Tender Info

Tender month	**MAY 2021**
Tender Date:	**21/05/2021**
Tender Number	**NC/07/2021**
Title of Tender	**THE CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLY.**
Description	**THE CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLY.**
Employer	**DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE**
Employer	**COGHSTA**
Employer email	**TMonoametsi@ncpg.gov.za**
Postal Address	**PRIVATE BAG X5005**
Town/City	**KIMBERLEY**
Code	**8300**
Physical Address 1	**LARRY MOLEKO LOUW BUILDING**
Physical Address 2	**9 CECIL SUSSMAN ROAD**
Physical Address 3	**8301**
Employer's Agent: Name	**D MABUELA**
Company	**KMSD ENGINEERING CONSULTANTS**
Postal Address	**P O BOX 12812**
Town/City	**CLUBVIEW 0014**
Physical 1	**53 Debeers Road**
Physical 2	**Kimberly , 8301**
Tel:	**(087) 940 3119**
Fax:	**(086) 211 6524**
E-mail:	**dephneym@kmsd.co.za**
Advert Date	**FRIDAY, 21st May 2021**
Site Briefing Date	**A non-compulsory virtual briefing session will be held on THURSDAY, 27th May 2021 at 10h00 at: https://teams.microsoft.com/l/meetup-join/19%3a66c7a9bb43f548d6b77d5116272d46a1%40thread.tacv2/1621423689301?context=%7b%22Tid%22%3a%2288c19a74-3c3b-445a-87e0-94c155bc09cf%22%2c%22Oid%22%3a%222a1606a0-2c6d-4970-8e96-be03a4541607%22%7d**
Tender Documents available	www.coghsta.ncpg.gov.za
Closure Date	**FRIDAY, 11th JUNE 2021**
Closure Time	**11H00**
Tender Box Location	**COGHSTA HEAD OFFICE, LARRY MOLEKO LOUW BUILDING, 9 CECIL SUSSMAN ROAD, KIMBERLEY, 8301**
General Enquiries Contact Person	**Tebogo Monoametsi of CoGHSTA, Tel: (053) 807 9713, e-mail: TMonoametsi@ncpg.gov.za**
Technical Enquiries Contact Person	**Dephney Mabuela of KMSD Engineering Consultants, Tel: (087) 940 - 3119, email: dephneym@kmsd.co,za**
Procurement Policy	**Preferential Procurement Regulations, 2017 (Government Gazette No. 10684)**
Functionality	**A functionality criterion will be applied at evaluation. Bidders must achieve a minimum score of 70 points to move to the financial bid evaluation**
PPPFA	**The bid will be evaluated on the 80:20 preference point system for all the bids that meet the minimum functionality score.**

DEPARTMENT OF CO-OPERATIVE

GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE (COGHSTA)

TENDER NO. NC/07/2021

THE CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLY.

MAY 2021

EMPLOYER:	**CONSULTING ENGINEERS:**
THE HEAD OF DEPARTMENT	**KMSD ENGINEERING CONSULTANTS (PTY) LTD.**
CoGHSTA	**P O BOX 12812**
PRIVATE BAG X5005	**CLUBVIEW**
KIMBERLEY	**0014**
8300	

TENDERER: _____

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLY.

CLOSING DATE**: 11 JUNE 2021**	CLOSING TIME**: 11H00**

NAME OF TENDERER* ……

CONTACT PERSON* ……

ADDRESS* …….

…….

…….....

…….....

TEL NO* …….

FAX NO* ……

E-MAIL ADDRESS* ……

CIDB GRADING* ……

CIDB REGISTRATION NO* ……

NHBRC REGISTRATION NO* ……

B-BBEE LEVEL* ……

TENDER AMOUNT, EXCL. VAT* R …….

TENDER PERIOD* ……..…….…… weeks

(As per C 1.2: Contract Data: Part 2: Clause 1.1.1.14)

(* TO BE COMPLETED BY TENDERER)

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY

GENERAL TENDER INFORMATION:

TENDER ADVERTISED	**FRIDAY, 21 MAY 2021**
REQUIRED GRADING	**4CE** CIDB grading of higher
CLARIFICATION MEETING (COMPULSORY)	**A non-compulsory virtual briefing session will be held on THURSDAY, 27th May 2021 at 10h00 at: https://teams.microsoft.com/l/meetup-join/19%3a66c7a9bb43f548d6b77d5116272d46a1%40thread.tacv2/1621423689301?context=%7b%22Tid%22%3a%2288c19a74-3c3b-445a-87e0-94c155bc09cf%22%2c%22Oid%22%3a%222a1606a0-2c6d-4970-8e96-be03a4541607%22%7d**
CLOSING DATE	**FRIDAY, 11 JUNE 2021**
CLOSING TIME	**11H00**
CLOSING VENUE	Tender Box at **COGHSTA HEAD OFFICE, J.S. DU PLOOY BUILDING, 9 CECIL SUSSMAN ROAD, KIMBERLEY, 8301.**

The tender Documents (which include the Form of Offer and Acceptance) completed in all respects, plus any additional supporting documentation required, must be submitted in a sealed envelope with the name and address of the Tenderer, the tender no and title and the closing date indicated on the envelope. The sealed envelope must be handed in at the Tender Box at the **CoGHSTA KIMBERLEY** Offices. Tenders will be opened directly after closing. Due to a two-stage evaluation process tender prices will NOT be read out.

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY

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ENGINEERING CONSULTANTS
(Pty) Ltd

COGHSTA
Co-operative Governance
Human Settlement & Traditional Affairs

VOLUME 1

KMSD ENGINEERING CONSULTANTS (Pty) Ltd

COGHSTA
Co-operative Governance
Human Settlement & Traditional Affairs

THE TENDER

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T 1.1:

TENDER NOTICE AND INVITATION TO TENDER

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021
CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLY

1. **CoGHSTA** hereby invites tenders for the **CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.**
2. Only CSD registered tenderers with a CIDB grading of **4CE or HIGHER** are eligible to submit tenders.
3. **A non-compulsory virtual briefing session will be held on THURSDAY, 27th May 2021 at 10h00** at: **https://teams.microsoft.com/l/meetup-join/19%3a66c7a9bb43f548d6b77d5116272d46a1%40thread.tacv2/1621423689301?context=%7b%22Tid%22%3a%2288c19a74-3c3b-445a-87e0-94c155bc09cf%22%2c%22Oid%22%3a%222a1606a0-2c6d-4970-8e96-be03a4541607%22%7d**
4. **Tender documents are available at www.coghsta.ncpg.gov.za**
5. The tender requires tenderers to submit a proposal for THE CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.
6. General enquiries relating to this tender should be addressed to Tebogo Monoametsi of CoGHSTA, Tel: (053) 807 9713, e-mail: TMonoametsi@ncpg.gov.za and technical enquiries to Dephney Mabuela of KMSD Engineering Consultants, Tel: (087) 940–3119, e-mail: dephneym@kmsd.co.za
7. **Please note:**
   a. Preference will be given to construction companies who are owned by Women, Youth & Persons with Disabilities.
   b. Functionality and 80/20 principle evaluation criteria will apply. Functionality will be scored and a minimum of 70 out of possible 100 is required to be evaluated any further. The functionality criteria are summarised on the following table;

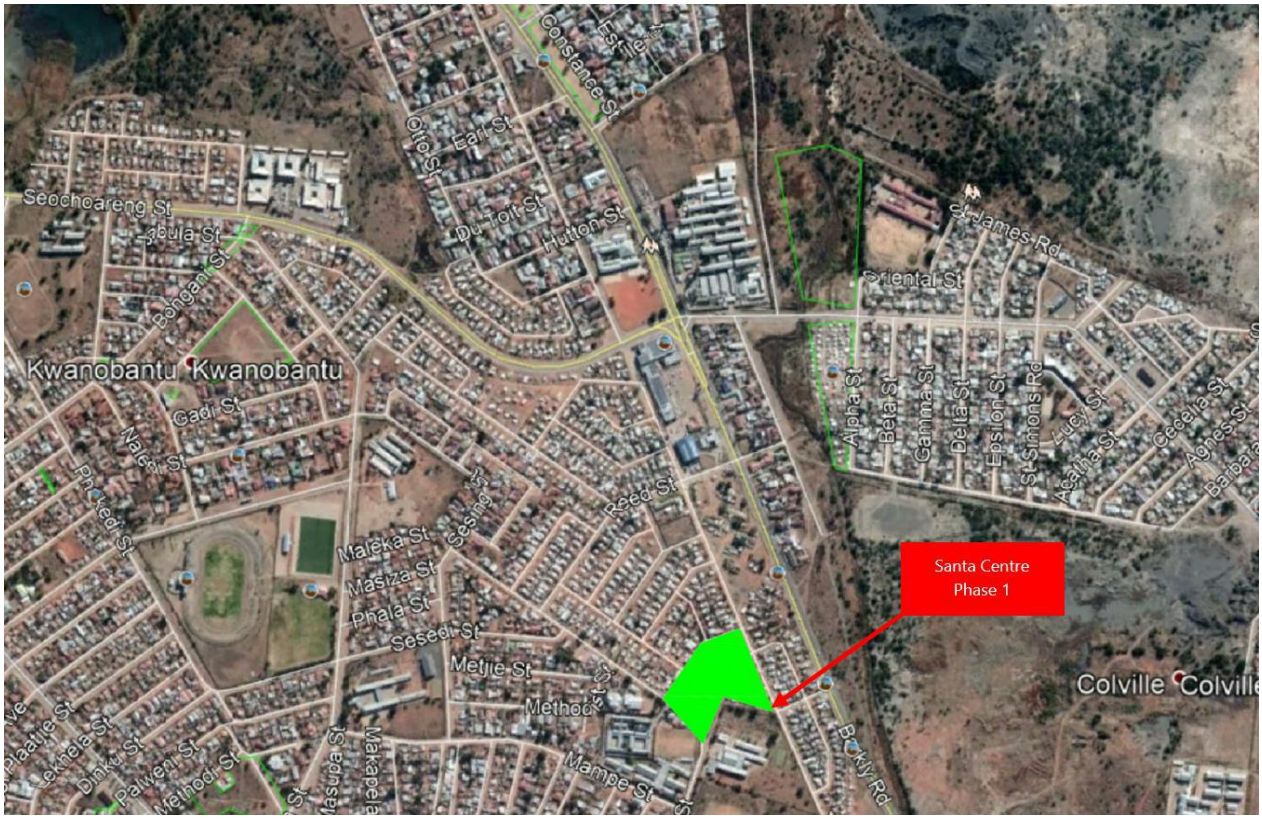
FUNCTIONALITY	CRITERIA	WEIGHT
1.	Experience of Tenderer	40%
2.	Project Staff Experience	30%
3.	Plant and Equipment	15%
4.	Woman, Youth and People with Disabilities Owned	10%
5.	Locality	5%
TOTAL		**100%**

   c. Telegraphic, telephonic, telex, facsimile and late tenders will not be accepted. Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.
   d. Documents to be submitted with the tender document: Original valid Tax Clearance Certificate, Copy of CSD Registration summary report, B-BBEE Status Level Certificates or certified copies thereof. Exempted Micro Enterprises must in terms of B-BBEE Act, submit a certificate issued by an Accounting Officer as contemplated in the Close Corporation Act or Verification Agency accredited by SANAS or Registered Auditor.
   e. Audited financial statements for the last three years also to be submitted with the tender document.
   f. The requirements of the Preferential Procurement Regulations. 2017 (Government Gazette No. 10684) shall also apply, together with all other requirements as set out in the Tender Data.
   g. Failure to comply with above requirements will result in automatic disqualification of the bidder.
   h. CoGHSTA reserves the right to withdraw any invitation to tender and/or re-advertise or to reject any tender or to accept a part of it. CoGHSTA does not bind itself to accepting the lowest tender or award a contract to the bidder scoring the highest number of points
   i. Tenders will be opened directly after closing. Due to a two-stage evaluation process tender prices will NOT be read out

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.



LOCALITY PLAN – SANTA CENTRE

T 1.2:

TENDER DATA

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLY.

T 1.2: TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of Board Notice 86 of 2010 in government Gazette No. 33239 of 28 May 2010, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of Tenderers as an Annex to this tender Data.

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

The following variations, amendments and additions to the Standard Conditions of Tender as set out in the Tender Data below shall apply to this tender:

Clause Number	**Tender Data**
F.1	**General**
F.1.1	**Actions**
	Add the following to F.1.1:
	The Employer is CoGHSTA.
F.1.2	**Tender Documents**
	Add the following to F.1.2:
	"The following documents form part of this contract:
	(i) The General Conditions of Contract (GCC) for Construction Works (3rd Edition) 2015, as published by the South African Institution of Civil Engineering. This publication is available and Tenderers must obtain copies at their own cost from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel.: (011) 805 5947, Fax: (011) 805 5971, e-mail: civilinfo@saice.org.za.
	(ii) The SANS Standardised Specifications for Civil Engineering Construction prepared by the South African Bureau of Standards. These publications are available and Tenderers must obtain copies at their own cost from the South African Bureau of Standards, Private Bag X191, Pretoria, 0001.

The above may also be inspected, by appointment, at the offices of the Employer's Agent during normal office hours.

The Tender Documents issued by the Employer comprise:

Volume 1: The Tender Document (this document), in which is bound:

The Tender

Part T 1:	**Tendering Procedure**
T 1.1	Tender notice and invitation to tender
T 1.2	Tender data

Part T 2:	**Returnable Documents**
T 2.1	List of returnable documents
T 2.2	Returnable Schedules

The Contract

Part C 1:	**Agreement and Contract Data**
C 1.1	Form of Offer and Acceptance
C 1.2	Contract Data
C 1.3	Form of Guarantee
C 1.4	Occupational Health and Safety Agreement
C 1.5	Contract of Temporary Employment as Community Liaison Officer

Part C 2:	**Pricing Data**
C 2.1	Pricing Instructions
C 2.2	Calculation of Fixed Price

Part C 3:	**Scope of Work**
C 3.1	Description of the Works
C 3.2	Engineering Drawings
C 3.3	Construction Work Specifications: Project Specifications
C 3.4	Management
C 3.5	Annexures

Part C 4:	**Site Information**
C 4.1	Site Information

Volume 2: Drawings (listed in C 3.2: Engineering Drawings)

Volume 1 is deemed the "**Returnable Document**" which must be returned to the Employer in terms of submitting a tender offer.

F.1.4 **Communication and Employer's Agent**

Add the following to F.1.4:

Attention is drawn to the fact that verbal information, given by the Employer's Agent during site visits / clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the Employer. Only information issued formally by the Employer's Agent in writing to Tenderers will be regarded as amending the Tender Document.

The Employer's Agent is:

Name: DEPHNEY MABUELA
KMSD ENGINEERING CONSULTANTS (PTY) LTD.
P O BOX 12812
CLUBVIEW 0014
Tel.: (087) 940 3199
Fax: (086) 211 6524
E-mail: dephneym@kmsd.co.za

F.1.6.2 **Competitive Negotiation Procedures**

Add the following to F.1.6.2:

A competitive negotiation procedure will **not** be followed.

F.1.6.3 **Proposal Procedure using the Two-Stage System**

Add the following to F.1.6.3:

A two-stage system will be followed.

F.2 Tenderer's Obligations

F.2.1 **Eligibility**

Add the following to F.2.1:

Only those Tenderers who satisfy the following criteria are eligible to submit tenders: **Construction Industry Development Board (CIDB) Contractor Registration**.

Only Tenderers who are registered with the CIDB, in a Contractor grading designation equal to or higher than a Contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a **4CE** Class of construction work, are eligible to have their tenders evaluated.

Joint Ventures are eligible to submit tenders provided that:

1. Every member of the Joint Venture is registered with the CIDB;

2. The lead partner has a Contractor grading designation in the **4CE** Class of construction work;

3. The combined Contractor grading designation calculated in accordance with the CIBD Regulations is equal to or higher than a Contractor grading designation determined in accordance with the sum tendered for a **4CE** Class of construction work or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations.

Notwithstanding the above, Tenderers who are capable of being so registered prior to the evaluation of submissions may be evaluated at the sole discretion of the Employer (the evaluation of tenders shall be deemed to take place when the Employer's Bid Evaluation Committee meets to make a recommendation to the Bid Adjudication Committee).

For alpha-numerics associated with the Contractor Grading Designations see **Annex G** attached.

F.2.7 **Clarification Meeting**

Add the following to F.2.7:

Clarification site or information meetings are **non-compulsory**. Tenders will not be accepted from Tenderers who have not attended the compulsory site or information meetings. Tenderers who arrive 15 (fifteen) minutes or more after the advertised time the meeting starts will not be allowed to attend the meeting or to sign the attendance register. If the Tenderer is delayed, he must inform the Contact Person before the meeting commences and will only be allowed to attend the meeting if the Chairperson of the meeting, as well as all the other Tenderers attending the meeting, give permission to do so.

All partners or the leading partner of a Joint Venture must attend the compulsory clarification site or information meeting.

Tenderers should be represented at the compulsory clarification meeting by a person who is suitably qualified and experienced to comprehend the implications of the work involved.

F.2.9 **Insurance**

Add the following to F.2.9:

The Employer will provide **no** insurance.

F.2.10 **Pricing the Tender Offer**

F.2.10.3 *Add the following to F.2.10.3:*

The tendered Price will **not** be subject to escalation.

See C 1.2: Contract Data: Part 1: Data Provided by the Engineer: Clause 6.8.2.

F.2.13 **Submitting of a Tender Offer**

Add the following to F.2.13.1:

Where the tendering entity is a joint venture it is recommended that the standard CIDB Joint Venture Agreement be used.

Replace sub-clause F.2.13.2 with the following:

Return all returnable documents to the Employer after completing them in their entirety by writing in **non-erasable black ink.**

Add the following to F.2.13.3:

Parts of each Tender offer communicated on paper shall be submitted as an original plus **0 (nil)** copies.

Add the following after the first sentence of F.2.13.4:

The tender shall be signed by a person duly authorised to do so. Tenders submitted by Joint Ventures of 2 (two) or more firms shall be accompanied by the document of formation of the Joint Venture, authenticated by a public notary or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the Joint Venture will function, its period of duration, the persons authorised to represent and obligate it, the participation of the several firms forming the Joint Venture, and any other information necessary to permit a full appraisal of its functioning.

Add the following to F.2.13.5:

The Employer's Agent's address for delivery of Tender Offers and identification details to be shown on each tender offer package are:

Location of tender closure: Tender Box**,** COGHSTA HEAD OFFICE, LARRY MOLEKO LOUW BUILDING, 9 CECIL SUSSMAN ROAD, KIMBERLEY, 8301.

Identification details: TENDER NUMBER: **NC/07/2021**

TITLE OF TENDER: **CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.**

Sealed tenders with the Tenderer's name and address and the endorsement: "TENDER **NUMBER: NC/07/2021: CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY** on the envelope, must be placed in the appropriate official Tender Box at the abovementioned address.

Add the following to F.2.13.6:

A two-envelope procedure will **not** be followed.

Add the following to F.2.13.9:

Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will **not** be accepted.

Add the following to F.2.13.10:

By signing the offer part of C 1.1: Form of Offer and Acceptance, the Tenderer declares that all information provided in the Tender submission is true and correct.

F.2.15 **Closing Time**

Add the following to F.2.15.1:

The closing time for submission of Tender Offers is as stated in the Tender Notice and Invitation to Tender.

F.2.16 **Tender Offer Validity**

Add the following to F. 2.16.1:

The tender offer validity period is **90 (ninety)** days from the closing date.

F.2.17 **Clarification of Tender Offer after Submission**

Add the following to F.2.17:

A tender will be rejected as non-responsive if the Tenderer fails to provide any clarification requested by the Employer within the time for submission stated in the Employer's written request for such clarification. A tender will also be rejected as non-responsive if the Tenderer fails, within the time stated in writing by the Employer, to comply with the requirements of F.4.4.

F.2.18 **Provide Other Material**

F.2.18.1 *Delete the word "notarised"*

Add the following to F.2.18. 1:

Provide, on written request by the Employer, where the tendered amount exclusive of VAT **exceeds R 8, 771, 929.8310 (Eight Million, Seven Hundred Seventy-One Thousand Nine Hundred Twenty-Nine Rand and Eighty-Three Cents)**:

i) audited annual financial statement for 3 (three) years, or for the period since establishment if established during the last 3 (three) years, if required by law to prepare annual financial statements for auditing;

ii) a certificate signed by the Tenderer certifying that the Tenderer has no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 (thirty) days;

iii) particulars of any contracts awarded to the Tenderer by an organ of state during the past 5 (five) years, including particulars of any material non-compliance or dispute concerning the execution of such contract;

a statement indicating whether any portion of the goods or services are expected to be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality or municipal entity is expected to be transferred out of the Republic.

Each party to a Consortium/Joint Venture shall submit separate certificates/statements in the above regard.

F.2.19 **Inspection, Tests and Analysis**

Add the following to F.2.19:

Access shall be provided for the following inspections, tests and analysis: **Site investigation.**

F.2.20 **Submit Securities, Bonds, Policies, etc.**

Add the following to F.2.20:

The successful Tenderer will have to provide a guarantee as security and documentary proof that the necessary insurance policies required in terms of the Contract have been taken out and provide proof of premium payments to the satisfaction of the Employer.

F.2.22 **Return of Other Tender Documents**

Add the following to F.2.22:

Return all retained tender documents and drawings within 28 (twenty-eight) days of the expiry date of the validity period.

F. 2.23 **Certificates**

Add the following to F.2.23:

The Tenderer is required to submit with his tender:

F.2.23.1 **Tax Clearance Certificate**

Tenderers shall be registered and in good standing with the South African Revenue Service (SARS) and shall submit documentary evidence in the form of an original valid Tax Clearance issued by SARS or proof that he or she has made arrangements with SARS to meet his or her outstanding tax obligations.

Each party to a Consortium/Joint Venture shall submit a separate Tax Clearance Certificate, or proof that he or she has made the necessary arrangements with SARS.

Each party to a Consortium/Joint Venture shall submit separate certificates in the above regard.

F.2.23.3 **Broad-Based Black Economic Empowerment Status Level Certificates**

In order to qualify for preference points, it is the responsibility of the Tenderer to submit the relevant certificate(s) (either an original valid B-BBEE status level verification certificate (in terms of the Construction Sector Charter on Black Economic Empowerment) or an Exempted Micro Enterprise certificate, or certified copies thereof) in terms of the Preferential Procurement Regulations, 2011.

A B-BBEE status level for the Consortium/Joint Venture will have to be obtained in order to qualify for preference points, provided that the entity submits the relevant certificate/scorecard in terms of the Preferential Procurement Regulations, 2011.

F.2.23.4 **NHBRC Registration**

A NHBRC Registration is not compulsory for this contract.

F.3 The Employer's Undertakings

F.3.2 **Issue Addenda**

Add the following to F.3.2:

Notwithstanding any requests for confirmation of receipt of Addenda issued, the Tenderer shall be deemed to have received such addenda if the Employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.

F.3.4 **Opening of Tender Submissions**

Add the following to F.3.4.1:

The time and location for opening of Tender Offers is as follows:

Time:	Tenders will be opened immediately after the closing time for receipt of tenders as stated in the Tender Notice and Invitation to Tender, or as stated in any Addendum extending the closing date. Due to a two-stage evaluation process tender prices will NOT be read out
Location:	COGHSTA HEAD OFFICE, LARRY MOLEKO LOUW BUILDING, 9 CECIL SUSSMAN ROAD, KIMBERLY 8301

F.3.5 **Two-envelope System**

Add the following to F.3.5:

The 2 (two) - envelope procedure will **not** be followed.

F. 3.8 **Test for Responsiveness**

Add the following Sub-clause F.3.8.3:

Tenders will be considered non-responsive if, inter alia:

a) the tender is not in compliance with the Scope of Work;
b) the Tenderer does not comply with the CIDB contractor grading designation specified in F.2.1 **above.**
c) the Tenderer has failed to clarify or submit any supporting documentation within the time for submission stated in the employers written request.
d) Bidders must achieve a minimum score of 70 points to move to the financial bid evaluation

F.3.9 **Arithmetical Errors, Omissions and Discrepancies**

Amend Sub-Clauses F.3.9.1 & F.3.9.2 to read as follows:

"F.3.9.1 Check the highest ranked Tender or Tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 and check only the Summary: Calculation of Tender Sum for:

a) The gross misplacement of the decimal point in any rate; or
b) Arithmetical errors in:

i) line item totals resulting from the product of a unit rate and a quantity or
ii) the summation of the amounts.

F.3.9.2 The Employer must correct the arithmetical errors in the following manner:

a) Where there is a discrepancy between the amount in words and the amounts in figures, the amount in words shall govern;

b) If, in the Summary: Calculation of tendered Fixed Price there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern and the unit rate shall be corrected.

c) Where there is an error in the total of the amounts either as a result of other corrections required by this checking process or in the Tenderer's addition of prices, the total of the prices shall govern and the Tenderer will be asked to revise selected unit rates to achieve the Tendered total of the amounts.

Consider the rejection of a tender offer if the Tenderer does not correct or accept the correction of the arithmetical error in the manner described above."

F.3.11 **Evaluation of Tender Offers**

F.3.11.7 **Scoring Financial Offers**

Add the following to F.3.11.7:

The financial offer will be scored using **Formula 2 (Option 1)** where the value of W1 is **80 (eighty)** points.

A maximum of **80 (eighty)** tender evaluation points (W1) will be scored for Financial Offers from responsive tenders under consideration scoring points according to the formula:

$$NFO = W1 \times \left[1 - \frac{(P - Pm)}{Pm}\right] \text{ where,}$$

NFO = Number of tender evaluation points awarded for Financial Offer
W1 = Maximum tender evaluation points awarded for Financial Offer = **80 (eighty)** points

P = Financial Offer = Tender Sum (including VAT, contingencies, provisional sums and escalation) = the comparative offer of the tender offer under construction

Pm = Lowest Tender Sum (including VAT, contingencies, provisional sums and escalation) = the comparative offer of the most favourable comparative offer.

F.3.11.8 **Scoring Preferences**

Add the following to F.3.11.8:

Points will be awarded to Tenderers who are eligible for preferences in terms of Schedule 22: NCP 6.1: Preference Points Claimed where preferences are granted in respect of B-BBEE contribution.

The terms and conditions of Schedule 22: NCP 6.1 shall apply in all respects to the Tender evaluation process and any subsequent contract.

Points for Preference

A maximum of 20 (twenty) tender evaluation points will be awarded for preference to Tenderers with responsive tenders, who are eligible for such preference, in accordance with the criteria listed below.

Exempted Micro Enterprise or B-BBEE Status Level of Contributor

The Tenderer shall indicate on Schedule 20 NCP 6.1 his or her company/firm/entity's B-BBEE status level of contributor, in accordance with one of the following:

- Enterprises with an annual turnover less than R10 million qualify as an Exempted Micro Enterprise (EME) and are exempted from being measured on a BEE scorecard.
- Verified B -BBEE status level of contributor in terms of the new B-BBEE Codes of Good Practice 2013 (published in Government Gazette of 11 October 2013)
- Non-compliant contributor'
- Up to 20 (twenty) tender evaluation points (Np) will be awarded for the level of B-BBEE contribution.

Add the following new sub-clause F.3.11.10:

Risk Analysis

Notwithstanding compliance with regard to CIDB registration or any other requirements of the tender, the employer will perform a risk analysis in respect of the following:

a. reasonableness of the financial offer
b. reasonableness of unit rates and prices
c. the Tenderer's ability to fulfil its obligations in terms of the tender document, that is, that the Tenderer can demonstrate that he/she possesses the necessary professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience, reputation, personnel to perform the contract, etc.

No Tenderer will be recommended for an award unless the Tenderer has demonstrated that he/she has the resources and skills required.

F.3.13 **Acceptance of Tender Offer**

Add the following to F.3.13:

The Employer reserves the right to withdraw any invitation to tender and/or to re-advertise or to reject any tender or to accept a part of it. The Employer does not bind itself to accepting the lowest or only tender.

Tender offers will only be accepted if:

(a) the Tenderer is registered and in good standing with the South African Revenue Service (SARS) and has submitted evidence in the form of an original valid Tax Clearance Certificate (for tender) issued by SARS or poof that he or she has made arrangements with SARS to meet his or her outstanding tax obligations;

(b) the Tenderer or any of its Directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;

(c) the Tenderer has not:

(i) abused the Employer's Supply Chain Management System; or

(ii) failed to pay municipal rates and taxes or service charges as applicable at the Tenderer's Head Office Municipality and such rates, taxes and charges are in arrears for more than three months;

(d) the Tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Tenderer's ability to perform the contract in the best interests of the Employer or potentially compromise the tender process.

F.13.16 **Notice to unsuccessful Tenderers**

Replace the heading above with:

Notice to successful and unsuccessful Tenderers

Replace sub-clause F.3.16.2 with the following:

The Employer shall, at the same time as notifying the successful Tenderer of the Bid Adjudication Committee's decision to award the tender to the successful Tenderer, also give written notice to the other Tenderers informing them that they have been unsuccessful.

F.3.17 **Provide copies of the contract**

Add the following to F.3.17:
The number of paper copies of the signed contract to be provided by the Employer is 1 (One).

F.4 ADDITIONAL CONDITIONS OF TENDER

The additional conditions of tender are:

F.4.1 **COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 of 1993)**

Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014 where applicable, issued in terms of Section 43 of the Act. The Tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

The Contractor will not be allowed to start with any construction works until his Health and Safety Plan is approved by the Health and Safety Agent.

Tenderers are to note that the Contractor is required to ensure that all Sub-Contractors or others engaged in the performance of the contract also comply with the above requirements.

The Contractor shall prepare and maintain a Health and Safety File in respect of the project, which shall be available for inspection on Site at all times and handed over to the Employer on Final Completion of the project.

The Contractor is required to submit to the Employer the Occupational Health and Safety Agreement (included in C 1.4 of the Contract document) and a letter of good standing from the Compensation Commissioner, or a licensed Compensation Insurer, within 14 (fourteen) days after the Commencement Date of the Contract.

F.4.2 **Eligibility with respect to Expanded Public Works Programme**

This Contract qualifies for consideration as an Expanded Public Works Program project.

The Contractor shall make use of local labour as far as possible. Where manual labour is required, remuneration must be paid according to the minimum wages for the region and in accordance with the latest published "Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (Epwp)". Monthly project reporting will be done on all the EPWP reporting documentation attached in Annexure A of Part 3: Scope of Works of this Tender Document.

F.4.3 Claims arising after submission of tender

No claim for any extras arising out of any doubt or obscurity as to the true intent and meaning of anything shown on the Contract Drawings or contained in the Conditions of Contract, Scope of Work and Pricing Data, will be admitted by the Employer after the submission of any tender and the Tenderer shall be deemed to have:

a) Inspected the Contract Drawings and read and fully understood the Conditions of Contract;

b) Read and fully understood the whole text of the Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract;

c) Visited the site of the proposed works, carefully examined existing conditions, the means of access to the Site, the conditions under which the work is to be done, and acquainted himself with the limitations or restrictions that may be imposed by the Municipality or other Authorities in regard to access and transport of materials, plant and equipment to and from the site and made the necessary provisions for any additional costs involved thereby.

d) Requested the Employer or his duly authorized agent to make clear the actual requirements of anything shown on the Contract Drawings or anything contained in the Scope of Work and Pricing Data, the exact meaning or interpretation of which is not clearly intelligible to the Tenderer.

e) Received any Addenda to the tender documents which have been issued in accordance with the Employer's supply Chain Management Policy.

Before submission of any tender, the Tenderer should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing indistinct, or if the Pricing Data contain any obvious errors, the Tenderer must apply to the Employer's agent at once to have the same rectified, as no liability will be admitted by the Employer in respect of errors in any tender due to the foregoing.

F.4.4 **Community Liaison Officer**

It is a requirement of the Contract that a Community Liaison Officer (CLO) for each area shall be appointed by the Contractor. The primary functions of the CLO shall be to assist the C ontractor with the selection and recruitment of labour, to represent the local community in matters concerning the use of labour on the works, and to assist with and facilitate communication between the Contractor, the Principal Agent and the local communities.

The method of identifying suitable candidates for the position of CLO, as well as requirements in respect of the employment of the selected candidate, are described in Part C 1.5: Contract of Temporary Employment as community Liaison Officer.

F.4.5 **Invalid tenders**

Tenders shall be considered invalid and shall be endorsed and recorded as such in the tender opening record, by the responsible official who opened the tender, in the following circumstances:

(a) If the tender offer (the tender price/amount) is not submitted on the Form of Offer and Acceptance bound into this tender document (Form C 1.1: Part C 1: Agreement and Contract Data);
(b) If the tender is not completed in non-erasable black ink;
(c) If the Form of Offer and Acceptance is signed, but the name of the Tenderer is not stated or is indecipherable.

F.4.6 **Negotiations with preferred Tenderers**

The Employer may negotiate the final terms of a contract with Tenderers identified through a competitive tendering process as preferred Tenderers, provided that such negotiation:

(a) does not allow any preferred Tenderer a second or unfair opportunity;

(b) is not to the detriment of any other Tenderer; and

(c) does not lead to a higher price than the quotation as submitted.
Minutes of any such negotiations shall be kept for record purposes.

F.4.7 **General Supply Chain Management Conditions applicable to tenders**

In terms of its Supply Chain Management Policy, the Employer may not consider a tender unless the provider who submitted the tender:

a) has furnished the Employer with that provider's:

- full name;
- identification number or company or other registration number; and
- tax reference number and VAT registration number, if any;
- Certificate of attendance at a compulsory site inspection, where applicable

b) has indicated whether:

- the provider is in the service of the state, or has been in the service of the state in the previous twelve months;
- the provider is not a natural person, whether any of the directors, managers, principal shareholders or stakeholders is in the service of the state, or has been in the service of the state in the previous twelve months; or
- whether a spouse, child or parent of the provider or of a director, manager, shareholder or stakeholder referred to above is in the service of the state, or has been in the service of the state in the previous twelve months.
  Irrespective of the procurement process followed, the Employer is prohibited from making an award to:
- a person who is in the service of the state;
- a juristic entity of which any director, manager, principal shareholder or stakeholder is in the service of the state;
- an advisor or consultant contracted with the Employer; or
- a person, advisor or corporate entity involved with the bid specification committee, or a director of such corporate entity.

In this regard, Tenderers shall complete Schedule 2, Part T2.2: Returnable Schedules: Compulsory Enterprise Questionnaire. Failure to complete this schedule may result in the tender not being considered.

F.4.8 **Combating abuse of the Supply Chain Management Policy**

In terms of the Its Supply Chain Management Policy, the Employer may reject the tender of any Tenderer if that Tenderer or any of its Directors has:

(a) failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months:

(b) failed, during the last five years, to perform satisfactorily on a previous contract with the Employer or any other organ of state after written notice was given to that Tenderer that performance was unsatisfactory;

(c) abused the supply chain management system of the Employer or has committed any improper conduct in relation to this system;

(d) been convicted of fraud or corruption during the past five years;

(e) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or

(f) been listed with the Register of Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or has been listed on National Treasury's database as a person or juristic entity prohibited from doing business with the public sector.

In this regard, Tenderers shall complete Schedules 3 as well as 5, Part T2.2: Returnable Schedules: Certificate of Independent Tender Determination and Declaration in terms of the Municipal Finance Management Act. Failure to complete these schedules may result in the tender not being considered.

F.4.9 **UIF payments**

The Tenderer shall submit to the Employer a letter from the Industrial Council indicating his or her good standing with regard to UIF payments upon being requested to do so.

F.4.10 **Registration with Bargaining Council**

Tenderers must be registered with a relevant Bargaining Council (if such be in place) and provide the applicable Certificate of Compliance in terms of the relevant Government Gazette.

F.4.11 **Price Variations**

The tendered Fixed Price shall **not** be subject to contract price adjustment in accordance with the General Conditions of Contract. If special materials are specified in the Contract Data, then the provision of the General Conditions of Contract shall apply to such special materials.

F.4.12 **Requests for contract documents, or parts thereof, in electronic format**

The Employer shall not formally issue tender documents in electronic format as contemplated in F.2.13.2 and F.2.13.3 and shall only issue tender documents in hard-copy. An electronic version of the issued tender documents may be made available to the Tenderer, upon written request in terms of this clause, subject to the following:

(a) electronic copies of the contract document, or parts thereof, will only be provided to Tenderers who have been issued with the tender documents as contemplated in F.1.2 in hardcopy;

(b) the electronic version shall not be regarded as a substitute for the issued tender documents;

(c) the Employer shall not accept tenders submitted in electronic format. Tenderers may not complete and submit a printed copy of the electronic version of the tender document or part thereof. Only those tenders that have been completed on the issued hard copy tender document shall be considered;

(d) the Employer accepts no responsibility or liability arising from any reliance on or use of the electronic version provided in terms of this clause. The Employer further does not guarantee that the electronic version corresponds with the issued tender documents in all respects. Tenderers are alerted to the fact that electronic versions of the tender documents may not reflect any notice or addenda that amend the tender document;

(e) any non-compliance with these provisions, including effecting any unauthorized alterations to the tender document as contemplated in F. 2.11, shall render the tender invalid. The Employer reserves the right to take any action against such Tenderer allowed in law including, in circumstances where the tender had already been awarded, the right to cancel the contract.

(f) In requesting the electronic version of the tender document or parts thereof, the Tenderer is deemed to have read, understood and accepted all of the above conditions.

F.4.13 **Minimum Wages**

The Tenderer is drawn to the fact that minimum wages must be paid in terms of the relevant legislation.

F.4.14 **Sub-Contracting**

(a) The Contractor shall not sub-contract the whole of the Contract.

(b) Except where otherwise provided by the Contract, the Contractor shall not sub-contract any part of the Contract without the prior written consent of the Employer, which consent shall not be unreasonably withheld.

(c) The contractual relationship between the Contractor and any Sub-Contractors selected by the Contractor in consultation with the Employer in accordance with the requirements of and a procedure contained within the Scope of Work, shall be the same as if the Contractor had appointed the Sub-Contractor in terms of paragraph (b) above.

(d) Any consent granted in accordance with paragraph (b) or appointment of a Sub-Contractor in accordance with paragraph (c) shall not imply a contract between the Employer and the Sub-Contractor, or a responsibility or liability on the part of the Employer to the Sub-Contractor and shall not relieve the Contractor from any liability or obligation under the Contract and he shall be liable for the acts, defaults and neglects of any Sub-Contractor, his agents or employees as fully as if they were the acts, defaults or neglects of the Contractor, his agents or employees.

(e) The Contractor shall not be required to obtain such consent for –

(i) The provision of labour, or

(ii) The purchase of materials which are in accordance with the Contract, or

(iii) The purchase or hire of Construction Equipment.

ANNEX F

(Normative)

STANDARD CONDITIONS OF TENDER

(As contained in Annexure F of Board Notice 86 of 2010 in Government Gazette No. 33239 of 28 May 2010, Construction Industry Development Board (CIDB): Standard for Uniformity in Construction Procurement) (See www.cidb.org.za)

F.1 **GENERAL**

F1.1 **Actions**

F.1.1.1 The Employer and each Tenderer submitting an offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

F.1.1.2 The Employer and the Tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the Employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.

2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty, which would in any way affect any decisions taken.

F.1.1.3 The Employer shall not seek and a Tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

F1.2 **Tender Documents**

The documents issued by the Employer for the purpose of a tender offer are listed in the Tender Data.

F.1 .3 **Interpretation**

F.1.3.1 The Tender Data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

F.1.3.2 These conditions of tender, the Tender Data and Tender Schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.

F.1.3.3 For the purposes of these conditions of tender, the following definitions apply:

a) **conflict of interest** means any situation in which:

- someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;

- an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or

- incompatibility or contradictory interests exist between an Employee and the organisation which employs that Employee.

b) **comparative offer** means the Tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis

c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the Employer or his staff or agents in the tender process; and

d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the Employer, including collusive practices intended to establish prices at artificial levels

e) **organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body

F.1.4 **Communication and Employer's Agent**

Each communication between the Employer and a Tenderer shall be to or from the Employer's Agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The Employer shall not take any responsibility for non-receipt of communications from or by a Tenderer. The name and contact details of the Employer's Agent are stated in the Tender Data.

F.1.5 **The Employer's right to accept or reject any tender offer**

F.1.5.1 The Employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The Employer shall not accept or incur any liability to a Tenderer for such cancellation and rejection, but will give written reasons for such action upon written request to do so.

F .1.5.2 The Employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work within a period of 6 (six) months unless only one tender was received and such tender was returned unopened to the Tenderer.

F.1.6 **Procurement procedures**

F.1.6.1 **General**

Unless otherwise stated in the Tender Data, a contract will, subject to F.3.13, be concluded with the Tenderer who in terms of F.3.11 is the highest ranked or the Tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

F.1.6.2 **Competitive negotiation procedure**

F.1.6.2.1 Where the Tender Data require that the competitive negotiation procedure is to be followed, Tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of F.3.4, the Employer shall announce only the names of the Tenderers who make a submission. The requirements of F.3.8 relating to the material deviations or qualifications which affect the competitive position of Tenderers shall not apply.

F.1.6.2.2 All responsive Tenderers, or not less than three responsive Tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions, and associated information. Notwithstanding the provisions of F.2.17, the Employer may request that tenders be clarified, specified and fine-tuned in order to improve a Tenderer's competitive position provided that such clarification, specification, fine tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

F.1.6.2.3 At the conclusion of each round of negotiations, Tenderers shall be invited by the Employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

F.1.6.2.4 The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after Tenderers have been requested to submit their best and final offer.

F.1.6.3 **Proposal procedure using the two stage-system**

F.1.6.3.1 **Option 1**

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The Employer shall evaluate each responsive submission in terms of the method of evaluation stated in the Tender Data, and in the second stage negotiate a contract with the Tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

F.1.6.3.2 **Option 2**

F.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The Employer shall invite all responsive Tenderers to submit tender offers in the second stage, following the issuing of procurement documents.

F.1.6.3.2.2 The Employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the Tender Data, and award the contract in terms of these conditions of tender.

F.2 **TENDERER'S OBLIGATIONS**

F.2.1 **Eligibility**

F.2.1.1 Submit a tender offer only if the Tenderer satisfies the criteria stated in the Tender Data and the Tenderer, or any of his principals, is not under any restriction to do business with the Employer.

F.2.1.2 Notify the Employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the Employer as the basis in a prior process to invite the Tenderer to submit a tender offer and obtain the Employer's written approval to do so prior to the closing time for tenders.

F.2.2 **Cost of tendering**

Accept that, unless otherwise stated in the Tender Data, the Employer will not compensate the Tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

F.2.3 **Check documents**

Check the tender documents on receipt for completeness and notify the Employer of any discrepancy or omission.

F.2.4 **Confidentiality and copyright of documents**

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the Employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

F.2.5 **Reference documents**

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, Conditions of Contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

F.2.6 **Acknowledge addenda**

Acknowledge receipt of addenda to the tender documents, which the Employer may issue, and if necessary apply for an extension to the closing time stated in the Tender Data, in order to take the addenda into account.

F.2.7 **Clarification meeting**

Attend, where required, a clarification meeting at which Tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the Tender Data.

F.2.8 **Seek clarification**

Request clarification of the tender documents, if necessary, by notifying the Employer **at least 5 (five) working days** before the closing time stated in the Tender Data.

F.2.9 **Insurance**

Be aware that the extent of insurance to be provided by the Employer (if any) might not be for the full cover required in terms of the Conditions of Contract identified in the Contract Data. The Tenderer is advised to seek qualified advice regarding insurance.

F.2.10 **Pricing the tender offer**

F.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful Tenderer, such duties, taxes and levies being those applicable 14 (fourteen) days before the closing time stated in the Tender Data.

F.2.1 0.2 Show VAT payable by the Employer separately as an addition to the tendered total of the prices.

F.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the Conditions of Contract identified in the Contract Data.

F.2.10.4 State the rates and prices in Rand unless instructed otherwise in the Tender Data. The Conditions of Contract identified in the Contract Data may provide for part payment in other currencies.

F.2.11 **Alterations to documents**

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the Employer, or necessary to correct errors made by the Tenderer. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

F.2.12 **Alternative tender offers**

F.2.12.1 Unless otherwise stated in the Tender Data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the Tenderer proposes.

F.2.12.2 Accept that an alternative tender offer may be based only on the criteria stated in the Tender Data or criteria otherwise acceptable to the Employer.

F.2.13 **Submitting a tender offer**

F.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the Contract Data and described in the scope of works, unless stated otherwise in the Tender Data.

F.2.13.2 Return all returnable documents to the Employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.

F.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the Tender Data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the Employer.

F.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The Employer will hold all authorized signatories liable on behalf of the Tenderer. Signatories for Tenderers proposing to contract as joint ventures shall state whom of the signatories is the lead partner whom the Employer shall hold liable for the purpose of the tender offer.

F.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the Employer's address and identification details stated in the Tender Data, as well as the Tenderer's name and contact address.

F.2.13.6 Where a two-envelope system is required in terms of the Tender Data, place and seal the returnable documents listed in the Tender Data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the Employer's address and identification details stated in the Tender Data, as well as the Tenderer's name and contact address.

F.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the Employer's address and identification details as stated in the Tender Data.

F.2.13.8 Accept that the Employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

F.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the Employer, unless stated otherwise in the Tender Data.

.2.14 **Information and data to be completed in all respects**

Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the Employer as non-responsive.

F.2.15 **Closing time**

F.2.15.1 Ensure that the Employer receives the tender offer at the address specified in the Tender Data not later than the closing time stated in the Tender Data. Accept that proof of posting shall not be accepted as proof of delivery.

F.2.15.2 Accept that, if the Employer extends the closing time stated in the Tender Data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

F.2.16 **Tender offer validity**

F.2.16.1 Hold the tender offer(s) valid for acceptance by the Employer at any time during the validity period stated in the Tender Data after the closing time stated in the Tender Data.

F.2.16.2 If requested by the Employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

F.2.16.3 Accept that a tender submission that has been submitted to the Employer may only be withdrawn or substituted by giving the Employer's Agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.

F.2.16.4 Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as "SUBSTITUTE".

F.2.17 **Clarification of tender offer after submission**

Provide clarification of a tender offer in response to a request to do so from the Employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of Tenderers or substance of the tender offer is sought, offered, or permitted.

Note: Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred Tenderer following a competitive selection process, should the Employer elect to do so.

F.2.18 **Provide other material**

F.2.18.1 Provide, on request by the Employer, any other material that has a bearing on the tender offer. The Tenderer's commercial position (including notarized joint venture agreements), referencing arrangements, or samples of materials, considered necessary by the Employer for the purpose of a full and fair risk assessment. Should the Tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the Employer's request, the Employer may regard the tender offer as non-responsive.

F.2.18.2 Dispose of samples of materials provided for evaluation by the Employer, where required.

F.2.19 **Inspections, tests and analysis**

Provide access during working hours to premises for inspections, tests and analysis as provided for in the Tender Data.

F.2.20 **Submit securities, bonds, policies, etc.**

If requested, submit for the Employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the Conditions of Contract identified in the Contract Data.

F.2.21 **Check final draft**

Check the final draft of the contract provided by the Employer within the time available for the Employer to issue the contract.

F.2.22 **Return of other tender documents**

If so instructed by the Employer, return all retained tender documents within 28 (twenty-eight) days after the expiry of the validity period stated in the Tender Data.

F.2.23 **Certificates**

The following certificates / information are to be provided with the tender offer:

a. A valid tax clearance certificate in terms of the Preferential Procurement Regulations, 2001 published in Government Gazette No 22549 dated 10 August 2001,
b. Certified copy of VAT Registration Certificate,
c. Certified copy of Certificate of Incorporation (if tenderer is a Company),
d. Certified copy of Founding Statement (if tenderer is a Closed Corporation)
e. Certified copy of Partnership Agreement (if tenderer is a Partnership),
f. Certified copy of Identity Document (if tenderer is a Sole Proprietor),
g. Copy of Deed of Trust (if a Trust is involved),
h. Joint venture agreement (if the tenderer is a joint venture).
i. Proof of CIDB Registration. A contractor may not undertake, carry out or complete any construction works or portion thereof for public sector contracts, awarded in terms of competitive tender or quotation, unless he or she is registered with the CIDB and holds a valid registration certificate issued by the Board not less than 25 calendar days before advertisement date of the tender, proof of application of registration in the correct class and grade must be supplied.
j. Valid Municipal Rates & Taxes Certificate, Valid Lease Agreement (If renting)
k. Curriculum vitae's and certified copies of qualification of a Site Agent, Safety Officer and Plumber.
l. Certified copy of Workmen's Compensation Certificate in terms of Act 4 of 2002;
m. Certified copy of Unemployment Insurance Certificate in terms of Act 4 of 2002;
n. Certified copies of identity documents for persons for which preference points are claimed

F.3 THE EMPLOYER'S UNDERTAKINGS

F.3.1 **Respond to requests from the Tenderer**

F.3.1.1 Unless otherwise stated in the Tender Data, respond to a request for clarification received up to 5 (five) working days before the tender closing time stated in the Tender Data and notify all Tenderers who drew procurement documents.

F.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to pre-qualify a Tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;

b) the new partners to a joint venture were not pre-qualified in the first instance, either as individual firms or as another joint venture; or

c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

F.3.2 **Issue Addenda**

If necessary, issue addenda that may amend or amplify the tender documents to each Tenderer during the period from the date that tender documents are available until **3 (three) days** before the tender closing time stated in the Tender Data. If, as a result a Tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all Tenderers who drew documents.

F.3.3 **Return late tender offers**

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the Tenderer concerned.

F.3.4 **Opening of tender submissions**

F.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of Tenderers' Agents who choose to attend at the time and place stated in the Tender Data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

F.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the Tender Data, the name of each Tenderer whose tender offer is opened and, where applicable, the total of his prices, preferences claimed and time for completion for the main tender offer only.

F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request.

F.3.5 **Two-envelope system**

F.3.5.1 Where stated in the Tender Data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of Tenderers' Agents who choose to attend at the time and place stated in the Tender Data and announce the name of each Tenderer whose technical proposal is opened.

F.3.4 **Opening of tender submissions**

F.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of Tenderers' Agents who choose to attend at the time and place stated in the Tender Data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

F.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the Tender Data, the name of each Tenderer whose tender offer is opened and, where applicable, the total of his prices, preferences claimed and time for completion for the main tender offer only.

F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request.

F.3.5 **Two-envelope system**

F.3.5.1 Where stated in the Tender Data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of Tenderers' Agents who choose to attend at the time and place stated in the Tender Data and announce the name of each Tenderer whose technical proposal is opened.

F.3.5.2 Evaluate the quality of the technical proposals offered by Tenderers, then advise Tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of Tenderers, who score in the quality evaluation more than the minimum number of points for quality stated in the Tender Data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to Tenderers whose technical proposals failed to achieve the minimum number of points for quality.

F.3.6 **Non-disclosure**

Not disclose to Tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful Tenderer.

F.3.7 **Grounds for rejection and disqualification**

Determine whether there has been any effort by a Tenderer to influence the processing of tender offers and instantly disqualify a Tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

F.3.8 **Test for responsiveness**

F.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

a) complies with the requirements of these Conditions of Tender,
b) has been properly and fully completed and signed, and
c) is responsive to the other requirements of the tender documents.

F.3.8.2 A responsive tender is one that conforms to all the terms, conditions and specifications of the Tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

a) detrimentally affect the scope, quality or performance of the works, services or supply identified in the Scope of work,
b) significantly change the Employer's or the Tenderer's risks and responsibilities under the contract, or
c) affect the competitive position of the other Tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

F.3.9 **Arithmetical errors, omissions and discrepancies**

F.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

F.3.9.2 Check the highest ranked tender or Tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 for:

a) the gross misplacement of the decimal point in any unit rate;
b) omissions made in completing the Pricing Schedule or Bills of Quantities; or
c) arithmetic errors in:

i) line item totals resulting from the product of a unit rate and a quantity in Bills of Quantities or Schedules of Prices; or
ii) the summation of the prices.

F.3.9.3 Notify the Tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

F.3.9.4 Where the Tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

a) If Bills of Quantities or Pricing Schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.

b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the Tenderer's addition of prices, the total of the prices shall govern and the Tenderer will be asked to revise selected unit prices (and their rates if Bills of Quantities apply) to achieve the tendered total of the prices.

F.3.10 **Clarification of a tender offer**

Obtain clarification from a Tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

F.3.11 **Evaluation of tender offers**

F.3.11.1 **General**

Only tenders that pass the stated eligibility criteria shall be evaluated. Evaluation shall be done in terms of Method 2 (Functionality, Price and Preference)

All responsive tenders as will be evaluated as follows:

a. Score functionality, rejecting all tender offers that fail to achieve the minimum number of points for functionality. Evaluate tenders that have achieved the minimum qualification score for functionality in terms of the following items b, c, and d
b. Score tender evaluation points for price
c. Score points for B-BBEE contribution
d. Add the points scored for price and B-BBEE to obtain the total number of points scored.

No tender will be regarded as an acceptable tender if it fails to achieve the minimum qualifying score for functionality as indicated in the tender invitation and elaborated further in the Tender Data.

Subject to paragraph 3.13 the contract must be awarded to the tender who scores the highest total number of points.

F.3.11.4 **Functionality**

The eligibility criteria are as follows:

A minimum of 70 points is required for the tenderer to be eligible for evaluation under this criteria meeting the minimum requirements for the following components.

FUNCTIONALITY	**CRITERIA**	**WEIGHT**
1.	Experience of Tenderer	40
2.	Project Staff Experience	30
3.	Plant and Equipment	15
4.	Woman, Youth and People with Disabilities Owned	10
5.	Locality	5
TOTAL		**100**

Points will be awarded as per the following criteria;

Criteria	Minimum Requirements	Points
Experience of Tenderer **(Scoring a max of 40**)	Completion of at least **3 projects** or more of similar scope **(value of works above R 3 Million, related to the installation of civil services**) in the last 5 years, supported by appointment letters, completion certificates and contactable references.	**40**
	Completion of at least **2 projects** of similar scope **(value of works above R 3 Million, related to the installation of civil services**) in the last 5 years, supported by appointment letters, completion certificates and contactable references.	**30**
	Completion of at least **1 project** of similar scope **(value of works above R 3 Million, related to the installation of civil services**) in the last 5 years, supported by appointment letters, completion certificates and contactable references.	**20**
Project Staff Experience **(Scoring a max of 30**)	**Site Agent** – National Diploma in Civil Engineering with a minimum of 5 years' experience as a Site Agent in the installation of civil services. Candidates CV & certified copies of qualification(s) required.	**20**
	Foreman/Plumber – Qualified Plumber with minimum 5 years' experience as a Foreman/Plumber in the installation of civil services. Candidates CV & certified copies of qualification(s) required.	**5**
	Safety Officer – National Diploma in Safety Management, registered with SACPCMP as a Safety Officer. Minimum 3 years' relevant experience. Candidates CV & certified copies of qualification(s) required.	**5**
Plant and Equipment	Owning all equipment supported by proof	**15**
	Owning 50% to 99% of equipment supported by proof	**10**
(Scoring a max of 15)	Owning <50% of equipment supported by proof	**5**
Woman, Youth and People with disabilities owned	Companies who are 100% owned by Women, Youth and People with Disabilities	**10**
	Companies who are between 50% and 100% owned by Women, Youth and People with Disabilities	**5**
(Scoring a max of 10)	Companies who are between 25% and 50% owned by Women, Youth and People with Disabilities	**3**
	Companies who are less than 25% owned by Women, Youth and People with Disabilities	**0**
Locality	Companies who are based in Northern Cape Province	**5**
(Scoring a max of 5)	Companies who are based outside Northern Cape Province	**0**

F.3.12 **Insurance provided by the Employer**

If requested by the proposed successful Tenderer, submit for the Tenderer's information the policies and / or certificates of insurance which the Conditions of Contract identified in the Contract Data, require the Employer to provide.

F.3.13 **Acceptance of Tender Offer**

Accept the Tender Offer if, in the opinion of the Employer, it does not present any unacceptable commercial risk and only if the Tenderer:

a) is not under restrictions, or has principals who are under restrictions, preventing participating in the Employer's procurement,
b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
c) has the legal capacity to enter into the contract,
d) is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
e) complies with the legal requirements, if any, stated in the Tender Data, and
f) is able, in the opinion of the Employer, to perform the contract free of conflicts of interest.

F.3.14. **Prepare contract documents**

F.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by the Employer as part of the tender documents to take account of:

a) addenda issued during the tender period,
b) inclusion of some of the returnable documents, and
c) other revisions agreed between the Employer and the successful Tenderer.

F.3.14.2 Complete the Schedule of Deviations attached to the Form of Offer and Acceptance, if any.

F.3.15 **Complete adjudicator's contract**

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

F.3.16 **Notice to unsuccessful Tenderers**

F.3.16.1 Notify the successful Tenderer of the Employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the Tender Data, or agreed additional period.

F.3.16.2 After the successful Tenderer has been notified of the Employer's acceptance of the tender, notify other Tenderers that their tender offers have not been accepted.

F.3.17 **Provide copies of the contracts**

Provide to the successful Tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

F.3.18 **Provide written reasons for actions taken**

Provide upon request written reasons to Tenderers for any action that is taken in applying these conditions of tender, but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of Tenderers or might prejudice fair competition between Tenderer

PART T 2:

RETURNABLE DOCUMENTS

T 2.1	**List of Returnable Documents**	**T 2 – 3**
T 2.2	**Returnable Schedules**	**T 2 - 4**

T 2.1:

LIST OF RETURNABLE DOCUMENTS

T 2.1: LIST OF RETURNABLE DOCUMENTS:

NB: TENDERERS MUST COMPLETE THESE SCHEDULES / DATA SHEETS / FORMS IN BLACK INK

1. **Returnable Schedules required for Tender Evaluation Purposes:**

   Schedule 1: Site Visit / Clarification Meeting Certificate
   Schedule 2: Compulsory Enterprise Questionnaire
   Schedule 3: Certificate of Independent Tender Determination
   Schedule 4: Certificate of Authority for Joint Ventures
   Schedule 5: Certificate for Municipal Services and Payments to Service Provider
   Schedule 6: Declaration in terms of the Public Finance Management Act.
   Schedule 7: Bargaining Council Certificate and Declarations in respect of Minimum Wage
   Schedule 8: Schedule of Work Experience
   Schedule 9: Schedule of Sub-Contractors
   Schedule 10: Proposed Amendments and Qualifications by Tenderer
   Schedule 11: Details of Management Team
   Schedule 12: Schedule of Construction Equipment
   Schedule 13: Confirmation of Construction Industry Development Board (CIDB) Registration
   Schedule 14: Tax Clearance Certificate
   Schedule 15: Compensation for Occupational Injuries & Diseases (COID)
   Schedule 16: Declaration concerning fulfilment of the Construction Regulations 2014, where applicable
   Schedule 17: Day works Schedule
   Schedule 18: Audited Financial Statements for the last 3 years

2. **Other documents required for Tender Evaluation Purposes:**

   2.1. Joint Venture Agreement (if applicable) - append to Schedule 4.

   2.2. A certified copy of the Bargaining Council Certificate (where applicable) - append to Schedule 7.

   2.3. A certified copy of the certificate of Contractor Registration issued by the CIDB - append to Schedule 13.

   2.4. An original valid Tax Clearance Certificate issued by the South African Revenue Services - append to Schedule 14.

   2.5. A certified copy of the COID - appended to Schedule 15

3. **Returnable Schedules that will be incorporated into the Contract:**

   Schedule 19: Record of Addenda to Tender Documents

   Schedule 20: NCP Schedules as required by COGHSTA: NCP 1; NCP 2; NCP 4; NCP 6.1; NCP 7.1; NCP 8; NCP 9.

4. C 1.1 The offer portion of the C1.1 Form of Offer and Acceptance

5. C 1.2 Contract Data (Part 2)

T 2.2:

RETURNABLE SCHEDULES

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 1

SITE VISIT / CLARIFICATION MEETING CERTIFICATE

This is to certify that I / we

……

of (Tenderer) ……

……

of (Address) ……

……
……

Telephone Number

……

Fax Number

……

on (Date)

have examined the Site of Works and its surroundings for which I/we am/are submitting this tender and have, so far as is practicable, familiarized myself/ourselves with all the information, risks, contingencies and other circumstances which may influence or affect my/our tender.

SIGNED ON BEHALF OF THE TENDERER:
……

SIGNED ON BEHALF OF THE CONSULTANT:
……

DATE: ……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS SANTA CENTRE, KIMBERLEY.

SCHEDULE 2

COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a Joint Venture, separate questionnaires in respect of each partner must be completed and submitted.

SECTION 1:

Name of Enterprise: ……

Address of Enterprise: ……

……

……

SECTION 2:

The following particulars must be furnished. In the case of a Joint Venture, separate

VAT Registration Number, if any: ……

SECTION 3:

CIDB Registration Number, if any:……

SECTION 4:

Particulars of Sole Proprietors and Partners in partnerships:

NAME*	IDENTITY NUMBER *	PERSONAL INCOME TAX NUMBER*

* Complete only if Sole Proprietors or Partnership and attach separate page if more than 5 (five) partners.

SECTION 5: Particulars of Companies and Close Corporations:

Company Registration Number::…….
Close Corporation Number:: ……
Tax Reference Number::: ……

SECTION 6: Record of service of the State:

Indicate by marking the relevant boxes with a cross, if any Sole Proprietor, partner in partnership or Director, Manager, Principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 (twelve) months in the service of any of the following:

- o A member of any Municipal Council;
- o A member of any Provincial Legislature;
- o A member of the National Assembly or the National Council for Provinces;
- o A member of the Board of Directors of any Municipal entity;
- o An official of any Municipality or Municipal entity;
- o An employee of any Provincial Department, National or Provincial public entity or Constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999);
- o A member of the accounting authority of any National or Provincial public entity; or
- o An employee of Parliament or a provincial legislature.
- o If any of the above boxes are marked, disclose the following:

Name of Sole Proprietor, Partner, Director, Manager, Principal shareholder or Stakeholder	**Identity Number**	**Name of Institution, Public Office, Board or Organ of State and position held**	**Status of service (tick appropriate column)**	
			Current	**Within last 12 months**

* **Insert** separate page if necessary.

SECTION 7: Record of spouses, children and parents in the service of the State

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a Sole Proprietor, Partner in a partnership or Director, Manager, Principal shareholder or Stakeholder in a company or close corporation is currently or has been within the last 12 (twelve) months been in the service of any of the following

- o A member of any Municipal Council;
- o A member of any Provincial Legislature;
- o A member of the National Assembly or the National Council for Provinces;
- o A member of the Board of Directors of any Municipal entity;
- o An official of any Municipality or Municipal entity;
- o An employee of any Provincial Department, National or Provincial public entity or Constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999);
- o A member of the accounting authority of any National or Provincial public entity;
- o An employee of Parliament or a provincial legislature.

Name of Sole Proprietor, Partner, Director, Manager, Principal shareholder or Stakeholder	Identity Number	Name of Institution, Public Office, Board or Organ of State and position held	Status of service (tick appropriate column)	
			Current	Within last 12 months

* **Insert** separate page if necessary.

The undersigned, who warrants that he/she is duly authorised to do so on behalf of the enterprise:

i) Authorizes the Employer to obtain a Tax Clearance Certificate from the South African Revenue Service that my/our tax matters are in order;
ii) Confirms that neither the name of the enterprise or the name of any Partner, Manager, Director or other person, who, wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulter established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
iii) Confirms that no Partner, Member, Director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last 5 (five) years been convicted of fraud or corruption;
iv) Confirms that I/we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the Tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
v) Confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

SIGNED ON BEHALF OF THE TENDERER: ……..……

DATE: ……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 3

CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting this tender for **TENDER NO. NC/07/2021 : CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY** in response to the invitation to tender made by the **DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE,** do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of (Name of Tenderer) ……... that

1. I have read and understand the contents of this Certificate;

2. I understand that this tender will be disqualified if this Certificate is found not to be true and complete in every respect;

3. I am authorised by the Tenderer to sign this Certificate, and to submit this tender on behalf of the Tenderer;

4. Each person whose signature appears on this tender has been authorised by the Tenderer to determine terms of, and to sign, the tender on behalf of the Tenderer;

5. For the purposes of this Certificate and this tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer whether or not affiliated with the Tenderer;

   a. has been requested to submit a tender in response to this invitation to tender;
   b. could potentially submit a tender in response to this invitation to tender, based on their qualifications, abilities or experience; and
   c. provides the same goods and services as the Tenderer and/or is in the same line of business as the Tenderer;

6. The Tenderer has arrived at this tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communicating between partners in a Joint Venture or Consortium[1] will not be construed as collusive tendering;

7. In particular, without limiting the generality of Paragraph 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding: prices;

   a. geographical area where product or service will be rendered (market allocation);
   b. methods, factors or formulas used to calculate prices;
   c. the intention or decision to submit or not to submit a tender;
   d. the submission of a tender which does not meet the specifications and conditions of the tender; or
   e. tendering with the intention not to win the tender.

[A] Joint Venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this invitation to tender relates.

9. The terms of this tender have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of Section 59 of the Competition Act No. 89 of 1989 and/or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and/or may be restricted from conducting business with the Public Sector for a period not exceeding 10 (ten) tears in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or another applicable legislation.

…….	…….....
SIGNATURE	**DATE**
……	……
POSITION	**NAME TENDERER**

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021
CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 4

CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This returnable schedule is to be completed by Joint Ventures.

YES NO **(PLEASE INDICATE IF THIS IS A JV OR NOT. IF YES, FILL IN THE DETAILS BELOW.**
ALSO ATTACH A SIGNED COPY OF AGREEMENT BETWEEN PARTIES)

We, the undersigned, are submitting this tender offer in Joint Venture and herby authorize

Mr/Mrs ……., authorised signatory of the

Company, Close Corporation or Partnership …….,
acting in the capacity of Lead Partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead Partner:		Signature: ……..…… Name: …… Designation: ……..
		Signature: ……..…… Name: …… Designation: ……..
		Signature: ……..…… Name: …… Designation: ……..

Note: A copy of the Joint Venture Agreement shall be appended to this Schedule.

SIGNED ON BEHALF OF THE TENDERER: ……..……

DATE: ……..……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 5

CERTIFICATE FOR MUNICIPAL SERVICES AND PAYMENT TO SERVICE PROVIDER

To: THE HEAD OF THE DEPARTMENT

TENDER NO. NC/07/2021:

NAME OF THE TENDERER: ……

FURTHER DETAILS OF THE TENDERER/S; PROPRIETOR / DIRECTOR/S / PARTNERS, ETC.

PHYSICAL BUSINESS ADDRESS OF THE TENDERER	MUNICIPAL ACCOUNT NUMBER/S

If there is not enough space for all the names, please attach the additional details to the Contract document.

NAME OF DIRECTOR/ MEMBER/PARTNER	IDENTITY NUMBER	PHYSICAL RESIDENTIAL ADDRESS OF DIRECTOR/ MEMBER/ PARTNER	MUNICIPAL ACCOUNT NUMBER/S

CERTIFICATION:

I, …….., the undersigned,

(Full name in block letters)

certify that the information furnished on this declaration form is correct and that I/we have no undisputed commitments for Municipal Services towards a Municipality or other Service Provider in respect of which payment is overdue for more than 30 (thirty) days.

……..

SIGNATURE

THUS DONE AND SIGNED for and on behalf of the Tenderer / Contractor

at …….(Place) on the …… day of ……(Month) 20 ……(Year)

Please note:

Even if the requested information is not applicable to the Tenderer, the table above should be endorsed NOT APPLICABLE and THIS DECLARATION MUST STILL BE SIGNED.

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 6

DECLARATION IN TERMS OF THE PUBLIC FINANCE MANAGEMENT ACT (No. 29 of 1999)

ITEM	QUESTION	YES	NO
1.1	Is the Tenderer or any of its Directors listed on the National Treasury's database as a company or person prohibited from doing business with the Public Sector? **(Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the *audi alteram partem* rule was applied)**		
1.1.1	If so, furnish particulars:		
1.2	Is the Tenderer or any of its Directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combatting of Corrupt Activities Act (No. 12 of 2004)? **(To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to Facsimile Number 012-326 5445).**		
1.2.1	If so, furnish particulars:		
1.3	Was the Tenderer or any of its Directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past 5 (five) years?		
1.3.1	If so, furnish particulars:		
1.4	Does the Tenderer or any of its Directors owe any Municipal rates and taxes or Municipal charges to the Municipality/Municipal entity, or to any other Municipality/Municipal entity, that is in arrears for more than 3 (three) months?		
1.4.1	If so, furnish particulars:		
1.5	Was any contract between the Tenderer and the Department / entity or any other Organ of State terminated during the past 5 (five) years on account of failure to perform on or comply with the contract?		
1.5.1	If so, furnish particulars:		

CERTIFICATION:

I, THE UNDERSIGNED …….

(Full Name)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM TRUE AND CORRECT.

I ACCEPT THAT, IN addition TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

……... ……

SIGNATURE **DATE**

……. ……

POSITION **NAME OF TENDERER**

*** Where the entity tendering is a Joint Venture, each party to the Joint Venture must sign a declaration in terms of the Public Finance Management Act and attach it to this Schedule.**

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE KIMBERLEY.

SCHEDULE 7

BARGAINING COUNCIL CERTIFICATE AND DECLARATION IN RESPECT OF MINIMUM WAGE

Tenderers must be registered with a relevant Bargaining Council (if such be in place) and must attach to this Schedule the applicable Certificate of Compliance (Letter of Good Standing in terms of the relevant Government Gazette).

Each party to a Consortium / Joint Venture shall attach separate certificates in the above regard.

DECLARATION IN RESPECT OF MINIMUM WAGE:

The Tenderer, by signing this Schedule, declares that not less than the statutory minimum wage shall be paid to Employees, as applicable.

SIGNED ON BEHALF OF THE TENDERER: ……..……

DATE: ……..……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 8

SCHEDULE OF WORK EXPERIENCE

The Tenderer shall insert in the spaces provided below a list of similar completed contracts awarded to him and those currently being undertaken.

EMPLOYER(NAME, NO AND FAX NO TEL)	PRINCIPAL AGENT(NAME, TELL NO AND FAX NO)	NATURE OF WORK	VALUE OF WORK R(m)	COMPLETION DATE
COMPLETED CONTRACTS				
CURRENT CONTRACTS				

Number of sheets appended by the Tenderer to this Schedule: ……..…… **(If nil, enter NIL**)

SIGNED ON BEHALF OF THE TENDERER: ……..……

DATE: ……..……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

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SCHEDULE 9

SCHEDULE OF SUB-CONTRACTORS

We notify you that it is our intention to employ the following Sub-Contractors for work (excluding work covered by provisional sums and contingencies) in this contract.

Acceptance of this tender shall not be construed as approval of all or any of the listed Sub-Contractors. Should any of the Sub-Contractors not be approved subsequent to acceptance of the tender, this shall in no way invalidate this contract and the tendered unit rates for the various items of work shall remain final and binding.

SUB-CONTRACTORS		
SUB-CONTRACTOR'S NAME	**WORK ACTIVITIES TO BE UNDERTAKEN BY THE SUB-CONTRACTOR**	**ESTIMATED VALUE OF WORK (RAND)**

Number of sheets appended by the Tenderer to this Schedule: ……..…… **(If nil, enter NIL**)

SIGNED ON BEHALF OF THE TENDERER: ……..……

DATE: ……...……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 10

PROPOSED AMENDMENTS AND QUALIFICATIONS BY TENDERER

The Tenderer should record any proposed deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a Tenderer may state such proposed deviations and qualifications in a covering letter attached to his tender and reference such letter in this Schedule.

The Tenderer's attention is drawn to Clause F.3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the employer's handling of material deviations and qualifications.

If no deviations or modifications are desired, the Schedule hereunder is to be marked **NIL** and signed by the Tenderer.

PAGE	CLAUSE OR ITEM	PROPOSAL

Number of sheets, appended by the Tenderer to this Schedule: ……..…… **(If nil, enter NIL)**

SIGNED ON BEHALF OF THE TENDERER: ……..……

DATE: ……..……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 11

DETAILS OF MANAGEMENT TEAM

Tenderers shall set out in the Schedule hereunder details of the Management Staff experience in work of a similar nature to that for which their tender is submitted.

Failure to complete this Schedule may result in the Tenderer not being considered.

1) Company Director's Name: ……

NO OF YEARS THAT DIRECTOR HAS OPERATED	YEAR'S EXPERIENCE
As a director	
In Engineering delivery field as project/contract manager	
Other (specify in CV)	
TOTAL YEAR'S EXPERIENCE	

2) Site Agent's Name:……..……

NO OF YEARS THAT SITE AGENT HAS OPERATED	YEARS' EXPERIENCE
As a Site Agent	
Other (Specify in CV)	
TOTAL YEARS 'EXPERIENCE	

NOTE: PLEASE APPEND CV'S AND CERTIFIED COPIES OF QUALIFICATION

Please indicate by write individual selected for the project's NQF level and cross with an (X) applicable candidate experience allocated for this project.

QUALITY CRITERIA: APPLICABLE EXPERIENCE

	POSITION	NQF LEVEL		YEARS OF EXPERIENCE				
1	Site Agent		2 - 5		6 - 8		9 and more	
2	General Foreman / Plumber		4 - 6		7 - 9		10 and more	
3	Health and Safety Officer		2 - 5		6 - 8		9 and more	

SIGNED ON BEHALF OF THE TENDERER: ……..……

DATE: ……..……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.
SCHEDULE 12

SCHEDULE OF CONSTRUCTION EQUIPMENT

F 1: CONSTRUCTION EQUIPMENT IMMEDIATELY AVAILABLE & OWNED BY TENDERER:

DESCRIPTION, SIZE, CAPACITY	NUMBER
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……
……	……

F 2: CONSTRUCTION EQUIPMENT ON ORDER:

(State details of arrangements made, with delivery dates)

DESCRIPTION, SIZE, CAPACITY	NUMBER
……..	…….
……..	……
……	……...

F 3: CONSTRUCTION EQUIPMENT THAT WILL BE ACQUIRED OR HIRED:

(State details of delivery arrangements)

DESCRIPTION, SIZE, CAPACITY	NUMBER
……..	…….
……..	……
……	……..
……	……...

SIGNED ON BEHALF OF THE TENDERER: ……..……

DATE: ……..……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

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CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 13

CONFIRMATION OF CIDB CONTRACTOR REGISTRATION

I/We understand that only Tenderers who are registered with the Construction Industry Development Board (CIDB) in a Contractor grading designation equal to or higher than a Construction grading designation determined in accordance with the sum tendered for, are eligible to submit tenders.

Joint Ventures are eligible to submit Tenders provided that:

a. Every member of the Joint Venture is registered with the CIDB;
b. The lead partner has a Contractor grading of not more than one lower than the designation determined in accordance with the sum tendered.
c. The combined Contractor grading designation calculated in accordance with the CIDB Regulations is equal to or higher than a Contractor grading designation determined in accordance with the sum tendered; and
d. The contract participation of each member in a Joint Venture is in accordance with the individual member's CIDB contractor grading designation.

I/We understand that the Employer may only enter into a formal contract with a Tenderer who is registered with the Construction Industry Development board (CIDB) as a CIDB Designation **CE** (of the correct Class in accordance with the tendered sum) and has been issued with such a CIDB Contractor registration grading designation.

Contractor Industry Development Board (CIDB) Contractor Registration

I/We wish to confirm the following:

Yes I/We are registered with the CIDB as a …..... CE (Class…….. Civil Engineering Works) Contractor:

Registration No.: ……

CIDB Contractor's Grading: …….

Tender amount, VAT excluded: R……

I/We understand that:

Tenderers must be registered prior to the closing date/time for tender submissions in a CIDB Contractor grading designation equal to or higher than a grading corresponding to the amount tendered.

SIGNED ON BEHALF OF THE TENDERER: ……

DATE: ……..……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

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CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 14

TAX CLEARANCE CERTIFICATE

An original valid Tax Clearance Certificate from the South African Revenue Service (SARS) shall be attached to this Schedule, or proof that the Tenderer has made arrangements with SARS to meet his or her outstanding tax obligations.

Each party to a Consortium / Joint Venture shall submit a separate Tax Clearance Certificate, or proof that he or she has made the necessary arrangements with SARS.

SIGNED ON BEHALF OF THE TENDERER: ……

DATE: ……..……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

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SCHEDULE 15

COMPENSATION FOR OCCUPATIONAL INJURIES & DISEASES (COID)

The Tenderer must attach to this page a **certified copy** of the Tenderer's COID Number from the Department of Labour.

GOOD STANDING FROM THE COMPENSATION COMMISSIONER

(e) A valid Letter of Good Standing from the Compensation Commissioner or a certified copy thereof must accompany the Tender Document.

(f) In the case of a Consortium/Joint Venture every member must submit a separate valid Letter of Good Standing from the Compensation Commissioner or a certified copy thereof with the Tender Documents.

(g) If a Tender Document is not supported by a valid Letter of Good Standing from the Compensation Commissioner or a certified copy thereof, the Employer reserves the right to obtain such document after the closing date. If no such document can be obtained within a period as specified by the Employer, the Tender will be disqualified.

(h) Should a Tenderer's Letter of Good Standing from the Compensation Commissioner expires during the contract period, a valid certificate must be submitted within an agreed upon time.

(i) The right is reserved to not award a Tender if a valid Letter of Good Standing from the Compensation Commissioner or a certified copy thereof is not submitted within the requested time.

SIGNED ON BEHALF OF THE TENDERER: ……

DATE: ……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 16

DECLARATION CONCERNING FULFILMENT OF THE CONSTRUCTION REGULATIONS 2014, WHERE APPLICABLE

In terms of regulations 5.1 (g) & (h) of the Construction Regulations, 2014 (hereinafter referred to as the Regulations), promulgated on 07 February 2014 in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) the Employer shall not appoint a Contractor to perform construction work unless the Contractor can satisfy the Employer that his/her firm has the necessary competencies and resources to carry out the work safely and has allowed adequately in his/her tender for the due fulfilment of all the applicable requirements of the Act and the Regulations.

Tenderers shall answer the questions below:

A) I confirm that I am fully conversant with the Regulations and that my Company has (or will acquire/procure) the necessary competencies and resources to timeously, safely and successfully comply with all of the requirements of the Regulations.

(*Tick)* **YES** ☐ **NO** ☐

B) Indicate which approach shall be employed to achieve compliance with the Regulations. *(Tick)*

Own resources, competent in terms of the Regulations (refer to 3 below)	
Own resources, still to be hired and/or trained (until competency is achieved) Specialist subcontract resources (competent) – Specify: ……	

C) Provide details of proposed key persons, competent in terms of the Regulations, who will form part of the Contract team as specified in the Regulations (CV's to be attached):

……

……

……

D) Provide details of proposed training (if any) that will be undergone:

……

……

……

……

E) List potential key risks identified and measures for addressing risks:

……

……

……

……

……

F) I have fully included in my tendered Fixed Price for resources, actions, training and any other costs required for the due fulfilment of the Regulations for the duration of the construction and defects repair period. (*Tick)*

YES ☐ **NO** ☐

SIGNATURE OF PERSON(S) AUTHORISED TO SIGN THIS TENDER:

SIGNED ON BEHALF OF THE TENDERER: ……...

(Name in print): ……,,,,,…… **ID NO**.: ……..……..

WITNESS: ……..

(Name in print): …… **ID NO**.: ……...……..……

DATE: ……...

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

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SCHEDULE 17

DAY WORKS SCHEDULE

This day work statement shall be used according to the opinion of the Engineer for the assessment of value of additional work which cannot be assessed easily according to the tendered Fixed Price.

The rates for labour and material should not include overhead costs and profit, Site Supervision of personnel, insurance, paid vacation, the use and maintenance of small hand equipment and non-mechanical equipment, travel allowance, other payments and allowance. Provision is being made for this by including the percentages covering all these items with the item "Up costs". The rate which should be used for the assessment of value of additional work is the basic rate plus the percentage "UP costs". The item "Up costs" is left out in the case of equipment. The rate then has to include all of the above "Up costs" mentioned as well as Operator's costs, user's goods, maintenance, etc.

The Tenderer has to fill in all of the items listed underneath, otherwise his tender can be considered as incomplete.

(d) **LABOUR**

1)	Workers	……	per hour plus	……. % "Up cost"
2)	Supervisors	……	per hour plus	……. % "Up cost"
3)	Artisans	……	per hour plus	……. % "Up cost"

B.**EQUIPMENT**

DESCRIPTION	RATE PER HOUR	
	In Work	Standing
Excavator ……	…….	…….
Front-end Loader …….	…….	…….
Tipper Truck …….. cubic meters	…….	…….
Compressor …….. (capacity)	…….	…….
……. (Specify)	…….	…….
……. (Specify)	…….	…….
……. (Specify)	…….	…….

Note: The rate for an air pressure machine has to include rubber pipes and pneumatic equipment.

(g) **MATERIAL**

Here, the Tenderer has to provide the "Up Costs" which ought to be added to the basic price:

……. %

SIGNED ON BEHALF OF THE TENDERER: …….……

DATE: ……..……

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

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SCHEDULE 18

AUDITED FINANCIAL STATEMENTS FOR THE PAST 3 FINANCIAL YEARS TO BE ATTACHED TO THIS PAGE

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

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CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY

SCHEDULE 19

RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	DATE	TITLE OR DETAILS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Attach additional pages if more space is required.

……...

SIGNATURE

……

DATE

……..

POSITION

……

NAME OF TENDERER

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

SCHEDULE 20

NCP SCHEDULES AS REQUIRED BY COGHSTA

LIST OF NCP FORMS **Pages**

1.	NCP 1	T 2 - 34
2.	NCP 2	T 2 - 36
3.	NCP 4	T 2 - 37
4.	NCP 6.1	T 2 - 39
5.	NCP 7.1	T 2 - 45
6.	NCP 8	T 2 - 47
7.	NCP 9	T 2 - 49

INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF COGHSTA

TENDER NO. NC/07/2021 CLOSING DATE: 11 JUNE 2021 CLOSING TIME:11H00

DESCRIPTION: **BIDS ARE INVITED BY DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE FOR THE CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY**

The successful Bidder will be required to fill in and sign a written contract Form (NCP 7)

BID DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT: **LARRY MOLEKO LOUW BUILDING**

9 CECIL SUSSMAN ROAD
KIMBERLEY
8301

A non-compulsory virtual briefing session will be held on THURSDAY, 27th May 2021 at 10h00 at: **https://teams.microsoft.com/l/meetup-join/19%3a66c7a9bb43f548d6b77d5116272d46a1%40thread.tacv2/1621423689301?context=%7b%22Tid%22%3a%2288c19a74-3c3b-445a-87e0-94c155bc09cf%22%2c%22Oid%22%3a%222a1606a0-2c6d-4970-8e96-be03a4541607%22%7d**

Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.

The bid box is generally open 24 (twenty-four) hours a day, 7 (seven) days a week.

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

THE FOLLOWING PARTICULARS MUST BE FURNISHED.

(FAILURE TO DO SO MAY RESULT IN YOUR BID BEING DISQUALIFIED)

NAME OF BIDDER: ……

POSTAL ADDRESS: ……

STREET ADDRESS: ……

TELEPHONE NUMBER: ……

CELLPHONE NUMBER: ……

FACIMILE NUMBER: ……

E-MAIL ADDRESS: ……

VAT REGISTRATION NUMBER: ……

HAS AN ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE BEEN SUBMITTED? (NCP 2) **YES NO**

HAS A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE BEEN SUBMITTED? (NCP 6.1) **YES NO**

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA) …….. ☐

A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN ACCREDITATION SYSTEM (SANAS); …… ☐

OR

A REGISTERED AUDITOR …… ☐

(Tick the applicable box)

A B-BBEE STATUS LEVEL VARIFICATION CERTIFICATE MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE)

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS / SERVICES / WORKS OFFERED? **YES NO**

IF YES, ENCLOSE PROOF

……... ……

SIGNATURE OF BIDDER **DATE**

……

CAPACITY UNDER WHICH THIS BID IS SIGNED

……... ……...……

TOTAL BID PRICE **TOTAL NUMBER OF ITEMS OFFERED**

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Contact Person: **Tebogo Monoametsi of CoGHSTA, Tel: (053) 807 9713,e-mail: TMonoametsi@ncpg.gov.za**

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:

Contact Person: **Dephney Mabuela of KMSD Engineering, Tel: (087) 940 3119, e-mail: dephneym@kmsd.co.za**

TAX CLEARANCE REQUIREMENTS

IT IS A CONDITION OF BIDDING THAT:

a) The taxes of the successful Bidder **must** be in order, or that satisfactory arrangements have been made with the Receiver of Revenue to meet his/her tax obligations.

b) The form "Application for Tax Clearance Certificate (in respect of Bidders)", must be completed in all respects and submitted to the Receiver of Revenue where the Bidder is registered for tax purposes. The Receiver of Revenue will then furnish the Bidder with a Tax Clearance Certificate that will be valid for a period of 6 (six) months from the date of issue. This Tax Clearance Certificate must be submitted in the original, together with the bid and attached to Schedule 15. Failure to submit the **original** and valid Tax Clearance Certificate **will** invalidate the bid.

c) In bids where Consortia / Joint Ventures / Sub-Contractors are involved, each party must submit a separate Tax Clearance Certificate. Copies of the "Application for Tax Clearance Certificates" are available at any Receiver's Office.

DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state[1], or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-

   - the bidder is employed by the state; and/or

   - the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

2. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

2.1 Full Name of bidder or his or her representative: …….

2.2 Identity Number: ……

2.3 Position occupied in the Company (director, trustee, shareholder[2]): ……..

2.4 Company Registration Number: ……..…….

2.5 Tax Reference Number: ……..……

2.6 VAT Registration Number: ……....

2.6.1 The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / persal numbers must be indicated in paragraph 3 below.

[1]"State" means –
(a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
(b) any municipality or municipal entity;
(c) provincial legislature;
(d) national Assembly or the national Council of provinces; or
(e) Parliament.

[2]"Shareholder" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

2.7 Are you or any person connected with the bidder presently employed by the state? **YES / NO**

2.7.1 If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member: ……...……
Name of state institution at which you or the person connected to the bidder is employed : ……
Position occupied in the state institution: ……

Any other particulars:
……
……
……

2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? **YES / NO**

2.7.2.1 If yes, did you attached proof of such authority to the bid document? **YES / NO**

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.

2.7.2.2 If no, furnish reasons for non-submission of such proof:

…….
…….
…….

2.8 Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months? **YES / NO**

2.8.1 If so, furnish particulars:
……..
……..
……...

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

2.9.1If so, furnish particulars.

……...
……..….
……

2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid?	**YES/NO**
2.10.1 If so, furnish particulars. …… …… ……	
2.11 Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract	**YES/NO**
2.11.1 If so, furnish particulars. …… …… ……	

3) Full details of Directors / Trustees / Members / Shareholders:

Full Name	**Identity Number**	**Personal Tax Reference Number**	**State Employee Number / Persal Number**

d) DECLARATION:

I, THE UNDERSIGNED (Name) ……

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 AND 3 ABOVE IS CORRECT. I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

……...	……
SIGNATURE	**DATE**
…….	……
POSITION	**NAME OF TENDERER**

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

---

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2

a) The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable.

1.3 Points for this bid shall be awarded for:

(a) Price; and

(b) B-BBEE Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	**80**
B-BBEE STATUS LEVEL OF CONTRIBUTOR	**20**
Total points for Price and B-BBEE must not exceed	**100**

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

a) **"B-BBEE"** means broad-based black economic empowerment as defined in section of the Broad-Based Black Economic Empowerment Act;
b) "**B-BBEE status level of contributor"** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
c) **"bid"** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
d) **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
e) **"EME"** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
f) **"functionality"** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
g) **"prices"** includes all applicable taxes less all unconditional discounts;
h) **"proof of B-BBEE status level of contributor"** means:
    1. B-BBEE Status level certificate issued by an authorized body or person;
    2. A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
    3. Any other requirement prescribed in terms of the B-BBEE Act;
i) **"QSE"** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
j) **"rand value"** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20

$$Ps = 80\left(1 - \frac{(Pt - Pmin)}{(Pmin)}\right)$$

90/10

$$Ps = 90\left(1 - \frac{(Pt - Pmin)}{(Pmin)}\right)$$

Where

Ps	=	Points scored for comparative price of bid under consideration
Pt	=	Comparative price of bid under consideration
Pmin	=	Comparative price of lowest acceptable bid

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

5. BID DECLARATION

5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

6.1 B-BBEE Status Level of Contributor: . = ……(maximum of 10 or 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

(***Tick applicable box***)

YES		NO	

7.1.1 If yes, indicate:

i) What percentage of the contract will be subcontracted.....%

ii) The name of the sub-contractor……..

iii) The B-BBEE status level of the sub-contractor.....……..

iv) Whether the sub-contractor is an EME or QSE
(Tick applicable box)

YES		NO	

v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

Designated Group: An EME or QSE which is at last 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		

Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm ……..

8.2 VAT registration number: ……...

8.3 Company registration number

8.4 TYPE OF COMPANY/ FIRM

Partnership/Joint Venture / Consortium
One person business/sole propriety
Close corporation
Company
(Pty) Limited
[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

……

……

……

……

8.6 COMPANY CLASSIFICATION

Manufacturer
Supplier
Professional service provider
Other service providers, e.g. transporter, etc.
[*TICK APPLICABLE BOX*]

8.7 Total number of years the company/firm has been in business:……

8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

i. The information furnished is true and correct;
ii. The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

iii. In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;

iv. If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –

a) disqualify the person from the bidding process;
b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
e) forward the matter for criminal prosecution.

WITNESSES 1. …….. 2. …….	……. **SIGNATURE(S) OF BIDDERS(S)** DATE: …….. ADDRESS …….. …….. ……..

CONTRACT FORM – PURCHASE OF GOODS / WORKS

THIS FORM MUST BE COMPLETED IN DUPLICATE BY BOTH THE SUCCESSFUL BIDDER

(PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SUCCESSFUL BIDDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS

PART 1 (TO BE COMPLETED BY THE BIDDER)

a) I hereby undertake to supply all or any of the goods and/or works described in the attached bidding documents to (name of institution) …….. in accordance with the requirements and specifications stipulated in bid number ……..…… at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the purchaser during the validity period indicated and calculated from the closing time of bid.

b) The following documents shall be deemed to form and be read and construed as part of this agreement:

i. bidding documents, *viz*
- Invitation to bid;
- Tax Clearance Certificate
- Pricing Schedule(s);
- Technical Specification(s);
- Preference claims for Broad Based Black
- Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011;
- Declaration of interest;
- Declaration of Bidder's past SCM practices;
- Certificate of Independent Bid Determination;
- Special Conditions of Contract;

ii. General Conditions of Contract; and

iii. Other (specify)

c) I confirm that I have satisfied myself as to the correctness and validity of my bid; that the tendered Fixed Price quoted cover all the goods and/or works specified in the bidding documents; that the tendered Fixed Price cover all my obligations and I accept that any mistakes regarding the tendered Fixed Price and calculations will be at my own risk.

d) I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.

e) I declare that I have no participation in any collusive practices with any Bidder or any other person regarding this or any other bid.

f) I confirm that I am duly authorised to sign this contract

NAME (PRINT) .....

CAPACITY .....

SIGNATURE .....

NAME OF FIRM

DATE

WITNESSES

1……

2……

DATE:

CONTRACT FORM – PURCHASE OF GOODS / WORKS

PART 2 (TO BE COMPLETED BY THE PURCHASER)

a) I, …… in my capacity as ……

accept your bid under Reference Number …….. dated …….. for the supply of goods / works indicated hereunder and/or further specified in the annexure(s).

b) An official order indicating delivery instructions is forthcoming.

c) I undertake to make payment for the goods/works delivered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice accompanied by the delivery note.

ITEM NO.	PRICE (ALL APPLICABLE TAXES INCLUDED), EXCL 14% VAT	BRAND	DELIVERY PERIOD	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

1. I confirm that I am duly authorised to sign this contract.

SIGNED AT ……. ON ……

NAME (PRINT)

…….

SIGNATURE

…….

OFFICIAL STAMP

WITNESSES

1. ……..

2. ……..

DATE:

…….

DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

d) This Standard Bidding Document must form part of all bids invited.

e) It serves as a declaration to be used institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

f) The bid of any Bidder may be rejected if that Bidder, or any of its Directors have:

abused the institution's supply chain management;
committed fraud or any other improper conduct in relation to such system; or

failed to perform on any previous contract.

g) In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
4.1	Is the Bidder or any of its Directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? **(Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the *audi alteram partem* rule was applied).** **The Database of Restricted Suppliers now resides on the National Treasury's website (**www.treasury.gov.za**) and can be accessed by clicking on its link at the bottom of the home page.**	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		
4.2	Is the Bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? **The Register for Tender Defaulters can be accessed on the National Treasury's website (**www.treasury.gov.za**) by clicking on its link at the bottom of the home page.**	Yes ☐	No ☐
4.2.1	If so, furnish particulars:		
4.3	Was the Bidder or any of its Directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
4.3.1	If so, furnish particulars:		

Item	Question	Yes	No
4.4	Was any contract between the Bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes ☐	No ☐
4.4.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME) ……..……..……..…

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

……...
SIGNATURE

……
DATE

……..
POSITION

……
NAME OF BIDDER

CERTIFICATE OF INDEPENDENT BID DETERMINATION

This Standard Bidding Document (NCP) must form part of all bids[1] invited.

Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).[2] Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.

Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system, and authorizes Accounting Officers and Accounting Authorities to:

Disregard the bid of any Bidder if that Bidder, or any of its directors have abused the institution's supply chain management system and/or committed fraud or any other improper conduct in relation to such system.

Cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.

This NCP serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.

In order to give effect to the above, the attached Certificate of Bid Determination (NCP 9) must be completed and submitted with the bid:

1 **Includes price quotations, advertised competitive tenders, limited tenders and proposals.**

2 **Bid rigging (or collusive tendering) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or Services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.**

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

……
(Bid Number and Description)

in response to the invitation for the Bid made by:

……

(Name of institution)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: …… that:

(Name of Bidder)

1 I have read and I understand the contents of this Certificate;

2 I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;

3 I am authorised by the Bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the Bidder;

4 Each person whose signature appears on the accompanying bid has been authorized by the Bidder to determine the terms of, and to sign, the bid, on behalf of the Bidder;

5 For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the Bidder, whether or not affiliated with the Bidder, who:

a. has been requested to submit a bid in response to this bid invitation;
b. could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
c. provides the same goods and services as the Bidder and/or is in the same line of business as the Bidder.

6 The Bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a Joint Venture or Consortium[3] will not be construed as collusive biding.

7 In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any Competitor regarding:

a. prices;
b. geographical area where product or service will be rendered (market allocation)
c. methods, factors or formulas used to calculate prices;
d. the intention or decision to submit or not to submit, a bid;
e. the submission of a bid which does not meet the specifications and conditions of the bid; or
f. biding with the intention not to win the bid.

[3] Joint Venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

8. In addition, there have been no consultations, communications, agreements or arrangements with any Competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

9. The terms of the accompanying bid have not been, and will not be, disclosed by the Bidder, directly or indirectly, to any Competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of Section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

…….	……
SIGNATURE	**DATE**
…….	……
POSITION	**NAME OF BIDDER**

KMSD ENGINEERING CONSULTANTS (Pty) Ltd

COGHSTA
Co-operative Governance
Human Settlement & Traditional Affairs

THE CONTRACT

PART C 1:

AGREEMENT AND CONTRACT DATA

C 1.1	**Form of Offer and Acceptance**	**C 1 – 1**
C 1.2	**Contract Data**	**C 1 - 8**
C 1.3	**Form of Guarantee**	**C 1 - 20**
C 1.4	**Occupational Health & Safety Agreement**	**C 1 - 24**
C 1.5	**Contract of Temporary Employment as Community Liaison Officer**	**C 1 – 27**

C 1.1:

FORM OF OFFER AND

ACCEPTANCE (AGREEMENT)

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLY

FORM OF OFFER AND ACCEPTANCE
(AGREEMENT)

OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

TENDER NO. NC/07/2021: SANTA CENTRE: CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS

The Tenderer, identified in the Offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

THE OFFERED TOTAL OF THE TENDERED FIXED PRICE EXCLUSIVE OF VALUE ADDED TAX IS:

R……...……..……..……..…… (in figures);

……...……..…….. (in words).

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

Signature(s) …… ……

Name(s) …… ……

Capacity …… ……

For the Tenderer ……

(Name and address of Organisation/Tenderer)

Name & signature of Witness …….…….…….…. **Date** ……

ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the contract that is the subject of this Agreement.

The terms of the Contract are contained in:

Part C 1: Agreement and Contract Data, which includes this agreement

Part C 2: Pricing Data (Tendered Fixed Price)

Part C 3: Scope of Work

Part C 4: Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C 3 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The Tenderer shall within 2 (two) weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of Contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives 1 (one) fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Contractor) within 5 (five) days of the date of such receipt, notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

Signature(s) ……. ……

Name(s) ……. ……

Capacity ……. ……

For the

Employer DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

PRIVATE BAG X5005
KIMBERLEY, 8300

Name & signature of Witness …….…….…… **Date** ……

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.

2. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the Contract shall also be recorded here.

4. Any change or addition to the tender documents arising from the above agreements and recorded here shall also be incorporated into the final draft of the Contract.

1. **Subject** ……..

Details ……..…….

2. **Subject** ……..

Details ……..…….

3. **Subject** ……..

Details ……..…….

4. **Subject** ……..

Details ……..……

5. **Subject** ……..

Details ……..……

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the tender Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

AGREEMENT

The Employer identified below has accepted a Tender Offer by the Contractor for the construction, completion and remedying of defects of the specified Works. Acceptance of the Contractor's Offer shall form an agreement between the Employer and the Contractor upon the terms and conditions contained in the Agreement and in the Contract that is the subject of the Agreement.

THIS AGREEMENT WITNESSES THAT:

1. The following documents shall be deemed to form and be read and construed as part of this Agreement:

   (a) Form of Offer and Acceptance, including Schedule of Deviations
   (b) Addenda, Schedules
   (c) Contract Data
   (d) Tendered Fixed Price
   (e) Scope of Work (Specifications, drawings)
   (f) Site Information
   (g) Annexures (as applicable)

2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor covenants with the Employer to execute and complete the Works and remedy any defects therein, in conformity with the provisions of the Contract.

3. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works and the remedying of defects therein, the tendered Fixed Price at the times and in the manner prescribed by the Contract.

FOR THE CONTRACTOR (SUCCESSFUL TENDERER):

Signature(s) …… ……

Name(s) …… ……

Capacity …… ……

For the Contractor ……
(Name and address of organisation)

Name & signature of Witness …… ……

FOR THE EMPLOYER:

Signature(s) …… ……

Name(s) …… ……

Capacity …… ……

For the Employer DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE
PRIVATE BAG X5005
KIMBERLEY, 8300

Name & signature of Witness …… ……

CONFIRMATION OF RECEIPT

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

At ……..…….… (Place) on the ……..… day of …… (Month) 20 …… (Year)

FOR THE CONTRACTOR (SUCCESSFUL TENDERER):

Signature(s) …… ……

Name(s) …… ……

Capacity …… ……

For the Contractor ……
(Name and address of organisation)

Name & signature of Witness …….…….…….…. …….
Date

C 1.2:
CONTRACT DATA

PART 1:

DATA PROVIDED BY THE EMPLOYER

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS SANTA CENTRE, KIMBERLEY.

CONTRACT DATA

PART 1: DATA PROVIDED BY THE EMPLOYER

CONDITIONS OF CONTRACT

Variations, amendments and additions to the General Conditions of Contract as Special Conditions of Contract prescribed by the Employer are set out below. Each item of the Special Conditions of Contract given below is cross-referenced to the clause in the General Conditions of Contract to which it mainly applies.

The General Conditions of Contract (GCC) for Construction Works, Third Edition, 2015, as published by the South African Institution of Civil engineering (SAICE), Private Bag X200, Halfway House, 1685, is applicable to this Contract and is obtainable from www.saice.org.za.

The Pro Formas bound with the General Conditions of Contract 2015, shall not apply to this Contract and shall be replaced with the documentation bound into this Contract Document.

CONTRACT SPECIFIC DATA

The following contract specific data, referring to the GCC for Construction Works, Third Edition, 2015, are applicable to this Contract:
Compulsory Data

Clause 1.1.1.13:

The Defects Liability Period is *12 (Twelve) months, measured from the date of the Certificate of Completion.*

Clause 1.1.1.15:

The name of the Employer is CoGHSTA.

Clause 1.1.1.16:

The name of the Employer's Agent is KMSD ENGINEERING CONSULTANTS (PTY) LTD.

Clause 1.1.1.26:

The Pricing Strategy is a Fixed Price Contract. See also Clause 1.1.1.19
.
Clause 1.2.1.2:

The address of the Employer is:

Physical address: LARRY MOLEKO LOUW BUILDING
9 CECIL SUSSMAN ROAD
KIMBERLEY
8301

Postal Address	PRIVATE BAG X5005 KIMBERLEY 8300
E-mail address:	TMonoametsi@ncpg.gov.za

The address of the Employer's Agent is:

Physical address:	Unit 15 Berkley Office Park 8 Bauhinia Street Technopark, Highveld 0157
Postal address:	P O BOX 12812 Clubview, 0014
E-mail address:	dephneym@kmsd.co.za

Clause 1.3.3:

The language of the Contract and of written communication shall be Afrikaans and/or English as determined by the Employer and the Employer's Agent at the onset of the Contract.

Clause 1.3.6:

The Employer's Agent shall retain copyright and property rights on his documentation, etc.

Clause 3.2.3:

The Employer's Agent is required to obtain the specific approval of the Employer before executing any of the following functions or duties:

1. Nominating the Employer's Agent's Representative in terms of Clause 3.3.1.
2. Delegation of Employer's Agent's authority in terms of Clause 3.3.4.
3. Granting permission to work during non-working times in terms of Clause 5.8.1.
4. Suspend the progress of the works in terms of Clause 5.11.
5. The issuing of an instruction to accelerate progress in terms of Clause 5.7.3.

Clause 4.1.2:

Amend the first three lines to read:

"Where any part of the Works, whether permanent or temporary is designed by the Contractor, he shall, notwithstanding any approval of the Employer's Agent be liable for any error or deficiency in and design, drawing or document and any loss or damage arising out of such error or deficiency."

Clause 4.2:

Add the following new sub-clause:

Clause 4.2.3:

"4.2.3.1 The Employer's Agent shall establish the basic reference pegs and benchmarks on the Site and give to the Contractor the particulars thereof in sufficient time to enable the Contractor to meet his approved programme.

4.2.3.2 After compliance by the Employer's Agent with the provisions of Sub-Clause 5.4.1, the Contractor shall be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith.

4.2.3.3 If at any time during the progress of the Works, any error shall appear or arise in the position, levels dimensions or alignment of any part of the Works, the Contractor, on being required to do so by the Employer's Agent, shall at his own expense rectify such error to the satisfaction of the Employer's Agent, but if such error is based on incorrect data supplied in writing by the Employer's Agent or if there is any delay in providing the particulars required in terms of Sub-Clause 5.4.1, the Contractor shall, in respect of that delay and the Cost of such rectification, be entitled to make a claim in accordance with Clause 10.1.

The Contractor shall carefully protect and preserve all benchmarks, sight-rails, pegs and other things used in setting out the Works. The checking of any setting-out or of any line or level by the Employer's Agent shall not relieve the Contractor of his responsibility for the correctness thereof."

Clause 4.3:

Add the following new sub-clause:

"4.3.3 The Employer and the Contractor shall enter into an agreement to complete the work required for construction of the works in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act 85 of 1993) and the Construction Regulations promulgated thereunder.

An agreement is concluded in the Contract Document (C 1.4 of Contract Data) and shall be completed and submitted to the Employer, together with a letter of Good Standing from the Compensation Commissioner (if not insured with a Licensed Compensation Insurer) within 14 (fourteen) days after the Commencement Date. The Contractor shall ensure that any letter of Good Standing shall be timeously **renewed in order that it remains in full force for the duration of the Contract**".

Clause 4.4.4:

Add the Employer's Agent to the consultation between the Employer and the Contractor.

Clause 4.9

Add the following new sub-clauses:

"4.9.2: In order to preclude seizure by the owner of any construction equipment being held by the Contractor on a hire-purchase agreement for the purposes of the contract, the Employer shall be entitled to pay any such owner the amount of any outstanding instalment or other sum owing under any hire or hire-purchase agreement and in the event of his doing so, any amount thus paid by him shall be a debt payable to the Employer by the Contractor and may be deducted by the Employer from any monies owing or that may become owing the Contractor in terms of the Contract, or be recovered at law from the Contractor by the Employer.

4.9.3: When entering into any subcontract for the execution of any part of the works, the Contractor shall incorporate in such subcontract, by reference or otherwise, the provisions of this clause in respect of construction equipment brought to the site by the Subcontractor."

Clause 5.3.1:

The Commencement Date will be the date that the site is handed over to the Contractor by the Employer's Agent/Employer.

The Contractor shall commence executing the Works **within *14 (fourteen) days*** *from the Commencement Date.*
The documentation required before commencement with Works execution is:

1) Approved Health and Safety Plan (Refer to Clause 4.3)

2) Initial programme (Refer to Clause 5.6)

3) Security or performance guarantee (Refer to Clause 6.2)

4) Insurance (Refer to Clause 8.6)

5) Occupational Health and Safety Agreement (C 1.4 of the Contract Document)

6) Letter of Good Standing from the Compensation Commissioner (if not insured with a Licensed Compensation Insurer)

Clause 5.3.2:

The Works programme is to be delivered within **7 (seven) days** of the Commencement Date
The time to deliver the Performance Guarantee; within **28 (twenty-eight) days** of Acceptance
The liability for the guarantee shall be for **10 (ten) %** of the Contract Price

The Works are to be commenced within **14 (fourteen) days** of the Commencement Date

The other documentation required before commencement with Works execution is **28 (twenty-eight) days**

Clause 5.3.3:

Add the following clause after Clause 5.3.3:

"5.3.4: The Contractor shall commence executing the Works within ***14 (fourteen) days*** from the Commencement Date.

The Commencement Date will be the date when all of the following takes place:
1) Site Handover to the Contractor
2) The Completion of the Form of Offer and Acceptance
3) The above will take place within **7 (seven) days** of the issue of the Letter of Acceptance".

Clause 5.4:

Clause 5.4.2:

Access to and possession of Site shall not be exclusive to the Contractor insofar as the provisions of Clause 4.8 apply, and where on-going use by the general public is required.

Add the following sub-clause:

"5.4.4 The Contractor shall bear all costs and charges for special and temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional facilities outside the Site required by him for purposes of the Works."

Clause 5.8.1:

The non-working days are *usually Sundays.*

The special non-working days are:

1. *Public holidays and the official Builder's Holiday (Year End Break).*
   The year-end break commencing on 15 December 2016 and ending on 09 January 2017 and similar dates in the following year end break.

Clause 5.9.1:

Add the following paragraph:

"All additional copies, whether provided by the Employer's Agent or reproduced by the Contractor, shall be to the Contractor's account."

Clause 5.11.4:

Add the following after "Contractor," and before "the Contractor: in the third line:

"5.11.4 "or by reason of any Contractor executing construction work, which is not in accordance with the Contractor's Health and Safety Plan for the site or which poses a threat to the health and safety of persons"

Clause 5.12.2.2:

No extension of time will be granted in respect of any delays attributed to normal climatic conditions. Normal climatic conditions shall be deemed to include normal rainfall and associated wet conditions and materials, strong winds and extremes of temperature. However, in the event that delays to critical activities exceed the number of working days listed in the Project Specifications for each month, then abnormal climatic conditions shall be deemed to exist and an extension of time may be claimed in accordance with the provisions of Clause 5.12.

The number of days quoted under the Project Specifications shall be regarded as a fair estimate of the delays to be anticipated and allowed for under normal climatic conditions where inclement weather prevents or disrupts critical work.

Claims for delays for abnormal climatic conditions shall be accompanied by substantiating facts and evidence, which shall be submitted timeously as each day or half-day is experienced.

Should an extension of time be granted by the Employer's Agent, such extension of time will be added to the time for completion or set against any over-provision that may have occurred in the abovementioned Schedule.

It shall further be noted that where the critical path is not affected, no extension of time for **abnormal** climatic conditions or for any other reason will be entertained.

See also C 3.3.3.5.10.

Clause 5.13.1:

The penalty for failing to complete the Works is ***R 1000-00 (One Thousand Rand)*** *per calendar day of delay.*

Clause 5.14.4:

Add the following at the end of this sub-clause:

"However, a Certificate of Completion will not be issued before the Contractor hands over a consolidated Health and Safety file that shall include all the specified information, as well as all "Record" information as required by the Employer's Agent."

Clause 5.16.3:

The latent defect period is *10 (ten) years.*

Clause 6.2.1:

The security to be provided by the Contractor shall be a performance guarantee of 10 (ten) % of the Contract Sum. The performance guarantee shall contain the wording of the document included in C 1.3.

Clause 6.2.2:

Delete Clause 6.2.2 in its entirety.

Clause 6.2.3:

Delete Clause 6.2.3 in its entirety and replace with the following:

"The Contractor shall ensure that the performance guarantee remains valid and enforceable until the Certificate of Completion of the Works is issued."

Clause 6.3:

Add the following sub-clause:

"6.3.3.1: The Fixed Price will be fixed as tendered, irrespective of the percentage variation."

Clause 6.6:

*In the second line of sub-clause 6.6.1.2, after the words "*sum or sums" *insert the words* "excluding VAT."
*In the first line of sub-clause 6.6.1.2.1, after the words "*sum or sums" *insert the words* "excluding VAT."
*In the second line of sub-clause 6.6.1.2.2, after the word "*sum" *insert the words* "excluding VAT." *In the fourth line of sub-clause 6.6.2, after the word "*price" *insert the words* "excluding VAT."

Clause 6.7.1:

Refer to sub-clause 1.1.1.26 and C 3.3.6.13.

Clause 6.8.2:

Add the following to Clause 6.8.2:

"The tendered Fixed Price shall **not be** subject to contract price adjustments in accordance with Clause 6.8 of the General Conditions of Contract.

If special materials are specified in Part 2 of the Contract Data then the provisions of Clause 6.8.3 of the General Conditions of Contract shall apply to such special materials."

Clause 6.8.4:

Add the following to Clause 6.8.4:

"Notwithstanding the above, in the event that a public holiday is proclaimed after 28 (twenty-eight) days before the closing date for tenders, no cost other than those that can be claimed under Clause 5.12.3 shall be added to the contract price."

Clause 6.10.1.5:

The percentage advance on materials not yet built into the Permanent Works is *80 (eighty) %.* See also Clause C 3.3.5.7.

Clause 6.10.2:

Replace the second sentence (commencing "The valuation of such materials …….") with the following:

"The valuation of such materials shall be based on the purchase price and delivery cost reflected by the relevant invoices or receipts, exclusive of Value Added Tax and discounts to the Contractor and inclusive of any other duties payable on such material. (Value Added Tax will be added only to the nett amount certified by the Employer's Agent as payable to the Contractor in respect of each Payment Certificate, as provided for in sub-clause 6.10.1;"

Add the following:

"Payment to the Contractor for any materials on site shall only be authorised after proof of ownership by the Contractor has been lodged with the Employer's Agent in the form of receipted invoices or other acceptable documents."

Clause 6.10.3:

Interim payments to the Contractors shall be subject to retention by the Employer of an amount of **5 (five) %** of the said amounts due to the Contractor. The limit of retention money is **5 (five) %** of the Contract Price, including allowances for contingencies and Contract Price Adjustment. A guarantee in lieu of retention is **not** permitted for the latent defects period.

Clause 6.10.4:

Add the following to Clause 6.10.4:

"Furthermore, payment shall be subject to the Employer being in possession of an original valid Tax Clearance Certificate at the time payment is due (it is the responsibility of the Contractor to submit an updated original Tax Clearance Certificate to the Employer) should any current certificate expire during the contract period.

Notwithstanding anything above, the Employer's Agent shall be empowered to withhold the delivery of the payment certificate until the Contractor has complied with his obligations to report in terms of Clause 4.10.2 and as described in the Scope of Work."

Clause 6.11:

For the purpose of this Tender Abovementioned Clause shall change so that 15 (fifteen) % reads
100 (one hundred) %.

Clause 7.2.1:

Add the following to this sub-clause:

"The onus rests with the Contractor to produce work which conforms in quality and accuracy of detail to all the requirements of the specifications and drawings, and the Contractor shall, at his own expense, institute a quality-control system and provide experienced personnel, together with all transport, instruments and equipment, to ensure adequate supervision and positive control of the works at all times."

Clause 7.4.1

Add the following to this sub-clause:

"The Contractor shall conduct tests or have them conducted continually on a regular basis, to check the properties of natural materials and processed natural materials and of products manufactured on site, such as concrete and asphalt. Although not a requirement for the Contractor to conduct regular tests on any commercially produced products such as cement, bitumen, steel and pipes, the Contractor shall remain fully responsible for any defective material or equipment provided by him.

Similarly, the quality of all elements of the works shall be checked on a regular basis so as to ensure compliance with the specified requirements.

The intensity of control and of tests to be conducted by the Contractor in terms of these obligations is not specified but shall be adequate to ensure that proper control is being exercised to the satisfaction of the Employer's Agent.

Where any natural materials or products made from natural materials are supplied, upon completion of each element of the construction works, the Contractor shall test and check such materials, products and or elements for compliance with the specified requirements and shall submit his results to the Employer's Agent for approval. Such submission shall include all his measurements and test results and shall furnish adequate proof of compliance with the specified requirements."

Clause 7.6.3.3

Add the following new sub-clause:
"To stop any Contractor from executing construction work, which is not in accordance with, the Contractor's Health and Safety Plan for the site or which poses a threat to the health and safety of persons and to implement the required health and safety measures before continuing."

Clause 8.4.1.1:

Delete and replace with the following:

"… hereby indemnifies the Employer, the Employer's Agent and all consultants against any liability in respect of damage to or physical loss of the property of any person, including any Employee of the Contractor, or injury to or death of any person, including any employee of the Contractor and"

Clause 8.6:

Clause 8.6.1.1.2:

The value of Plant and Materials supplied by the Employer to be included in the insurance sum is *R0-00 (Nil Rand).*

Clause 8.6.1.1.3:

The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is **10% of the tendered amount.**

Clause 8.6.1.3:

The limit of indemnity for liability insurance is *R 10 000 000-00 (Ten Million Rand).*

Clause 8.6.1.5:

In addition to the insurances required in terms of the General Conditions of Contract Clauses 8.6.1.1 to 8.6.1.4, the following insurance is also required:

1 Insurance of Construction Equipment (including tools, offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient for their replacement.

2 Insurance in terms of the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993.

3 Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability indemnity.

4 Where the contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the Site, the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication then such interest shall be noted by endorsement to the Contractor's Policies of Insurance.

Clause 8.6.6:

The evidence that the insurances have been effected in terms of Clause 8.6.1, shall be in the form of an Insurance Broker's Warranty, worded precisely as given in Part C 1.6 "Insurance Broker's Warranty".

Clause 8.6.8:

Add the following new sub-clause 8.6.8:
"Where the contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the Site, the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication then such interest shall be noted by endorsement to the Contractor's Policies of insurance."

Clause 9.2.1:

Add the following new sub-clause 9.2.1.3.9, 9.2.1.3.10, 9.2.1.3.11 and 9.2.1.3.12:

"9.2.1.3.9: The Contractor committed a corrupt or fraudulent act during the procurement process or execution of the contract. "

"9.2.1.3.10 An official or other role player committed any corrupt or fraudulent act during the procurement Process or in the execution of the contract that benefitted the Contractor."

"9.2.1.3.11 The Contractor fails to provide the required Guarantee and insurances within the prescribed time."

"9.2.1.3.12 Has failed to execute construction work in accordance with the Contractor's Health and Safety Plan or with a threat to the health and safety of persons within 14 (fourteen) days after receiving from the Employer's Agent written notice of the same."

Clause 10.1.6

Add the following sub-clause:

"Early warning – A Party shall notify the other as soon as he is aware of any circumstance which may delay or disrupt the Works, or which may give rise to a claim for additional payment. The Contractor shall take all reasonable steps to minimise these effects.

The Contractor's entitlement to extension of the Time for Completion or additional payment shall be limited to the time and payment which would have been due if he had given prompt notice and had taken all reasonable steps."

ADDITIONAL CONDITIONS OF CONTRACT

Add the following new clause after Clause 10:

Clause 11: Details to be confidential

The Contractor shall treat the details of the Works comprised in this Contract as private and confidential (save in so far as may be necessary for the purposes hereof) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper elsewhere without prior written consent from the Engineer.

PART 2:

DATA PROVIDED BY THE TENDERER

PART 2: DATA PROVIDED BY THE TENDERER

Clause 1.1.1.9:

The name of the Contractor is ……..……

Clause 1.2.1.2:

The address of the Contractor is:

Physical address: ……..

……

…….. ……

Postal address: …….....

E-mail address: ……..…….

Fax number: ……..……..

Contact person: ……..…….

Cell No.: ……..……

Clause 1.1.1.14:

The time for achieving Practical Completion is: …… weeks from the Commencement Date.

In determining their Tender Period, Tenderers must take cognisance of Construction Regulations, 2014, Clause 3 (1), as applicable.

SIGNED ON BEHALF OF THE TENDERER: ……...

DATE: ……

C 1.3:

FORM OF GUARANTEE

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

C 1.3: PERFORMANCE GUARANTEE FROM AN APPROVED FINANCIAL INSTITUTION

For use with the General Conditions of Contract for Construction Works, Second Edition, 2010.

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means: .....

Physical address: ....

"Employer" means: CoGHSTA

"Contractor" means: ……..

"Engineer" means: KMSD ENGINEERING CONSULTANTS (PTY) LTD.

"Works" means: TENDER NO. NC/07/2021: CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

"Site" means: The site as defined in Clause 1.1.1.29 of the General Conditions of Contract.....

"Contract" means: The agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

"Contract Sum" means: The accepted amount exclusive of tax of R ……..

Amount in words: ……..

"Guaranteed Sum" means: The maximum aggregate amount of R .....

Amount in words: .....

"Expiry Date" means: The date of issue by the Engineer of the Certificate of Completion of the Works

CONTRACT DETAILS

Engineer issues: Interim Payment Certificates, Final Payment Certificates and the Certificate of Completion of the Works as defined in the Contract.

PERFORMANCE GUARANTEE

i) The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.

ii) The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever comes first. The Engineer and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

iii) The Guarantor hereby acknowledges that:

3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a surety ship;

3.2 its obligation under this Performance Guarantee is restricted to the payment of money.

iv) Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:

4.1A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Engineer in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;

4.2A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;

4.3A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.

v) Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:

5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or

5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; or

5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.

vi) It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.

vii) Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.

viii) The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.

ix) The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.

x) This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.

xi) This Performance Guarantee, with the required demand notices in terms of 4 and 5, shall be regarded as a liquid document for the purposes of obtaining a court order.

xii) Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No. 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

SIGNED AT: …….

DATE: ……

GUARANTOR'S SIGNATORY (1): ……

CAPACITY: ……..

GUARANTOR'S SIGNATORY (2): …….

CAPACITY: …….

WITNESS SIGNATORY (1): ……

WITNESS SIGNATORY (2): ……

iv) 1.4:

OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

C 1.4: OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

AGREEMENT MADE AND ENTERED INTO BETWEEN CoGHSTA (HEREINAFTER CALLED THE "EMPLOYER") AND

……

(Contractor / Mandatary / Company / CC Name)

IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, ACT NO. 85 OF 1993 AS AMENDED

I,.....

, representing

....., as an employee in its own right, do hereby undertake to ensure, as far as is reasonably practicable, that all work will be performed, and all equipment, machinery or plant used in such a manner as to comply with the provisions of the Occupational Health and Safety Act (OHSA) and the Regulations promulgated there under.

I furthermore confirm that I am/we are registered with the Compensation Commissioner and that all registration and assessment monies due to the Compensation Commissioner have been fully paid or that I/we are insured with an approved licensed Compensation Insurer.

COID Act Registration Number:

.....

OR Compensation Insurer: .... Policy No.: .....

I undertake to appoint, where required, suitable competent persons, in writing, in terms of the requirements of OHSA and the Regulations and to charge him/them with the duty of ensuring that the provisions of OHSA and Regulations as well as the Council's Special Conditions of Contract, Way Leave, Lock-Out and Work Permit Procedures are adhered to as far as reasonably practicable.

I further undertake to ensure that any Sub-Contractors employed by me will enter into an occupational health and safety agreement separately, and that such Sub-Contractors comply with the conditions set.

I hereby declare that I have read and understand the appended Occupational Health and Safety Conditions undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specifications and Plan.

Signed at …….. on the …… day of ……. 2016.

WITNESS: ……

MANDATARY: ……

Signed at …….. on the …… day of ……. 2016.

WITNESS: ……

For and on behalf of COGHSTA: ……

OCCUPATIONAL HEALTH AND SAFETY CONDITIONS

a) The Chief Executive Officer of the Contractor shall assume the responsibility in terms of Section 16(1) of the Occupational Health and Safety Act (as amended). Should the Contractor assign any duty in terms of Section 16(2), a copy of such assignment shall immediately be provided to the representative of the Employer as defined in the Contract.

b) All work performed on the Employer's premises shall be performed under the supervision of the Construction Supervisor who understands the hazards associated with any work that the Contractor performs on the site in terms of Construction Regulations 2014.

c) The Contractor shall appoint a Competent Person who shall be trained on any occupational health and safety aspect pertaining to them or to the work that is to be performed.

d) The Contractor shall ensure that he familiarizes himself with the requirements of the Occupational Health and Safety Act and that he, his employees, and any Sub-Contractors, comply with them.

e) Discipline in the interests of occupational health and safety shall be strictly enforced.

f) Personal protective equipment shall be issued by the Contractor as required and shall be worn at all times where necessary.

g) Written safe work procedures and appropriate precautionary measures shall be available and enforced, and all employees shall be made conversant with the contents of these practices.

h) No substandard equipment / machinery / articles or substances shall be used on the site.

i) All incidents referred to in terms of Section 24 of the Occupational Health and Safety Act shall be reported by the Contractor to the Department of Labour and the Employer.

j) The Employer hereby obtains an interest in the issue of any formal inquiry conducted in terms of Section 32 of the Occupational Health and Safety Act and into any incident involving a Contractor and /or his employees and/or his Sub-Contractors.

No use shall be made of any of the Employer's machinery / plant/ equipment /substance/ personal protective equipment or any other article without prior arrangement and written approval.

No alcohol or any other intoxicating substance shall be allowed on the site. Any person suspected of being under the influence of alcohol or any other intoxicating substance shall not be permitted access to, or allowed to remain on the site.

Prior to commencement of any work, verified copies of all documents mentioned in the agreement, must be presented to the Employer.

1.5:
CONTRACT OF

TEMPORARY EMPLOYMENT AS COMMUNITY LIAISON OFFICER

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

C 1.5: CONTRACT OF TEMPORARY EMPLOYMENT AS COMMUNITY LIAISON OFFICER

Construction Contract No.: …….....

PROJECT : ……..... .....

AGREEMENT made between the CONTRACTOR .....

and the Community Liaison Officer. ..... hereafter referred to as the CLO, for the appointment and employment of a CLO for the duration of the work in respect of the **above named construction contract.**

a) THE PARTIES HAVE AGREED THAT

The CLO will be employed by the CONTRACTOR on a temporary basis for the duration of the contract to the date of practical completion as defined in the Contract, subject to all the conditions set out below.

b) THE DUTIES OF THE CLO SHALL BE:

- to keep the community informed on the progress of the project;
- to keep the Contractor informed on relevant Community affairs and possible grievances;
- to manage the recruitment of workers from the Sub-Council Job-Seekers Database;
- to assist the Contractor's supervisory staff in the management of the workers.

c) THE FOLLOWING CONDITIONS OF EMPLOYMENT SHALL APPLY:

The Conditions of Temporary Employment as applicable on this Contract for the workers recruited from the Community shall apply equally to the CLO, except that the rate of remuneration shall be R150.00 per working day. All costs pertaining to the CLO must be included in the tendered rates for contractual requirements in Preliminary & General in the Bill of Quantities. These conditions that apply are listed below as they appear in the Contract of Temporary Employment:

3.1 If required to work on a statutory public holiday or Sunday the payment will be double the amount stated in the previous paragraph.

3.2 Maximum hours of work:

a) 9¼ hours per day
b) 45 hours per week;
c) 5 days per week;
d) 5 hours without an interval, whereupon there shall be an interval of at least 30 minutes;
e) A spread-over period of 12 hours.

3.3 The CLO shall be entitled to payment where the CLO is prevented from working by reasons which are within the control of the Contractor.

3.4 On days when it is raining the Contractor may, before 9 a.m., decide not to open the site and there will be no pay.

If the Contractor closes the site between 9 a.m. and 1 p.m., the CLO will be paid half the daily wage.
If the site works later than 1 p.m., the CLO will be paid the full daily wage.

3.5 Workers and the CLO will not be permitted to work under conditions of:

a) abuse of intoxicating substances;
(b) criminal actions by the employee;
(c) strike action or political stayaways.

3.6 Workers, including the CLO, may be dismissed after 2 official written warnings for the following behavior:

(d) undisciplined or unruly behavior;

(e) insubordination to Team Leader, Supervisors or Management;
(f) abuse of intoxicating substances;

(g) willful or negligent damage to or loss of machines or equipment.

The Contractor shall ensure that he has statements from at least 2 witnesses' concern-ing any of the above situations.

The Contractor shall inform the CLO within 24 hours of any warning issued to workers employed from the Job-Seekers Database.

3.7 The CLO will be paid on a Friday afternoon every 2 weeks, 1 week in arrears**.**

3.8 The CLO shall be given a statement with each payment on which is recorded:

The name of the Contractor;

a) the CLO's name;
b) the number of days worked by the CLO;
c) the rate per day;
d) the details of any deductions made;
e) the actual amount paid to the CLO.

3.9 No deduction shall be made from the remuneration except where the CLO consents in writing or unless the Contractor is permitted or required to do so by law or the order of any competent court.

3.10 The CLO shall be supplied free of charge with all health and safety equipment required by the Occupation Health and Safety Act. The equipment shall remain the property of the Contractor.

3.11 The Contractor must give the CLO at least 1 weeks' notice of the termination of the Contract of Temporary Employment. If this is not done, the CLO must be paid earnings for 5 days. This condition does not apply if the CLO is dismissed.

3.12 At the end of the period of temporary employment, the Contractor shall provide a Certificate of Service recording the Contractor's name, the CLO's name and address, the period of service, the type of work on which the CLO was engaged and the rate of remuneration on termination.

a) TERMINATION OF AGREEMENT

4.1 If the CLO can no longer perform and execute his/her duties as detailed in this agreement, this agreement will be terminated without prejudice to any rights under this agreement.

b) THE CONDITIONS OF THIS AGREEMENT

5.1 The parties expressly declare that this agreement contains all the conditions negotiated between them, and no condition or stipulation not contained herein shall be binding upon the parties.

THUS AGREED AND SIGNED BY THE PARTIES:

CONTRACTOR: ……

COMMUNITY LIAISON OFFICER: ……

DATE: ……

PART C 2:

PRICING DATA

C 2.1	**Pricing Instructions**	**C 2 - 1**
C 2.2	**Calculation of Tender Price**	**C 2 - 20**

(A)2.1:

PRICING INSTRUCTIONS

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

C 2.1 PRICING INSTRUCTIONS

a) Pricing Instructions means the criteria as set out below, read together with all parts of this Contract document, which will be assumed in the contract that the Tenderer has taken into account when developing his prices.

b) The work scheduled below is described in more detail in the specifications and drawings. Where certain items are referred to the General Conditions of Contract or Specification or a certain drawing number for more information, the Tenderer is referred to the complete General Conditions of Contract, Specification and Drawings and it must not be presumed that the references are complete.

c) Arithmetical errors will be corrected by assuming the amount per Item as correct. The tendered Fixed Price will be corrected accordingly if there are arithmetical errors.

d) The price quoted shall be assumed **the all-inclusive price** for the work to be executed.

(e) The prices as tendered in the Calculation of Tender Sum (Fixed Price) shall be taken as being valid for the full duration of the Tender, unless otherwise stated in C 1.2: Contract Data: Part 1: Clause 6.8.2 of this Tender Document.

(f) No deviation that may be requested by the Tenderer from the above, or from the General Conditions of Contract, Specification, Calculation of Tender Sum (Fixed Price), Tender form and Conditions, shall be considered, unless clearly indicated in Part 2: Returnable Documents: Schedule 10 of this Tender Document when the Tender Document is submitted.

(g) The costs to comply with all the conditions, obligations and liabilities and as described in the General Conditions of Contract and Specifications, shall be assumed as being all inclusive in this Calculation of Tender Sum (Fixed Price), except if indicated differently in Part 2: Returnable Documents: Schedule 10 of this Tender Document.

(h) The Calculation of Tender Sum (Fixed Price) must be completed in **BLACK INK** and must not be removed from the bound set of documents. Only the Calculation of Tender Sum (Fixed Price) as bound into this document may be used. **Nothing else** will be accepted. Deviation from this will render the Tender as invalid.

(i) **No** correction fluid may be used.

(j) The price quoted in the Calculation of Tender Sum (Fixed Price) shall be in Rand and whole cents. Fractions of a cent shall be discarded.

(k) In this document SABS will mean SANS and vice versa.

(l) Measurements for Certificates of Payment will be in accordance to C 3.3.3.6.

(B)2.2:
CALCULATION OF TENDER PRICE

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

C 2.2 CALCULATION OF TENDER SUM (FIXED PRICE)

NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	**SABS 1200 A**	**SECTION 1: PRELIMINARY AND GENERAL**				
	8.3 & PSA 3.1	**FIXED CHARGE AND VALUE RELATED ITEMS**				
1.1	8.3.1	Contractual Requirements	Sum			
	PSAB 4	Facilities for Engineer (SABS 1200 AB)				
1.2		(a) Offices: 1 furnished office with cellphone and car pot as per PS 6.1 & PS 6.2	Sum			
1.3		(b) Provide survey equipment as per PSAB 2.2	Sum			
1.4		(c) 1 Nameboard as per PSAB 1.1	Sum			
	PS 5 & PS 6	Facilities for contractor				
1.5		(a) Offices and storage sheds	Sum			
1.6		(b) Workshops	Sum			
1.7		(c) Living accommodation	Sum			
1.8		(d) Ablution and equipment	Sum			
1.9		(e) Tools and equipment	Sum			
1.10		(f) Water supplies, electric power and communication	Sum			
1.11	8.3.3	Other fixed-charge obligations				
SUB-TOTAL (CARRIED FORWARD)						

NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD						
1.12	8.3.4	Remove Engineers and Contractors site establishment on completion	Sum			
	8.4.1 & PSA 3.2	**TIME-RELATED ITEMS**				
1.13	8.4.1	Contractual Requirements	Sum			
1.14	8.4.2	Operate and maintain facilities on the Site:				
1.15	8.4.2.1	Facilities for Engineer for duration of construction (SABS 1200 AB)				
1.16		(a) Offices; 1 room, etc., as for item 1.1.2 including one cellphone for the engineer	Sum			
1.17		(b) Survey assistants, materials and equipment, as per item 1.1.3	Sum			
1.18		(c) Provide a set of SABS Standardazied Specifications on site	Sum			
1.19		Facilities for contractor for duration of construction except where otherwise stated	Sum			
1.20		(a) Offices and storage sheds	Sum			
1.21		(b) Maintain and staff contractor's workshop and laboratory	Sum			
1.22		(c) Living accommodation and other expenses	Sum			
1.23		(d) Ablution and latrine facilities	Sum			
1.24		(e) Tools and equipment	Sum			
1.25		(f) Water supplies, electric power and communications	Sum			
1.26	8.4.3	Supervision	Sum			
1.27	8.4.4	Company and head office overhead costs	Sum			
SUB-TOTAL (CARRIED FORWARD)						

NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD						
1.28	8.4.5	Other time-related obligations	Sum			
	8.7	**DAYWORK (PROVISIONAL FOR UNFORSEEN EXPENSES)**				
		LABOUR (INCL. OVERHEADS, PROFIT etc.)	Sum			Rate Only
1.29		Skilled	h	8		Rate Only
1.30		Semi-skilled	h	8		Rate Only
1.31		Unskilled	h	8		Rate Only
		PLANT (INCL. OVERHEADS PROFITS etc.)				
1.32		Backactor ……CAT 320	h	8		Rate Only
1.33		Loader ……CAT 936	h	8		Rate Only
1.34		Roller ……BW 212	h	8		Rate Only
1.35		Compressor ..325 CFM plus tools	h	8		Rate Only
1.36		Portable dewatering pump.. 3"	h	8		Rate Only
1.37		Tipper truck 6 cubic metre	h	8		Rate Only
		DISRUPTION TIME (provisional)				
1.38		Allow for all costs which could be experienced as a result of disruption or standing time caused by unrest situation and general strikes in the area (including) moving of plant and materials)	day	6		Rate Only
SUB-TOTAL (CARRIED FORWARD)						

NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD						
	8.8	**TEMPORARY WORKS**				
1.39		Accommodation of traffic as per PSA4	Sum			
1.40		Providing access to properties as per PSA 5	Sum			
		COMMUNITY LIASON OFFICER	P.S		15 000	
		Contracor's handling cost and profit i.r.t. CLO	%			
	PSA 8.4.2.4	Health and Safety:				
1.41		(a) Preparation of Health and Safety plan	Sum			
1.42		(b) Health and Safety training	Sum			
1.43		(c) Personal protective clothing and equipment	Sum			
1.44		(d) Fences, signs and barricades	Sum			
1.45		(e) Establishment of safety administration	Sum			
1.46		(f) Other Health and Safety Obligations	Sum			
	PSA 8.6	Prime cost items				
1.47		(**a) Additional quality control tests by** approved laboratory instructed by Engineer (Test not conforming to standards shall not be re-imbursed)	Sum			
1.48		(b) Contractor's handling costs, profit and other charges in respect of item (a) above	%			
SUB-TOTAL (CARRIED FORWARD TO SUMMARY)						

NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2	**SANS 1200 C**	**SECTION 2: SITE CLEARANCE**				
2.1		**CLEAR SITE**				
2.1.1	8.2.1	Clear and grub area	ha	1		
	8.2.2	Remove and grub large trees and tree stumps of girth				
2.1.2		a) Over 1m and up to 2m	No.	2		
2.1.3		b) Over 2m and up to 3m	No.	1		
2.1.4	8.2.5	Take down existing fences	km	1		
	8.2.7	Remove and re-install existing services where applicable:				
2.1.5		a) Water pipes	m	100		Rate Only
2.1.6		b) Sewer pipes	m	100		Rate Only
2.1.7		c) Eskom/ Telkom Cables	No.	2		Rate Only
	8.2.9	Transport material and debris to unspecified site and dump	m3.km	3300		
	8.2.10	Remove topsoil to nominal depth of 150mm and stockpile	m^3	1500		
	8.2.11	Hand excavation for the detection, exposure and protection of existing services	m^3	300		
SUB-TOTAL (CARRIED FORWARD TO SUMMARY)						

NO.	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3	**SANS 1200 DB**	**SECTION 3: EARTHWORKS (PIPE TRENCHES)**				
3.1	8.3.2	**EXCAVATION**				
	a)	Excavate in all materials for trenches, backfill, compact and dispose of surplus material within the freehaul distance, for trenches up to 315mm diameter pipes for depths of:				
3.1.1		1) Over 0.0m and up to 1.5m	m^3	800		
3.1.2		2) Over 1.5m and up to 2.5m	m^3	500		
3.1.3		3) Over 2.5m and up to 3.5m	m^3	400		
3.1.4		4) Over and above 3.5m	m^3	200		
	b)	Extra over item				
3.1.5		1) Intermediate excavation	m^3	350		
3.2.6		2) Hard rock excavation	m^3	300		
3.2	8.3.3	**EXCAVATION ANCILLARIES**				
	8.3.3.1	Make up deficiency in backfill material				
3.2.1		a) From other necessary excavations on site	m^3	1500		
3.2.2		b) By importation from designated borrow pits	m^3	250		
3.2.3		c) By importation from commercial or off-site sources selected by the contractor	m^3	250		
3.2.4	8.3.3.3	Compaction in road reserves to 93% mod AASHTO density	m^3	300		
SUB-TOTAL (CARRIED FORWARD)						

NO.	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD						
3.3		**EXISTING SERVICES**				
	8.3.5	Existing services that intersect or adjoin pipe trench excavations				
		(a) Services that intersect a trench				
3.3.1		i) Electric cables	no	3		
3.3.2		ii) Telephone/Eskom cables	no	3		
3.3.3		iii) Water main not exceeding 300mm diameter	no	2		
3.3.4		iv) Stormwater pipe not exceeding 1200mm diameter	no	3		
		(b) Services that adjoin a trench				
3.3.5		ii) Telephone cable	m	3		
3.3.6		iii) Water main not exceeding 500mm diameter	m	2		
3.3.7		vi) Stormwater pipe and Channels not exceeding 1200mm diameter	m	1		
SUB-TOTAL (CARRIED FORWARD TO SUMMARY)						

NO.	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4	**SANS 1200 L**	**SECTION 4: MEDIUM PRESSURE PIPELINES**				
4.1		**MEDIUM PRESSURE PIPES**				
	8.2.1	Supply , lay, joint, bed pipes complete with couplings				
4.1.1		a) 110mm diameter uPVC Class 16	m	500		
4.1.2		b) 250mm diameter uPVC Class 16	m	500		
		Extra-over item 8.2.1 for the supply, lay, bed, join including cutting pipes according to required lengths where necessary, test and disinfect the following for Class 16 uPVC pipes:				
4.2		**Cast Iron Equal Tees:**				
4.2.1		a) 110 mm	No.	5		
4.2.2		b) 160 mm	No.			Rate Only
4.2.3		c) 250 mm	No.			Rate Only
4.3		**Cast Iron Reducing Tees:**				
4.3.1		a) 160 mm x 110 mm	No.			Rate Only
4.3.2		b) 250 mm x 110 mm	No.	4		
4.3.3		c) 250 mm x 160 mm	No.			Rate Only
4.4		**Cast Iron Hydrant Tees (Flanges to SABS 1123 Table 10):**				
4.4.1		a) 110 mm x 75 mm	No.	2		
4.4.2		b) 90 mm x 80 mm	No.			Rate Only
4.4.3		c) 160 mm x 75 mm	No.			Rate Only
4.4.4		d) 250 mm x 75 mm	No.			Rate Only
SUB-TOTAL (CARRIED FORWARD)						

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD						
4.5		**Cast Iron Reducers Male/Female for Upvc pipes:**				
4.5.1		a) 160 mm x 90 mm	No.			Rate Only
4.5.2		b) 250 mm x 110 mm	No.	2		
4.5.3		c) 250 mm x 160 mm	No.			Rate Only
4.6		**Cast Iron End Caps:**				
4.6.1		a) 110 mm ø	No.			Rate Only
4.6.2		b) 160 mm ø	No.			Rate Only
4.7		**Cast Iron Reducers:**				
4.7.1		a) 160 mm x 110 mm	No.			Rate Only
4.7.2		b) 250 mm x 110 mm	No.	2		Rate Only
4.7.3		c) 250 mm x 160 mm	No.			Rate Only
4.8		**Cast Iron Pressure Bends:**				
4.8.1		a) 110 mm x 11,25°	No.	10		
4.8.2		b) 110 mm x 22,5°	No.	10		
4.8.3		c) 110 mm x 45°	No.	10		
4.8.4		d) 110 mm x 90°	No.	10		
4.8.5		e) 250 mm x 11,25°	No.			Rate Only
4.8.6		f) 250 mm x 22,5°	No.			Rate Only
4.9		**VALVES**				
		Supply and install socket ended Class 16 resilient seal gate valve to SABS 664 with non-rising spindle and clockwise closing for uPVC pipes:				
4.9.1		(b) 110 mm	No.	8		
4.9.2		(d) 160 mm	No.			Rate Only
4.9.3		(e) 250 mm	No.	4		
SUB-TOTAL (CARRIED FORWARD)						

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD						
4.10		**ANCILLARIES**				
		PERMANENT END CAPS				
4.10.1		Supply, deliver and install uPVC 110mm endcaps used to isolate sections to be pressure tested before acceptance .	No.	5		
4.10.3		**VALVE CHAMBERS**				
		Construct valve box for gate valves complete as specified in drawing no. 3258-CIV-DET-003	No	8		
4.10.4		**FIRE HYDRANTS**				
		Fire Hydrants. Extra over 8.2.1 for supply and install 65mm pillar hydrants with outlet 1.0 m above ground including flange to Table 1 000 SANS 1123 stand pipe painted yellow and hydrant head painted red ex factory. Inclusive of non-return valve and stop valve.	No	2		
4.10.5		**CONNECT TO EXISTING MAINS**				
		Connections to existing system complete including excavation and all specials	No	2		
4.10.6	PS 8.2.17	**HORIZONTAL DRILLING**				
		Horizontal directional drilling under roads for 110mm HDPE pipe Class 16, including excavations for entry and exit pits, pilot drilling, secondary drilling, and supplying and installation of piping.	No	2		
4.10.7		**STANDPIPES:**				
		Supply, install and test garden standpipe complete with pre-cast concrete channel 600x600x100mm as detailed in drawing no. 3258-CIV-DET-010	No	66		
4.10.8	PS 8.2.18	**WATERMETERS**				
		Complete supply and installation of Meinecke Cosmos Watermeters	No	66		
4.10.9		**ANCHOR/ THRUSTBLOCK & PEDESTAL**				
		Construct thrust blocks as specified in drawing no. 3258-CIV-DET-004.	No	15		
SUB-TOTAL (CARRIED FORWARD TO SUMMARY)						

NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5	**SANS 1200 LB**	**SECTION 5: BEDDING (PIPES)**				
	8.2.2.3	Provision of bedding from commercial sources				
5.1		a) Selected granular material	m^3	700		
5.2		b) Selected fill material	m^3	380		
SUB-TOTAL (CARRIED FORWARD TO SUMMARY)						

NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6	**SANS 1200 LF**	**SECTION 6: ERF CONNECTIONS (WATER)**				
	8.2.1	**Construct erf connections complete from any pipe diameter including excavation, bedding and backfilling**				
6.1		Long double erf connection for road reserve width up to 16 m	No.	20		
6.2		Short double erf connection	No.	46		
SUB-TOTAL (CARRIED FORWARD TO SUMMARY)						

NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
7	**SANS 1200 LD**	**SECTION 7: SEWERS**				
	8.2.1	**Supply, lay, joint, bed Class 34 uPVC pipe and test pipeline**				
7.1		a) 160mm diameter pipe	m	1000		
7.2		b) 200mm diameter pipe	m	100		
7.3	8.2.3	**MANHOLES**				
		Supply all materials and labour for the construction of concrete manholes from precast sections complete with cover and frame, including step irons, channelling, benching, grouting, Kimberley socket, short pipes, etc in the following diameter and depth categories:				
7.3.1		1 000mm dia : 0,0m - 1,5m	No.	8		
7.3.2		1 000mm dia : 1,5m - 2,0m	No.	4		
7.3.3		1 000mm dia : 2,0m - 2,5m	No.	2		
7.3.4		1 200mm dia : 2,5m - 3,0m	No.	2		
7.3.5		1 200mm dia : 3,0m - 3,5m	No.	2		
7.3.6		2 200mm dia : 3,5m - 4,0m	No.	2		
7.4	8.2.5	**RODDING EYES**				
7.4.1		Construct Rodding eyes Complete	No	70		
7.5	8.2.6	**ERF CONNECTIONS**				
7.5.1		Long Erf connection allowing for a 30m to 34m long 110mm dia. Upvc Twin Wall pipe with stiffness 400kpa, 160mm x 110mm Y-Junction on main sewer, 110mm x 45 bend and 110mm dia. x 45 degree bend abc rodding eye	No	27		
SUB-TOTAL (CARRIED FORWARD)						

NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BROUGHT FORWARD						
7.5.2		Short erf connection allowing for a 5m long Upvc Twin Wall pipe with stiffness 400KPa 160mm X 110mm Y-junction (Inspection Eye) on main sewer,110mm X 45 abc rodding eye (complete).	No	39		
7.5.3		Short erf connection allowing for a 1.5m long uPvc Twin Wall pipe with stiffness 400kpa 110mm X 110mm Y-junction (Inspection Eye) on erf sewer pipe line, and end cap and marker in concrete	No	10		
	8.2.11	Connect to existing sewer and manholes of new sewer to existing bulk sewer for depths of :				
7.5.4		2.5m to 3.0m	No	1		
7.5.5		3.5m to 4m	No	1		
7.5.6	8.2.9	**MARKER POSTS** Construct marker posts complete as per drawing no 3258-CIV-DET-004	No	10		
SUB-TOTAL (CARRIED FORWARD TO SUMMARY)						

NO.	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
8	**SANS 1200 ME**	**SECTION 8: SUBBASE**				
	8.3.1	Construct the gravel wearing course with material excavated in all materials from borrow pits				
8.1		a) 150mm G6 crushed stone material compacted to 97% mod AASHTO density	m^3	300		
	8.3.3	Construct subbase layer with material from commecial sources				
8.2		a) 150mm G6 crushed stone material compacted to 97% mod AASHTO density	m^3	300		
		Extra over item 8.3.2 for class of excavation				
8.3		a) Intermediate excavation	m^3	140		
8.4		b) Hard rock excavation	m^3	100		
SUB-TOTAL (CARRIED FORWARD TO SUMMARY)						

NO.	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
9	**SANS 1200 MF**	**SECTION 9: BASE**				
	8.3.1	Construct base material from borrow pits				
9.1		a) G5 material compacted to 93% Mod AASHTO density	m^3	300		
9.2	8.3.3	Construct base material from commercial sources	m^3	300		
	8.3.4	Extra over item 8.3.2 for class of excavation				
9.3		a) Intermediate excavation	m^3	100		
		b) Hard rock excavation	m^3	140		
SUB-TOTAL (CARRIED FORWARD TO SUMMARY)						

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

C 2.2 CALCULATION OF TENDER SUM (FIXED PRICE)

ITEMS		**AMOUNT**
SECTION 1:	PRELIMINARY AND GENERAL	
SECTION 2:	SITE CLEARANCE	
SECTION 3:	EARTHWORKS (PIPE TRENCHES)	
SECTION 4:	MEDIUM-PRESSURE PIPELINES	
SECTION 5:	BEDDING (PIPES)	
SECTION 6:	EFR CONNECTIONS (WATER)	
SECTION 7:	SEWERS	
SECTION 8:	SUBBASE	
SECTION 9:	BASE	
SUB TOTAL 1		
PLUS : 10% CONTINGENCIES (calculated on SUB TOTAL 1) *1		
SUB TOTAL 2		
PLUS : **0% VAT** (calculated on SUB TOTAL 2)		
TOTAL (CARRIED OVER TO FORM OF OFFER & FRONT PAGE)		

Note *1 : This contract can be awarded excluding Contingencies whereby this amount may only be utilized on written instruction by the engineer and approval by the client.

....

TENDERER'S SIGNATURE **DATE**

.....

ON BEHALF OF COMPANY

PART C 3:

SCOPE OF WORK

C 3.1	**Scope of Work: Part 1**	**C 3 – 1**
C 3.2	**Part 2: Project Specifications**	**C 3 - 11**
C 3.3	**Engineering Drawings**	**C 3 - 39**
C 3.4	**Management**	**C 3 - 42**
C 3.5	**Annexures**	**C 3 - 50**

STATUS:

Should any requirement or provision in the parts of the Scope of Works conflict with any requirement of any Standardised Specification, or any drawings, the order of precedence, unless otherwise specified, is:

Drawings

Scope of Work (Part C 3.1, C 3.3, C 3.4 and C 3.5)

SABS / SANS Standardised Specifications

C 3.1:

SCOPE OF THE WORKS:

PART 1

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

C 3.1: SCOPE OF WORKS: PART 1

C 3.1.1 GENERAL DESCRIPTION OF THE CONTRACT

The project entails the construction of internal water and sewer services as well as the construction of gravel streets and storm water infrastructure for Santa Centre.

A summary of the works to be executed are as follows:

a) The construction of internal water reticulation network comprising of:

- The construction of 245m of 110mm diameter uPVC Class 16 water reticulation network.
- The construction of 200m of 250mm diameter uPVC Class 16 pipe
- 66 erf connections standpipes, Sanitation Services

b) The construction of internal water-borne sewer network comprising of:

- The construction of 585m of 160mm diameter uPVC Class 34 heavy-duty pipes with associated works.
- 66 erf connections

c) The Construction of gravel streets (importation of wearing course), earth canals and drifts including the placement of road signs and street name boards.

All the work will be executed and measured according to SABS (SANS) 1200.

In additional to the above, this contract will also comprise of the following:

a) Site establishment.

b) Complying with the OHS Act.

c) Provision of a proper site office with site meeting facility.

d) Accommodation of traffic for the duration of the project.

e) Site clearance and levelling of area.

f) Detection of existing services.

g) Excavations for pipeline trenches and removal of unsuitable or surplus material to indicated spoil site.

h) Bedding, blanket and backfilling for underground pipe lines.

i) Supply and installation of 160mm diameter 400kpa PVC sewer pipes with 110mm diameter 400kpa PVC erf connections.

j) Fittings, bends and valves for above pipes as specified.

k) Testing of all water and sewer pipe lines.

l) Removal of topsoil and excavation in street prism to ±150mm below natural ground level depending on layer works thickness and stockpiling of excavated material for construction of fill in depressions.

m) Importation, lay and compaction of gravel wearing course (TRH20).

n) Excavation and compaction to cut/shape storm water channels and drifts (earth canals)

o) All tests regarding prove of densities for layers works shall be supplied by the contractor and costs for these testing shall be deemed to be included in the tendered rates of the items.

p) Cleaning and tidying up of site.

Please take notice that all transportation of personnel or labour shall be done by a licensed vehicle with seats and seat belts for all the occupants.

C 3.1.2 DESCRIPTION OF THE SITE AND ACCESS

The site is situated within the inner municipal boundaries of Kimberley. Access to the site will be via existing surfaced or gravel roads. The exact location of the site will be pointed out during the site clarification meeting.

Where existing roads and accesses are not sufficient for construction purposes, the Contractor will have to construct his own accesses to meet his needs and repair it, to the satisfaction of the Engineer, after completion of the Contract.

Due to the fact that the works will be executed in residential areas, the Contractor will ensure that his work does not inconvenience the residents. Work will only be executed during normal working hours from Monday to Friday.

Where the construction takes place within existing road reserves, the Contractor will at all times ensure safe passage to vehicles and/or pedestrians.

Where only half of the carriageway is accessible to vehicular traffic, sufficient flagmen, signs, etc. will be provided to safely regulate the traffic. Site traffic management must comply with SA Road Traffic Signs Manual, Chapter 13.

C 3.1.3 NATURE OF SOIL AND UNDERGROUND SOIL CONDITIONS

There are areas, underlain by either fill or residual soil, where excavation conditions can be categorized as 'soft mechanical excavation' according to SANS 1200D "Classification of material for machine excavation". The areas with overburdens extend to minimum depths of about 0.20m and maximum depth of about 0.8m below ground level. Nevertheless, there are some areas whereby bedrock is exposed on ground surface and therefore rendering "hard mechanical excavation. It is therefore safe to anticipate "hard mechanical excavation" at any instance throughout the site because of undulating bedrocks at shallow depth. Soil conditions will be pointed out on the day of the site inspection, but it remains the contractor's responsibility to familiarize himself of the conditions as detailed in the geotechnical report attached in Section C.4.

C 3.1.4 DRAWINGS

The drawings attached in this document are only for tender purposes. Final construction drawings will be issued to the successful contractor at commencement of the project.

C 3.1.5 CONSTRUCTION PROGRAMME

The Contractor must program his work in such a way that no construction is to be done during the December and/or Easter Weekend break as set out in the Contract Data. The Contractor has to complete a preliminary construction program attached to the tender document. The construction program has to be revised within 21 days after the acceptance of his tender. Consultation between the appointed Contractor, the Engineer and the workforce will be required before finalizing the program.

C 3.1.6 SITE FACILITIES AVAILABLE

C 3.1.6.1 WATER SUPPLY

Water is available in the immediate vicinity of the sites but the Contractor has to make the necessary arrangements with Sol Plaatje Municipality regarding points of extraction and costs.

C 3.1.6.2 ELECTRICITY SUPPLY

The Contractor will have to make his own arrangements regarding electricity if needed.

C 3.1.6.3 LOCATION OF CAMP AND DEPOTS

The contractor has to arrange with Sol Plaatje Municipality for an appropriate site that can be used for the Contractor's site office and camp.

C 3.1.6.4 HEALTH & SAFETY

The contractor has to make the necessary arrangements to comply with the Occupational Health and Safety Act. This includes all the registrations required and the appointment of a qualified safety officer on site.

C 3.1.6.5 LOCATION OF CAMP AND DEPOTS

The contractor has to arrange with Sol Plaatje Municipality for an appropriate site that can be used for the Contractor's site office and camp.

C 3.1.6.6 LOCATION OF CAMP AND DEPOTS

The contractor has to arrange with Sol Plaatje Municipality for an appropriate site that can be used for the Contractor's site office and camp.

C 3.1.7 **SITE FACILITIES REQUIRED**

C 3.1.7.1 ENGINEERS OFFICE

A separate office for the Engineer will not be necessary.

C 3.1.7.2 SANITATION AND FIRST AID

The Contractor shall provide and maintain adequate sanitation and first aid for his work force. These facilities shall comply with the requirements of the Local Authority and must be accessible from all points of construction.

C 3.1.7.3 TELEPHONE

A site telephone will not be required by the engineer but the contractor must be available 24/7 on his cell phone for the duration of the contract. The time related tender rate for the contractor's telephone shall include for official calls made by/to the Engineer.

C 3.1.7.4 HOUSING FOR THE CONTRACTOR'S EMPLOYEES

The contractor shall make his own arrangements with regards to the housing of his employees since no housing is available. The transporting of the contractor's employees to the site is his own responsibility. No extension of time as a result of mismanagement of afore mentioned will be granted.

C 3.1.8 **FEATURES REQUIRING SPECIAL ATTENTION**

C 3.1.8.1 EXISTING SERVICES

It may be possible to cross existing water, sewer, electrical and Telkom services during construction of possible pipeline routes. The Contractor must liaise with all services owners before any excavation begins, as the responsibility remains with the Contractor to detect and protect the existing services.

C 3.1.8.2 BORROW PITS

There are no borrow pits available for street pavement layers. Class G5 material is available from commercial sources and the contractor must supply proof of correct class of material imported to the site.

C 3.1.8.3 SURVEY BEACONS

The Contractor will be held responsible for the cost of replacing, by a registered land surveyor, any boundary pegs or survey beacons which have been disturbed during his operations on site. Where the displacement of a peg is unavoidable, approval must be obtained from the Engineer stating that the disturbance is necessary. The contract will include a once off resurvey/replacement of all pegs on site.

C 3.1.8.4 SITE CLEARING

The construction site shall be neatly finished off and left without any rubble. Payment will be withheld if the engineer or client is not satisfied with the site clearing at the end of the project.

C 3.1.8.5 WATER FOR CONSTRUCTION PURPOSES

Water for construction purposes must be arranged with Sol Plaatje Municipality.

C 3.1.8.6 SAFETY REGULATIONS

The Occupational Health and Safety Act (Act 85 of 1993) will substitute the “Factories, Machinery and Building Work Act (Act 22 of 1941) and the “Machinery and Occupational Safety Act (Act 6 of 1983). The contractor shall apply construction methods that comply with the OHS Act.

C 3.1.8.7 EXCAVATIONS

The contractor must take note that due to the sandy soil in some parts of the area where construction will take place, the side walls of trenches and other excavations might collapse. No additional payment will be made for this widening of trenches and the contractor must allow for it in the normal excavation rates in the bill of quantities. The contractor must also allow for over breakage in rock excavations in the normal excavations rates.

C 3.1.8.8 “AS BUILT” DRAWINGS AND COMPLETION OF COMMISSIONING FORMS

The contractor shall keep full records of all deviations and amendments to the construction drawings handed over to him at the commencement of the project. The completion payment certificate will only be issued to the client when the engineer has received the said drawings. Commissioning forms of all mechanical and electrical work must be ticked and completed during commissioning and submitted to the engineer for inclusion in the as built data.

C 3.1.8.9 SITE INSTRUCTION BOOK

A site instruction book in triplicate format will be provided by the contractor free of charge.

C 3.1.8.10 BLASTING ON SITE

Any blasting on site shall be conducted by a competent registered blaster. No blasting shall take place after 17:00 or over weekends.

C 3.1.8.11 ACCESS FOR OTHER CONTRACTORS

Not applicable.

C 3.1.8.12 NOTICE FOR SITE INSPECTIONS

Requests for site inspections shall be arranged with the engineer 72 hours in advance.

C 3.1.8.13 COSTS FOR LABORATORY TESTS

The contractor shall make provision in his rates for all tests required to construct the required work with the prescribed specifications. It is the responsibility of the contractor to prove to the engineer by means of the necessary tests that the work constructed conforms to the required specifications.

C 3.1.8.14 DAILY RECORDS

The contractor shall keep a daily record of all site activities including weather, personnel, plant and any other aspects deemed to be of value to contract.

C 3.1.8.15 PAYMENT CERTIFICATES

Payment certificates will be prepared in accordance with Clause 49 of the General Conditions of Contract for Construction Works (2010).

C 3.1.8.16 RECORDING OF RAIN DAYS

The contractor shall provide and erect a rain-gauge for the purpose of recording any rainy periods on site during the construction period. The contractor shall record all rain days which may affect the construction period in terms of Clause 6 of the General Conditions of Contract for Construction Works (2010). Abnormal weather (rainfall and wet conditions) in terms of Clause 5 of the General Conditions of Contract for Construction Works (2010) shall be calculated according to the following formula :

= (Nw-Nn) + (Rw-Rn)/X Where

	=	Extension of time for calendar days of the calendar month concerned. If the value of V is negative and the absolute value thereof is greater than Nn, V is taken as negative Nn.
Nw	=	Actual number of days during calendar month of construction on which a rainfall of Y mm or more is recorded.
Nn	=	Average number of days in the calendar month concerned on which a rainfall of Y mm or more is recorded in terms of existing rainfall.
Rw	=	Actual rainfall for the calendar month concerned in mm.
Rn	=	Average rainfall for the calendar month in mm deduced from existing rainfall data.

For the purpose of this contract the values, Nn, Rn, X and Y will be the following:

Rainfall Station: Kimberley

Average Rainfall: 412.7 mm per year

Average No of Days with Rainfall exceeding 10 mm: 2.7 days / year

MONTH	Nn	Rn
January	1.7	59.3
February	2.0	60.9
March	2.1	73.1
April	1.6	41.4
May	0.5	17.8
June	0.2	7.0
July	0.2	6.5
August	0.2	8.0
September	0.2	13.5
October	0.9	32.1
November	1.5	41.6
December	1.6	51.5
TOTAL	12.7	412.7

X = 20 Y = 10

The total extension of time is the algebraic sum of the monthly totals for the period concerned. Extension of time for parts of a month shall be calculated by using pro rata values of Nn and Rn. If the algebraic sum of the monthly totals is negative, no reduction of the time for completion as a result of rainfall shall be applicable.

This formula does not take any delays as a result of flood damage which may cause further or simultaneous delays into consideration and flood damage shall be treated separately for purposes of extension of time for completion.

The factor (Nw – Nn) is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall exceeds Y mm. The factor (Rw – Rn)/X is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall does not exceed Y mm, but on which wet conditions will hamper or disrupt work.

C 3.1.9 LABOUR

C 3.1.9.1 CONTRACTS WITH LABOURERS

The contractor will enter into employment contracts with all labourers to be employed during the construction period of this project.

C 3.1.9.2 WAGE RATES

Wage rates for labourers will be paid in accordance with the latest Government Gazette for the Northern Cape Province. The current rate is R29.37/hour for a normal 9 hours working day.

C 3.1.9.3 PROJECT LIAISON OFFICER (PLO)

A project liaison officer (PLO) will be appointed on a full time basis for the duration of the project in order to facilitate, inter alia, the smooth proceeding of the employment of local labour. The PLO will be the link between contractor and labourers. The PLO will be identified by the Sol Plaatje Municipality but will be paid out of the project. The wages for the PLO shall be R4 850.00/month for an average 9 hour working day.

C 3.1.9.4 LABOUR INTENSIVE CONSTRUCTION ACTIVITIES

The following activities where applicable shall be carried out using Labour Intensive Construction (LIC) methods:

a) Preparation of bedding and blanket
b) Laying of all pipes with a diameter of less than 355mm
c) Installation of all fittings and accessories (valves etc) to pipes
d) Mixing and placing of concrete for small concrete works (i.e. thrust blocks)
e) Building of manholes and benching
f) Finishing and cleaning of site
g) Other activities that by their nature are usually done by labour intensive construction methods.

The Contractor is encouraged to add activities to the above list but he shall ensure that the specified standards of construction will be achieved.

Although it is the intention that the above activities be carried out by labour intensive construction methods the Contractor may propose to the Engineer alternative ways in which the work is to be executed. The Engineer's approval of these alternative methods will not be unreasonably withheld from the Contractor.

C 3.1.9.5 EMPLOYMENT OF LOCAL LABOUR

C 3.1.9.5.1 QUANTUM OF KEY PERSONNEL

The Contractor must submit the description and numbers of his key-personnel that he will bring onto Site in a Key Personnel Schedule. Key personnel will include Foremen, Artisans, Clerks, skilled Supervisors and Operators.

C 3.1.9.5.2 QUANTUM OF LABOUR EMPLOYED

The Contractor shall submit detailed daily labour records, weekly, to the Engineer indicating respectively the numbers of permanent and temporary local employees employed on the Works, and the activities on which they were engaged.

The number of labourers stated by the Contractor in the Key Personnel Schedule shall be used by the PLO (if appointed), Engineer and Employer, in collaboration with the Contractor in the planning and programming of the Contractor's local labour requirements.

C 3.1.9.5.3 PAYMENT AND PRODUCTIVITY

Payment to the local labour force shall be made on a forth nightly basis in respect of Tasks completed during that period. Formal up to date records must be kept of all payments made to subcontractors and labourers.

In order that the project is economically viable and the employment of labour is not merely a "hand-out" to the local community, is important that payment of the labour force is linked to productivity. Increased productivity can be achieved by utilising the "Task Work" principle (see Clause C 3.1.9.7), in terms of which the Contractor will be required to reward the labour force on the basis of Tasks completed.

C 3.1.9.6 CONDITIONS OF TEMPORARY EMPLOYMENT

It is envisaged that there may not be sufficient experienced local subcontractors available to warrant tenders or quotations on the base of competitive labour rates. Equally it may prove confusing to the local labourers and therefore counterproductive for possible tenderers to bargain for lower labour rates. A rate agreed upon at tender stage, may no longer be accepted as valid by the time the Tender is awarded. For the purpose of this tender therefore, tenders are to price labour at the approved local minimum daily rate as prescribed by the Department of Labour.

The rate of payment to local labour will be based on the accepted contractual productivity levels. The Engineers Representative will monitor productivity to ensure that this principle is carried out. For labour intensive construction (LIC) activities where no production rate is applicable, the minimum rate of payment per working day specified above shall apply.

The following conditions of work shall complement the conditions of employment:

a) The Contractor shall give to a temporary employee, at the earliest possible opportunity, notice of the termination of the project and/or the requirements of that employee's participation in the project; provided that such notice.

b) The temporary employee shall, upon termination of his services, be entitled to a certificate of service showing the full names of the employer and the employee, the date of commencement, a record of training received and the date of termination of the contract.

c) Skilled labour eg. Brick layers and carpenters will be paid normal hourly rates as commonly used in the industry.

d) The Contractor must provide unemployment insurance for the local labourers.

C 3.1.9.7 TASK WORK RELATED ACTIVITIES

A task shall be determined on the basis of what an average person from the local Community could complete in a day. A Task shall be defined on the said basis with regard to the prevailing physical conditions and other regulatory conditions as specified in Clause C 3.1.9.6.

A task is a quantified activity or operation to be performed by a person/labourer in one ordinary working day. The quantification of tasks shall be based on individual employees or a group of employees.

The supply and control of hand tools and other equipment necessary to do the work, will be the responsibility of the Contractor.

	DESCRIPTION	UNIT	QUANTITY
1.	Excavation in:		
	- Soft (sandy) material		
	0 to 1,0 m deep	m^3	3,0
	0 to 1,5 m deep	m^3	2,2
2.	Backfilling: 0 to 1,5 m deep	m^3	6
3.	Brickwork to Manholes and similar (220 mm thick)	m^2	5
4.	Pipe laying, including bedding and blanket		
4.1	Sewer Pipes	m	48m/team of 8
4.2	Water Pipes	m	60m/team of 8

The activity and production rates ranges given in the schedule above, must be used only as a guideline.

C 3.1.9.8 TRAINING OF LOCAL LABOUR

C 3.1.9.8.1 IN SERVICE TRAINING OF LOCAL LABOUR

Through the core of artisans, skilled and semi-skilled personnel are required to construct, supervise and adequately control the Contract; the Contractor shall provide the necessary in-service (on-the-job) training in basic construction skills.

C 3.1.10 **QUANTITIES**

Some of the quantities in the Bill of Quantities are provisional and the Engineer retains the right to change any quantities before awarding the tender, if more accurate quantities become available. These revised quantities shall be entered into the Bill of Quantities and revised amounts calculated according to the original unit rates tendered by the Contractor.

C 3.1.11 **VALUE ADDED TAX**

The Contractor must be registered as a vendor in terms of the Law on Value Added Tax of 1991. **NOTE THAT COGHSTA DOES NOT PAY VALUE ADDED TAX.**

3.2:

PART 2:

PROJECT SPECIFICATIONS

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

C 3.2: PART 2: VARIATIONS AND ADDITIONS TO SABS 1200 STANDARDIZED SPECIFICATIONS

The following variation and additions to the SABS 1200 Standardized Specifications referred to will be valid for this contract. The prefix "PS A" indicated an amendment to SABS 1200 A; "PS C" to SABS 1200 C; etc. The numbers following these prefixes are the relevant Clause numbers in SABS 1200.

SANS 1200 A	:	1986	General
SANS 1200 AB	:	1986	Engineer's Office
SANS 1200 C	:	1980	Site Clearance (Amended 1982)
SANS 1200 D	:	1988	Earthworks (Amended 1990)
SANS 1200 DB	:	1989	Earthworks (Pipe Trenches)
SANS 1200 DM	:	1981	Earthworks (Roads, Subgrade)
SANS 1200 GA	:	1982	Concrete (Small Works)
SANS 1200 L	:	1983	Medium pressure pipelines
SANS 1200 LB	:	1983	Bedding (Pipes)
SANS 1200 LD	:	1982	Sewers
SANS 1200 LE	:	1982	Storm water Drainage
SANS 1200 LF	:	1983	Erf Connections (Water)
SANS 1200 M	:	1996	Roads (General)
SANS 1200 ME	:	1981	Sub-base
SANS 1200 MF	:	1981	Base
SANS 1200 MM	:	1984	Ancillary Roadworks

PS A PRELIMINARY AND GENERAL (SANS 1200 A)

PS A 3 MATERIALS

PS A 3.1 QUALITY OF MATERIALS

All materials used in the Works shall bear the SABS Standardised mark.

PS A 4 PLANT

The Contractor's plant for construction purposes shall be of modern design, adaptable for the purpose for which it is required, in sound condition, and ample in capacity for carrying out the Works expeditiously.

Should the Engineer be of the opinion that the plant in use is in any way unsuitable for carrying out the Works in a manner or at a rate commensurate with the requirements of the Contract, they shall have the right to call on the Contractor at any time during the progress of the works to provide additional or improved plant and tools as may be necessary to meet these requirements.

PS A 4.1 CONTRACTORS CAMP

No living accommodation for the Contractor's employees will be allowed on site. The Contractor must make his own arrangement to house his staff and transport them to and from the site. No claims for additional costs in time will be accepted in this regard.

PS A 8 MEASUREMENT AND PAYMENT

PS A 8.3 SCHEDULED FIXED CHARGE AND VALUE RELATED ITEMS

PSA 8.3.2 CONTRACTUAL REQUIREMENTS

For the purpose of this Contract, the Contractor shall supply one amount for providing sureties and insurance as described in the General Conditions of Contract and Special Conditions of Contract and as indicated in the Schedule of Quantities.

These costs must include the cost of preparation supply and maintenance for the period of the Contract and payment will be made on the first payment certificate after the respective requirements have been met.

PS A 8.4 SCHEDULED TIME-RELATED ITEMS

PS A 8.4.1 CONTRACTUAL REQUIREMENTS

PS A 8.4.2 OPERATION AND MAINTENANCE OF FACILITIES ON SITE, SUPERVISION AND OVERHEAD COST

The Contractor must allow in a lump sum for all time-related costs - related to his temporary camp, provision and maintenance of access roads, accommodation of personnel, provision of water and electricity and maintenance of name boards for the duration of the Contract.

The setting out of the Works, supervision and other overhead costs are covered by a separate Item.

This amount will be paid on a monthly basis and will be calculated as a pro rata amount by dividing the monthly certificate amount by the total contract amount and multiplying it with the total amount provided for these items in the Schedule of Quantities.

PS A 8.4.6 STANDING TIME

This rate will only be applicable if the project came to a total standstill due to non-construction activities such as major riots. Minor occurrences of public/community interference shall not qualify for the claiming of these items.

PS A 8.5(a)1 PROJECT LIAISON OFFICER

An amount is allowed for a Project liaison officer (PLO), which must be appointed on the project. The name of this person will be identified by the Sol Plaatje Municipality

PS A 8.5(b)1.1 SURVEY COSTS

The cost for the staking and leveling off the streets will be included in the contract price and paid for under the contract. The final replacement of the erf boundary pegs will also be required at the end of the contract period.

PS A 8.5(b)3 ADDITIONAL MATERIALS TESTING

The costs for additional materials testing by a commercial laboratory as may be required for the exclusive use by the engineer. This will typically be required for control tests, additional borrow pits, etc.

PS A 8.5(c) PROFIT CHARGES

Overhead costs and profit charges on all provisional sums asked for by the engineer. These provisional sums shall be paid by the contractor and only claimable on submission of proof of costs by means of an invoice by the service supplier.

PS A 8.9 OCCUPATIONAL HEALTH AND SAFETY

The costs claimable shall be to comply with the Occupational Health and Safety Act of 1993. This will furthermore include all costs as per Contract Agreement Data: Safety Agreement on pages C1.5.1 to C1.5.7 of this document.

PS AB ENGINEER'S OFFICE (SANS 1200 AB)

AB 3 MATERIALS

PS AB 3.2 OFFICE BUILDINGS

The contractor's site office must have an adjacent carport for the exclusive use of the engineer during visits with minimum dimensions of 6m x 6m with a free draining floor. The roof must be built in such a way that a vehicle will always be shielded against the sun throughout the day. An approved shade net may be used for the sides to comply with above-mentioned requirement.

The contractor shall provide one board room with a table and chairs to accommodate at least 10 people for site meeting purposes.

AB 4 PLANT

PS AB 4.1 TELEPHONE

The Contractor's contract manager and site agent must have a cellular phone available as contact between him and the engineer. The site agent must always be available on his cellular phone except during long weekends and the Christmas break where special arrangements will be required.

AB 5 CONSTRUCTION

PS AB 5.5 SURVEY ASSISTANTS

Two semi-skilled labourers with relevant experience will be required to assist the engineer if required.

PS AB 5.6

SURVEY EQUIPMENT

The Contractor shall provide the following tested and approved survey equipment (a certificate will be required) on site for the duration of the contract and for the use of the Engineer whenever needed:

9. one automatic level plus tripod and level staff.
10. one 5m and one 50m measuring tape
11. Diverse surveyor's necessities like paint, pegs, etc.

The above-mentioned equipment may by arrangement be shared between the Contractor and the Engineer's representative. It must be maintained and kept in good working order for the duration of the contract.

AB 8 MEASUREMENT AND PAYMENT

AB 8.3 PAYMENT

PS AB 8.3.2.1 Telephone, Survey Assistants, Survey Equipment and Office Building

All payments for the telephone, survey assistants, survey equipment, office building and other requirements shall be covered by the rates tendered under this item.

PS C SITE CLEARANCE (SANS 1200 C)

PS C 5 CONSTRUCTION

PS C 5.2 **CUTTING OF TREES**

PS C 5.2.3 PRESERVATION OF TREES

PS C 5.2.3.2 Individual Trees

The Contractor shall pay a penalty of R5,000 for each Kameeldoring (Acasia Erioloba) tree damaged or removed by him without the written permission of the Engineer and permit issued to do so.

PS C 5.4 **GRUBBING**

Grubbing shall consist of the grubbing out of roots and stumps to a depth of at least 600 mm below cleared surface level.

PS C 8 MEASUREMENT AND PAYMENT

PS C 8.2 **SCHEDULED ITEMS**

PS C 8.2.1 CLEAR AND GRUB

The rate shall also include for compacting the backfilling to cavities formed by de-stumping to 93% MOD AASHTO. For payment purposes the area will be measured in m² or the number of trees removed. The tendered rates will include the removal of all vegetation, structures, trees and fencing except if specifically provided for in the Schedule of Quantities. No additional payment will be made for structures and bigger trees and shrubs. The Engineer retains the right to prescribe whether an area must be cleared or not and with the size of such areas shall be.

PS C 8.2.3 REMOVAL OF ACASIA, PRESOPIS AND OTHER LARGE TREES ..... Unit: No

The removal of all Acasia, Presopis and other large trees with trunk girth more than 1.0m will be measured under this item. All trees and bushes with trunk girth less than 1.0m will be covered for under PS C 8.2.1 above

PS C 8.2.5 TAKE DOWN EXISTING FENCES

The cost of taking down existing fences is considered part of clearing and grubbing except if specifically provided for in the Schedule of Quantities.

PS C 8.2.11 FENCING OF CONSTRUCTION CAMP

The rate shall include all costs for erecting the fence as prescribed, with lockable gate, contractor's signage around fence perimeter and access to the contractor's camp. The fence became the ownership of the client at the end of the construction period and may not be removed unless ordered by the client to do so.

PS D EARTHWORKS (SANS 1200 D)

PS D 3 MATERIALS

PS D 3.1.2 **CLASSES OF EXCAVATION**

The excavation of materials shall be classified as follows:

(a) Soft Excavation shall be excavations which are not classified as hard rock in underneath. Intermediate excavation will be paid as soft excavation.

(b) Hard rock is solid rock present in mass, banks or bands for which the use of explosives would be the normal practical method of excavation or boulders over 0,52 m^3 in volume.

If the Contractor chooses to drill, through material other than rock to underlying rock before excavating the trench then the volume of rock, as defined above, will be measured after the excavations have been completed.

PS D 5 CONSTRUCTION

PS D 5.1.2.4 NEGLIGENCE

Where a service is damaged due to the Contractor's negligence, he shall bear the full cost of repairs to the service. These repairs will be carried out by the relevant authority, or at their discretion by the Contractor to satisfaction of the relevant authority.

PS D 5.2.2.1 EXCAVATION FOR STRUCTURES

Should blasting be required to bring the foundations to levels indicated on the drawings or instructed by the Engineer, all loose rock shall be removed by barring wedging and the use of pneumatic tools.

PS D 5.2.3. PLACING AND COMPACTION

Placing and compaction shall be described in the Schedule of Quantities and/or indicated on the Drawings.

PS D 5.2.5 TRANSPORT FOR EARTHWORKS

The transport of all imported material shall be included in the rate for supply, placing and compaction, if required. All surplus excavated material shall be transported to a dumping site approved by the local authority.

The free haul distance for this contract is as follows:
Transport, dump and spread of any excess or unsuitable material to a site indicated by the Engineer: 2,0 km

Transport of material from borrow-pits of the Municipality as indicated: unlimited.
Transport of material from commercial sources: unlimited.

The dumping sites and borrow pits has to be confirmed with the local authority and the Contractor must provide for the above free haul distances in his tariffs.

PS D 8 MEASUREMENT

PS D 8.3.5 WORK SPACE AROUND STRUCTURE

Allowance was made in the computation of quantities for 1m working space around vertical underground structures, which will be the size of the ground needs to be compacted under the footings.

Quantities will be measured net over footings. The Contractor should allow for working space in his rates for excavation more than those allowed above.

PS D 8.3.14 BARRICADING OF TRENCES

Barricading of trenches will be not be measured separately and measured along the centerline of the trench. Both sides shall be barricaded and included in this measurement. Shoring will be required for all trenches deeper than 1.5m in sand excavations or excavated at 60 degree slope on both sides. No more than 500m of open trenches will allowed and the pipe laying process must follow immediate after trenches are excavated.

PS DB EARTHWORKS (PIPE TRENCHES) (SANS 1200 DB)

PS DB 3 MATERIALS

PS DB 3.2 **CLASSIFICATION OF EXCAVATION**

The classification of excavation for pipe trenches is the same as PSD 3.1.2 namely soft (inclusive of Intermediate) and rock.

PS DB 5 CONSTRUCTION

PS DB 5.1 **PRECAUTIONS**

PS DB 5.1.3 ACCOMMODATION OF TRAFFIC AND ACCESS TO PROPERTIES

The Contractor shall execute the work in such a manner to ensure that public roads, entrances, right of ways, sidewalks and footpaths and that the comfort of house-owners are affected to the minimum. Entrances to buildings and premises shall be arranged by the Contractor at his own expense.

If it is necessary to close a street, the Contractor shall make necessary arrangements in advance with the Engineer and Municipality.

PS DB 5.1.4 EXISTING SERVICES
See PSD 5.1.2.4

PS DB 5.2 **MINIMUM BASE WIDTHS**

The specified trench width for uPVC pipelines up to 160 mm shall be 760 mm. Pipes with diameters above 160 mm shall have trench widths of the pipe diameter plus 600mm.

Notice must be taken that all trenches shall be barricaded and shored. The side slopes of all trenches deeper than 1.5m must be slanted at 60 degrees in sand conditions and the additional excavations must be included in the tendered price.

Should the Contractor excavate a trench to a width greater than the maximum specified and should the Engineer consider that, as a result of such increased trench width, there is a danger of the pipe being subjected to excessive backfill loads, the cost incurred to rectify the problem will be for the contractor's own account.

The Contractor shall be required to provide such improved bedding condition required in relation to the maximum trench width specified to his own expense.

Should the Contractor carry any excavation to a greater depth than specified, he shall at his own expense replace the excess material so removed with G6 material compacted to 90% MOD AASHTO density or as required by the Engineer.

PS DB 5.4 **EXCAVATION**

The Contractor will excavate pipe trenches progressively and will not be permitted to pass over hard sections of the excavation to proceed with soft excavation at further points along the trench.

At the discretion of the Engineer the requirements of this Clause may be relaxed as far as any road crossings are concerned.

PS DB 5.5 **TRENCH BOTTOM**

Trench bottoms shall be excavated 100 mm lower than the pipe bottom in all materials and where the trench bottoms are loosened during excavation, the loose material shall be removed by hand, replaced with approved material and compacted to 90% MOD AASHTO before constructing the bedding.

When the trench bottom is unsuitable due to waterlogged conditions, at the direction of the Engineer, the Contractor shall excavate for and lay a crushed stone mat of minimum thickness 100 mm, the stone having a maximum particle size of 13 mm.

The bottom of excavations for manholes and head walls in soft ground shall be thoroughly rammed to 90% MOD AASHTO and consolidated at the Contractor's expense, before any concrete is placed.

PS DB 5.6.2 BACKFILLING

Material from excavation shall only be used for main backfilling after approval by the Engineer. Any shortage in backfilling as a result of contaminated material shall be replaced with approved imported material from the quarries pointed out to the Contractor. The Contractor may, after approval by the Engineer, mix imported and excavated material for use as main backfilling.

PS DB 5.6.3 DISPOSAL OF EXCAVATION MATERIALS

Unsuitable and excess material shall be disposed of in areas indicated by the Engineer. Freehaul distance of 2,0 km shall apply if specified in the bill of quantities.

PS DB 5.6.5 DEFICIENCY OF BACKFILL MATERIAL

Where a deficiency of backfill material originates due to backfill material being contaminated due to instructions by the Engineer, the Contractor shall bring in approved material from the quarries indicated to him.

PS DB 5.6.6 COMPLETION OF BACKFILLING

Backfilling around the pipe shall not be allowed to fall more than 250 m behind the pipe laying gang in open country and 100 m through the residential sections.

After the pipes have been laid, no backfilling shall be approved by the Engineer. The Contractor may use his discretion as to whether to backfill around joints before the pipeline is tested and should he decide to backfill the joints, he shall be responsible for the locating of any leaks no extra payment shall be made for any re-excavation and subsequent reinstatement.

PS DB 5.9.3 REINSTATEMENT OF SURFACES

Where gravel roads are crossed, a sub-base layer of 150 mm compacted to 93% MOD AASHTO and a wearing course layer of 150 mm compacted to 95% MOD AASHTO, both of approved gravel material, shall be provided in the top of the trench.

PS DB 5.9.4 SURFACED ROADS

Where surfaced roads are crossed, the top 330 mm shall be repaired as follows:

12. - 30 mm approved Bitumen Premix (or 19mm Cape seal)

30 - 180 mm approved gravel base course layer compacted to 98% MOD AASHTO

180 - 330 mm approved gravel sub-base layer compacted to 95% MOD AASHTO, or

13. - 330 soilcrete to specifications set by engineer.

All kerbing and storm-water channels shall be properly repaired and reinstated to their original condition.

PS DB 5.11 **SEGMENTED PAVING ROADS**

Where segmented paving roads are crossed, the sub-base layers must be repaired as for surfaced roads.

PS DB 8 MEASUREMENT AND PAYMENT

PS DB 8.1.4 BASIC PRINCIPLES

Transport cost of all material shall be included in other scheduled rates and no additional payment will be made for transport.

PS DB 8.3.2 SCHEDULED ITEMS

PS DB 8.3.2 EXCAVATION

Separate items are provided in the Schedule of Quantities for:

14. Excavate trenched for uPVC pipes in soft material for different trench depths and is measured per meter (m), according to specified trench widths. Please take notice of PS DB 5.2.

15. Excavate trenches for HDPE pipes in soft material up to 750 mm depth and 450 mm wide and is measured per meter (m). If the Contractor proposes to do this excavation by hand, the rate must be inclusive.

16. Extra-over item for excavation by hand at existing services and is measured per cubic meter (m^3).

17. Extra-over item for rock excavation and is measured per cubic meter (m^3).

18. Trimming of trench and is measured per meter (m) according to specified trench widths.

19. Backfill and compact trenches with excavated material and is included in the excavation rate for the trench and measured per meter (m) according to specified trench widths and included in the excavated rate.

20. Backfill and compact trenches with imported material and is measured per cubic meter (m^3).

21. Dispose surplus or unsuitable material from trench excavations and is measured per cubic metre (m^3).

22. Density tests on compacted backfilling or required by the Engineer and is measured per set of three tests each.

DB 8.3.6 FINISHING

23. GRAVEL ROADS

The repair of gravel roads shall be measured per square metre (m²) according to specified trench widths and the rate shall include additional costs of accommodation of traffic, excavation and compaction of layers in accordance with PSDB 3.1 and the repair of kerbs and storm-water channels.

24. SURFACED AND SEGMENTED PAVING ROADS

The repair of roads shall be measured per square metre (m²) according to specified trench widths and small include additional costs of accommodation of traffic, excavation and compaction of layers in accordance with PSDB 3.2 and the repair of kerbs and storm-water channels.

PS DB 8.3.8 EXCAVATION: MANHOLES

The volume of excavation for which the Contractor will be paid, shall be calculated according to the actual outside dimensions of the structures and the Contractor shall allow in his rates for wider excavation as a result of the soil collapsing, backfilling and compaction to create the required working space.

PS DM EARTHWORKS ROADS SUB-GRADE (SANS 1200 DM)

PS DM 3 MATERIALS

DM 3 MATERIALS

PS DM 3.1 CLASSIFICATION FOR EXCAVATION PURPOSES

Add the following to DM 3.1:

All in situ pavement material shall be classified as soft material for excavation purposes.

DM 3.2 CLASSIFICATION FOR PLACING PURPOSES

PS DM 3.2.3 Selected Layers

Substitute DM 3.2.3 with the following:

Materials used for selected layers shall comply with the requirements of standard specification 1200 M.

All imported material underlying the subbase or base of the final road prism, whichever may be applicable, that does not comply with the requirements for lower selected layer or upper selected layer in the respective depth categories, shall be removed and replaced with material complying with the requirements of selected layers, all at the Contractor's expense.

DM 4 PLANT

PS DM 4.2 PLANT FOR TREATMENT BELOW SELECTED LAYER

PS DM 4.2.1 Pneumatic-Tyred Roller

Pneumatic-tyred rollers shall be of the self-propelled type that is equipped with smooth pneumatic-tyred wheels of the same diameter. The mass of the roller shall be at least 10 tons. All wheels must bear the same mass.

The rollers must be equipped with devices that will be able to keep the wheels wet and clean during operation.

The wheels of the roller shall be arranged in such a way that one pass with the roller will cover the whole width of the machine. The roller must be able to take a tyre pressure of 600 kPa and the minimum allowed working tyre pressure shall be 450 kPa. The maximum difference in pressure between any two wheels shall not be greater than 35 kPa.

DM 5 **CONSTRUCTION**

DM 5.2 **METHODS AND PROCEDURES**

PS DM 5.2.2.3 b) **Cut to spoil**

Substitute DM 5.2.2.3(b) with the following:

All surplus and/or unsuitable material shall be removed from the site and disposed of at the spoil site and shall be shaped to establish a free draining surface.

DM 5.2.3 **Treatment of Road bed**

PS DM 5.2.3.3 **Treatment of road bed**

a) Preparation and compaction of road bed

Substitute the first paragraph of DM 5.2.3.3(a) with the following:

The road bed shall be scarified to a depth of 100 mm, watered, shaped and compacted to 93 % of MAASHTO density (100 % for sand), except where otherwise ordered by the Engineer. If roadbed is in rocky areas or exposed to rock excavations, a thin layer of imported material shall be levelled over the rocky areas and compacted by means of eight roller passes with a pneumatic tyred roller.

In clay areas only excavation and shaping to the correct level will be necessary.

Add the following subclause:

c) In situ preparation of road bed with eight roller passes

Any part of the road bed that lies within the selected layer and which, regardless of its density, is suitable according to the Engineers opinion, can be used in situ if so instructed by the Engineer.

If due to the nature of material, the degree of compaction cannot be controlled by means of in situ density tests, the Engineer may instruct compaction to be done by eight roller passes as specified in PS DM 4.2. The Engineer may further request that the compaction effort be altered by increasing or reducing the number of passes and that payment be amended accordingly.

The surface of the road bed shall be shaped true in respect of line and level within the tolerances as specified in clause 6. During the shaping of the road bed, all material that has to be removed and cannot be re-used, shall be disposed of and will be paid for under item PS DM 8.3.7. If necessary, additional material that has been approved by the Engineer shall be imported to meet the required levels.

No strict measurements in connection with soil moisture content will be applied by the Engineer during compaction. The Contractor must however convince the Engineer that all possible efforts have been made to utilise favourable soil moisture conditions. Compaction must be done during periods when the road bed is not to wet or to dry. The Engineer has full authority to decide whenever conditions are favourable for compaction, and may at any stage instruct the Contractor to water the road bed at the Contractors expense if he, in the Engineer's opinion, neglected to satisfy the above-mentioned requirements.

DM 6 **TOLERANCES**

PS DM 6.5 **DIMENSIONS AND LEVEL CONTROL**

The Contractor shall submit to the Engineer, in a form acceptable to the Engineer, records of dimension and level control, prior to requesting the Engineer to carry out any routine inspections.

DM 7 **TESTING**

PS DM 7.2 **PROCESS CONTROL**

Amend table 1 of DM 7.2 as follows:

Substitute "2 000 m^2" with "1 500 m^2", "1 500 m^2" with "1 200 m^2 and "5 000 m^2" with "3 000 m^2".

DM 7.3 **ROUTINE INSPECTION AND TESTING**

Substitute DM 7.3.2 with the following:
No density shall be less than the specified minimum density for the relevant layer.

The cost of all routine testing done by the Engineer, and of which the results do not comply with the specified minimum requirement for the material, shall be borne by the Contractor and will be subtracted from the monthly payment certificates.

DM 8 **MEASUREMENT AND PAYMENT**

DM 8.3 **SCHEDULED ITEMS**

PS DM 8.3.3 **Preparation of Road Bed**

Substitute DM 8.3.3(b)(1) and (2) with the following:

a) Preparation of in situ road bed in:

1) Intermediate material ..... Unit : m^3
2) Hard rock material ..... Unit : m^3

Add the following sub-clauses:

b) In situ preparation of road bed with eight pneumatic roller passes ... Unit : m^2

The unit of measurement is in square metres of road bed which has been treated with eight roller passes.

The rate shall cover the costs of shaping, watering and compacting all as specified in PS DM 5.2.3.3(c). The removal, disposal, transport and replacing of materials will be paid under the appropriate items.

c) Variations in compaction effort (pneumatic roller) ..... Unit : m^2.pass

The unit of measurement is the surface on which the variation is applicable multiplied by the amount with which the compaction effort was reduced or increased as instructed by the Engineer.

If there is a change in compaction effort, as instructed by the Engineer, the Contractor will be paid as for the standard effort, except that the amount as calculated above will be subtracted or added in the appropriate item.

This rate shall include full compensation for supervision, labour, machines, construction equipment, fuel, material and additional costs necessary for the completion of the process.

PS DM 8.3.4 **Cut To Fill, Borrow To Fill** ..... Unit : m^3

Substitute "90 %" in DB 8.3.4 with "90 % (100 % for sand)" and "road prism" with "road prism and borrow pits".

Add the following:

Separate items will be scheduled for fill in the road prism, fill on spoil areas and fill on erven (where a minimum density for such spoil material is required by the Engineer) and fill from the road prism, fill from the site and fill from commercial sources.

The rate for fill from commercial sources shall, in addition to the requirements of DM 8.3.4, cover the cost of the location of the source, complying with all the applicable precaution as set out in DM 5.1, obtaining the material, selection and transport from the source to the point on the road where it is to be used.

PS DM 8.3.5 **Selected Layer Compacted To 93 % Of MAASHTO Density** ..... Unit : m^3

Substitute "93 % of MAASHTO density" in the heading of DM 8.3.5 with "93 % (100 % for sand) of MAASHTO density".

Add the following to DM 8.3.5:

Separate items will be scheduled for lower and upper selected layers as well as for material from the site of works and from commercial sources. The rate for selected layers from commercial sources shall, in addition to the provisions of DM 8.3.5, allow for locating the source, complying with all the applicable precautions as set out in DM 5.1, obtaining the material, selection and transport from the source to the point on the road where it is going to be used. No payment shall be made for the removal and replacement of unsuitable imported material.

PS DM 8.3.7 **Cut To Spoil Or Stockpile From** ..... Unit : m^3

Add the following to DM 8.3.7:

Payment for temporary stockpiling shall be made under DM 8.3.11, only if so instructed in writing by the Engineer.

PS DM 8.3.12 **Overhaul** ..... Unit : m^3 or m^3.km

Substitute DM 8.3.12 with the following:

The provisions of clause D 8.3.6 shall apply mutatis mutandis.

PS DM 8.3.17 **Trim, Shape And Compact Sidewalks** ..... Unit : m^2

The area to be trimmed is the unsurfaced area from the back side of the kerbs to the boundary of the road reserve, or such wider area necessitated by the road prism.

Measurement and payment for the above shall be restricted to areas ordered in writing by the Engineer.

The rate shall cover the cost of trimming and shaping the sidewalks to the lines, levels and dimensions as shown on the drawings, of acquiring additional material to compensate for any material lost due to weather or other reasons, and of the compaction of any loose or disturbed material to 90 % of MAASHTO density (100 % for sand).

PS DM 8.3.21 **Existing Services That Adjoin Excavation For Streets** ..... Unit : m

The provision of items DB 8.3.5(a) and DB 8.3.5(b) shall apply mutatis mutandis

PS DM 8.3.22 **Existing Services Intersecting Excavation For Streets** …… Unit : No

The quantity is the number of each service, as indicated in the schedule of quantities that intersect the excavation for streets.

Separate items will be provided for the depth increments as scheduled.

The rate for the crossing of services below the level of the road bed, measured to the top of the service, covers all additional costs in respect of excavation, irrespective of the method, the protection and ensuring of the continuous functioning thereof and the cost of all repair work and/or subsequent costs arising from damage to the service.

The rate for services that are not fully covered by the road bed shall, in addition to the above-mentioned requirements, cover all additional costs in respect of excavation and backfilling with material as required for the relevant pavement layer as well as for compacting to the specified minimum density of the relevant pavement layer.

Services with a depth of cover of more than 500 mm shall not be measured and paid for.

PS DM 8.3.23 **Shaping Of Storm water Channels Adjoining Streets** ..... Unit : m

The rate is an extra-over item PS DM 8.3.4 and shall be all inclusive for labour, material and equipment to shape storm water channels according to the dimensions and grades as shown on the drawings and to compact to 90 % of MAASHTO density (100 % for sand). The placing of the gravel layer shall be measured in item PS DM 8.3.24.

PS DM 8.3.24 **Construction Of Gravel Layer In Storm water Channels** ..... Unit : m^3

There will be differentiated between material from the stockpile and that from the borrow pits. The rate shall be all inclusive for labour, material and equipment necessary for construction, selection, transport, off-loading and placement according to the specified slopes and dimensions as shown on the plans, as well as for compaction to 93 % of MAASHTO density.

PS GA CONCRETE (SMALL WORKS) SANS 1200 GA

PS GA 3.2.1 CEMENT

Ordinary Portland Cement to SABS 471 must be used.

PS GA 5.4.1.5 STRENGTH CONCRETE

25 Mpa Concrete with 19 mm coarse aggregate must be used except where otherwise specified. Concrete cubes for every day's production will be required and costs for these must be brought into account for the concrete rates supplied.

PS GA 5.4.8 CONCRETE SURFACES

The concrete surfaces shall be finished as shown on the drawings.

PS GA 6.4 PERMISSIBLE DEVIATION

The degree of accuracy II will be applicable.

PS L MEDIUM PRESSURE PIPELINES (SANS 1200 L)

PS L 3 MATERIALS

The material for all pipelines and fittings for this Contract, are described in the Schedule of Quantities.

PS L 3.8.3 FLANGES AND ACCESSORIES

All flanges will be drilled to SABS 112 Table 600/3 specification. All the pipe-work in the sewer manholes and pump stations shall be either uPVC or high grade stainless steel.

PS L 5 CONSTRUCTION

PS L 5.1.4 DEPTH AND COVER

The pipe cover shall be 1,0 m under roads and 0,8 m in road reserves except for erf connection which shall have a cover of 0,6 m.

PS L 7 TESTING

The testing of pipelines will not be allowed over a length of more than 1000 m.

PS L 8 MEASUREMENT AND PAYMENT

PS L 8.2.4 CUTTING OF PIPES

The final positions of valves and fittings will be determined on site, but no extra-over payment will be made for the cutting of pipes and extra couplings.

PS L 8.2.11 ANCHOR/THRUST BLOCKS AND PEDESTALS

The dimensions of anchor- and thrust blocks must be according to the drawings included in this document. All costs for the anchor and thrust blocks must be included in the tariffs of the valves and fittings and no separate payment will be made for this.

PS L 8.2.17 MARKER POSTS

Marker posts will be measured and paid for by number and the tariff must include all excavation, installation, paint and numbering of marker, concrete, reinforcement and formwork, as well as labour for the complete construction as per attached standard drawing.

PS LB 3.4 SELECTION

PS LB 3.4.2 SUITABLE MATERIAL NOT AVAILABLE FROM EXCAVATION

If the material from excavation is not suitable for bedding, suitable material must be imported. The excavated sand material in Colville, Phomolong and Jacksonville (excluding the topsoil) shall be tested and graded and if acceptable, may be used for the selected bedding, blanket and fill.

PS LB 5.3 **PLACING AND COMPACTING**

The bedding will be at least 100 mm under the pipe and will then be placed and compacted in layers of 100 mm up to 300 mm above the pipe.

PS LB 8.2 **SCHEDULES ITEMS**

The bedding will be measured per cubic metre and the tariff must include supply, place and compact. Separate items are provided for bedding and for selected fill blanket for material from excavations and for imported fill.

PS LD SEWERS (SANS 1200 LD)

LD 3 MATERIALS

PS LD 3.1 **PIPES, FITTINGS, AND PIPE JOINTS**

PS LD 3.1.5 uPVC PIPES

uPVC smooth walled pipes shall have a hoop stiffness of 400kPa for all gravity mains except for pipe diameters larger than 355mm uPVC class 9 pipes according to SABS 966 will be used for the rising mains of the small lift sewer pump station.

PS LD 3.5 **MANHOLES, CHAMBERS, ETC.**

PS LD 3.5.2 PRECAST CONCRETE SECTION

Pre-cast concrete manholes with an inside diameter of at least 1 000mm shall be constructed for all manholes up to a depth of 6 metres.

PS LD 3.5.7 STEP IRONS

Step irons shall be installed in all manholes deeper than 1,2 m. Step irons shall consist of polypropylene coated 12 mm high tensile steel, such as Calcamite or similar. PVC steps shall also be considered but installation must be done strictly according to supplier specifications. The installation of the step irons shall be in accordance with the specification of the manufacturer.

PS LD 3.5.8 MANHOLE COVERS AND FRAMES

All manhole covers, lid and frames must be precast concrete complying with the requirements of SABS 1294.

Covers inside the site boundary will be medium duty and all covers in street reserves will be heavy duty complying with SABS 558.

PS LD 3.6 **MARKER POSTS**

Marker posts, consisting of a 600 mm length of 110 mm dia uPVC sewer pipe filled with concrete, shall be planted directly above of the end cap at the connection point. The one end of the pipe must extend to 200 mm above the natural ground level and the bottom end of the marker post shall be connected to the end cap with a piece of wire.

LD 5 CONSTRUCTION

LD 5.6 **MANHOLES, INSPECTION CHAMBERS, ETC**

PS LD 5.6.1 GENERAL

Manholes shall be constructed as follows unless otherwise indicated.

25. Final cover levels of manholes in streets and paved areas shall be to the same level as the street or paved area.

26. On sidewalks, lawns and garden areas the cover level shall be 50 mm above the final ground level.

27. In mid-block sewers it shall be 100 mm above ground level.

28. In open areas 150 to 200 mm above natural ground level.

If a manhole is positioned at a low point or in a hollow where storm water infiltration may occur, the manhole cover level must be raised to a level to avoid the danger of infiltration, or to a level as agreed with the Engineer.

LD 5.9 **CONNECTING SEWERS**

PS LD 5.9.1 LOCATION AND DETAILS

Erf connections shall be installed at least one meter from and on the lowest end of the premise to be serviced.

All connecting sewers shall be laid at a minimum gradient of 1:60, except where otherwise ordered by the Engineer.

LD 7 TESTS

PS LD 7.1 **GENERAL**

All tests shall be repeated after the completion of backfilling of pipe trenches.

LD 8 MEASUREMENT AND PAYMENT

LD 8.2 **SCHEDULED ITEMS**

PS LD 8.2.3 MANHOLES ..... **Unit : No**

Manhole depth shall be measured as the difference between the invert level and cover level of the manhole.

This cost includes the as-built survey for each manhole. The as-built survey data will include the actual WGS coordinates as well as the cover and inlet level for each manhole.

PS LD 8.2.6 ERF CONNECTIONS ..... **Unit : No**

Erf connections will be measured and paid for according to the actual material installed.

This connection is measured from the connection on the main pipe to the end cap on the site as indicated on the drawings. Included in the rate must be the cost of crossing and reinstating of any fences.

PS LD 8.2.11 CONNECTION TO EXISTING SEWERS ..... **Unit : No**

Items actually installed will be measured and paid for.

The tendered rate shall include full compensation for connecting the proposed pipe, any additional channelling and benching associated with the connection, cutting the pipe to suit the connection, supplying and building in the short junction pipe, extra couplings, dealing with existing flow, preventing foreign material from entering the sewer and making the connection.

The excavation for pipelines, pipes, backfilling and manholes shall be measured separately.

PS LF ERF CONNECTIONS (WATER) (SANS 1200 LF)

LF 1 SCOPE

The water connections shall consist of a 20mm water connection pipe with an end stop on both ends. The installation of the water meters shall also be done during construction if approved by the municipality.

LF 3 MATERIALS

PS LF 3.1 PIPES, FITTINGS AND COUPLINGS

PS LF 3.1.4 POLYETHELENE PIPES

Only uPVC pipes as prescribed in the scheduled items will be used. PVC couplings and fittings similar to Plasson type shall be used.

PS LF 3.4 BEDDING

The bedding shall be as specified in PS LB 3.1.

PS LF 3.5 VALVE

PS LF 3.5.3 SURFACE BOXES

These chambers are to be of an approved manufacture and samples are to be provided to the Engineer for approval prior to installation. The chambers shall be installed 1000mm outside the premise boundary in the street reserve.

PS LF 3.6 MARKER POST (CHANGE IN DIRECTION IN WATER LINES)

Marker posts with “W” in concrete (or stainless steel plate in the concrete) shall be manufactured according to the drawing and planted above all points where change in direction occurs.

LF 5 CONSTRUCTION

PS LF 5.2 LAYING FROM MAIN TO ERF

PS LF 5.2.3 SERVICE CONNECTIONS

PS LF 5.2.3.1 General

The testing pressure at which tests for erf connections shall be done will be 1.25 times the maximum allowable pressure of the class pipe in use.

LF 8

MEASUREMENT AND PAYMENT

PS LF 8.2

SCHEDULED ITEMS

PS LF 8.2.1

PROVIDE ERF CONNECTIONS COMPLETE ..... **Unit : No**

Measurement and payment for erf connections shall differentiate between double and single erf connections, as well as between short and long connections, each for the various pipe diameters and for each diameter of water main as shown on the drawings.

M3 **MATERIAL**

PS M 3.2 **RESPONSIBILITY FOR LOCATION**

Add the following to M3.2:

The subbase and base layers of all streets shall be constructed with material from designated commercial material suppliers. The Contractor is responsible to prove that the material delivered to site is according to specification and if the material in the paving layers does not comply with the minimum requirements it shall be removed and replaced with suitable material at the expense of the Contractor. All oversize material shall be less than 50% of the layer thickness in diameter and not more than 5% per volume. All final layers under the permanent wearing course shall not exceed 37.5mm in size or crushed with a single stage crusher to -37.5mm in size.

M 5 **CONSTRUCTION**

Add the following paragraph:

PS M 5.1 **SELECTION**

The Contractor shall deal selectively with material when existing streets are broken up in order that suitable material is not contaminated with unsuitable material. If suitable material is contaminated, the Contractor shall replace such contaminated material with suitable material, at his own expense.

M 6 **TOLERANCES**

PS M 6.3 **FREQUENCY OF CHECKS**

Add the following to M 6.3:

These checks shall be submitted to the Engineer for his approval.

M 7 **TESTING**

PS M 7.3 **ROUTINE INSPECTION AND TESTING**

Substitute M 7.3.3 with the following:

Statistical evaluation of test results shall not be applicable to this contract and all tests shall meet the specified minimum requirements for the specific material.

M 8 MEASUREMENT AND PAYMENT

Add the following to M 8.1:

The contractor shall include the costs of all laboratory testing to proof that constructed layers are within specifications in their tendered rate for the specific layer.

The cost of all routine testing done by the Engineer, and of which the results do not comply with specified minimum requirements for the material, shall be borne by the Contractor.

These costs shall be deducted from the Contractor's monthly payment certificates.

PS ME SUBBASE (SANS 1200 ME)

ME 3 MATERIALS

ME 3.2 PHYSICAL PROPERTIES

PS ME 3.2.1 Subbase Material

Substitute ME 3.2.1 with the following:

a) Materials of G5/G6 quality for use in the unstabilised subbase shall comply with the requirements of SABS 1200 M 3.3.3. and the maximum aggregate size after compaction shall not exceed 63 mm.

b) Materials of G5/G6 quality for use in the stabilised subbase shall comply with the requirements as specified in SABS 1200 M 3.3.3 and either be delivered to site as -37mm size or crushed with a single stage crusher to -37mm size.

PS ME 3.2.2 Gravel Shoulder and Gravel Wearing Coarse Material

Substitute ME 3.2.2 with the following:

The material used for gravel shoulders and/or gravel wearing course shall comply with the following requirements:

i)	Maximum aggregate size after compaction	37,5 mm
ii)	Oversize index (Io)	nil
iii)	Shrinkage product (Sp)	100-240
iv)	Grading coefficient (Gc)	16-34
v)	Minimum CBR at 95 % of MAASHTO of density	25

Where:

Oversize index (Io) is the mass of the material larger than 37,5 mm, expressed as a percentage of the total mass of material;

Shrinkage product (Sp) is the product of the linear shrinkage and the percentage smaller than 0,425 mm (expressed as a percentage of the material smaller than 37,5 mm) of the material;

Grading coefficient (Gc) is the product of the percentage of material smaller than 26,5 mm but larger than 2,0 mm and the percentage smaller than 4,75 mm (expressed as a percentage of the material smaller than 37,5 mm) divided by 100.

ME 5 CONSTRUCTION

ME 5.4 PLACING AND COMPACTION

PS ME 5.4.1 Placing

Substitute "the project specification" in the second paragraph of ME 5.4.1 with "ME 6.1.4".

PS ME 5.4.5 **Work in Restricted Areas**

No additional payment shall be made for work in restricted areas and any relevant costs shall be deemed to be included in the tendered rates.

ME 5.7 **TRANSPORT**

PS ME 5.7.1 **Free-haul**

Substitute ME 5.7.1 with the following:

An unlimited free-haul distance shall apply to subbase material of no identification of any over haul is given by the engineer.

ME 7 **TESTING**

ME 7.2 **PROCESS CONTROL AND ROUTINE INSPECTION AND TESTING**

PS ME 7.2.1 **Process Control**

Substitute "1 500 m^2" with "1 200 m^2" and "5 000 m^2" with "3 000 m^2" in Table 2 of ME 7.2.1.

PS ME 7.2.2 **Routine Inspection And Testing**

Substitute the second sentence of ME 7.2.2 with the following:

No density shall be less than the specified minimum density for the relevant layer.

ME 8 **MEASUREMENT AND PAYMENT**

PS ME 8.2 **COMPUTATION OF QUANTITIES**

Substitute ME 8.2 with the following:

Measurement and payment shall be to the exact dimensions as shown on the drawings. All laboratory tests to proof that the layer works is within specification shall be borne by the contractor and the costs are deemed to be included in the tendered rate for the item.

ME 8.3 **SCHEDULED ITEMS**

PS ME 8.3.8 **Stabilising Agent**

Add the following subitem to ME 8.3.8:

g) Ionic stabilising agent ..... Unit : L

The rate shall also cover the cost of application and mixing in of the stabilising agent.

PS MF BASE (SANS 1200 MF)

MF 3 MATERIALS

MF 3.3 PHYSICAL AND CHEMICAL PROPERTIES

PS MF 3.3.1 Natural Gravel (Unstabilised or Stabilised)

Substitute the requirements of MF 3.3.1 for natural gravel with the following:

1) Natural gravel, of G4 quality which is placed in the base shall, after compaction, comply with the requirements of SABS 1200 M 3.3.3.

2) Natural gravel, of G5 quality which is placed in the base shall, after compaction, comply with the requirements of SABS 1200 M 3.3.3. but with no aggregate size larger than 37mm. If material does not comply with this grading it must be crushed with a single stage crusher to specifications.

PS MF 3.3.2 Graded Crushed Stone

Substitute the requirements of MF 3.3.2 with the following:

Graded crushed stone placed in the base shall, after compaction, comply with the requirements for type G2 as specified in 3.3.3 in SABS 1200 M.

PS MF 3.3.3 Graded Crushed Stone and Soil Fines

Substitute the requirements of MF 3.3.3 with the following:

Graded crushed stone that is admixed with soil fines, placed in the base shall comply with the requirements for type G2 or G3 as specified in 3.3.3 in SABS 1200 M.

MF 5.4 PLACING AND COMPACTION OF A BASE OTHER THAN A WATER BOUND MACADAM BASE

PS MF 5.4.6 Work In Restricted Areas

No additional payment shall be made for work in restricted areas and any relevant costs shall be deemed to be included in the tendered rates.

MF 5.9 TRANSPORT

PS MF 5.9.1 Free-haul

Substitute M 5.9.1 with the following:

An unlimited free-haul distance shall apply to base course material unless measured by the engineer.

MF 6 **TOLERANCES**
DIMENSIONS, LEVELS, ETC

MF 6.1

PS MF 6.1.2 **Grade**

Add the following to MF 6.1.2:

In addition to the above-mentioned requirements the surface shall be of such a grade that all surface water shall drain freely to the adjacent kerbs and/or channels, and all subsequent costs to rectify the surface to comply hereto shall be borne by the contractor

MF 7 **TESTING**

PS MF 7.2 **PROCESS CONTROL**

Substitute "1 500 m2" with "1 200 m2", "1 500 m3" with "1 200 m3" and "5 000 m2" with "3 000 m2" in Table 3 of MF 7.2.

MF 7.3 **ROUTINE INSPECTION AND TESTING**

Substitute MF 7.3.2 with the following:

No density shall be less than the specified minimum density for the relevant layer.

MF 8 **MEASUREMENT AND PAYMENT**

PS MF 8.2 **COMPUTATION OF QUANTITIES**

Substitute MF 8.2 with the following:

PS ME 8.2 shall apply mutatis mutandis

C 3.3:

ENGINEERING DRAWINGS

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

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C 3.3: ENGINEERING DRAWINGS

C 3.3.1 DRAWINGS ISSUED WITH THIS DOCUMENT

The drawings found on the drawing list on the next page are applicable to the Contract and are issued with this tender document and will form part of the Contract Documents as **Volume 2.**

C 3.3.1.1 DESIGN BY ENGINEER

The Engineer, on behalf of the Employer, has designed the permanent works to be executed under this Contract.

C 3.3.1.2 "RECORD" DRAWINGS

The Contractor shall record all amendments and deviations from the drawings. This shall be done on a set of drawings specially allocated for this purpose. These drawings shall be handed to the Engineer on completion of the Works. The Completion Certificate **will not be issued** without this information having been submitted to the Engineer.

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LIST OF DRAWINGS

Drawing No.	Description
3258-KP-001	Key Plan
3258-CIV-LAY-001	Water Layout
3258-CIV-LAY-002	Sewer Layout Plan
3258-CIV-LAY-003	Sewer Long Sections
3258-CIV-RD-001	Road Plan & Long Sections
3258-CIV-DET-001	Bedding Details
3258-CIV-DET-002	Sewer Manhole Details
3258-CIV-DET-003	Valve Chamber Details
3258-CIV-DET-004	Thrust Block Details
3258-CIV-DET-010	Standpipe Details
3258-NAME-001	Nameboard Details

C3.4:

MANAGEMENT

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

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C 3.4 MANAGEMENT

C 3.4.1 **CONSTRUCTION PROGRAMME**

C 3.4.1.1 FORMAT

In addition to the requirements of the General Conditions of Contract, the Contractor's programme shall:

1 Be in a bar chart form;
2 Show the various activities related to a time-chart indicating the sequence of performing the works comprising the contract;
3 Indicate critical path activities.

C 3.4.1.2 ALLOWANCES

The Contractor's programme shall take the following into consideration:

4. Expected weather conditions;
5. Special non-working days as stipulated in the Tender;
6. The accommodation and safeguarding of traffic.

C 3.4.2 **PROCEDURES DURING CONSTRUCTION**

The Contractor to supply, keep up to date and keep the following documents on site:

C 3.4.2.1 A full set of the latest construction drawings to be on site permanently for use by the Engineer and others.

C 3.4.2.2 The Contractor to supply and keep on site an A4 triplicate Site Instruction Book.

C 3.4.2.3 The Contractor to supply an A4 duplicate diary on Site. The Contractor to keep daily dairy, with at least the following information:

- Weather conditions;
- Record of any accidents and details;
- Record of construction activities of the day;
- Information of any strikes;
- Any other relevant information.

C 3.4.3 SITE FACILITIES AVAILABLE

C 3.4.3.1 SOURCE OF WATER SUPPLY

The Contractor shall make his own arrangements with the relevant Authorities for obtaining water for construction and domestic purposes as well as toilet facilities as required by the Health and Safety Regulations. The Contractor shall pay for the water at the rates and tariffs as determined by the Local Authority, including the cost of supplying a temporary standpipe as required.

C 3.4.3.2 SOURCE OF POWER SUPPLY

The Contractor shall make his own arrangements for obtaining power and be responsible for all costs involved.

C 3.4.3.3 LOCATION OF CAMP AND DEPOT

The Contractor must make his own arrangements for a Camp Site at the location of the Works. The location of the Contractor's camp, including the material storage areas, will be subject to the Engineer's approval.

The Contractor shall make his own arrangements for the accommodation of labour.

C 3.4.3.4 SPOIL SITES

No indiscriminate spoiling of material will be allowed.

All unsuitable surplus material shall be removed from the Site and the Contractor shall make his own arrangements with regard to a suitable spoil site.

C 3.4.4 ABNORMAL RAINFALL

Refer to C 3.1.8.16

C 3.4.5 TIME RELATED ITEMS

An approved extension of time (other than an extension of time granted in terms of the Special Conditions of Contract) will entitle the Contractor to submit a claim for additional payment. Any such approved additional payment will be made for proven additional costs for each relevant time related item.

C 3.4.6 NAMEBOARD

No name board will be provided.

C 3.4.7 PROTECTION FROM STORMS AND FLOODS

The tendered Fixed Price shall be deemed to be full compensation for any damage to the Works due to storms, rain, floods, storm water or subsurface water.

Under no circumstances shall the Contractor be entitled to any additional payment in this regard. The Contractor shall accept full responsibility and costs to handle water from any source on his Site.

C 3.4.8 EXISTING SERVICES

The Engineer will provide information regarding the location of existing utility services, but the Engineer does not accept responsibility for the accuracy of this information. The Contract shall make further investigations to determine the exact locality, size and depth of existing services before commencing construction to ensure that no damage is done to any service.

The Contractor shall take all reasonable precautions to protect existing services during construction and during relocation of such services.

Any pipe, cable, conduit or other services of any nature whatsoever indicated to the Contractor and subsequently damaged as a result of the Contractor's operations shall be repaired and reinstated forthwith by the Contractor or by the authority concerned, all at the expense of the Contractor and to the satisfaction of the Engineer.

Whenever services are encountered which interfere with the execution of the works and which require to be moved and relocated, the Contractor shall advise the Engineer, who will determine the extent of the work, if any, to be undertaken by the Contractor in removing, relocating and reinstating such services.

The Contractor shall work in close co-operation with private owners or public authorities controlling services, which have to be protected, removed or relocated. No undertaking can be given as to the exact time of commencement or of completion of the relocation, removal or protection of services, which have to be carried out by the owners or controlling authorities themselves. The Contractor is to make allowance in his programme for this contingency.

Where services have to be removed or relocated or protected, the Engineer will at the request of the Contractor, notify or negotiate with the owners or Authorities controlling those services, but the Engineer does not accept liability for any costs resulting from delays in the relocation, removal or protection of any service, or delays as a result of delays in negotiations.

It will be accepted that the Tenderer made provision in his tendered Fixed Price for the cost of the above. No additional payment will be made by the Client.

C 3.4.9 ACCOMMODATION OF TRAFFIC AND PUBLIC ACCESS

During all his operations and when using his machinery, plant and equipment, the Contractor shall at all times take the necessary cate to protect the public and to facilitate the traffic flow.

C 3.4.10 SETTING OUT OF WORKS

All setting out required to carry out the work shall be undertaken by the Contractor. Setting out of the Works to be included in the tendered Fixed Price.

It will be accepted that the Tenderer made provision in his tendered Fixed Price for the cost of the above. No additional payment will be made by the Client.

C 3.4.11 SANITARY CONDITIONS

The Contractor shall ensure that, during the period of construction, sanitary conditions prevail on the site and surrounding areas. Unhygienic behaviour that may cause contamination of the works or the surrounding area is strictly prohibited.

It will be accepted that the Tenderer made provision in his tendered Fixed Price for the cost of the above. No additional payment will be made by the Client.

C 3.4.12 CONSTRUCTION IN CONFINED AREAS

It may be necessary for the Contractor to work within confined areas and no additional payment will be made for work done in restricted areas. The method of construction in these confined areas will depend largely on the Contractor's construction plant.

It will be accepted that the Tenderer made provision in his tendered Fixed Price for the cost of the above. No additional payment will be made by the Client.

C 3.4.13 DENSITY TESTS / CONCRETE CUBES

The Contractor shall carry out his own density tests on each compacted layer and these tests shall be submitted to the Engineer for scrutiny and approval before commencing with the construction of the following layer.

The Contractor also needs to do his own concrete cube tests, which is to be handed to the Engineer for scrutiny and approval. The Engineer may order that further, control tests are to be taken.

The Engineer may order that control tests be taken by his own or another independent laboratory. Cube/density tests carried out by the Contractor in the normal course of his work shall be carried out at his own expense.

It will be accepted that the Tenderer made provision in his tendered Fixed Price for the cost of the above. No additional payment will be made by the Client.

C 3.4.14 HEALTH AND SAFETY SPECIFICATION

C 3.4.14.1 PURPOSE

In terms of the Occupational Health and Safety Act (Act 85 of 1993) (OHSA) or as amended, and the Construction Regulations 2014 or as amended, the Employer must provide the Contractor with a Health and Safety Specification to which the Contractor must respond with a Health and Safety Plan for approval by the Employer.

The purpose of this Specification is to ensure that the Principal Contractors entering into a contract with the Employer maintain an acceptable level of performance with regard to health and safety issues during the performance of the contract. In this regard the OHSA Specification form an integral part of the Contract and the Principal Contractor shall ensure that their Contractors and/or Suppliers comply with the requirements of this Specification.

C 3.4.14.2 SCOPE

This Contract comprises of CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

The Contractor, in complying with the OHS Act and the Construction Regulations, shall consider all aspects of the Works described and take into account the construction methods and materials to be used.

C 3.4.14.3 GENERAL

The Contractor is referred to and shall comply with the full text of the Occupational Health and Safety Act (Act 85 of 1993) (OHSA) or as amended and to the Construction Regulations 2014 or as amended, promulgated there under.

In this regard refer also to the Health and Safety Agreement and Conditions attached to these Contract documents (See Part C 1.4)

The following Specification covers health and safety matters applicable during construction.

All the work included in this Contract shall, for the purpose of complying with OHSA and the Construction Regulations, be deemed to be “construction work”.

It should be noted that, with a few exceptions, the Model Preambles and the Project Specifications are “end product specifications” and not “method Specifications”. As the

methods of construction to be used are generally determined by the Contractor, detailed safety requirements applicable to all the operations to be carried out on Site are not provided in the project documentation. The Contractor shall apply all the relevant regulations and requirements to the work methods and materials used.

The Principal Contractor shall give the required notice to the Provincial Department of Labour before commencement of any work on Site. This notice shall include the information as required by the Construction Regulations and shall be signed by the Contractor and the Employer.

The Principal Contractor shall ensure current registration and good standing with the Compensation Commissioner and shall provide evidence to this effect to the Employer.

It is the responsibility of the Principal Contractor and his Contractors to provide for all costs and expenses related to the management of and compliance with the OHSA and this Specification.

It will be accepted that the Tenderer made provision in his tendered Fixed Price for the cost of the above. <u>No</u> additional payment will be made by the Client.

C 3.4.14.4 EXISTING SITE CONDITIONS

The Contractor shall take into account, *inter alia*, the following existing conditions when complying with the OHSA:

1 Existing utility services;
2 Existing site conditions. The Contractor shall be deemed to have visited the site and examined the site conditions applicable for the Works;
3 The traffic accommodation requirements;
4 Surrounding land use;
5 Anticipated weather conditions for the area; and
6. Access to the public and the use of the facility during construction.

C 3.4.14.5 DESIGN INFORMATION

Design information provided for safety planning purposes, such as design loads for structures, foundation conditions, etc. is available from the Engineer where required.

C 3.4.14.6 CONSTRUCTION MATERIALS

The following commonly used construction materials and substances potentially pose health and safety hazards:

7) All materials contained in pressurized containers;
8) Bitumen and tar products;
9) Cement;
10) Epoxies;
11) Lime and other stabilizing agents;
12) Paints;
13) Timber preservatives; and
14) Asbestos cement products.

The materials to be used to construct the Works are described in the following:

a) The Project Specification

The Contractor shall take appropriate measures to manage the risks associated with the use of all materials required to complete the “Works, i.e. not only those listed above, and shall, *inter alia*, implement all the precautionary measures provided by Manufacturers and Suppliers for the storage, use and application of materials used.

C 3.4.14.7 SITE ACCESS AND ENVIRONMENTAL CONDITIONS

b) Site access, egress, deliveries and vehicular and pedestrian routes

The requirements regarding the control of access to and egress from the Site and vehicular and pedestrian routes are to be noted by the Contractor and provision is to be made to ensure the safety of all pedestrians and vehicular traffic at all times.

c) Environment

The Contractor shall ensure compliance with all current environmental legislation applicable to the Works and the Site. The Contractor is advised of the existing asbestos cement products and all necessary environmental precautions and requirements shall be adhered to in this regard.

C 3.4.14.8 USE OF SITE BY THE EMPLOYER

Any continues use of the Site required by the Employer to maintain traffic flows or to allow work to be done by other Contractors or Authorities is a requirement of this contract and the Contractor shall take due precaution in this regard.

C 3.4.14.9 SITE RULES

d) Way leaves, permissions and permits:

The Contractor shall be responsible for obtaining all the way leaves, permissions or permits applicable to working near any existing services or other infrastructure on Site and shall abide by the safety conditions imposed by such way leaves, permissions or permits.

e) Reporting of incidents:

All incidents shall be reported strictly in accordance with the requirements of the OHSA and the General Conditions of Contract.

C 3.4.14.10 HEALTH AND SAFETY PLAN

In compliance with the Construction Regulations the Contractor shall, after performing a risk assessment, prepare a Health and Safety Plan for approval by the Employer.

The Health and Safety Plan shall include, but not be limited to, the following:

f) The Safety Management Structure, including the names of all designated persons such as the Construction Supervisor and any other competent persons;

T Safety Method Statements and procedures to be adopted to ensure compliance with the OHSA. Aspects to be dealt with shall include:

Public vehicular and pedestrian traffic accommodation measures;
Control of the movement of construction vehicles;
The storage and use of materials;
The use of tools, vehicles and plant;

xiii) Environmental conditions and safety requirements in working hazardous materials, including asbestos cement products;

xiv) Security, access control and the exclusion of unauthorised persons

xv) The provision and use of temporary services;

xvi) Compliance with the way leaves, permissions and permits;

xvii) Safety equipment, devices and protective clothing to be employed;

xviii) Emergency procedures;

xix) Provision of welfare facilities;

xx) Induction and training;

xxi) Provision and maintenance of the Health and Safety file and other documentation;

xxii) Arrangements for monitoring and control to ensure compliance with the safety plan.

C 3.4.14.11 AUDITS BY THE EMPLOYER

The Contractor shall permit the Employer to regularly audit, at an agreed interval, the implementation and maintenance of the approved Health and Safety Plan and shall co-operate and provide all the required documentation, as may be required, in this regard.

C 3.4.14.12 VARIATIONS

Should any variations be ordered or design amendments issued, the Engineer shall inform the Contractor of all associated potential hazards to ensure that the health and safety aspects of the work ordered are taken into account.

xxiii) 3.5

ANNEXURES

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLY.

C 3.5 ANNEXURES

ANNEXURE A **OCCUPATIONAL HEALTH AND SAFETY**

ANNEXURE A

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS

HEALTH AND SAFETY SPECIFICATION

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

v) HEALTH AND SAFETY SPECIFICATION

1.1Scope

This Health & Safety Specification has been developed to address all aspects of occupational health and safety, as affected by the proposed construction work in accordance with the provisions in the Construction Regulations.

The specification provides the requirements that the Principle Contractor and other Contractors shall have to comply with in order to reduce the risks associated with the construction work to a level as low as reasonably practicable.

1.2 Introduction

In terms of Construction Regulation 5(1) (b) and (c) of the Occupational Health and Safety Act, No. 85 of 1993, the Client, or his Health and Safety Agent, is required to compile a Site Specific Health & Safety Specification for any intended project and provide such specification to the Designer as well as to any prospective tenderers.

The Client's further duties are stipulated in Clause 3, and in the Construction Regulations, published in Government Gazette No 37305 of 2014. This specification has an objective to ensure that Principle Contractors and other Contractors entering in to a Contract with the Client, achieve an acceptable level of Occupational Health & Safety performance. This document forms an integral part of the Contract and Principle Contractors should make it part of any Contracts that they may have with Contractors and/or Suppliers.

Compliance with this document does not absolve the Principle Contractor and other Contractors from complying with minimum legal requirements. All Contractors remain responsible for the health & safety of his employees, persons other than his employees in terms of Section 9 of the Occupational Health and Safety Act, No. 85 of 1993 and those of his Mandatory's

1.3 General Occupational Health and Safety Provisions

1.3.1 Hazard Identification & Risk Assessment

1.3.1.1 Development of Risk Assessments

Every Contractor shall appoint a competent person in writing to perform a Risk Assessment before the commencement of any Construction work. This Risk Assessment shall form part of the Occupational Health and Safety Plan and be implemented and maintained as contemplated in Construction regulation 5(1).

The Risk Assessment shall include at least the following:

- the identification of the risks and hazards to which persons may be exposed to
- the analysis and evaluation of the identified risks and hazards
- a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified

- a monitoring plan, and
- a review plan

Based on the Risk Assessments, the Contractor must develop a set of site-specific Occupational Health & Safety rules that will be applied to regulate the Occupational Health & Safety aspects of the construction. The Risk Assessments, together with the site-specific Occupational Health & Safety rules shall be submitted to the Client before mobilisation on site commences.
The Contractor is required to conduct a baseline Risk Assessment of the risks he anticipates encountering during the project. The baseline Risk Assessment must include the Standard Working Procedures (SWP) and the applicable Method Statements based on the Risk Assessments.

1.3.1.2 ***Review of Risk Assessments***

The Contractor is to review the Hazard Identification, Risk Assessments and Safe Work Procedure's at each Production Planning and Progress Report meeting as the Contract work develops and progresses and each time changes are made to the designs, plans and construction methods and processes [monthly].

The Contractor shall provide the Client, other Contractors and all other concerned-parties with copies of any changes, alterations or amendments brought about by the above.

1.3.2 Legal Requirements

All Contractors entering into a Contract with the Client**,** shall, as a minimum, comply with the:

- Occupational Health & Safety Act and Regulations (Act 85 of 1993). **A current, up-to-date copy of the Occupational Health Safety Act shall be available on site at all times**.

- Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993). The principle Contractor will be required to submit a letter of Registration and "good-standing" from the Compensation Insurer before being awarded the Contract. **A current, up-to-date copy of the Compensation for Occupational Injury and Diseases Act (CIODA) shall be available on site at all times.**

- The Client must determine the competency of Contractors/persons he allows (authorise) to enter such premises.

1.3.3 Structure and Responsibilities

1.3.3.1 ***Overall Supervision and Responsibility for Occupational Health and Safety***

- The Client is to ensure that the Contractor, appointed in terms of Construction Regulation 5(1) (k), implements and maintains the agreed and approved Occupational Health & Safety Plan.

- The Chief Executive Officer of the Contractor, in terms of Section 16(1) of the Act, is to ensure that the Employer (as defined in the Act) complies with the Act. Annexure 5. "Audit System" may be used for this purpose.

- It is a requirement that the Contractor, when he appoints Contractors in terms of Construction Regulations 7 includes an Occupational Health & Safety Act Section 37(2) agreement ("Agreement with Mandatory") in his agreement with such Contractors.

- Every project must have an Occupational Health & Safety Act (85 /1993), Section 16(2) Appointee.

- The client must ensure that the contractor appoints a Construction Supervisor and Assistant Construction Supervisor in terms of Construction Regulation 8(8).

1.3.3.2 ***Further (Specific) Supervision Responsibilities for Occupational Health & Safety***

The Contractor shall appoint designated competent employees and/or other competent persons as required by the Act and Regulations. The appointments shall be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information must be communicated and agreed with the appointees.

1.3.3.3 ***Designation of* Occupational Health & Safety *Representatives* (Section 18 of the Occupational Health & Safety Act)**

The Contractors shall ensure Occupational Health & Safety Representatives are appointed for every workplace where employees (including the employees of other Contractors) are exposed to risk.

Occupational Health & Safety Representatives have to be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

The Contractor shall ensure that the designated OH&S Representatives conduct an inspection of their respective areas of responsibility using a checklist and report thereon.

Occupational Health & Safety representatives shall be included in accident/incident investigations and must attend all Occupational Health & Safety committee meetings.

1.3.4 Administrative Controls and the Occupational Health & Safety File

1.3.4.1 ***The* Occupational Health & Safety *File***

As required by Construction Regulation 7(1)(b), the Principal Contractor and other Contractors will each keep an updated Occupational Health & Safety File on site containing the following documents as a minimum

- Permit to construct Notification of Construction Work (Construction Regulations 4)
- Copy of Occupational Health & Safety Act (updated) (Gen Administrative Regulation 4)
- Proof of Registration and good standing with a COID Insurer (Construction Regulation 5(1) (j)
- Occupational Health & Safety Programme/Plan agreed with the Client including the underpinning Risk Assessment/s & Method Statements (Construction Reg 5(1)(q)
- Copies of Occupational Health & Safety Committee and other relevant Minutes
- Designs/drawings
- A list of Contractors including copies of the agreements between the parties (Section 37(2) agreement in terms of the OHS act) and the type of work being done by each Contractor
- Appointment/Designation forms (For example H&S rep, first aider etc.)
- Electrical Installations, -Equipment & -Appliances including temporary certificate of compliance
- All other applicable records

1.3.5 OH&S Goals & Objectives & Arrangements for Monitoring & Review of Occupational Health and Safety Performance

The Contractor is required to report all incidents to the Project Manager/Client. The Project manager must also submit an up to date report regarding all incidents to the Head, OHS.

1.3.6 Notification of Construction Work

The Contractors shall, where the Contract meets the requirements laid down in Construction Regulation 4, notify the Department of Labour at least 7 days before the commencement of work of the intention to carry out construction work.

A copy must be held on the Occupational Health & Safety File and included into the project file.

1.3.7 Training, Awareness and Competence

1.3.7.1 General Induction Training

All persons on site are to attend a general induction session presented by the Contractor.

All persons on the site shall be in possession of documentation/proof that they have undergone General Induction training.

The Contractor will be required to develop project specific induction training based on the Risk Assessments for the Contract work and train all employees and other Contractors and their employees in this.

1.3.7.2 Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment (for example overhead cranes) shall be in possession of documentation proving that they have undergone training to operate said vehicles, plant and equipment.

All employees in jobs requiring training in terms of the Act and Regulations shall be in possession of valid proof of training as required in the portfolio of evidence of the contractor.

1.3.7.3 Awareness & Promotion

The Contractor is required to have scheme in place to promote an Occupational Health & Safety awareness and culture in employees. The following are some of the methods that may be used:

- Toolbox Talks
- Occupational Health & Safety Posters
- Videos
- Competitions
- Suggestion schemes
- Participative activities such as Occupational Health & Safety circles.

1.3.7.4 Competence

The Contractor shall ensure that all appointed staff is competent and that all training required to do the work safely and without risk to health, has been completed before work commences.

The Contractor shall ensure that follow-up and refresher training is conducted as the contract work progresses and the work situation change. Records of all training shall be kept on the Health & Safety file for auditing purposes.

1.3.8 Consultation, Communication and Liaison

Occupational Health & Safety Liaison between the Client, Principal Contractor, other Contractors, Designer and other concerned parties will be through the Client/Project Manager. In addition to

the above, communication may be directly with the Client or his appointed Agent, verbally or in writing, as and when the need arises.

The Principle Contractor will be required to do Site Safety Audits with the Client/Project Manager on a basis to be determined between the two parties.

1.3.9 Checking, Reporting and Corrective Actions

3.3.9.1 ***Monthly Audit by Client*** **(Construction Regulation 4(1)(d)**

The **Client or his agent** will conduct minimum monthly audits to comply with Construction Regulation 5(1) (o) to ensure that the Contractor has implemented and is maintaining the agreed and approved Occupational Health & Safety Plan.

The Contractor is to conduct his own minimum monthly internal audits to verify compliance with his own Occupational Health & Safety plan.

The Occupational Health & Safety Representative is to conduct monthly inspections of their areas of responsibility and report thereon to their supervisor

All the results of the abovementioned inspections shall be in writing, reviewed, endorsed and placed on the Occupational Health & Safety File.

1.3.10 Incident Reporting and Investigation

1.3.10.1 ***Reporting of Accidents and Incidents***

The Contractor shall report all incidents where an employee is injured on duty to the extent that he/she:

- dies
- becomes unconscious
- loses a limb or part of a limb
- is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed

OR where:

- a major incident occurred
- the health or safety of any person was endangered
- where a dangerous substance was spilled
- the uncontrolled release of any substance under pressure took place
- machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
- machinery ran out of control

to the **Client** and to the Provincial Director of the Department of Labour forthwith (Section 24 of the Act & General Administrative Regulation 8.)
The Contractor is required to provide the **Client** with copies of all internal and external accident/incident investigation as well as all statutory reports required in terms of the Act within 7 days of the incident occurring.

1.3.10.2 ***Accident and Incident Investigation***

The Contractor is responsible for the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to be referred for medical treatment by a doctor, hospital or clinic and the results of the investigation shall be entered into the Accident/Incident Register.

The Contractor is responsible for the investigation of all minor, non-injury incidents and near misses. The Client reserves the right to hold its own investigation into an incident or call for an independent external investigation.

1.3.11 Operational Control

1.3.11.1 **Emergency Preparedness, Contingency Planning and Response**

The Contractor shall appoint a competent person to act as Emergency Coordinator.

The Contractor shall conduct an emergency identification exercise and establish what emergencies could possibly develop. He/she must then develop detailed contingency plans and emergency procedures.

1.3.11.2 **First Aid**

The Contractor shall provide relevant First Aid equipment and have qualified First Aider/s on site as required by General Safety Regulation 3 of the Occupational Health & Safety Act.

1.3.11.3 **Security**

The Contractor shall develop, implement and maintain Security- and Site Access Control rules and procedures throughout the construction period. Access control shall include the rule that non-employees will not be allowed on site unaccompanied.

1.3.11.4 **Fall Protection (Working in Elevated Positions)**

Any work undertaken at height above ground level higher than two metres or any floor level will be classified as "Work in Elevated Positions" and a pre-emptive Risk Assessment shall be carried out.

Workers working in elevated positions shall be trained to do this safely, without risk and compliant with legislation.

Risk Assessment shall take the possibility into account of persons falling through fragile material, skylights and other openings in the roof.

1.3.11.5 **Structures**

The Contractor shall ensure that:

- Steps are taken to ensure that no structure becomes unstable or collapses due to construction work being performed on it or in the vicinity of it
- No structure is overloaded to the extent where it becomes unsafe
- He/she has received from the designer the following information:

- Information on known or anticipated hazards relating to the construction work and the relevant information required for the safe execution of the construction work.
- A geo-scientific report (where applicable)
- The loading the structure is designed to bear
- The methods and sequence of the construction process
- All drawings pertaining to the design are on site and available for inspection

1.3.11.6 **Temporary Works**

Temporary work shall be carried out under the supervision of a competent person designated in writing to do so.

All drawings pertaining to the temporary work shall be kept available on site. A competent person shall check all equipment used in the erection of temporary work before it is used.

1.3.11.7 **Access Scaffolding**

Access Scaffolding shall be erected, used and maintained safely in accordance with Construction Regulation 16 and SA Bureau of Standards Code of Practice, SANS 085 entitled, "The Design, Erection, Use & Inspection of Access Scaffolding.

Detailed consideration shall be given to all scaffolding to ensure that it is properly planned to meet the working requirements.

Scaffolding may only be erected, altered or dismantled by a person who has adequate training and experience in this type of work or under the supervision of such a person (Proof of competence to be put on the OHS File).

1.3.11.8 **Construction Vehicles & Mobile Plant (CV&MP)**

All Construction Vehicles and Mobile Plant shall be inspected by the Contractor prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment will be required to comply with this specification as well as the Occupational Health & Safety Act and Regulations.

No unauthorised persons are to be allowed to drive CV&MP. Operators/drivers of CV&MP shall be competent to operate the equipment safely and be in possession of a valid medical certificate issued by an Occupational Medicine Practitioner testifying that the holder is physically and psychologically fit to operate the equipment.

1.3.11.9 **Electrical Installations**

Temporary electrical installations shall be carried out by competent persons, and controlled by a competent person that has been appointed to do so in writing, in accordance with Construction Regulation 24 and the Electrical Installation Regulations. Temporary electrical installations shall be inspected at least once per week by a competent person and a record of the inspections kept in the Occupational Health & Safety File.

The Contractor shall ensure that:

- existing electrical services are located and marked before construction commences and during the progress thereof. Where this is not possible, workers with jackhammers etc. are to be protected against electric shock by the use of suitable protective equipment like insulated handles, rubber mats etc.

- electrical installations and -machinery are sufficiently robust to withstand working conditions on site.

- all electrical machinery used on site are inspected before start-up on a daily basis by a competent person and that a record of the inspection is kept in the Occupational Health & Safety File.

An electrical and mechanical lock-out procedure for the construction site shall be developed by the Principle Contractor and submitted for approval by the Project Manager before construction commences. This lock-out procedure shall be adhered to by all Contractors on site.

1.3.11.10 **Housekeeping**

The Contractor shall ensure that good housekeeping practises are implemented so that:

- an unimpeded work space is maintained for every employee.
- the walls and roof of every indoor workplace is sound and leak-free.

- every workplace is kept clean, orderly and free of tools and materials that is not required for the work being done.

- every floor, walkway, stair, passage and gangway is kept in a good state of repair, skid-free and free of obstruction, waste and materials.

- catch platforms or -nets are erected over entry and exit ways or over places where persons are working to prevent them being struck by falling objects.

- openings in floors, hatchways, stairways and open sides of floors or buildings are barricaded, fenced, boarded over or provided with protection to prevent persons from falling through or off them.

- materials and equipment are stored properly.

- materials ready for use is placed safely and not allowed to accumulate or cause an obstruction to pedestrian and vehicular traffic.

- Scrap, waste and debris is removed regularly and in a safe manner.
- construction sites are fenced off to prevent entry by unauthorised persons.

1.3.11.11 **Eating-, Changing-, Washing- and Toilet Facilities**

Eating facilities should be provided in a location that is sheltered from the elements. Adequate changing-, washing – and toilet facilities shall be provided for both sexes.

At least 1 shower per 15 workers and 1 toilet per 30 workers shall be provided. Chemical toilets may be used instead of the water borne sewerage type.

1.3.11.12 **Personal & Other Protective Equipment**

The Contractor shall identify the hazards in the workplace and endeavour to eliminate them. Where this is not possible, suitable steps shall be taken to protect workers from these hazards. Engineering- and other solutions to mitigate the hazard(s) should be attempted before the issue of **personal protective equipment (PPE)** is considered.

The Contractor is required to inform employees of health and safety hazards and issue them with suitable equipment to protect them from these hazards. It is a further requirement that the Contractor maintains the equipment and instructs and train employees in the use of the equipment. Employees do not have the right to refuse to use/wear safety equipment.

1.3.11.13 **Portable Electrical Tools & Equipment**

Portable electrical tools and equipment is defined as units taking electrical power from 220Volt 15 Amp power outlets and is moved around the workplace to perform work like drilling, sawing, grinding etc. and also include portable lights. Electrical appliances, on the other hand, include items like fridges, stoves and heaters.

1.3.11.14 **Public Health & Safety**

The Contractor is responsible for ensuring that non-employees affected by the construction work, like visitors, the surrounding community and passers-by, are made aware of the dangers likely to arise from the construction work as well as the precautionary measures to be observed to avoid or minimise these dangers. Appropriate signage must be posted to this effect and all employees on site shall be instructed to ensure that non-employees are protected at all times. All non-employees entering the site must receive induction into the hazards and risks and the control measures.

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Annexure "B"

LIST OF CONTRACTORS

NAME OF PROJECT …….

CONTRACTOR NAME	SUMMARY OF SERVICES	SECTION 37(2) AGREEMENT IN PLACE	LETTER OF GOOD STANDING IN PLACE	RISK ASSESSMENT, HEALTH AND SAFETY PLAN AND FILE IN PLACE

PART C 4:

SITE INFORMATION

C 4.1 Scope

DEPARTMENT OF CO-OPERATIVE GOVERNANCE, HUMAN SETTLEMENTS AND TRADITIONAL AFFAIRS OF THE NORTHERN CAPE

TENDER NO. NC/07/2021

CONSTRUCTION OF INTERNAL SERVICES FOR 66 STANDS IN SANTA CENTRE, KIMBERLEY.

C 4: SITE INFORMATION

C 4.1 SCOPE

The documentation included describes the site as at the time of tender to enable the Tenderer to price his tender and to decide upon his method of working and programming.

Work will be executed in a residential area and the Contractor will take **all** necessary steps to ensure the safety of people, animals and/or property.

C 4.1 GEOTECHNICAL REPORT PHASE 1

The attached phase 1 geotechnical report provides a detailed information, which the contractors need to take into considering in preparing this bid.

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DRAWINGS

GEOTECHNICAL INVESTIGATION FOR: SANTA CENTRE & MAHALA PARK, KIMBERLEY, NORTHERN CAPE PROVINCE

FINAL REPORT

FEBRUARY 2020

Report ref No: 19-021

February 2020

Livingstone Complex

Edgar Street,

Noordwyk Midrand 1687,

South Africa

Prepared by: Phatela GeoConsulting (Pty) Ltd

Document Properties

Attribute	Value
Client Name	KMSD Engineering Consultants cc
Project Name	Geotechnical Investigation For Santa Centre and Mahala Park in Kimberley, Northern Cape Province
Document Number	19-021
Document Version	0
Version Date	February 2020
Document Status	Final
Referenced as	Geotechnical Investigation Report
Author	Limpho Phatela
Access Rights	The following have access to the document for information and action, as stipulated. • KMSD Engineering Consultants cc

Change History

Version	Revision Date	Revised By	Description
0	-	-	-

Distribution List

Name & Title	Purpose
KMSD ENGINEERING CONSULTANTS CC	Information and retention

Approval

The signatories hereof, being duly authorized thereto, by their signatures hereto confirm their acceptance of the contents hereof.

Name	Designation	Signature	Date
Limpho Phatela	Engineering Geologist, Pr Sci Nat, MSAIEG		21/02/2020

EXECUTIVE SUMMARY

At the request of KMSD Engineering Consultants cc, Phatela Geoconsulting (Pty) Ltd carried out a geotechnical investigation for proposed RDP housing development and infrastructure at Santa Centre and Mahala Park near Kimberley, in Northern Cape Province. The proposed site is an extension of Galeshewe Township, just adjacent to Kimberley town. The area's coordinates in Longitude and Latitude, Datum WGS 84 are 28°43'05.5"S and 24°44'56.1"E respectively.

The geotechnical investigation was carried out in three stages, which were a desktop study, geotechnical profiling of test pits and DCP tests as well as testing of soil samples at materials laboratory in Kimberley.

Geologically, the site is underlain by a mantle of fill and residual soils overlying either dolerite or shale bedrocks.

The site is categorised as **Intermediate Favourable Class** for the construction of the RDP houses provided cognisance is taken of the following geotechnical constraints:

- Excavation requirements on shallow bedrock,
- Areas of potentially expansive

The development of the township therefore requires certain precautionary measures as prescribed in the foundation design and constructions in accordance with South African National Standard (SANS 10400-H: 2012 Edition 3). Part H; Foundations, The application of the National Building Regulations.

Given the shallowness of the bedrock and low activity of the clay in residual soil , the recommended foundation construction types in accordance with South African National Standard (SANS 10400-H: 2012 Edition 3). Part H; is normal foundations

The site is dominated by shallow bedrock of which at some areas it is exposed on surface therefore "Hard excavation class" can be anticipated at any point throughout the site especially when it comes to trench excavations.

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1 INTRODUCTION

This report provides factual and interpretive details of geotechnical investigations carried out at Santa Centre and Mahala Park informal settlements near Kimberley in Northern Cape Province. The purpose of the investigation was to explore the subsurface conditions in order to determine the characteristics of the soil, its expected behaviour upon loading and to provide recommendations including suitable foundations for proposed single storey RDP houses as well as suitability of the ground for trench excavation for the purpose of pipeline networks.

The investigations commenced with a desktop study followed by fieldwork which entailed excavation of the tests pits across the site using a Tractor-Loader-Backhoe (TLB); profiling of the test pits and exposures by an engineering geologist; retrieval of soil samples from the test pits to be tested at a soils laboratory as well as performing in-situ Dynamic Cone Penetrometer tests.

The report provides details of method of investigations, results obtained, geotechnical assessment, site characterisation, foundations solutions as well as recommendations.

1.1 Terms of Reference

Santa Centre and Mahala Park comprise of informal settlement therefore Phatela Geoconsulting (Pty) Ltd was as a result appointed by KMSD Engineering Consultants cc to conduct the geotechnical investigation at the area to give recommendations with regard to founding conditions and site characterisation for pipeline trenches.

1.2 Scope of Work

The scope of work as agreed with the Client was as follows;

- Excavation of test pits on areas at the area. Test pits to be logged by an engineering geologist in accordance with Guidelines for Soil and Rock Logging in SA by ABA Brink and RMH Bruin, 2002. Excavation could only be done on designated areas whereby it was deemed safe to do so without damaging the existing properties.
- Obtaining of soil samples from the test pits for testing at soils laboratory.
- Presentation of field data and laboratory data. This should include photos, profiles, DCPs results and laboratory test results.
- Analysis of results and production of the Geotechnical Investigation Report.

1.3 Available Information

- KMSD Engineering Consultants cc provided background of the project
- Physical address of the site was provided.
- Approximate extent of the site
- Guidance by the local representative to indicate safe areas to excavate

1.4 Limitations

There are shacks throughout most of the site. This made it difficult to excavate at some of the places lest damage to the properties and existing buried water pipeline.

2 LOCALITY

Santa Centre and Mahala Park are informal settlements forming extension of Galeshewe Township. This township that is near Kimberley is within Sol Plaatje Local Municipality under the Jurisdiction of Frances Baard District Municipality.

The actual site is situated just about 3km from Kimberley CBD towards north-western direction. Santa Centre shares a boundary with Sasol fuel station on the north-west end. Barkly Road marks the end of Santa Centre on the eastern side. Mahala Park shares the immediate gravel street with Santa Centre and is flanked by the George Kekana Secure Care School on the south-western end. **Figure 1 below** shows a general combined outline of Santa Centre and Mahala Park sites. The site coordinates in Longitude and Latitude, Datum WGS 84 are 28°43'05.5"S and 24°44'56.1"E respectively.

Figure 1 : Aerial view image of the proposed sites extracted from Google Earth

2.1 Site Description

Santa Centre and Mahala Park are informal settlements comprising of shacks. The two adjacent sites are an extension of a well developed Galeshewe Township. The shacks are distributed in a semi-orderly manner although at some parts the streets are inaccessible with excavation machines.

There are communal water taps sparsely distributed throughout the two areas. Electricity is available within those settlements with power lines visible overhead.

Most of the ground is covered with fill soil while other areas have visible patches of the bedrock. The gravel streets connect to the schools, government institutions, town and other parts of the greater township.

2.2 Topography

The proposed site is situated on a generally flat terrain. **Figure 2 below** shows a topographical locality map for the study area at scale of 1:50 000 extracted from 2824DA Barkly West. The widely spaced contours lines show the flatness of the terrain.

Figure 2 : An extract of a topographic map where the proposed sites are situated

2.3 Climate

According to SA Explorer, Kimberley usually receives about 283mm of rain per year, whereby most rainfall takes place mainly in summer. The minimum rainfall (0mm) occurs in July with the maximum (59mm) in March. The monthly distribution of average daily highest temperatures shows that the average midday temperatures for Kimberley range from 18°C in June to 32°C in January. The region is the coldest during July whereby temperatures drop to 0.3°C on average during the night. **Figure 3 below** shows graphs with approximate average temperatures and rainfall in Kimberley.

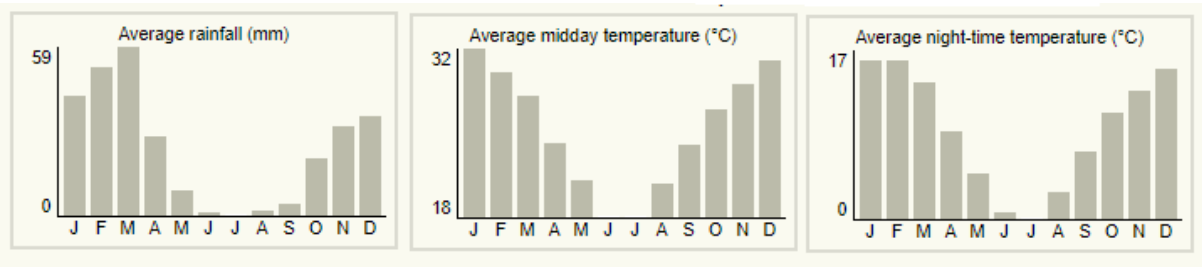

Figure 3: Various graphs illustrating climate at the Kimberley

3 METHODS OF INVESTIGATION

The geotechnical study was carried out in three phases; ***desktop study***, ***field work*** which comprised of excavation and profiling of test pits and mapping as well as dynamic cone penetration (DCP) tests. The third phase was ***laboratory testing*** of soil samples. The details of each stage are explained below.

3.1 Desktop Study

The desktop study comprised of studying of geological maps to confirm the anticipated geology and geotechnical properties of the soils. This information was used to provide guidance on appropriate soil tests to be performed. The desktop study also involved location of the area using Google Earth in order to get an appreciation of the site and to prepare accordingly for the investigations, as well as studying of topography and any other provided information.

3.2 Test Pits Excavation and Mapping

Seven test pits, designated TP1 through TP7, were excavated using a TLB, aimed to 3.0m depth or refusal, in order to investigate subsurface soil and bedrock conditions. The subsurface investigation focuses on the moisture, colour, consistency, soil structures, soil type and origin of the soil. In the case of bedrock, the focus would mainly be on colour, weathering, existing structures, rock hardness, type of rock and its origin.

Whereby the rock outcrop was visible it was also mapped and described according to its characteristics. Such areas were termed as exposures (EXP) and a total of four exposures designated EXP1 through EXP4 were identified.

The positions of the test pits and exposures were recorded using a Garmin GPS handset and are pinned on the Google Earth image on **Figure 4 below**. All areas were profiled by an engineering geologist and their respective photographs are included in **Appendix A** of this report.

Figure 4: Positions of test pits ,exposures and DCP's pinned on Google Earth image

3.3 Dynamic Cone Penetration Test

Fourteen Dynamic Cone Penetration (DCP) tests, designated DCP1 through DCP14, were carried out at the positions as shown on **Table 1 below**. The DCP tests were aimed to final depths of 1 metre below existing ground level unless whereby refusal occurred before then. The results of the DCP tests, comprising plots of blow counts per 100mm advance and allowable bearing capacity parameters against depth, are given in **APPENDIX B**.

Table 1: List of DCP points with their respective positions and depths

DCP No.	Coordinates		Advanced depth(m)	Refusal (m)
	Longitude	Latitude		
DCP 1	28°42'55.6"S	24°44'59.3"E	0.70	0.70
DCP 2	28°42'58.3"S	24°45'03.2"E	0.50	0.50
DCP 3	28°43'00.5"S	24°45'01.9"E	0.30	0.30
DCP 4	28°43'06.9"S	24°45'02.0"E	0.80	0.80
DCP 5	28°43'05.7"S	24°44'00.3"E	0.90	0.90
DCP 6	28°43'05.5"S	24°44'56.1"E	0.50	0.50
DCP 7	28°42'54.7"S	24°44'59.9"E	0.80	0.80
DCP 8	28°42'55.7"S	24°45'0.43"E	0.90	0.90
DCP 9	28°42'59.8"S	24°45'3.30"E	0.40	0.40
DCP 10	28°43'06.9"S	24°44'59.4"E	0.40	0.40
DCP 11	28°43'4.41"S	24°45'02.7"E	0.80	0.80
DCP 12	28°43'6.50"S	24°45'03.8"E	0.70	0.70
DCP 13	28°43'8.50"S	24°45'59.5"E	0.60	0.60
DCP 14	28°43'54.8"S	24°45'02.2"E	0.50	0.50

.

3.4 Laboratory Testing

Disturbed bulk soil was sampled by the engineering geologist and sent to soil laboratory, Simlab Laboratory, for testing in Kimberley.

The following laboratory tests were conducted on representative samples from site:

- Foundation Indicators; Particle Size distribution and Atterberg Limits
- Moisture content
- Mod AASHTO moisture/density relationship and CBR
- Electric Conductivity
- pH

4 INVESTIGATIONS RESULTS

4.1 Geology

The Geological Map Series, sheet number 2824 Kimberley, published at a scale of 1:250 000 by Council for Geosciences indicate that Kimberley is situated on the area that is underlain by shale of Prince Albert Formation under Ecca Group of the Karoo Supergroup. Aeolian sand and calcrete cover a significant part of the region. Dolerite sills and dykes intrude the formation both on local and regional scale. **Figure 5 below** shows an extract of the geological map series of a region where the proposed sites are situated.

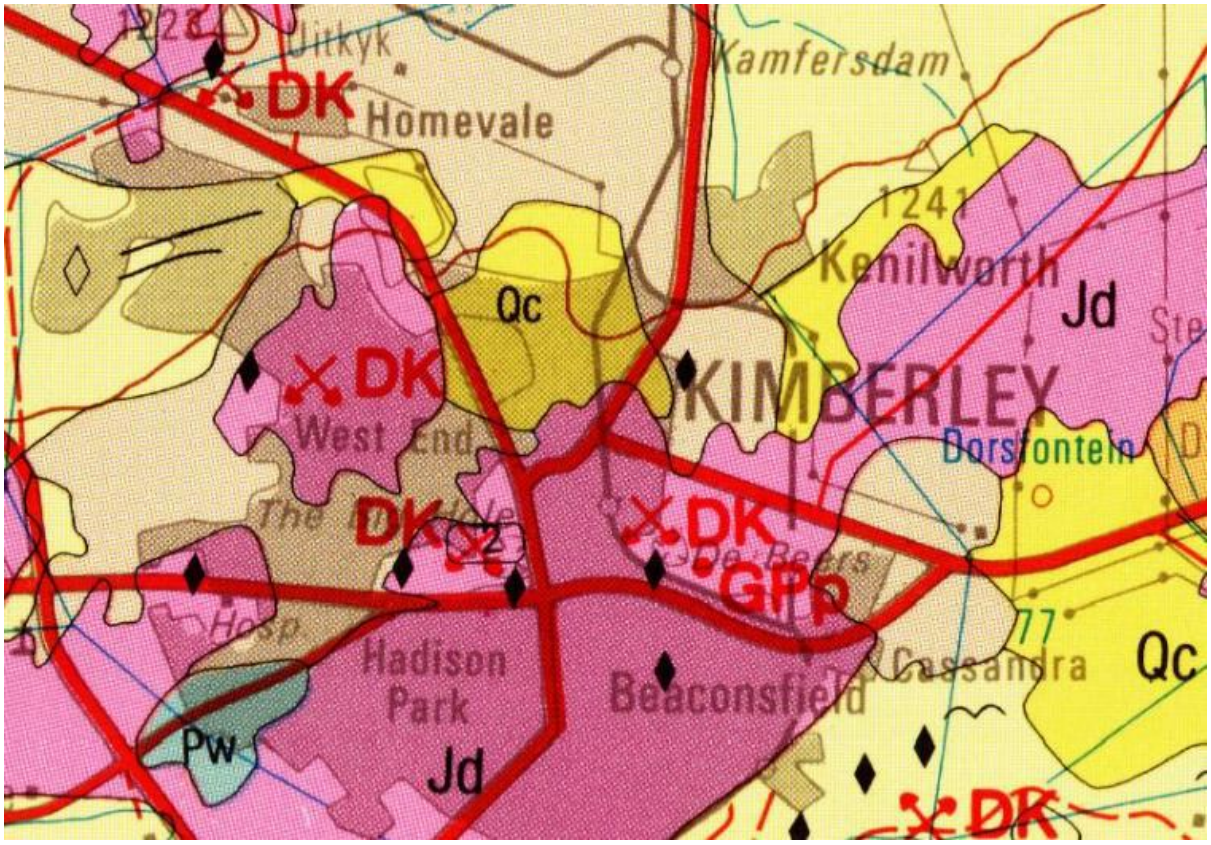

Figure 5: Regional geology of the area where the sites are situated extracted from Sheet 2824 Kimberley Geological Map

4.2 Local Geology

Upon profiling of the seven test pits and four exposures, the site was observed to be underlain by a mantle of a fill, residual soil and two types of bedrock. **Table 2 below** shows a summary of each test pit and exposure profile log whereby **Appendix A** will show full details.

Table 2: Summary of test pits and exposures logs

Test Pit No.	Co-ordinates		Test Pit Depth (m)	Fill Depth (m)	Residual dolerite, Depth (m)	Shale/ Dolerite Bedrock Depth (m)	Sample Obtained Depth (m)	Water seepage Depth (m)	Refusal depth (m)
	Longitude	Latitude							
TP 1	28°42'55.6"S	24°44'59.3"E	0.80	0.0-0.70	None	0.7-0.80	None	None	0.80
TP 2	28°42'58.3"S	24°45'03.2"E	0.80	0.0-0.20	None	0.2-0.80	None	None	0.80
TP 3	28°43'00.5"S	24°45'01.9"E	0.40	None	0.0-0.20	0.2-0.40	None	None	0.40
TP 4	28°43'06.9"S	24°45'02.0"E	0.80	0.0-0.20	0.2-0.70	0.7-0.80	0.2-0.70	None	0.80
TP 5	28°43'05.7"S	24°44'58.5"E	None	None	None	0.0-0.20	None	None	0.20
TP 6	28°43'05.7"S	24°44'00.3"E	0.90	0.0-0.80	0.8-0.90	0.9-0.90	0.8-0.90	None	0.90
TP 7	28°43'05.5"S	24°44'56.1"E	0.50	0.0-0.50	None	None	0.0-0.50	None	0.50
EXP 1	28°43'03.5"S	24°45'00.4"E	0.10	None	None	0.0-0.10	None	None	0.10
EXP 2	28°43'06.9"S	24°44'57.2"E	0.10	None	None	0.0-0.10	None	None	0.10
EXP 3	28°45'58.1"S	24°45'00.4"E	0.10	None	None	0.0-0.10	None	None	0.10
EXP 4	28°42'59.8"S	24°45'02.3"E	0.10	None	None	0.0-0.10	None	None	0.10

4.2.1 Fill material

This is soil material that was transported to the current location due to human activity. At Santa Centre and Mahala Park, such fill material generally comprised of slightly moist, orangey brown speckled dark gray, loose to medium dense, intact, gravelly sand with dolerite cobbles, pieces of papers and plastics. This soil horizon was identified at depths of between 0.20 and 0.80m from surface with average thickness of about 0.5m.

4.2.2 Residual dolerite

Residual soil is such soil that is directly derived from weathering of the underlying bedrock and should have similar geochemistry as the parent bedrock. On this particular site, the existing residual soil is formed as a result of a complete weathering of the underlying dolerite bedrock.

The residual soil was observed at depths of between 0.20 and 0.70m from surface with average thickness of about 0.30m. This residual soil mantle comprised of slightly moist, reddish brown speckled dark gray, soft, intact, gravelly clay with dolerite cobbles and boulders.

4.2.3 Bedrocks

Two types of bedrock existed on the area. The first one was a dark gray stained orangey brown, highly to medium weathered, closely fractured, soft to hard dolerite bedrock. Such bedrock was identified in test pits at depths of between 0.20m and 0.90m, however, on three exposures such dolerite rock formed outcrop on surface.

The second type of bedrock was a greenish gray, slightly weathered, very close to closely fractured, laminated and thinly bedded, medium hard to hard shale bedrock of Ecca Group under Karoo Supergroup. This type of bedrock was identified at depths of between 0.20 and 0.80m below ground level. Shale rock was also identified on one exposure forming an outcrop.

A TLB machine was able to excavate through an average thickness of about 0.2m before refusal on both dolerite and shale bedrocks.

4.3 Seismicity

According to seismic hazard map derived from Council for Geoscience, particularly the seismic intensity map, Kimberley in general is located in class VI using Mercalli Scale. **Figure 6 below** shows a map of different seismic intensity across parts of Southern Africa extracted from Council for Geoscience report.

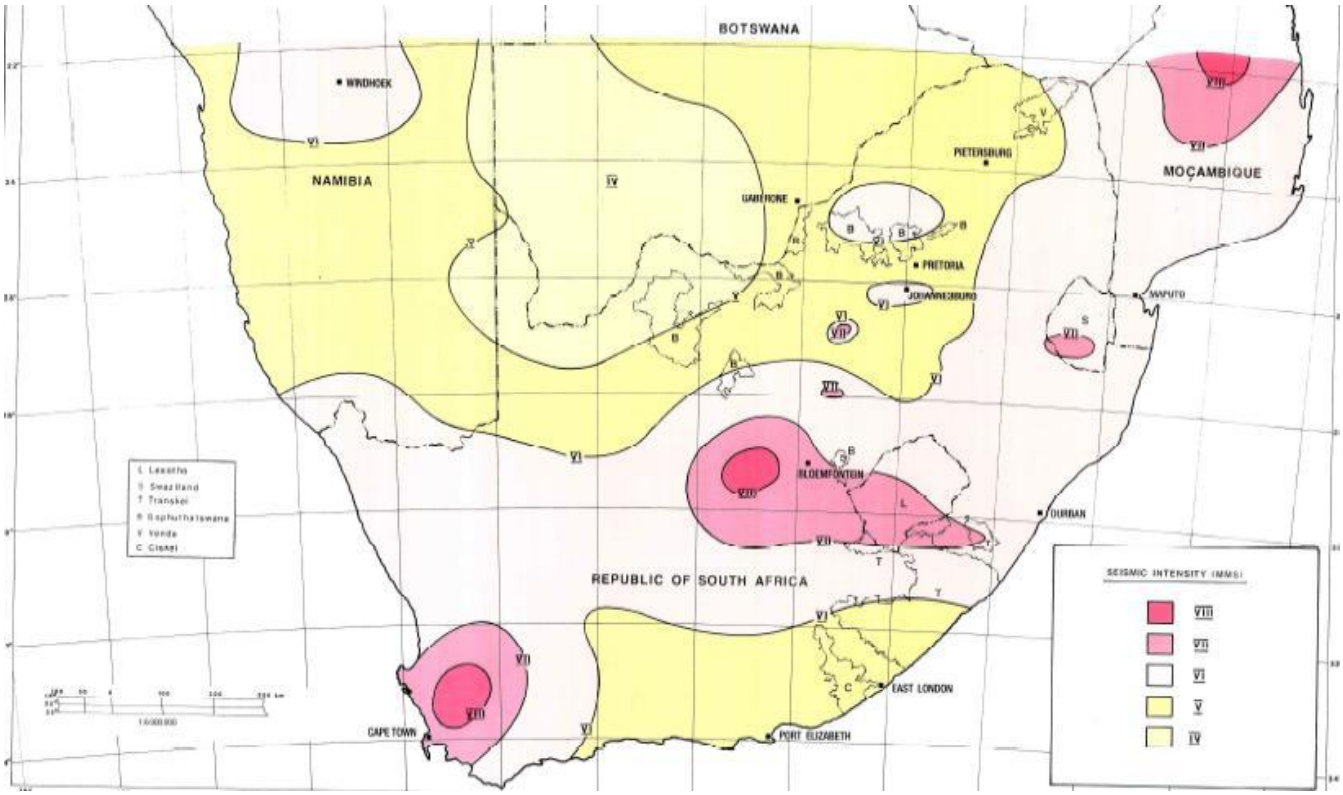

Figure 6: Seismic Intensity map of parts of Southern Africa

The Mercalli Scale is used to measure the intensity of an earthquake and its effects on people and structures .A level VI on Mercalli Scale categorises the impact of the seismic event as strong and can be felt by most people if not all, with heavy and/or unstable objects being broken or overturned and plasters fallen. **Table 3 below** shows varying classifications of Mercalli Scale intensities.

Table 3: Modified Mercalli scale intensities

I. Not felt	Not felt except by a very few under especially favourable conditions.
II. Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III. Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV. Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V. Moderate	**Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.**
VI. Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII. Very Strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII. Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.

4.4 Laboratory Test Results

Laboratory tests results are detailed in **Appendix C** and summarised in **Table 4** below.

Table 4: Summary of laboratory test results.

Descriptions	TP4	TP6	TP7
	0.2-0.8m	0.2-0.9m	0.0-0.5 m
Gravel (%)	46.0	43.0	13.0
Sand (%)	48.0	52.0	69.0
Silt (%)	6.0	5.0	10.0
Clay (%)	0	0	8.0
Liquid Limit (%)	0.0	30.0	0.0
Plasticity Index (%)	SP	4.0	NP
Linear Shrinkage (%)	0.8	2.0	0.0
Van der Merwe's potential swell	Low	Low	Low
Chemical Tests			
pH	5.06	7.7	7.5
Conductivity (Siemens/m)	0.2220	0.1917	0.2522
Compaction Tests			
Max. Dry Density (kg/m3)	2238	1997	1996
Optimum Moisture (%)	7.7	8.6	6.4
% Swell	0.0	0.0	0.0
100% ModAASHTO	13.0	10.0	52.0
98% ModAASHTO	11.0	9.0	42.0
97% ModAASHTO	17.4	8.0	30.0
93% ModAASHTO	9.0	1.5	24.0
90% ModAASHTO	8.0	7.0	17.0

5 GEOTECHNICAL ASSESSMENT

5.1 Groundwater

Groundwater seepage was not evident in all test pits and exposures. However, during periods of prolonged rainfall, particularly during the summer season, a marked in the occurrence and magnitude of groundwater seepage flow may be anticipated. Perched groundwater flows at the soil / rock interface may become more prolific during the rainy months.

5.2 Soil Expansivity

Expansive soil is the one that has clay with a high smectite mineral content. This mineral has the ability to absorb a high volume of water and that results in swelling of the soil also known as heave. When the moisture decreases, the soil will also decrease in volume and thus shrink. Structures that are constructed on expansive clays are destabilised by the heave effect. For this reason, the soil is normally taken to the laboratory to analyse its expansivity potential. The purpose of the Foundation Indicator tests at the laboratory is to determine the expansivity of the soil. On these sites, the laboratory results show that the soil has low swelling activity, therefore, there is no heave movement anticipated according to Van Der Merwe[1], 1975.

5.3 Excavatability

There are areas, underlain by either fill or residual soil, where excavation conditions can be categorized as 'soft mechanical excavation' according to SANS 1200D "Classification of material for machine excavation". The areas with overburdens extend to minimum depths of about 0.20m and maximum depth of about 0.8m below ground level.

Nevertheless, there are some areas whereby bedrock is exposed on ground surface and therefore rendering "hard mechanical excavation.

It is therefore safe to anticipate "hard mechanical excavation" at any instance throughout the site because of undulating bedrocks at shallow depths.

[1] D.H Van Der Merwe (1964) The Prediction of Heave from the Plasticity Index and Percentage Clay Fraction of Soils. The Civil Engineer, pp103-107

5.4 Bedding Material

In terms of the SANS 1200 LB (1983) concerning bedding requirements, buried pipelines require two types of selected material. Those selected materials are termed "Selected Granular Material" and "Selected Fill Material".

In general, the "Selected Granular Material "is used as bedding material to support the pipe, while the "Selected Back Fill Material" is used as blanket material over the crown of the pipe. General Backfill material is placed above the blanket materials, up to ground level.

From the laboratory tests results of the materials encountered in the test pits:

- The following conclusions can be made regarding the suitability of the in situ materials for use as the bedding layers for the pipeline according to the requirements of SABS1200LB:
  - **None** of the insitu materials sampled meet the grading requirements for "Selected Granular Material" laid down in SABS 1200 LB (1983). Selected granular material is defined as *"granular, non-cohesive and singularly graded between 0.6mm and 19mm. The material must be free draining and have a compactability factor not exceeding 0.4"*. Therefore, all selected granular bedding material will need to be **imported** to the site.

  - The materials identified will also **not** be suitable for "Selected Fill" purposes. Selected fill is defined as *"a material with a Plasticity Index (PI) not exceeding 6, free from lumps, vegetation and stones of a diameter exceeding 30mm"*. Therefore, the selected fill materials will also need to be imported to the site.

All soil materials excavated from trenches may be used as general backfill over the selected layers.

5.5 Precautionary Measures

5.5.1 Bedding

- Bedding material for pipe placement shall not be a frost susceptible material.

- Before placing any bedding material, the bottom of the trench shall be hand raked ahead of the pipe laying operation to remove stones and lumps which will interfere with

smooth and complete bedding of the pipe.

- The specified bedding material shall then be placed in layer(s) the full width of the trench, each layer not exceeding eight inches in thickness loose measure, and compacted to 95% of maximum density as determined by AASHTO T 180 D, until the elevation of the plan grade for the pipe invert is attained.

- After the pipe has been laid and approved for covering, the specified bedding material shall be placed evenly on both sides of the pipe for the full width of the trench.

5.5.2 Stability of Trenches

The test pits were all near vertical and there was no evidence of side wall collapse while left open during that short period, therefore any possible trenches excavated to within the limits of the tests pit depths are expected to be stable. However, in cases where water ingress is encountered, or the trenches are left open for an extended period, there could be instability problems. In such case(s), the excavated trenches may have to be battered to stable angles or shored to avoid sidewall collapse.

5.5.3 Trench Safety

It is important to ensure that soil removed from the trench is placed no closer than 1.5m from the edge of the trench. It is generally required that trenches deeper than 1.5m be adequately shored where there is a possibility of collapse. With pipeline trenches in particular, there is a tendency to open the trench over large lengths thereby increasing the risk of sidewall collapse. In any event there must be provision for safe access not more than every 50m along the trench length.

Key issues regarding the stability of trench sidewalls are;-

- Soft wet soil conditions
- Surcharge loading at edges of trenches
- Groundwater seepage

- Rainwater runoff

Of these, both surcharge loading and control of rainwater runoff can be managed. Surcharge in the form of stockpiling of backfill, or trenching machinery (pipe laying rigs), must be placed well away from the edge of the trench.

5.5.4 Backfill and Erosion

The trench line can also become a route for continued erosive activity, and with time could develop into a donga feature with resultant failure of the pipeline. It is therefore important to vegetate the trench outline as soon as possible after a process of backfilling is complete.

Compaction of the general backfill over the selected backfill layer may be carried out in 150mm thick layers and compacted to minimum 93% MAASHTO density. This is critical to ensure that settlement over pipes and within trench outlines is limited.

5.6 Bearing Capacity

Dynamic Cone Penetration can assist in determining the estimated allowable safe bearing pressures (EASBP) of the soils. **Appendix B** shows that EASBP to one metre depth at on site lack consistency. However because the bedrock is very shallow, foundations can be placed on either shallow shale or dolerite bedrock. The bearing capacity of both bedrocks exceeds 600kpa.

5.7 Corrosivity

Acidity (pH) and electric conductivity of the soil contribute to the soil to have a corrosive characteristic. In general the higher the acidity and the electric conductivity of the soil, the higher is its corrosiveness. The results from the laboratory show that the soil at the proposed sites has a pH between 5.06 and 7.7 with electric conductivity between 0.1917 and 0.2522Siemens/m. From these figures, it can therefore be concluded that the soil be considered as mildly corrosive.

5.8 Geotechnical Classification

In terms of Geotechnical Classification of Urban Development, after Patridge, Wood and Brink, the area can be categorised as **Intermediate Favourable Class**. This class was selected based on the parameters discussed in **section 5** above and using **Table 5 below** as a guideline. **Intermediate Class** category means precautionary measures are to be taken as prescribed during design and construction.

Table 5: Geotechnical Classification for Urban Development (after Patridge, Wood and Brink)

Constraint		Most Favourable (1)	Intermediate (2)	Least Favourable (3)
A	Collapsible Soil	Any collapsible horizon or consecutive horizons totalling a depth of less than 750mm in thickness *	Any collapsible horizon or consecutive horizons with a depth of more than 750mm in thickness	A least favourable situation for this constraint does not occur
B	Seepage	Permanent or perched water table more than 1.5m below ground surface	Permanent or perched water table less than 1.5m below ground surface	Swamps and marshes
C	Active Soil	Low soil heave potential anticipated	Moderate soil heave potential anticipated	High soil-heave potential anticipated
D	Highly compressible soil	Low soil compressibility anticipated*	Moderate soil compressibility anticipated	High soil compressibility anticipated
E	Erodability of soil	Low	Intermediate	High
F	Difficulty of excavation to 1.5m depth	Scattered or occasional boulders less than 10% of the total volume	Rock or hardpan pedocretes between 10 and 40% of the total volume	Rock or hardpan pedocretes more than 40% of the total volume
G	Undermined ground	Undermining at a depth greater than 240m below surface (except where total extraction mining has not occurred	Old undermined areas to a depth of 90 - 240m below surface where slope closure has ceased	Mining within less than 90 - 240m of surface or where total extraction mining has taken place
H	Stability : (Dolomite & Limestone)	Possibly stable. Areas of dolomite overlain by Karoo rocks or intruded by sills. Areas of Black Reef rocks. Anticipated Inherent Risk Class 1	Potentially charecterised by instability. Anticipated Inherent Risk Classes 2 - 5	Known sinkholes and dolines. Anticipated Inherent Risk Classes 6 - 8
I	Steep slopes	Between 2 and 6 degrees (all regions)	Slopes between 6 and 18 degrees and less than 2 degrees (Natal & Western Cape) Slopes between 6 and 12 degrees and less than 2 degrees (all other regions)	More than 18 degrees (Natal and Western Cape) More than 12 degrees (all other regions)
J	Areas of unstable natural slopes	Low risk	Intermediate risk	High risk (especially in areas subject to seismic activity)
K	Areas subject to seismic activity	10% probability of an event less than 100cm/s² within 50 years	Mining induced seismic activity more than 100cm/s²	Natural seismic activity more than 100cm/s²
L	Areas subject to flooding	A "most favourable" situation for this constraint does not occur	Areas adjacent to a known drainage channel or floodplain with slope less than 1%	Areas within a known drainage channel or floodplain

5.9 Building Site Class

Classification of the proposed site has been carried out in accordance with NHBRC building codes and South African National Standard (SANS 10400-H: 2012 Edition 3). Part H; Foundations, The application of the National Building Regulations.

Given the parameters discussed in **section 5,** the residential site class designation for Santa Centre and Mahala Park is R/H. Normal strip footings placed on the bedrock may be most favourable given the shallowness of the bedrock.

In the event whereby the residual dolerite gets deeper than test pits depths, a normal construction footing may still be used because of the low activity of clay. No foundation may be placed on fill. **Table 6 below** shows different foundation options for each class.

Table 6: Foundation design, building procedures and precautionary measures

SITE CLASS	ESTIMATED TOTAL Heave (mm)	CONSTRUCTION TYPE	FOUNDATION DESIGN AND BUILDING PROCEDURES (Expected damage limited to Category 1)
R	Negligible	Normal	• Normal strip footings
H	> 7.5	Normal	• Normal construction foundation. • Site drainage and plumbing/service precautions.

NOTE

1. Differential heave equals 50% of total heave.
2. The relaxation of some of these requirements, eg. the reduction or omission of reinforcement or articulation joints, may result in a Category 2 level of expected damage.

All foundation reinforcement should be designed by a Structural Engineer with the above points in mind.

Under no circumstances should the foundations be placed in fill, unless such fill is engineered for this purpose. Buildings should be positioned in the cut part of platforms to avoid founding in fill and to minimise founding costs.

In addition to the above, the following good building practice is recommended to minimise differential movements beneath foundations:

- All buildings should have a concrete surround, minimum width 1 metre, with falls away from the building to ensure drainage of stormwater away from the structure. This will prevent the ingress of water into the foundation soils.

- All roof water is to be collected via down pipes and discharged away and downslope of the building
- No flower beds or vegetation to be planted within 3 metres of any structure.
- Septic tanks and soakpits must not be located within 3 metres of the structure, downslope from structures

It is recommended that an experienced engineering geologist must inspect and approve all foundations excavations to confirm depth of founding and bearing pressure.

6 PRECAUTIONERY MEASURES

6.1 Drainage

A most important factor in the promotion of a stable site is the control and removal of both surface and groundwater from the site. It is important that the design of the stormwater management system allow for the drainage of accumulated surface water. Such water should be directed towards the natural drainage lines. Disposal of stormwater should in any case conform to the Local Authority's requirements. Points of discharge of piped stormwater should be carefully designed to limit erosion.

6.1.1 Surface Drainage

Surface drainage of building platforms should be designed to direct water away from fill edges to prevent overtopping of the fill crest and erosion of the fill embankment slopes. It is important that grassing of fill embankments be carried out as soon as possible after construction.

6.1.2 Sub-surface Drainage

The need for subsoil drains will have to be assessed on site during development. Where groundwater seepage is encountered during construction, these zones will need to be controlled with effective subsoil drains, particularly where water is likely to gain ingress into the structural layers of foundations. The occurrence of seepage at the base of housing platform cuts may also require similar treatment.

6.2 Vegetation

All trees should be regarded as potential source of damage to any housing developments. The following varieties are, however, particularly prone to causing damage:

a) All eucalyptus varieties;

b) Lombardy (Free State) poplars;

c) London planes;

d) Willows (Salix) of any type; and

e) Jacarandas.

The greatest risk of direct damage occurs close to the tree from the growth of the main trunk and roots, and diminishes rapidly with distance. The risk of damage can be minimized should precautions be taken when the distance from trees is less than given in **Table 7** derived from the *South African National Standard (SANS 10400-H: 2012 Edition 3). The Application of the National Building Regulations. Part H: Foundations.*

Table 7: Minimum distance between masonry and centre of trunks of young trees

Description	Minimum distance between buildings and trees (meters)		
	Mature height of tree		
	<8 m	8 m to 15 m	>15 m
Buildings other than single-storey buildings of lightweight construction (for example, timber framed)	-	0.5	1.2
Single-storey buildings of lightweight construction (for example, timber framed)	-	0.7	1.5
Free-standing masonry walls: - distance for prevention of all damage - distance which permits some movement and minor damage which might be tolerable	- -	1.0 -	- 2.0
Drains and underground services: - distance which permits some movement and minor damage which might be tolerable - less than 1 m deep - more than 1 m deep	- 0.5 -	0.5 1.5 1.0	1.0 3.0 2.0
In-situ concrete paths and driveways: - distance for prevention of all direct damage - distance which permits some movement and minor damage which might be tolerable	0.5 -	1.0 0.5	2.5 1.5
Paths and driveways with flexible surfaces, such as asphalt, shale or paving slabs: - distance for prevention of all direct damage - distance which permits some movement and minor damage which might be tolerable	0.7 -	1.5 0.5	3.0 1.0
Note: This table provides guidance on the proximity of young trees or new planting to allow for future growth. This should not be taken that construction work can occur at the specified distance from existing trees, as such work might damage the tree, or render it dangerous, but refers to the potential for future growth, either of a young tree or of planting occurring subsequent to construction.			

7 CONCLUSIONS AND RECOMMENDATIONS

The geotechnical investigation performed has indicated that the proposed area is suitable for the construction of the RDP houses and excavation of the trenches for a pipeline network.

The geotechnical investigation carried out and discussed in the report is based on the assumption that single storey RDP houses will be constructed on the proposed site. Should this not be the case, further geotechnical investigations might have to be conducted.

The recommendations made are based on the information obtained from the seven test pits,four exposures and fourteen DCP's. It is possible that the ground profile varies at other areas on site where these investigations were not performed. Hence it is highly recommended that an experienced geologist or geotechnical engineer is engaged to assess the foundation conditions during construction to ensure that the ground conditions are as anticipated and to make recommendations if conditions change.

8 REFERENCES

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- M Brandt(2011) *Seismic Hazard in South Africa*.Council for Geosciences
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- D.H Van Der Merwe (1964) The Prediction of Heave from the Plasticity Index and Percentage Clay Fraction of Soils. The Civil Engineer , pp103-107
- South African National Standards, Geotechnical Investigations for Township Development, SANS 634.
- South African National Standard (SANS 10400-H: 2012 EDITION 3). Part H; Foundations. *The application of the National Building Regulations*
- *www.google.com*
  http://www.saexplorer.co.za/south-africa/climate/kimberley_climate.asp

APPENDIX A: SOIL PROFILES

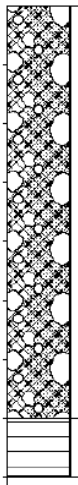
Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: TP1
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10



0.00 Slightly moist, orangey brown speckled dark gray, loose to medium dense, intact, gravelly SAND with dolerite cobbles, pieces of papers and plastics. Fill.

0.70 Greenish gray, slightly weathered, very close to closely fractured, laminated and thinly bedded, medium hard to hard SHALE rock .Ecca Group.

0.80

NOTES

1) Refusal on shale bedrock at 0.8m
2) No groundwater seepage
3) No Side wall collapse

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2842'55.6"S
Y-COORD : 2444'59.3"E

HOLE No: TP1

TP1

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: TP2
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10

0.00	Slightly moist, orangey brown speckled dark gray, loose to medium dense, intact, gravelly SAND with dolerite cobbles, pieces of papers and plastics. Fill.
0.20	Greenish gray, slightly weathered, very close to closely fractured, laminated and thinly bedded, medium hard to hard SHALE rock. Ecca Group.
0.80	

NOTES

1) Refusal on bedrock at 0.8m
2) No groundwater seepage
3) No Side wall collapse

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2842'58.3"S
Y-COORD : 2445'03.2"E

HOLE No: TP2

TP2

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: TP3
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10

0.00	Slightly moist, reddish brown speckled dark gray, soft, intact, silty GRAVEL with dolerite cobbles and boulders.Residual dolerite.
0.20	Dark gray stained orangey brown, highly weathered, closely fractured, soft to hard DOLERITE rock. Jurassic.
0.40	

NOTES

1) Refusal on bedrock at 0.4m
2) No groundwater seepage
3) No Side wall collapse

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2843'00.5"S
Y-COORD : 2445'01.9"E

HOLE No: TP3

TP3

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: TP4
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10

CBR

Depth	Description
0.00	Slightly moist, orangey brown speckled dark gray, loose to medium dense, intact, gravelly SAND with dolerite cobbles, pieces of papers and plastics. Fill.
0.20	Slightly moist, reddish brown speckled dark gray, soft, intact, silty GRAVEL with dolerite cobbles and boulders. Residual dolerite.
0.70	Dark gray stained orangey brown, highly weathered, closely fractured, soft to hard DOLERITE rock. Jurassic.
0.80	

NOTES

1) Refusal on dolerite bedrock at 0.8m
2) No groundwater seepage
3) No Side wall collapse
4) Disturbed sample of Mod CBR, Foundation Indicator & Chemical tests between 0.2 -0.7m

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2843'06.9"S
Y-COORD : 2445'02.0"E

HOLE No: TP4

TP4

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: TP5
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10

0.00 Dark gray stained orangey brown, highly to medium weathered, closely fractured, soft to hard DOLERITE rock. Jurassic.

0.20

NOTES

1) Refusal on bedrock at 0.2m
2) No groundwater seepage
3) No Side wall collapse

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2843'05.7"S
Y-COORD : 2444'58.5"E

HOLE No: TP5

TP5

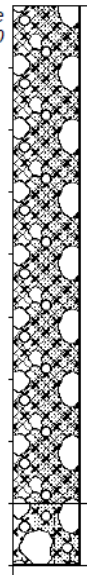
Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: TP6
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10



CBR

Depth	Description
0.00	Slightly moist, orangey brown speckled dark gray, loose to medium dense, intact, gravelly SAND with dolerite cobbles, pieces of papers and plastics. Fill.
0.80	Slightly moist, reddish brown speckled dark gray, soft, intact, silty GRAVEL with dolerite cobbles and boulders. Residual dolerite.
0.90	

NOTES

1) Refusal on a dolerite bedrock at 0.9m
2) No groundwater seepage
3) No Side wall collapse
4) Disturbed sample of Mod CBR , Foundation Indicator & Chemical tests between 0.8 -0.9m

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2843'05.7"S
Y-COORD : 2444'00.3"E

HOLE No: TP6

TP6

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: TP7
Sheet 1 of 1

JOB NUMBER: 19-021

CBR C
Scale 1:10

0.00 Slightly moist, reddish brown speckled dark gray, loose to medium dense, intact, slightly sandy GRAVEL. Fill.

0.50

NOTES

1) Refusal on dolerite bedrock at 0.5m
2) No groundwater seepage
3) No Side wall collapse
4) Disturbed sample of Mod CBR , Foundation Indicator & Chemical tests between 0.0 -0.5m

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:42
TEXT : ..mberlySanta\SantaEXP.txt

ELEVATION :
X-COORD : 2843'05.5"S
Y-COORD : 2444'56.1"E

HOLE No: TP7

TP7

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: EXP 1
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10

0.00 Dark gray stained orangey brown, highly to medium weathered, closely fractured, soft to hard DOLERITE rock. Jurassic.

0.10

NOTES

1) End of exposure on a dolerite bedrock at 0.1m

2) No groundwater seepage

3) No Side wall collapse

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2843'03.5"S
Y-COORD : 2445'00.4"E

HOLE No: EXP 1

EXP1

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: EXP 2
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10

0.00 Dark gray stained orangey brown, highly to medium weathered, closely fractured, soft to hard DOLERITE rock. Jurassic.

0.10

NOTES

1) End of exposure on a dolerite bedrock at 0.1m

2) No groundwater seepage

3) No Side wall collapse

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2843'06.9"S
Y-COORD : 2444'57.2"E

HOLE No: EXP 2

EXP2

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: EXP 3
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10

0.00 Greenish gray, slightly weathered, very close to closely fractured, laminated and thinly bedded, medium hard to hard SHALE rock. Ecca Group.

0.10

NOTES

1) End of exposure on a shale bedrock at 0.1m

2) No groundwater seepage

3) No Side wall collapse

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2845'58.1"S
Y-COORD : 2445'00.4"E

HOLE No: EXP 3

EXP3

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

HOLE No: EXP 4
Sheet 1 of 1

JOB NUMBER: 19-021

Scale 1:10

0.00 Dark gray stained orangey brown, highly to medium weathered, closely fractured, soft to hard DOLERITE rock. Jurassic.

0.10

NOTES

1) End of exposure on a dolerite bedrock at 0.1m

2) No groundwater seepage

3) No Side wall collapse

CONTRACTOR :
MACHINE : TLB
DRILLED BY :
PROFILED BY : L Phatela
TYPE SET BY : L Phatela
SETUP FILE : STANDARD.SET

INCLINATION :
DIAM :
DATE :
DATE : 27/1/2020
DATE : 22/02/2020 19:27
TEXT : C\KimberlySanta\Santa.txt

ELEVATION :
X-COORD : 2842'59.8"S
Y-COORD : 2445'02.3"E

HOLE No: EXP 4

EXP4

Phatela GeoConsulting (Pty) Ltd

KMSD Engineering Consultants
Santa Centre and Mahala Park

LEGEND
Sheet 1 of 1

JOB NUMBER: 19-021

	BOULDERS	{SA01}
	GRAVEL	{SA02}
	GRAVELLY	{SA03}
	SAND	{SA04}
	SILTY	{SA07}
	SHALE	{SA12}
	DOLERITE	{SA18}{SA42}
	FILL	{SA32}
Name	CHEMICAL SAMPLE	{SA39}
	COBBLES	{SA58}

CONTRACTOR :	*INCLINATION :*	*ELEVATION :*
MACHINE :	*DIAM :*	*X-COORD :*
DRILLED BY :	*DATE :*	*Y-COORD :*
PROFILED BY :	*DATE :*	
TYPE SET BY : L Phatela	*DATE :* 22/02/2020 19:27	
SETUP FILE : STANDARD.SET	*TEXT :* C\KimberlySanta\Santa.txt	

LEGEND
SUMMARY OF SYMBOLS

APPENDIX B: DYANAMIC CONE PENETRATION TESTS

EASBP FROM DCP

8kg Hammer 20mm point

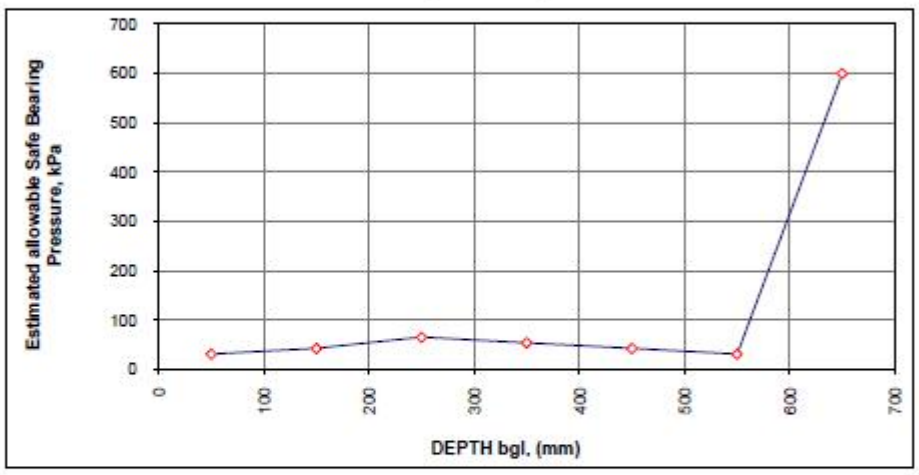
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 1 Location: 28°42'55.6"S 24°44'59.3"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal @700mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	1	50	100	1	0	31
2	100	200	150	2	150	50	2	3	43
3	200	300	250	4	250	25	5	7	66
4	300	400	350	3	350	33	4	5	54
5	400	500	450	2	450	50	2	3	43
6	500	600	550	1	550	100	1	0	31
7	600	700	650	50	650	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

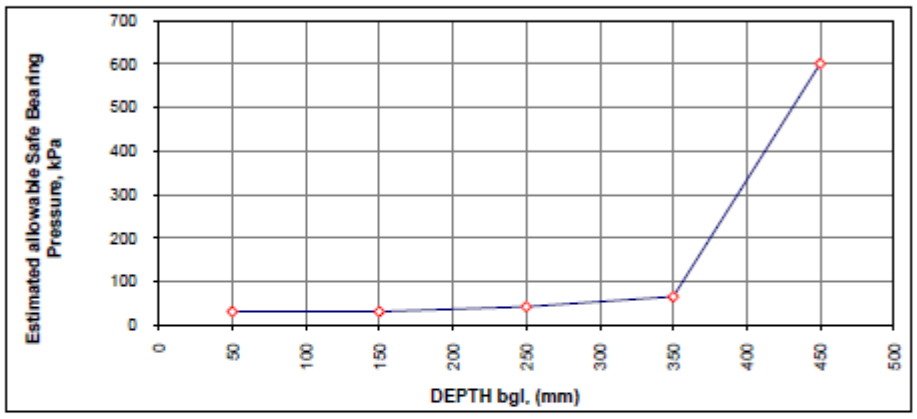
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 2 Location: 28°42'58.3"S 24°45'03.2"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal @400mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	1	50	100	1	0	31
2	100	200	150	1	150	100	1	0	31
3	200	300	250	2	250	50	2	3	43
4	300	400	350	4	350	25	5	7	66
5	400	500	450	50	450	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

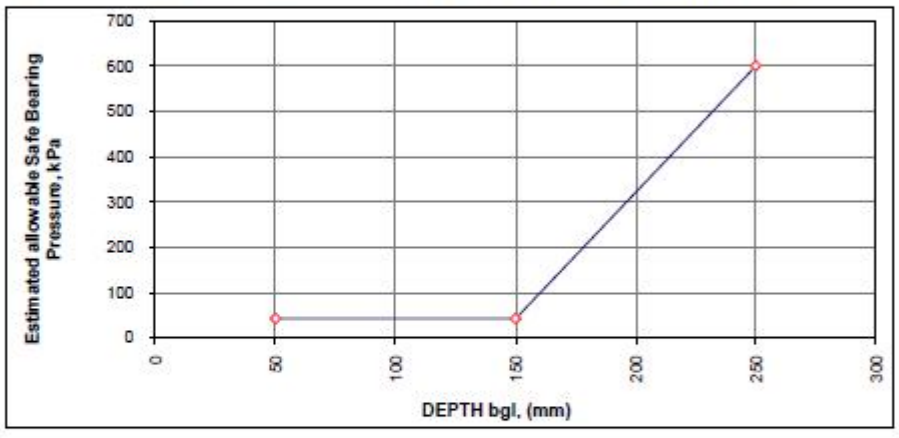
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 3 Location: 28°43'00.5"S 24°45'01.9"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal@300mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	2	50	50	2	3	43
2	100	200	150	2	150	50	2	3	43
3	200	300	250	50	250	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

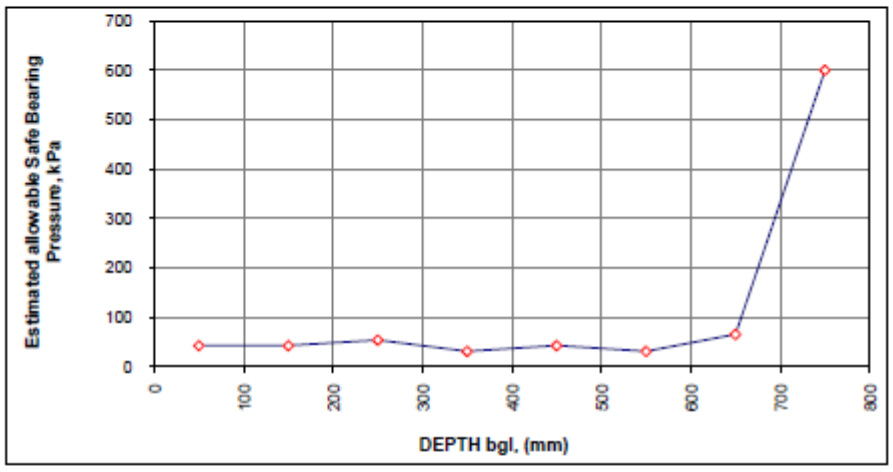
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 4 Location: 28°43'06.9"S 24°45'02.0"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal @800mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	2	50	50	2	3	43
2	100	200	150	2	150	50	2	3	43
3	200	300	250	3	250	33	4	5	54
4	300	400	350	1	350	100	1	0	31
5	400	500	450	2	450	50	2	3	43
6	500	600	550	1	550	100	1	0	31
7	600	700	650	4	650	25	5	7	66
8	700	800	750	50	750	2	60	110	600

EASBP FROM DCP

8kg Hammer — 20mm point

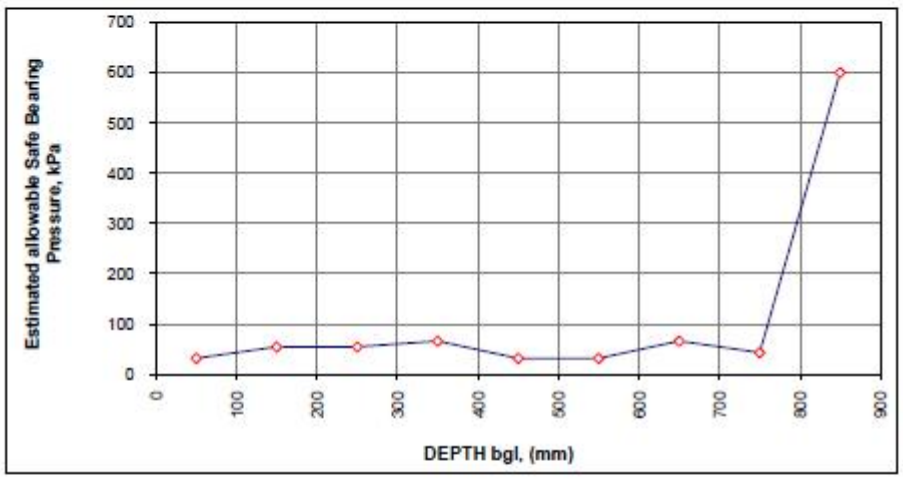
Job Name: Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Photela GeoConsulting (Pty) Ltd

DCP No: 5 Location: 28°43'05.7"S 24°45'00.3"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value — SPT = 1.2 DN

Remarks : Refusal @900mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	1	50	100	1	0	31
2	100	200	150	3	150	33	4	5	54
3	200	300	250	3	250	33	4	5	54
4	300	400	350	4	350	25	5	7	66
5	400	500	450	1	450	100	1	0	31
6	500	600	550	1	550	100	1	0	31
7	600	700	650	4	650	25	5	7	66
8	700	800	750	2	750	50	2	3	43
9	800	900	850	50	850	2	60	110	600

EASBP FROM DCP

8kg Hammer — 20mm point

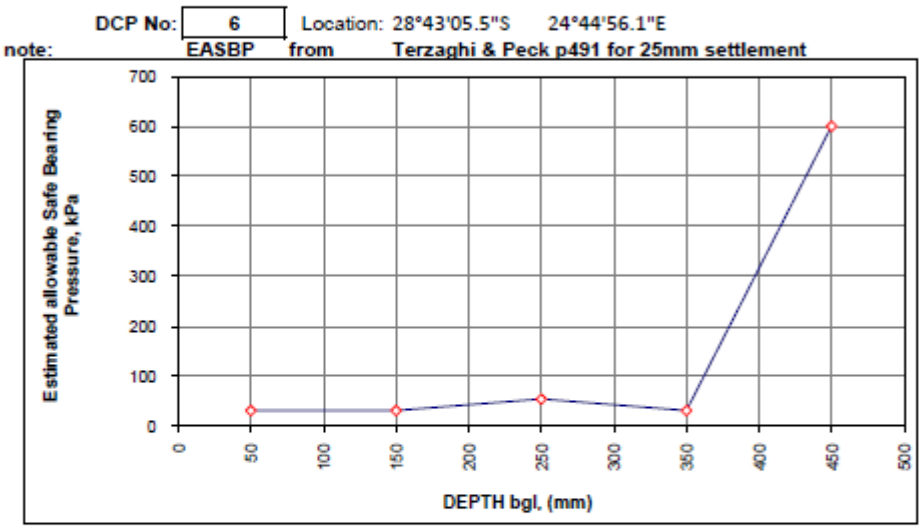
Job Name: Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Photela GeoConsulting (Pty) Ltd

DCP No: 6 Location: 28°43'05.5"S 24°44'56.1"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value — SPT = 1.2 DN

Remarks : Refusal @500mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	1	50	100	1	0	31
2	100	200	150	1	150	100	1	0	31
3	200	300	250	3	250	33	4	5	54
4	300	400	350	1	350	100	1	0	31
5	400	500	450	50	450	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

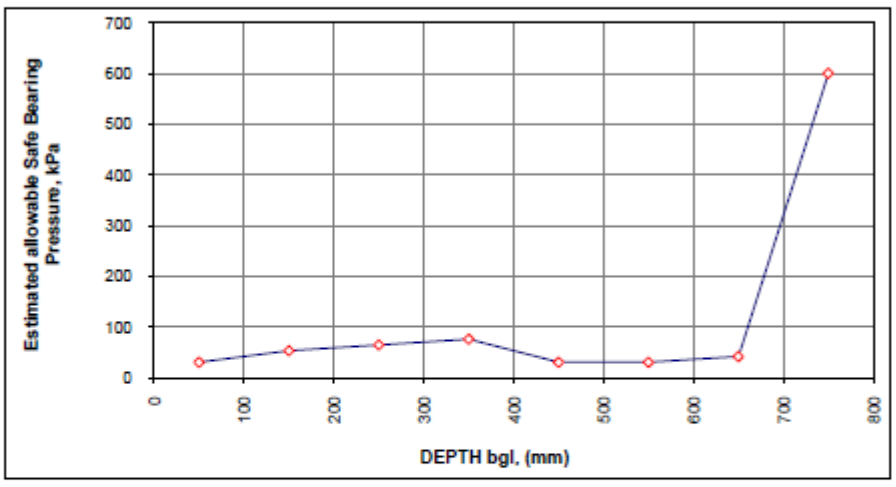
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 7 Location: 28°42'54.7"S 24°44'59.9"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal@800mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	1	50	100	1	0	31
2	100	200	150	3	150	33	4	5	54
3	200	300	250	4	250	25	5	7	66
4	300	400	350	5	350	20	6	9	77
5	400	500	450	1	450	100	1	0	31
6	500	600	550	1	550	100	1	0	31
7	600	700	650	2	650	50	2	3	43
8	700	800	750	50	750	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

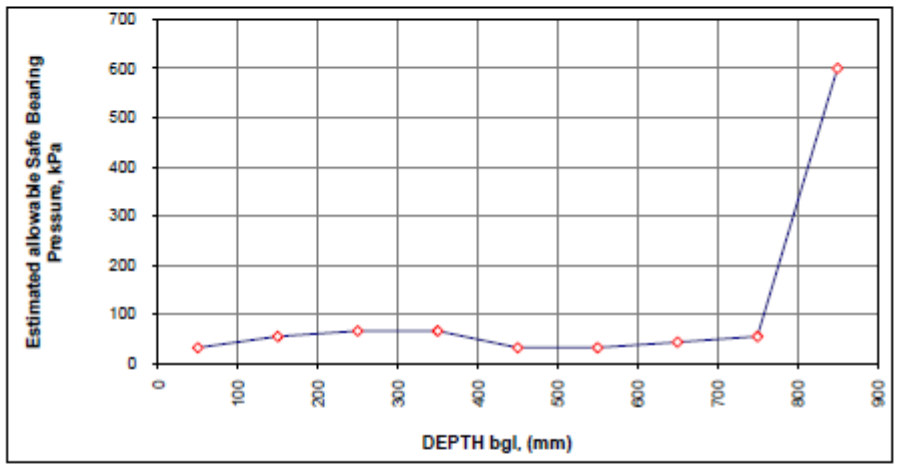
Photela GeoConsulting (Pty) Ltd

Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

DCP No: 8 Location: 28°42'55.7"S 24°45'0.43"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal@900mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	1	50	100	1	0	31
2	100	200	150	3	150	33	4	5	54
3	200	300	250	4	250	25	5	7	66
4	300	400	350	4	350	25	5	7	66
5	400	500	450	1	450	100	1	0	31
6	500	600	550	1	550	100	1	0	31
7	600	700	650	2	650	50	2	3	43
8	700	800	750	3	750	33	4	5	54
9	800	900	850	50	850	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

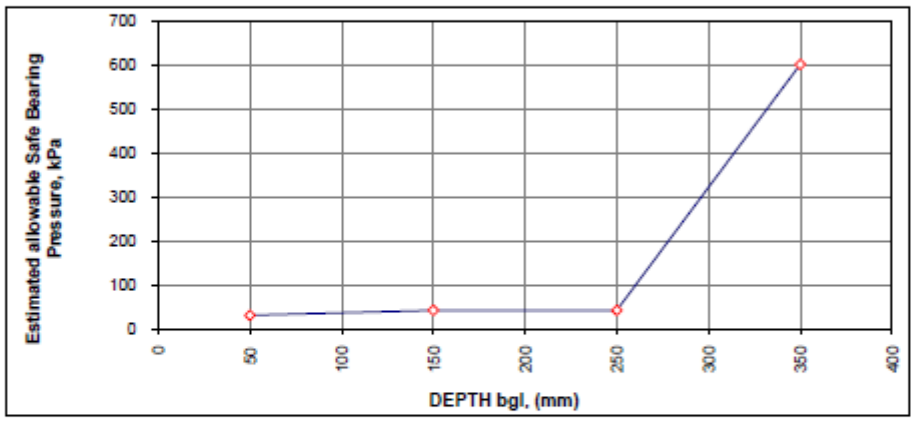
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 10 Location: 28°43'06.9"S 24°44'59.4"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal@400mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	1	50	100	1	0	31
2	100	200	150	2	150	50	2	3	43
3	200	300	250	2	250	50	2	3	43
4	300	400	350	50	350	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

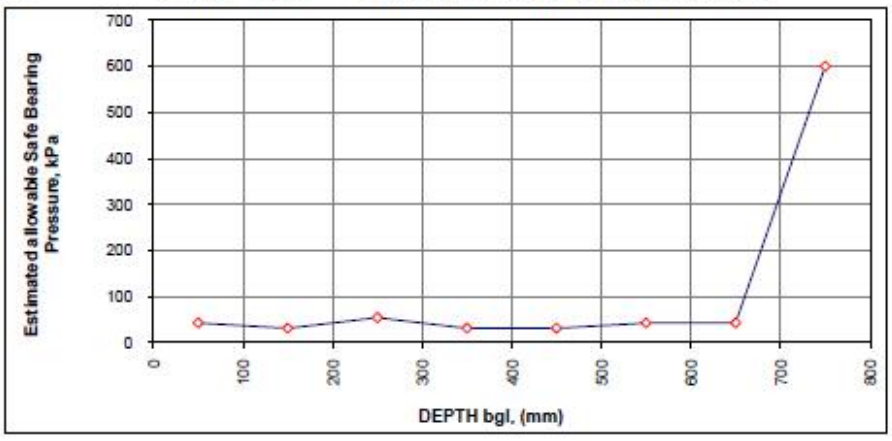
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 11 Location: 28°43'4.41"S 24°45'2.7"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal@800mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	2	50	50	2	3	43
2	100	200	150	1	150	100	1	0	31
3	200	300	250	3	250	33	4	5	54
4	300	400	350	1	350	100	1	0	31
5	400	500	450	1	450	100	1	0	31
6	500	600	550	2	550	50	2	3	43
7	600	700	650	2	650	50	2	3	43
8	700	800	750	50	750	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

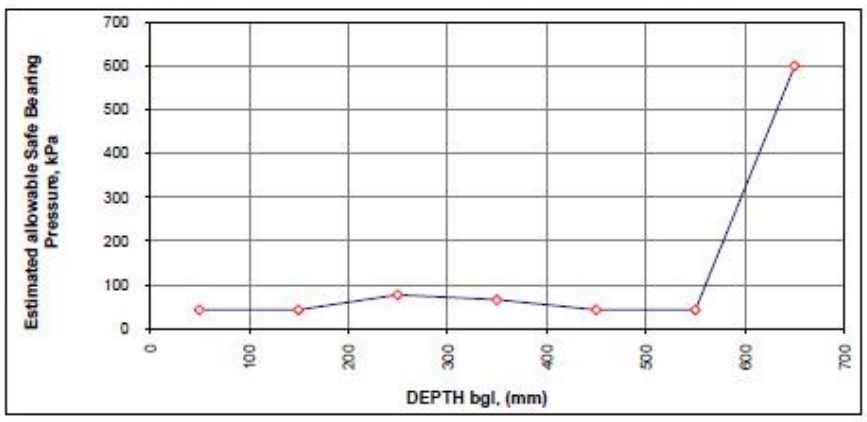
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 12 Location: 28°43'6.50"S 24°45'3.8"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal@700mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	2	50	50	2	3	43
2	100	200	150	2	150	50	2	3	43
3	200	300	250	5	250	20	6	9	77
4	300	400	350	4	350	25	5	7	66
5	400	500	450	2	450	50	2	3	43
6	500	600	550	2	550	50	2	3	43
7	600	700	650	50	650	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

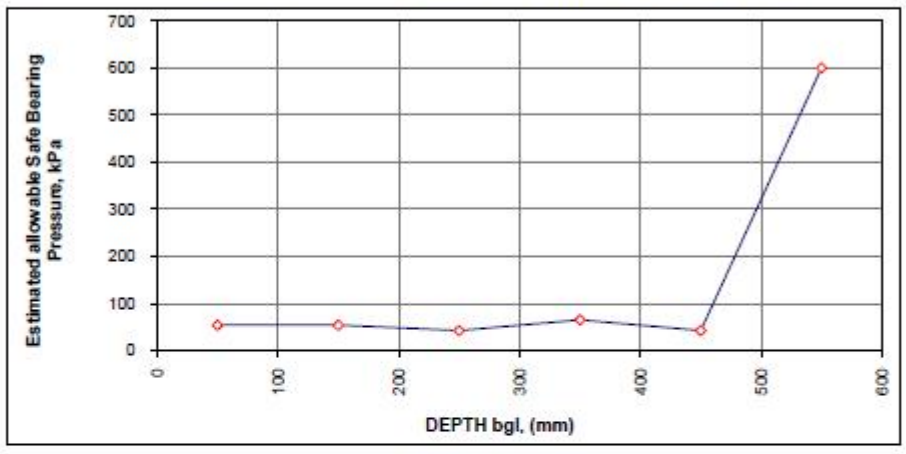
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 13 Location: 28°43'8.50"S 24°45'59.5"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal@600mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	3	50	33	4	5	54
2	100	200	150	3	150	33	4	5	54
3	200	300	250	2	250	50	2	3	43
4	300	400	350	4	350	25	5	7	66
5	400	500	450	2	450	50	2	3	43
6	500	600	550	50	550	2	60	110	600

EASBP FROM DCP

8kg Hammer 20mm point

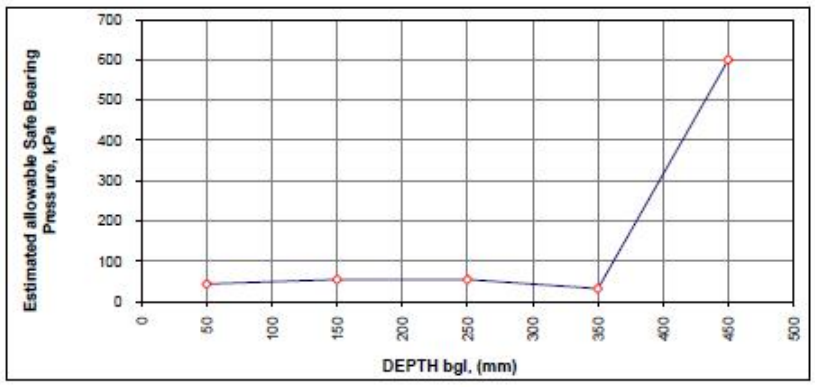
Job Name Santa Centre & Mahala Park

File No: 19-021 Job No: 19-021 Date of Test: Jan-20

Phatela GeoConsulting (Pty) Ltd

DCP No: 14 Location: 28°43'54.8"S 24°45'2.2"E

note: EASBP from Terzaghi & Peck p491 for 25mm settlement



Depth of hole in which DCP was taken : 0 mm below NGL

Applied Factor : 1 times Terzaghi's value SPT = 1.2 DN

Remarks : Refusal@500mm

Reading No.	Layer From	Layer To	Average Layer Depth	DCP DN Blows/100mm	Level Below NGL mm	DCP penetration mm/blow	Equiv. SPT N Value	Approx In-situ CBR	Approx EASBP kPa
1	0	100	50	2	50	50	2	3	43
2	100	200	150	3	150	33	4	5	54
3	200	300	250	3	250	33	4	5	54
4	300	400	350	1	350	100	1	0	31
5	400	500	450	50	450	2	60	110	600

APPENDIX C: LABORATORY TESTS RESULTS

Simlab (EDMS) BEPERK GEOTEGNIESE DIENSTE (PTY) LIMITED GEOTECHNICAL SERVICES

REG. No. 1987/004282/07 NLA No. 2012/187

1231, KIMBERLEY, 8300, SOUTH AFRICA. 3 Roper Street, KIMBERLEY, 8301
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*** PAGE CONTINUES FROM PAGE 1

DOCUMENT No.: 020/0103 (a) Page 2 of 2

CLIENT & PROJECT : PHATELA GEO CONSULTING - Kimberley - Galeshewe - Santa					DATE : 10/02/2020
HOLE No. / KM (Chainage)		TP 4	TP 6	TP 7	
MATERIAL DEPTH (m)		0.2 - 0.7	0.8 - 0.9	0.0 - 0.5	
SAMPLE / LABORATORY No.		020/0103	020/0104	020/0105	
MATERIAL DESCRIPTION		Light brown sand with weathered dolerite	Light brown sand with weathered dolerite	Reddish brown sand with dolerite	
* IN SITU FIELD MOISTURE (%)		2.1	2.3	2.2	
UNIFIED SOIL CLASSIFICATION					
TRH14 / * COLTO CLASSIFICATION		*G9	*G9	*G6	
SIEVE ANALYSIS, PERCENTAGE OF MATERIAL PASSING 0.075 mm SIEVE (SANS 3001-GR1, PR5 : 2011) - % PASSING SIEVES					
SIEVE ANALYSIS	63.0 mm	100	100		
	50.0 mm	95	94	100	
	37.5 mm	91	90	93	
	28.0 mm	84	85	93	
	20.0 mm	75	79	91	
	14.0 mm	71	72	911	
	5.00 mm	54	57	87	
	2.00 mm	39	37	82	
	0.425 mm	21	19	69	
	0.075 mm	6	5	18	
	0.002 mm	-	-	8	
SOIL MORTAR	COARSE SAND	46	48	16	
	FINE SAND	14 / 13 / 13	12 / 11 / 14	9 / 21 / 32	
	MATERIAL<0.075 mm	14	15	22	
GRADING MODULUS (GM)		2.34	2.39	1.31	
ATTERBERG LIMITS ANALYSIS (SANS 3001-GR10 : 2011), PH VALUE & CONDUCTIVITY (TMH 1 : 1986, METHOD A20 & A21T)					
ATTERBERG LIMITS PASSING SIEVE 0.425mm	L.L (%)	-	30	-	
	P.I. / L.S. (%)	S.P. / 0.8	4 / 2.0	N.P. / 0.0	
POTENTIAL EXPANSIVENESS (mm)		-	-	-	
pH VALUE / CONDUCTIVITY (Sm^{-1})		5.06 / 0.2220	5.05 / 0.1917	5.02 / 0.2522	
MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT, CALIFORNIA BEARING RATIO ANALYSIS (SANS 3001-GR30, GR40 : 2010) UNCONFINED COMPRESSIVE STRENGTH & INDIRECT TENSILE STRENGTH OF STABILISED MATERIAL (SANS 3001-GR53, GR54 : 2010)					
CBR / UCS / ITS DETERMINATION	MOD AASHTO	MAX DRY DENSITY (kg/m^3)	2238	1997	1996
		OPT MOISTURE (%)	7.7	8.6	6.4
		COMP MOISTURE (%)	7.7	8.5	6.4
		DRY DENSITY (kg/m^3)	2238	1997	1996
		CBR (%)	13	10	52
		SWELL (%)	0.0	0.0	0.0
		UCS (KPa)	-	-	-
		ITS (KPa)	-	-	-
	NRB	DRY DENSITY (kg/m^3)	2081	1836	1810
		CBR (%)	10	8	30
	PROCTOR	MAX DRY DENSITY (kg/m^3)	1985	1740	1770
		OPT MOISTURE (%)	-	-	-
		CBR (%)	8	7	17
	CBR	100%	13	10	52
		98%	11	9	42
		95%	10	8	30
		93%	9	8	24
		90%	8	7	17

Results reported relate only to the materials tested
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Classification/Rep/019

DRAWING LIST

COVER

3258-KP-001	KEY PLAN

PHASE 1: 66 ERVEN

3258-CIV-RD-001	ROAD PLAN & LONG SECTIONS
3258-CIV-LAY-001	WATER LAYOUT
3258-CIV-LAY-002	SEWER LAYOUT PLAN
3258-CIV-LAY-003	SEWER LONG SECTIONS

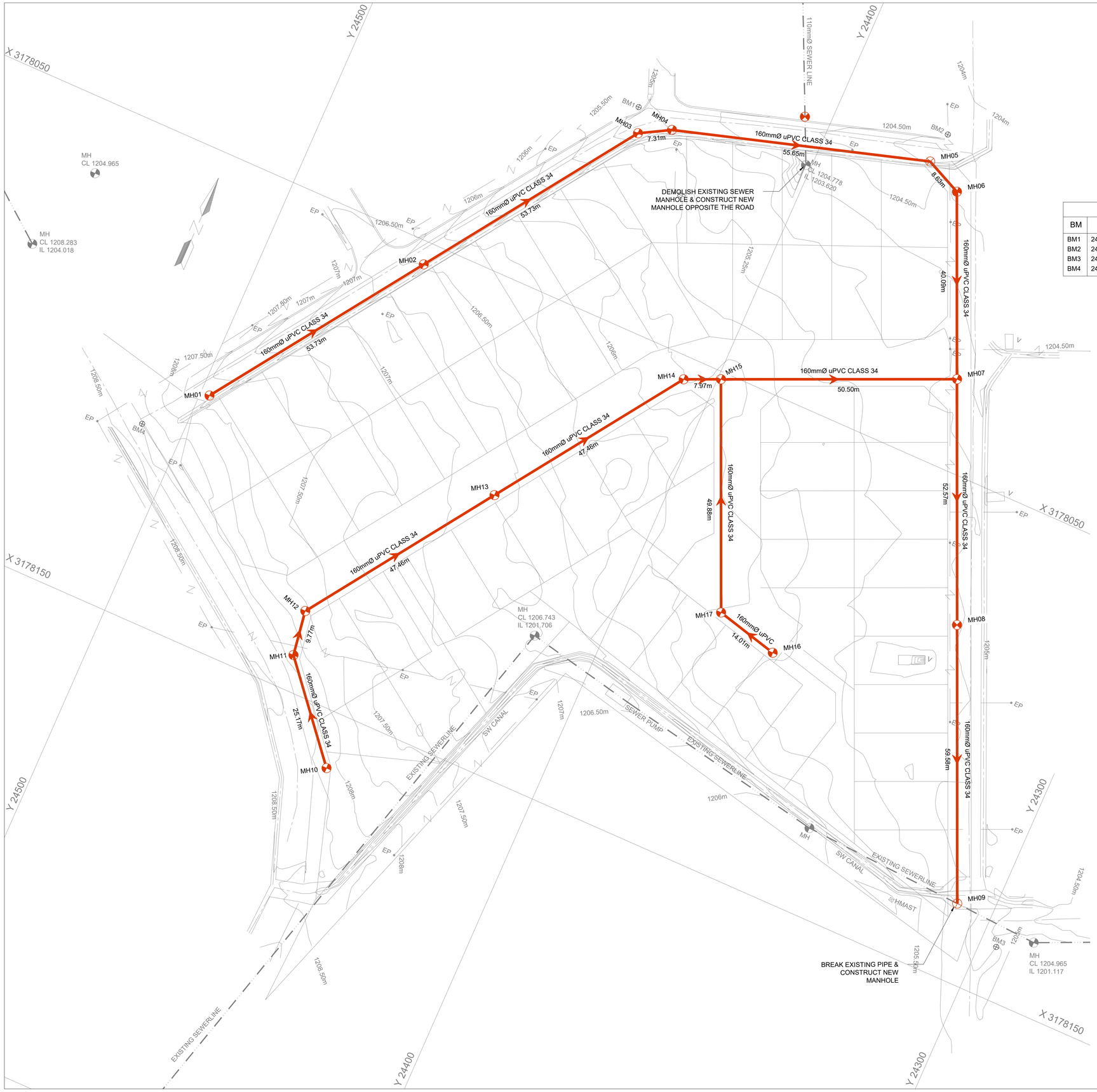
PHASE 2: 69 ERVEN

3258-CIV-RD-001	ROAD PLAN & LONG SECTIONS
3258-CIV-RD-002	ROAD PLAN & LONG SECTIONS
3258-CIV-SEW-001	SEWER PLAN & LONG SECTIONS
3258-CIV-SEW-002	SEWER PLAN & LONG SECTIONS
3258-CIV-WAT-001	WATER LAYOUT

TYPICAL DETAILS

3258-CIV-DET-001	BEDDING DETAILS
3258-CIV-DET-002	SEWER MANHOLE DETAILS
3258-CIV-DET-003	VALVE CHAMBER DETAILS
3258-CIV-DET-004	THRUSTBLOCK DETAILS
3258-CIV-DET-005	SEWER HOUSE CONNECTION DETAILS
3258-CIV-DET-006	WATER HOUSE CONNECTION DETAILS SHEET 1 OF 3
3258-CIV-DET-007	WATER HOUSE CONNECTION DETAILS SHEET 2 OF 3
3258-CIV-DET-008	WATER HOUSE CONNECTION DETAILS SHEET 3 OF 3
3258-CIV-DET-009	TYPICAL CROSS SECTION DETAIL
3258-NAME-001	NAMEBOARD

KIMBERLEY
PHASE 2
PHASE 1
Kwanobantu
Vergenoeg
Galeshewe
Colville
Gemdene
Square Hill Park
Ramatsheta St
Mashiwa St
Hutton St
Barkly Rd
Galeshewe Rd
Jade St
Tyson St
Coriless Rd
Veld Rd
Gamka St
John Daka St
Dingaan St
Shaka St
Mendi St
Motlomelo St
Motlhabane St
Mondrie St
Mandela Ave
Motlogelwa St
Mokgeleki St
Moshoeshoe St
Mokgatlha Ave
Mokgatlha St
Motopo St
Elsnowe St
Theseles St
Morris Enyibi St
Rebecca Motlhwai St
Mahne Dipico St
Mampe St
Oakets St
Stone St
Mshaka St
Mimosa St
Palos St
Ethel St
Kgare St
Reserve Rd
Rap St
Phala St
Sesoti St
Sessie St
Reed St
Bonga St
Nassi St
Phaka St
Judge St
Mokgatlhe St
Mokgatlhe St
Lerato St
Lerato St
Mauritius St
Mauritius Ave
Mokgatla Ave
Mokgatla St
Mokgatlhe St
Mokgatlhe St
Mokgatlhe



LEGEND:

- PROPOSED SEWERLINE
- EXISTING SEWERLINE
- EXISTING WATERLINE
- EXISTING SEWER MANHOLE
- NEW SEWER MANHOLE
- DIRECTION OF FLOW

BENCHMARK COORDINATE LIST - WG25				
BM	Y	X	Z	DESCRIPTION
BM1	24 438.921	3 178 005.442	1205.240	12mm HOLE IN CONCRETE
BM2	24 376.030	3 177 984.108	1204.561	12mm HOLE IN TELKOM MH COVER
BM3	24 296.424	3 178 138.895	1204.996	12mm HOLE IN CONCRETE
BM4	24 508.750	3 178 110.288	1208.498	ROOF NAIL IN TAR

COORDINATE LIST		
WGS84		
Sewer Network		
MH No.	YLo	XLo
Constant:		
MH01	24498.011	3178098.932
MH02	24467.403	3178054.767
MH03	24436.795	3178010.602
MH04	24430.422	3178007.018
MH05	24377.155	3177990.905
MH06	24369.312	3177994.510
MH07	24353.113	3178031.180
MH08	24331.869	3178079.271
MH09	24307.795	3178133.769
MH10	24442.945	3178161.724
MH11	24459.165	3178142.474
MH12	24460.664	3178132.818
MH13	24433.629	3178093.810
MH14	24406.595	3178054.802
MH15	24399.304	3178051.582
MH16	24365.560	3178100.620
MH17	24379.153	3178097.214

PIPE DATA LIST	
MH - MH	Distance
Sewer Network	(m)
MH01 - MH02	53.735
MH02 - MH03	53.735
MH03 - MH04	7.312
MH04 - MH05	55.651
MH05 - MH06	8.632
MH06 - MH07	40.089
MH07 - MH08	52.575
MH08 - MH09	59.578
MH10 - MH11	25.173
MH11 - MH12	9.772
MH12 - MH13	47.460
MH13 - MH14	47.460
MH14 - MH15	7.970
MH15 - MH07	50.497
MH16 - MH17	14.013
MH17 - MH15	49.883

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discipline
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PROPOSED SERVICED STANDS AT SANTA CENTRE - PHASE 1_66ERFS

WCS number

drawing title

SEWER LAYOUT PLAN

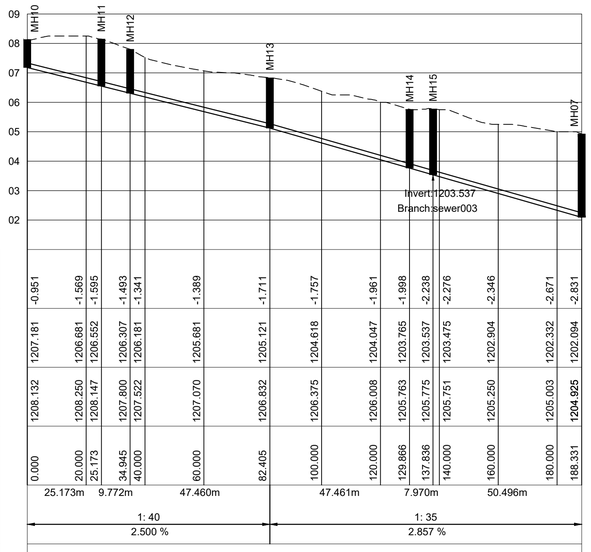
ref.no	designed: BD
scale: AS SHOWN	drawn: B.D
date: 03/2020	checked: DM
type number	
drawing number: 3258-CIV-LAY-002	A1

PIPE

NGL

SCALES:
Horizontal 1:1000
Vertical 1:100

Datum: 1201m



		MH10	MH11	MH12	MH13	MH14	MH15	MH07
DEPTH TO INVERTS		-0.951	-1.569	-1.595	-1.493	-1.341	-1.389	-1.711	-1.757	-1.961	-1.998	-2.238	-2.276	-2.346	-2.671	-2.831
INVERT LEVEL		1207.181	1206.681	1206.552	1206.307	1206.181	1205.681	1205.121	1204.618	1204.047	1203.765	1203.537	1203.475	1202.904	1202.332	1202.094
GROUND LEVEL		1208.132	1208.250	1208.147	1207.800	1207.522	1207.070	1206.832	1206.375	1206.008	1205.763	1205.775	1205.751	1205.250	1205.003	1204.925
CHAINAGE (m)		0.000	20.000	25.173	34.945	40.000	60.000	82.405	100.000	120.000	129.866	137.836	140.000	160.000	180.000	188.331
		25.173m	9.772m	47.460m	47.461m	7.970m	50.496m									
PIPE GRADES		1: 40			1: 35											
		2.500 %			2.857 %											
PIPE DETAILS		160mm uPVC Class 34 Flexible pipe bedding														
HYDRAULICS	DESIGN: Q (l/s)	0.50	0.50	0.50	0.50	0.50	0.71									
	DESIGN: V (m/s)	0.58	0.58	0.58	0.60	0.60	0.67									
	MAX.(0.83D): Q (l/s)	26.85	26.85	26.85	28.70	28.70	28.70									
	MAX.(0.83D): V (m/s)	1.69	1.69	1.69	1.81	1.81	1.81									

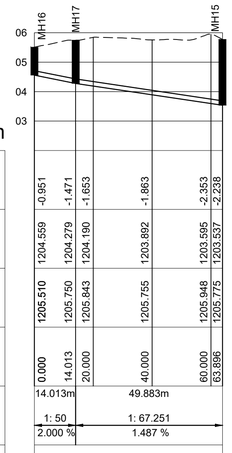
MH10 - MH07

PIPE

NGL

SCALES:
Horizontal 1:1000
Vertical 1:100

Datum: 1202m



		MH16	MH17	MH15
DEPTH TO INVERTS		-0.951	-1.471	-1.653	-1.863	-2.353	-2.238
INVERT LEVEL		1204.559	1204.279	1204.190	1203.892	1203.595	1203.537
GROUND LEVEL		1205.510	1205.750	1205.843	1205.755	1205.948	1205.775
CHAINAGE (m)		0.000	14.013	20.000	40.000	60.000	63.896
		14.013m	49.883m				
PIPE GRADES		1: 50	1: 67.251				
		2.000 %	1.487 %				
PIPE DETAILS		160mm uPVC Class 34 Flexible pipe bedding					
HYDRAULICS	DESIGN: Q (l/s)	0.21	0.21				
	DESIGN: V (m/s)	0.41	0.37				
	MAX.(0.83D): Q (l/s)	24.01	20.70				
	MAX.(0.83D): V (m/s)	1.51	1.30				

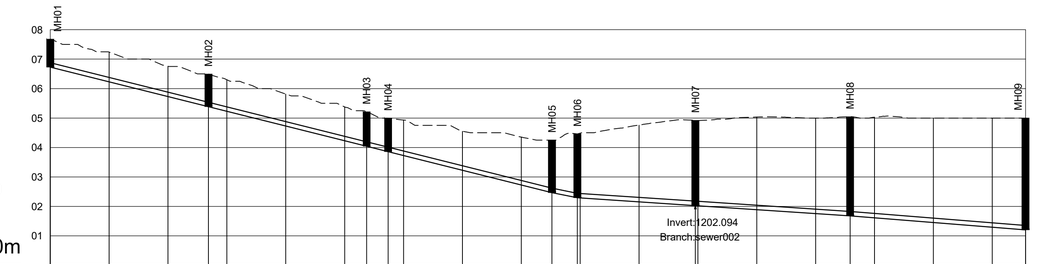
MH16 - MH15

PIPE

NGL

SCALES:
Horizontal 1:1000
Vertical 1:100

Datum : 1200m



		MH01	MH02	MH03	MH04	MH05	MH06	MH07	MH08	MH09
DEPTH TO INVERTS		-0.951	-1.013	-1.030	-1.109	-1.071	-1.085	-1.148	-1.171	-1.139	-1.205	-1.323	-1.625	-1.783	-2.167	-2.197	-2.599	-2.898	-2.892	-3.144	-3.245	-3.368	-3.420	-3.549	-3.710	-3.802
INVERT LEVEL		1206.728	1206.228	1205.728	1205.385	1205.228	1204.728	1204.228	1204.041	1203.858	1203.728	1203.228	1202.728	1202.467	1202.295	1202.288	1202.155	1202.027	1202.022	1201.888	1201.755	1201.677	1201.611	1201.451	1201.290	1201.200
GROUND LEVEL		1207.679	1207.241	1206.758	1206.494	1206.299	1205.813	1205.376	1205.212	1204.997	1204.933	1204.551	1204.353	1204.250	1204.462	1204.485	1204.754	1204.925	1204.914	1205.032	1205.000	1205.045	1205.031	1205.000	1205.000	1205.002
CHAINAGE (m)		0.000	20.000	40.000	53.735	60.000	80.000	100.000	107.469	114.781	120.000	140.000	160.000	170.432	179.064	180.000	200.000	219.152	220.000	240.000	260.000	271.727	280.000	300.000	320.000	331.305
		53.735m	53.734m	7.312m	55.651m	8.632m	40.088m	52.575m	59.578m																	
PIPE GRADES		1: 40				1: 50	1: 150		1: 124.952																	
		2.500 %				2.000 %	0.667 %		0.800 %																	
PIPE DETAILS		160mm uPVC Class 34 Flexible pipe bedding																								
HYDRAULICS	DESIGN: Q (l/s)	0.43	0.43	0.43	0.43	0.43	0.43	1.14	1.14																	
	DESIGN: V (m/s)	0.55	0.55	0.55	0.55	0.51	0.35	0.46	0.50																	
	MAX.(0.83D): Q (l/s)	26.85	26.85	26.85	26.85	24.01	13.86	13.86	15.19																	
	MAX.(0.83D): V (m/s)	1.69	1.69	1.69	1.69	1.51	0.87	0.87	0.96																	

MH01 - MH09

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discipline
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PROPOSED SERVICED STANDS AT SANTA CENTRE - PHASE 1_66ERFS

WCS number

drawing title

SEWER LONG SECTIONS

ref.no

designed
BD

scale
AS SHOWN

drawn
B.D

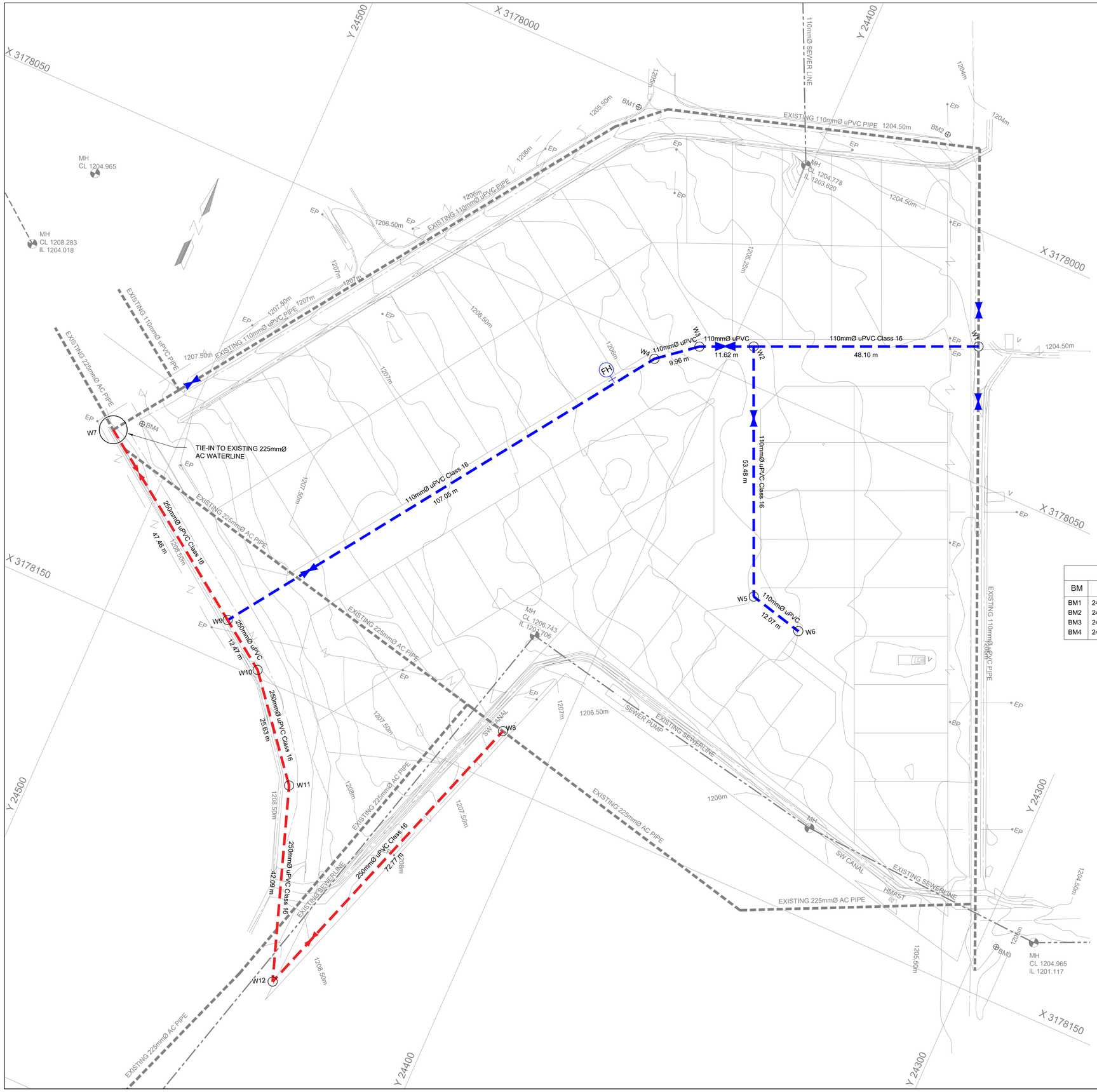
date
03/2020

checked
DM

type number

drawing number
3258-CIV-LAY-003

A1



LEGEND:

- NODES
- 110mmØ ISOLATION VALVE
- 250mmØ ISOLATION VALVE
- 110mmØ uPVC PIPE
- 250mmØ uPVC PIPE
- EXISTING WATERLINE
- EXISTING SEWERLINE

Coordinate List

Lo 27

WATER RETICULATION		
Node	YLo	XLo
Const:		
W1	24 351.730	3 178 022.913
W2	24 395.730	3 178 042.353
W3	24 406.356	3 178 047.048
W4	24 414.089	3 178 053.320
W5	24 374.118	3 178 091.267
W6	24 362.405	3 178 094.195
W7	24 513.896	3 178 113.946
W8	24 411.618	3 178 139.271
W9	24 475.095	3 178 141.281
W10	24 464.905	3 178 148.460
W11	24 448.764	3 178 168.370
W12	24 435.059	3 178 208.162

Pipe Data List

Node	-	Node	Length
WATER RETICULATION			(m)
W1	-	W2	48.10
W2	-	W3	11.62
W2	-	W5	53.48
W3	-	W4	9.96
W4	-	W9	107.05
W5	-	W6	12.07
W7	-	W9	47.46
W8	-	W12	72.77
W9	-	W10	12.47
W10	-	W11	25.63
W11	-	W12	42.09

BENCHMARK COORDINATE LIST - WG25

BM	Y	X	Z	DESCRIPTION
BM1	24 438.921	3 178 005.442	1205.240	12mm HOLE IN CONCRETE
BM2	24 376.030	3 177 984.108	1204.561	12mm HOLE IN TELKOM MH COVER
BM3	24 296.424	3 178 138.895	1204.996	12mm HOLE IN CONCRETE
BM4	24 508.750	3 178 110.288	1208.498	ROOF NAIL IN TAR

No.	DATE	AMENDMENT	CHECKED BY
A	03/2020	FOR APPROVAL	DM

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discipline
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service

PROPOSED SERVICED STANDS AT SANTA CENTRE - PHASE 1_66ERFS

WCS number

drawing title

WATER LAYOUT

ref.no	designed
	BD
scale	drawn
AS SHOWN	B.D
date	checked
03/2020	DM

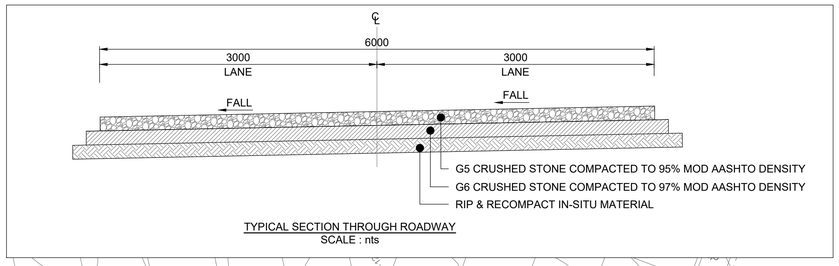
type number

drawing number
3258-CIV-LAY-001

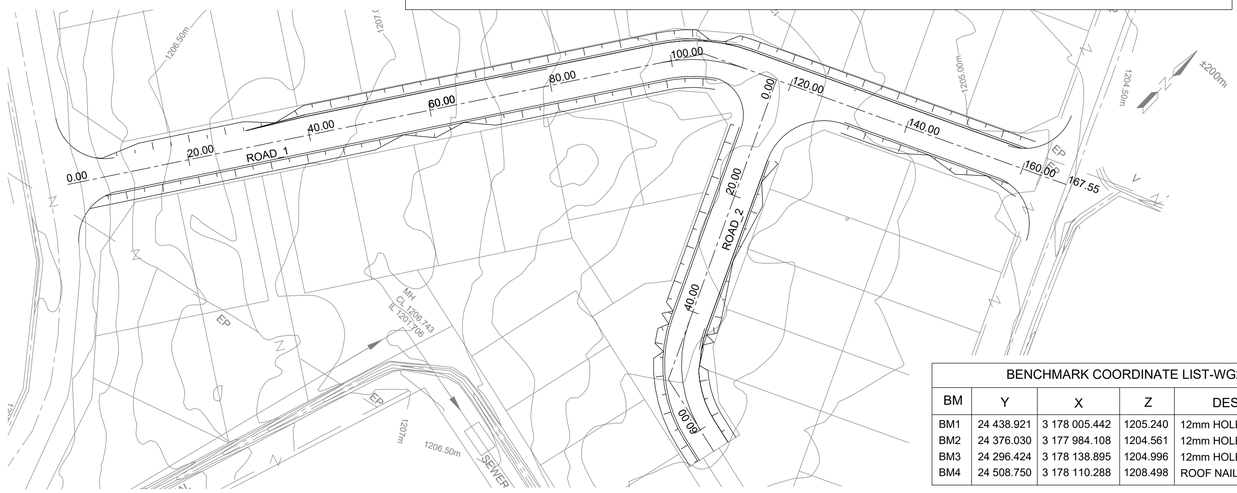
A1

No.	DATE	AMENDMENT	CHECKED BY
A	03/2020	FOR APPROVAL	DM

PLAN LAYOUT
SCALE 2:1



TYPICAL SECTION THROUGH ROADWAY
SCALE : nts



LEGEND (NEW)

- GRAVEL ROAD
- NEW BRIDGE
- NEW CONCRETE EDGE BEAM
- NEW PIPE CULVERT
- NEW CONCRETE SIDE DRAIN

ROAD 1: HORIZONTAL ALIGNMENT DATA

PIno	Name	Y	X	Radius	Tr.In	Tr.Out	Defl.
1	START	24468.979	3178138.672	-	-	-	-
2	PI 1	24408.910	3178051.999	25.00	0.00	0.00	Right
3	END	24351.785	3178026.767	-	-	-	-

ROAD 2: VERTICAL ALIGNMENT DATA

Peg dist.	Elev.	BVc	EVc	CL	Grade(%)
0.000	1208.403	0.000	0.000	0.00	-3.445
42.569	1206.937	12.569	72.569	60.00	-1.945
125.505	1205.324	90.505	160.505	70.00	-1.272
167.548	1204.789	167.548	167.548	0.00	0.000

ROAD 2: HORIZONTAL ALIGNMENT DATA

PIno	Name	Y	X	Radius	Tr.In	Tr.Out	Defl.
1	START	24397.517	3178046.966	-	-	-	-
2	PI 1	24376.643	3178094.235	20.00	0.00	0.00	Left
3	END	24363.255	3178097.590	-	-	-	-

ROAD 2: VERTICAL ALIGNMENT DATA

Peg dist.	Elev.	BVc	EVc	CL	Grade(%)
0.000	1205.514	0.000	0.000	0.00	0.501
64.108	1205.835	64.108	64.108	0.00	0.000

BENCHMARK COORDINATE LIST-WG25

BM	Y	X	Z	DESCRIPTION
BM1	24 438.921	3 178 005.442	1205.240	12mm HOLE IN CONCRETE
BM2	24 376.030	3 177 984.108	1204.561	12mm HOLE IN TELKOM MH COVER
BM3	24 296.424	3 178 138.895	1204.996	12mm HOLE IN CONCRETE
BM4	24 508.750	3 178 110.288	1208.498	ROOF NAIL IN TAR

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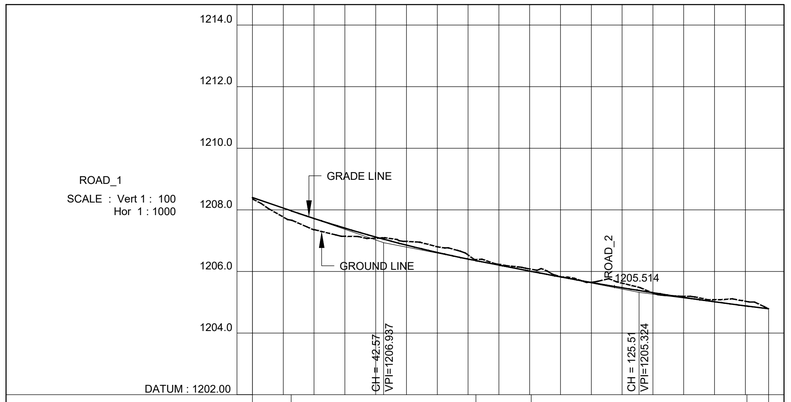

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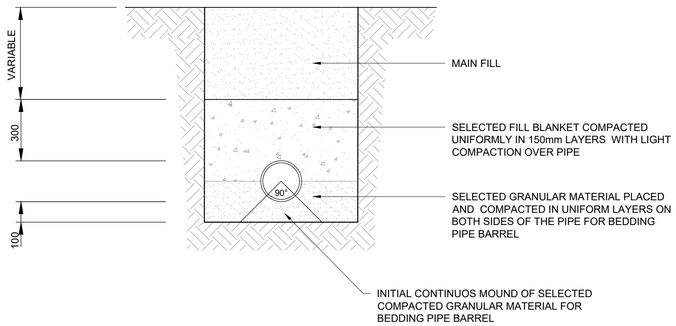
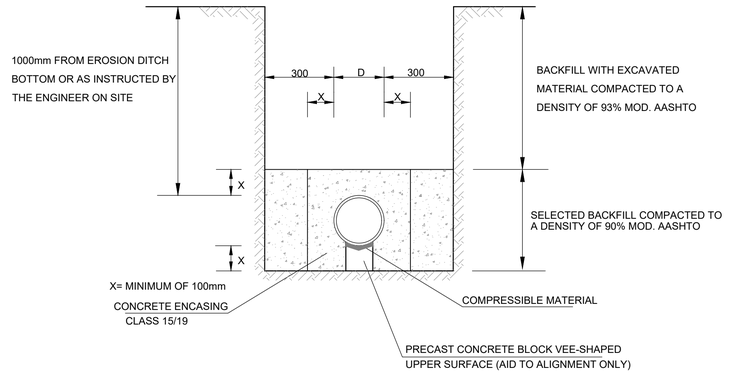


RIGID PIPE CLASS 'B' BEDDING



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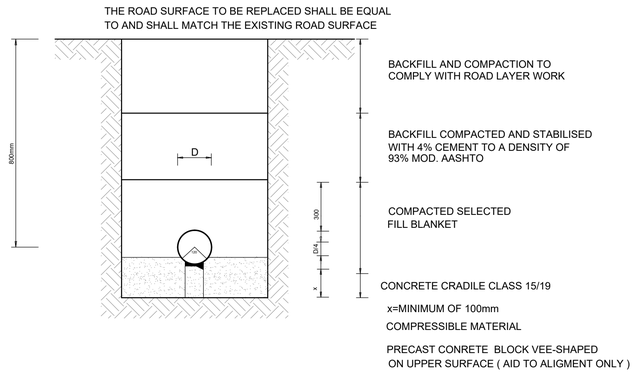
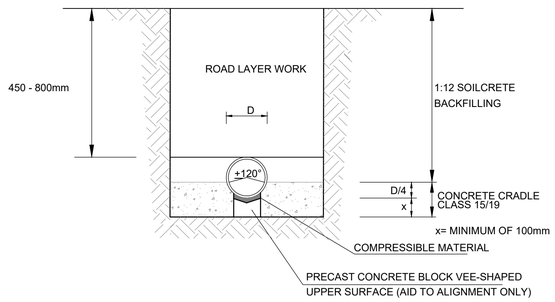
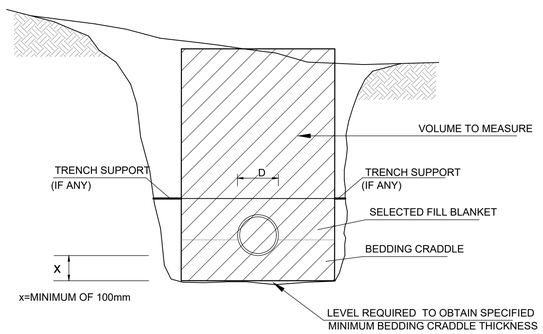


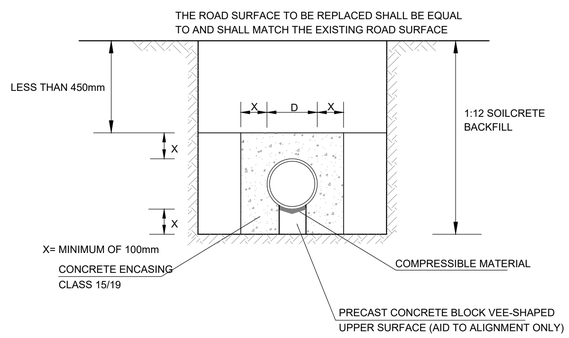
ROAD CROSSING : COVER > 800



ROAD CROSSING : COVER > 450mm < 800mm



MEASUREMENT OF BEDDING



ROAD CROSSING : COVER < 450mm

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WCS number

drawing title
BEDDING DETAILS

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scale AS SHOWN	drawn B.D
date 03/2020	checked DM
type number	

drawing number
3258-CIV-DET-001

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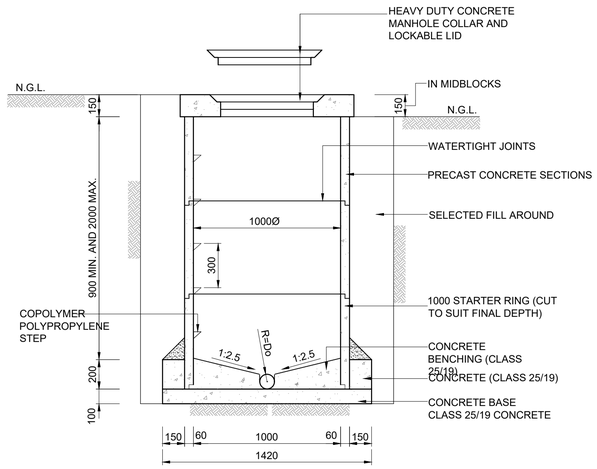
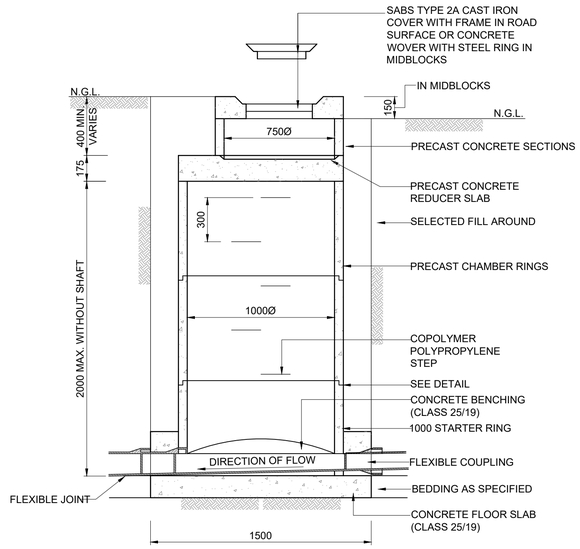


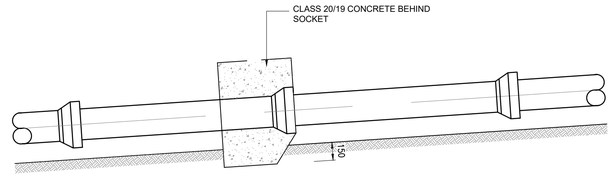
TYPICAL SECTION OF MANHOLE

SCALE 1:20



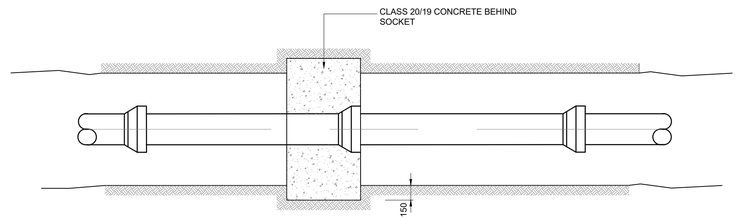
TYPICAL SECTION OF MANHOLE

SCALE 1:20



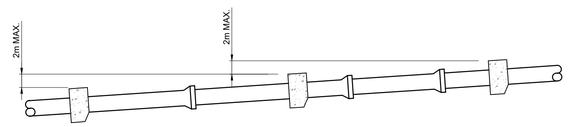
SECTION

SCALE 1:25



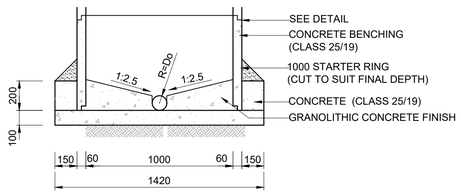
PLAN

SCALE 1:25



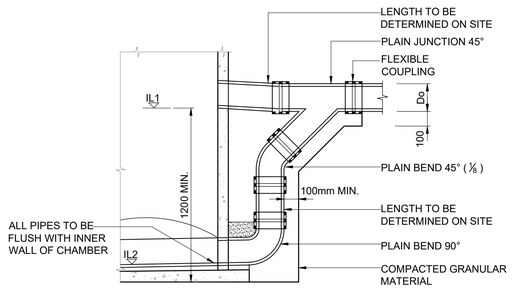
SPACING OF ANCHOR BLOCKS ON SLOPES STEEPER THAN 1:10

SCALE 1:25



SECTION ELEVATION AT RIGHT ANGLES TO MAIN SEWERS

SCALE 1:20

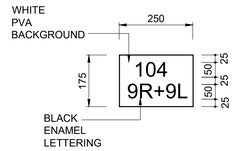


MANHOLE WITH HIGH INLET VERTICAL DROP TYPE

SCALE 1:20

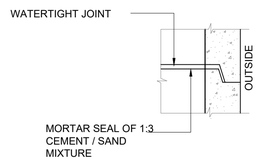
NOTES:

1. FLEXIBLE JOINTS :
   a) RUBBER RINGS COMPLYING WITH PART 1 OF SABS 974 TO BE USED FOR FLEXIBLE JOINTS
   b) FLEXIBLE JIUNTS TO BE TIGHT WITH NO SIGNS OF LEAKAGE WHEN TESTED ACCORDING TO SUBCLAUSE 4.4 OF SECTION LD OF PART 3 OF SABS 1200.
2. FIELD TESTS :
   a) AIR TESTS ACCORDING TO CLAUSE 7.2 OF SABS 1200 LD MUST BE CARRIED OUT BETWEEN MANHOLES DURING THE FOLLOWING PHASES OF CONSTRUCTION:
      i) AFTER THE PIPES HAVE BEEN LAID.
      ii) AFTER THE INITIAL BACKFILLING HAS BEEN COMPLETED.
   b) THE AIR TEST IS ONLY AN INDICATION OF ACCEPTANCE OF COMPLETED PORTION OF THE LINE AND IN ANY DISPUTE ARISING THE OUTCOME OF A WATER TEST WILL BE BINDING.
3. TRENCHES :
   a) EXCAVATION AND BACKFILLING OF TRENCHES TO COMPLY WITH SABS 1200 DB.
   b) BEDDING OF PIPES TO COMPLY WITH SABS 1200 LB.
   c) SEWERS TO BE PROTECTED AT ROAD CROSSINGS AS SHOWN ON THE TYPICAL PLAN FOR BEDDINGS.
   d) THE INFLOW OF STORMWATER IS TO BE PROHIBITED.
4. MANHOLES AND FITTINGS :
   a) ALL CONCRETE, BENCHING AND SEALERS SHALL COMPLY WITH SABS 1200 GA. OR SABS 1200 AS APPLICABLE.
   b) PRECAST CONCRETE SECTIONS TO COMPLY WITH SABS 1294.
   c) CLASSES OF CONCRETE :
      i) PRECAST CONCRETE SECTIONS - 30/19
      ii) ALL OTHER CONCRETE - 25/19
   d) CHANELLS IN MANHOLES TO BE LAID IN THE WET CONCRETE FLOOR AND THE FIRST PRECAST CONCRETE SECTION TO BE PLACED AND THE BENCHING COMPLETED WITHIN 24 HOURS AFTER CASTING THE CONCRETE FLOOR. NO DRIERS WILL BE PERMITTED FOR THE BENCHING. BENCHING TO BE STEEL TROWELLED TO A SMOOTH FINISH.
5. CONCRETE FOR MANHOLES TO BE CONSTRUCTED WITH DOLOMITE AGGREGATE AND SAND.
6. LEVELS OF MANHOLE COVERS :
   a) MIDBLOCK SEWERS : TOP OF FRAME MUST BE 150mm PROUD OF NATURAL GROUND LEVEL.
   b) SIDE WALK SEWERS : TOP OF FRAME MUST BE 150mm PROUD OF FINISHED GROUND LEVEL.
   c) FLOOD PLAINS : 500mm PROUD OF NATURAL GROUND LEVEL.
7. OVER EXCAVATION TO BE BACKFILLED WITH BEDDING MATERIAL ACCORDING TO SPECIFICATION FOR BEDDING MATERIAL.
8. uPVC HEAVY DUTY CLASS 34 TO SABS 791 WILL BE USED. MANHOLE CHANNELS, ETC. TO BE VITRIFIED CLAY EVEN IF uPVC ID USED IN RETICULATION.



PAINT MARKER FOR MAIN SEWER

SCALE 1:10



DETAIL OF MANHOLE PRECAST RING JOINT

SCALE 1:5

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WCS number

drawing title
SEWER MANHOLE DETAILS

ref.no	designed: BD
scale: AS SHOWN	drawn: B.D
date: 03/2020	checked: DM
type number	

drawing number
3258-CIV-DET-002

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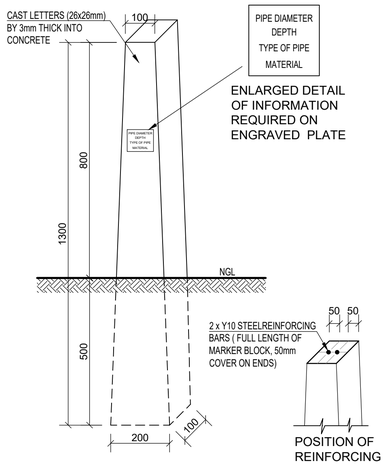
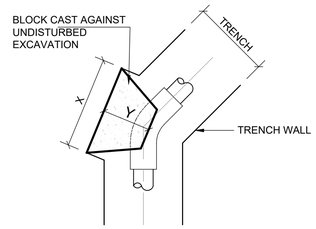
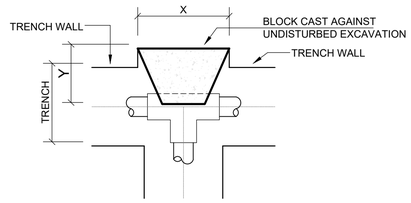


CONCRETE MARKER BLOCK
SCALE 1:10



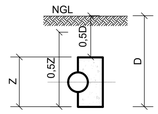
THRUST BLOCK FOR 45° BEND
SCALE 1:30

NOMINAL PIPE DIA. ø (mm)	AREA REQUIRED m²	DIMENSIONS (mm)				AREA PROVIDED m²	VOL (m³)
		D	Z	X	Y		
75	0.061	800	400	450	225	0.180	0.040
100	0.109	1 000	500	500	250	0.250	0.060
150	0.245	1 000	500	1000	500	0.500	0.250
200	0.435	1 200	600	1400	700	0.840	0.590
250	0.680	1 300	650	2000	1000	1.300	1.300
300	0.979	1 400	700	2600	1300	1.820	2.370
350+	SEE NOTE 5						

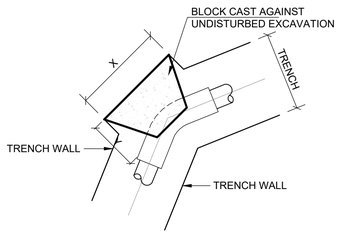


THRUST BLOCK FOR TEE-PIECE
SCALE 1:30

NOMINAL PIPE DIA. ø (mm)	AREA REQUIRED m²	DIMENSIONS (mm)				AREA PROVIDED m²	VOL (m³)
		D	Z	X	Y		
75	0.080	800	400	400	200	0.160	0.032
100	0.141	1 000	500	500	250	0.250	0.063
150	0.318	1 000	500	700	350	0.350	0.123
200	0.565	1 200	600	1000	500	0.600	0.300
250	0.883	1 300	650	1400	700	0.910	0.637
300	1.272	1 400	700	1900	950	1.330	1.264
350+	SEE NOTE 5						

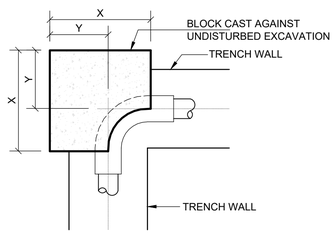


TYPICAL SECTION
SCALE 1:30



THRUST BLOCK FOR 22½° BEND
SCALE 1:10

NOMINAL PIPE DIA. ø (mm)	AREA REQUIRED m²	DIMENSIONS (mm)				AREA PROVIDED m²	VOL (m³)
		D	Z	X	Y		
75	0.031	800	400	400	200	0.1600	0.032
100	0.055	1 000	500	500	250	0.2500	0.063
150	0.124	1 000	500	500	250	0.2500	0.063
200	0.220	1 200	600	600	300	0.3600	0.108
250	0.344	1 300	650	650	325	0.4225	0.137
300	0.496	1 400	700	800	400	0.5600	0.224
350+	SEE NOTE 5						



THRUST BLOCK FOR 90° BEND
SCALE 1:30

NOMINAL PIPE DIA. ø (mm)	AREA REQUIRED m²	DIMENSIONS (mm)				AREA PROVIDED m²	VOL (m³)
		D	Z	X	Y		
75	0.113	800	400	450	225	0.18	0.065
100	0.201	1 000	500	500	250	0.25	0.100
150	0.451	1 000	500	1 000	500	0.50	0.402
200	0.803	1 200	600	1 400	700	0.84	0.945
250	1.254	1 300	650	2 000	1000	1.30	2.089
300	1.806	1 400	700	2 600	1 300	1.82	3.803
350+	SEE NOTE 5						

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WCS number

drawing title
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ref.no

designed
BD

scale
AS SHOWN

drawn
B.D

date
03/2020

checked
DM

type number

drawing number
3258-CIV-DET-004

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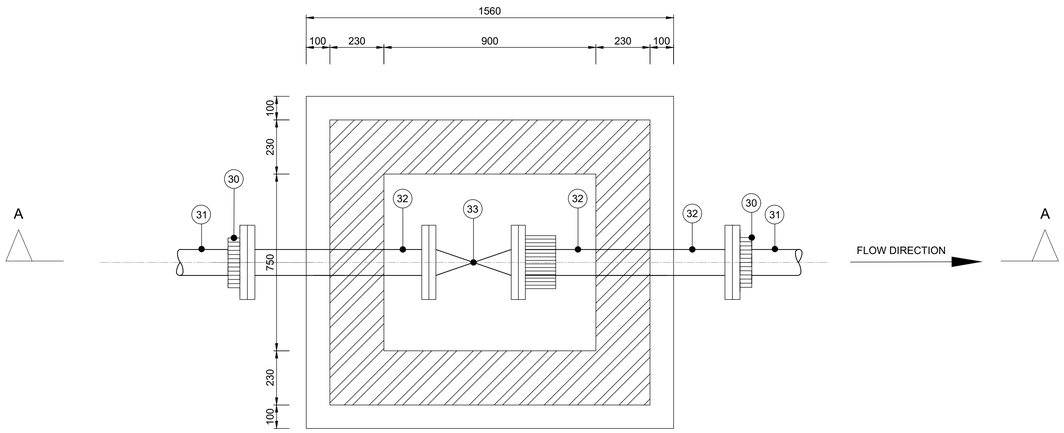

PLAN
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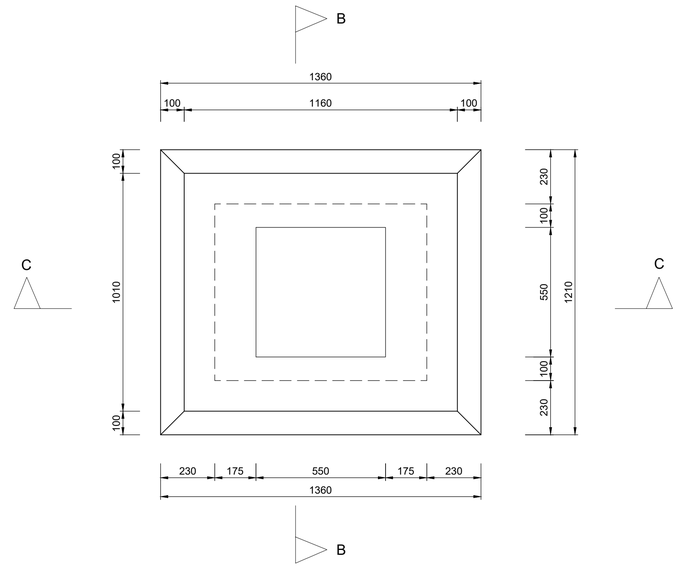

ROOF PLAN
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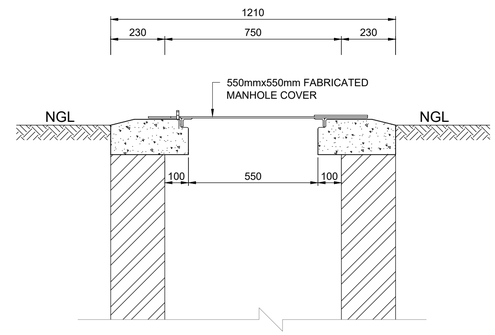

SECTION B-B
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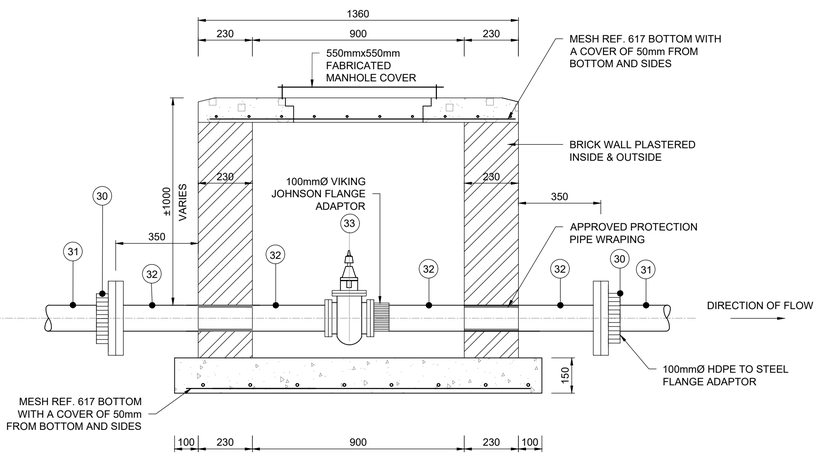

SECTION A-A
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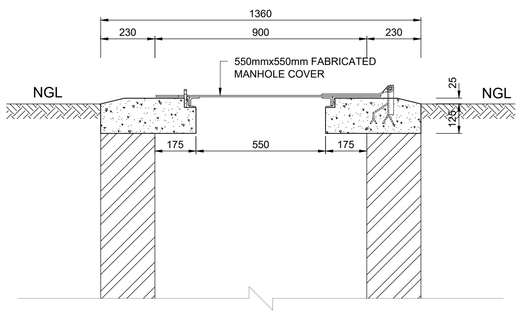

SECTION C-C
SCALE: 12.5

ITEM LIST

30	100mmØ HDPE TO STEEL FLANGE ADAPTOR
31	100mmØ HDPE PIPE
32	100mmØ GMS PIPE
33	ISOLATING VALVE

NOTAS:

1. ALL FLANGES TO SANS 1123 TABLE 1600/3.
2. ALL NUTS AND BOLTS GALVANIZED.
3. CONCRETE CLASS 20/19.
4. BRICKWORK 14 MPa BURNT CLAY BRICKS TO SANS 227 CONSTRUCTED IN 1:3 CEMENT MORTAR, BRICKFORCE EVERY 2nd COURSE.
5. VALVES CLOCKWISE CLOSING, NON RISING SPINDLE , RESILIENT SEAL TO SANS 664
6. DIMENSIONS MAY VARY DUE TO BRAND-SPECIFICATIONS.

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WCS number

drawing title
VALVE CHAMBER DETAILS

ref.no	designed: BD
scale: AS SHOWN	drawn: B.D
date: 03/2020	checked: DM
type number	

drawing number
3258-CIV-DET-003

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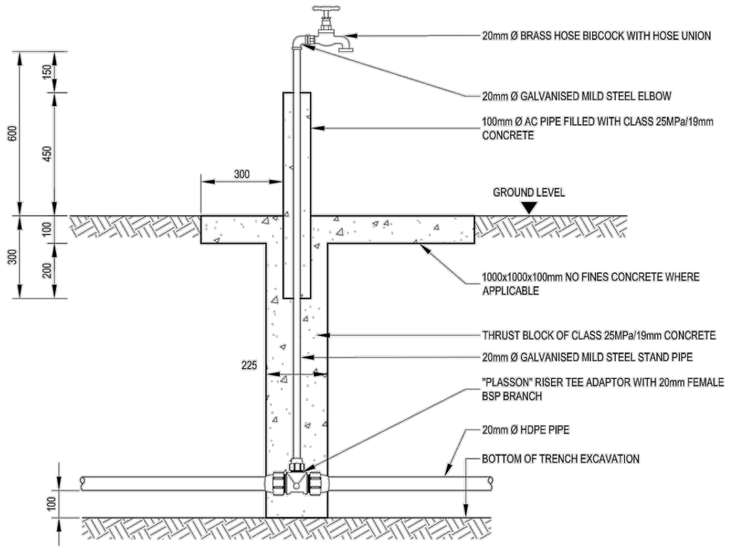
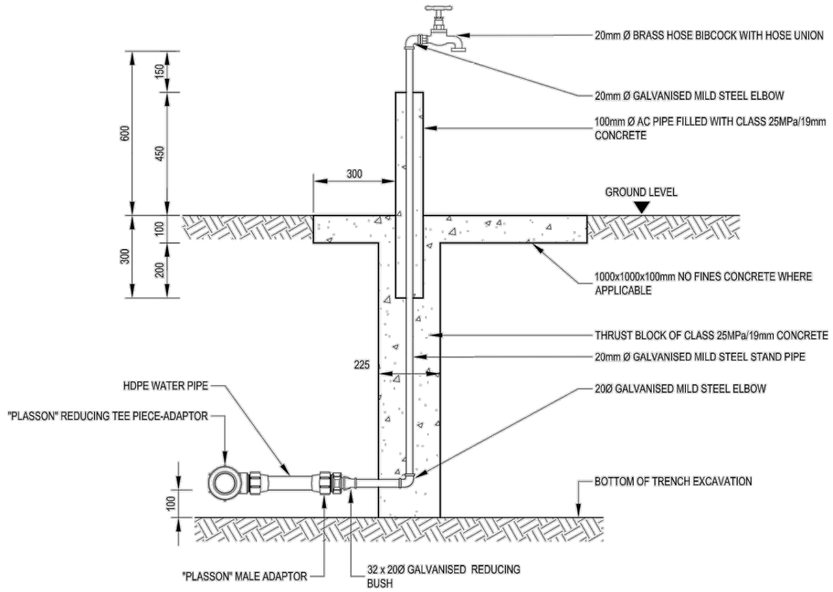


TYPICAL DETAIL OF GARDEN TAP (HDPE) WITH APRON



TYPICAL DETAIL OF GARDEN TAP (HDPE) WITH APRON DIRECTLY ON MAIN PIPE

No.	DATE	AMENDMENT	CHECKED BY
A	04/2021	FOR APPROVAL	DM

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discipline
CIVIL

service
PROPOSED SERVICED STANDS AT SANTA CENTRE

WCS number

drawing title
STANDPIPE DETAILS

ref.no	designed BD
scale AS SHOWN	drawn B.D
date 04/2021	checked DM
type number	

drawing number
3258-CIV-DET-010

A1