer must pay a worker sick pay on the worker's usual payday.

9.5.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is

(a) absent from work for more than two consecutive days; or

(b) absent from work on more than two occasions in any eight-week period.

9.5.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.

9.5.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

9.6. Maternity Leave

9.6.1 A worker may take up to four consecutive months' unpaid maternity leave.

9.6.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.

9.6.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.

9.6.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.

9.6.5 A worker may begin maternity leave as follows;

(a) four weeks before the expected date of birth; or

(b) on an earlier date

(i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or

(ii) if agreed to between employer and worker; or

(c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.

10,6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

9.7. Family responsibility leave

9.7.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances;

(a) when the employee's child is born;

(b) when the employee's child is sick;

(c) in the event of a death of

(i) the employee's spouse or life partner;

(ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

9.8. Keeping Records

9.8.1 Every employer must keep a written record on site for the duration of the project and three (3) year after completion records should consists of at least the following;

(a) the worker's name and position;

(b) copy of an acceptable worker identification

(c) in the case of a task-rated worker the number of tasks completed by the worker;

(d) in the case of a time-rated worker, the time worked by the worker;

(e) payments made to each worker in a form of Proof of Payment, Payroll registers and the acknowledgement of payment receipt signed by the worker.

9.8.2 The employer must keep this record for a period of at least three years after the completion of the EPWP.

9.9. Payment

9.9.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.

9.9.2 A worker may not be paid less than the Ministerial Determination wage rate.

9.9.3 A task-rated worker will only be paid for tasks that have been completed.

9.9.4 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.

9.9.5 A time-rated worker will be paid at the end of each month.

9.9.6 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

9.9.7 Payment in cash or by cheque must take place

(a) at the workplace or at a place agreed to by the worker;

(b) during the worker's working hours or within fifteen minutes of the start or finish of work;

(c) in a sealed envelope which becomes the property of the worker.

9.9.8 An employer must give a worker the following information in writing

(a) the period for which payment is made;

(b) the numbers of tasks completed or hours worked;

(c) the worker's earnings;

(d) any money deducted from the payment;

(e) the actual amount paid to the worker.

9.9.9 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.

9.9.10 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

9.10. Inclement weather

If no work has begun on site, and if an employee has reported for work, the employee will be paid for four hours. Should work be stopped after the first four hours, the employee will be paid for the hours worked. Where the employer has given employees notice on the previous working day that no work will be available due to inclement weather, then no payment will be made.

9.11. Deductions

9.11.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

9.11.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

9.11.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement of Law; court order or arbitration

9.11.4 It is the responsibility of the employers to arrange for all persons employed on a Project to be covered in terms of the Unemployment Insurance Fund Contributions Act, 2002 (Act No. 4 of 2002)

9.11.5 An employer may not require or allow a worker to

(a) repay any payment except an overpayment previously made by the employer by mistake;

(b) state that the worker received a greater amount of money than the employer actually paid to the worker; or

(c) pay the employer or any other person for having been employed.

9.12. Health and Safety

9.12.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

9.12.2 A worker must;

(a) work in a way that does not endanger his/her health and safety or that of any other person;

(b) obey any health and safety instruction;

(c) use any personal protective equipment or clothing issued by the employer;

(d) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

9.13. Compensation for Injuries and Diseases

9.13.1 It is the responsibility of the employers to arrange for all persons employed on a Project to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993 as amended by COIDA Act 61, 1997.

9.13.2 A worker must report any work-related injury or occupational disease to their employer or manager.

9.13.3 The employer must report the accident or disease to the Compensation Commissioner.

9.13.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

9.14. Termination

9.14.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.

9.14.2 A worker will not receive severance pay on termination.

9.14.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

9.14.4 A worker **who is absent for more than three consecutive days** without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available.

9.14.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available.

Notice procedure is as follows;

- One week if employed for four weeks or less
- Two weeks if employed for more than four weeks but not more than a year
- Four weeks of employed for one (1) year or more

9.15. Certificate of Service

9.15.1 On termination of employment, a worker is entitled to a certificate stating;

(a) the worker's full name;
(b) the name and address of the employer;
(c) the Project on which the worker worked; the work performed by the worker;
(d) any training received by the worker;
(e) the period for which the worker worked on the Project; and
(f) any other information agreed on by the employer and worker.

9.16. DOMICILE

The address to which notices and all legal documents may be delivered or served are as follows:

Employee Details

Name & Surname: _____

ID No: _____

Residential Address: _____

_____

Contact No: _____

Date of Employment: _____

To be supervised by: **Main Contractor:** ☐
or Sub Contractor: ☐

Category of employment: **Skilled:** ☐
Semi-skilled: ☐
Unskilled: ☐

For Skilled & Semi-skilled state the trade: _____

Period of employment: Fixed for until when your services are still required on site

I confirm that I have been inducted and fully understand the condition of my appointment.

Employee Signature: _____ **Witness by SGB/CLO:** _____

Signature by Witness: _____

Employer Details

Name & Surname: _____
Designation: _____
Contact No: _____ **Signature:** _____

KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

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

ANNEXURE 13

EPWP Attendance Register

KWAZULU-NATAL DEPARTMENT OF PUBLIC WORKS

EXPANDED PUBLIC WORKS PROGRAMME

The Attendance Register for on-site Workers

Reporting month: _____ Cell No: _____

Surname: _____ First Name: _____

Project Name: **Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic**

Tender No **ZNB 5522/2023-H**

IDENTITY NUMBER:

Day	Date	Time In	Signature	Time Out	Signature	Report On Any Formal Training Provided In The Reporting Month
WEEK 1						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
WEEK 2						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
WEEK 3						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
WEEK 4						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
Total Days worked						

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

ANNEXURE 14

Registration and Business Form

BUSINESS PLAN

Reference No	
Profile ID	
Project Name	
Project Details	
Project Name	
Project Reference Number	
Project description	
Project Start Date	
Project End Date	
Estimated Budget	
Project Location	
Province	
District/Metro Municipality	
Local Municipality/Metro Region	
Latitude (in decimal format)	
Longitude (in decimal format)	
Public Body Details	
Public body sphere	
Reporting public body that is the project owner (and will report on the project)	
Implementing public body type	
Public body that will implement the project	
IDP reference number allocated to the project	
EPWP Details	
EPWP Sector	
EPWP Program	
EPWP Sub programme	
Budget Amount	
April 2014/March 2015	
April 2015/March 2016	
Total Budget Amount	
Wages	
UIF	
COIDA	
Training	
Administration	
Equipment and materials	
Other	
Describe other	
Outputs and Training	
First Name	
Surname	
Email	
Tel (Office)	
Fax Number	
Cell Number	
Physical Address 1	
Physical Address 2	
Physical Address 3	
Physical Address 4	
Postal Address 1	
Postal Address 2	
Postal Address 3	
Postal Address 4	

KWAZULU-NATAL PROVINCE
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Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic

ANNEXURE 15

Beneficiary Monthly Capture Form

KZN DEPARTMENT OF HEALTH

Monthly Data collection for LOCAL Labour

EXPANDED PUBLIC WORKS PROGRAMME

Name of Contractor: _____ Tender No.: **ZNB 5522/2023-H** Project location name (area):_____

Name of Project: **Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic**

Reporting month:_____ Project location (Ward No.):_____

Beneficiary Details																		Experience/Literacy				Location Details				Household Details		
No	First Name	Initial	Surname	ID number	D.O.B	Gender F/M	Disability Y/N	Start Date on the current month	End Date on the current month	Total days worked	Job description	Registered on UIF (Y/N)	Registered with COIDA (Y/N)	Are you receiving any Gov grant? (Y/N)	1st Language	Other Language 1	Other Language 2	Education Level (See Codes below)	Highest Level of Education	Address	Ward No.	Cell No.	Nationality	No. of people in Household	No. of Dependants in Household	No. of Children attending school
1																										
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										

- Education Levels – use the codes (1,2,3) on the excel spreadsheet
  - **(1)** Unknown **(3)** Grade 1-3 (Sub A – Std 1) **(5)** Grade 5-6 (Std 3-4) ABET 2 **(7)** Grade 9 (Std 7) ABET 4 **(9)** Grade 12 (Std 10)
  - **(2)** No Schoc **(4)** Grade 4 (Std 2) ABET 1 **(6)** Grade 7-8 (Std 5-6) ABET 3 **(8)** Grade 10-11 (Std 8-9) **(10)** Post Matric

Contractor sign:_____ **DPW Official/Consultant sign:**_____ **EPWP Official sign:**_____

Designation:_____ Designation:_____ Designation:_____

Date:_____ Date:_____ Date:_____

Contact no:_____ Contact no:_____ Contact no:_____

KWAZULU-NATAL PROVINCE
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Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic

ANNEXURE 16

Workers Monthly Payment Upload

KZN DEPARTMENT OF HEALTH

EXPANDED PUBLIC WORKS PROGRAMME

Worker payment capture form for LOCAL Labour

Name of Contractor: _____ Tender No.: **ZNB 5522/2023-H**

Name of Project: **Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic**

Reporting month: _____

Payment Upload

No.	First Name	Initials	Surname	Identity No.	D.O.B	Job Description	Daily Wage Rate	Total Paid Days	Total Amount Paid	Total days Worked Days
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Contractor sign:_____
Designation:_____
Date:_____
Contact no:_____

DPW Official/Consultant sign:_____
Designation:_____
Date:_____
Contact no:_____

EPWP Official sign:_____
Designation:_____
Date:_____
Contact no:_____

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

ANNEXURE 17

Workers Monthly Training Form

KZN DEPARTMENT OF HEALTH

Worker Training capture form for LOCAL Labour

Name of Contractor: _____ Tender No.: **ZNB 5522/2023-H**

Name of Project: **Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic**

Reporting month: _____

Training														
No	Name	Surname	ID No.	Job description	Course Name	Was training Accredited or Non - accredited by a relevant SETA	Start date on current month	End date on current month	Training Days Paid	Training Days Not Paid	Total Number of Training Days	Cost per trainee	Is training complete or on - going	Name of Training Provider
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

Contractor sign: _____

Designation: _____

Date: _____

Contact no: _____

DPW Official/Consultant sign: _____

Designation: _____

Date: _____

Contact no: _____

EPWP Official sign: _____

Designation: _____

Date: _____

Contact no: _____

KWAZULU-NATAL PROVINCE
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Newtown A CHC: Conversion of Newtown CHC from a CHC to Large Clinic

ANNEXURE 18

Site Location

Location

Locality Name	Inanada
Municipality	Ethekwini Local Municipality
Subplace	Newtown
Ward	
Government Facility	Hospital
Latitude	Latitude: 29°71'1.80"S
Longitude	Longitude: 30°94'1.95"E
Physical Address/Location	1345 Corner of King Bhekhuzulu Road and Nhlwathi Crescent


Nkonkoni Rd
Imbila Rd
Iduba Rd
Phithi Ave
Nkonka Dr
King Bhekuzulu Dr
Newtown A CHC
Newtown Community Health
Backyard Shisanyama & Carwash
Clinic Rd
Bhele Ave
Newtown A SAPS
Milk Africa Creche
Khanyanjalo day care centre
Mpangele Cres
Nhlwathi Cres
Ndlovu Dr
Nyathi Rd
Take me home
Bhubesi Dr