

TENDER NO. 234Q/2018/19

SCM – 509 Approved by Branch Manager: 10/04/2017

COPY
BID DOCS
REMOVED

CONTRACT DOCUMENT

FOR THE

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

VOLUME 3

(RETURNABLE DOCUMENT)

NOTE:

- The Form of Offer and Acceptance (C1.1) is on **page 89** of this document
- Table 1: Preference Schedule (B-BBEE contribution) is on **page 84** of this document

ISSUED BY:	
DIRECTOR: DIRECTORATE SETTLEMENTS: SETTLEMENT IMPLEMENTATION CITY OF CAPE TOWN Tower Block, Civic Centre 12 Hertzog Boulevard CAPE TOWN 8001	HUMAN HUMAN

COMPILED BY:

For official use.
TENDER SERIAL No.: 2
SIGNATURES OF CITY OFFICIALS UNDER OPENING

JANUARY 2018

NAME OF TENDERING ENTITY	
EMAIL ADDRESS OF TENDERING ENTITY	
FAX NUMBER OF TENDERING ENTITY	



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

CONTRACT ID: 234Q/2018/19

**CONTRACT DESCRIPTION: CONSTRUCTION OF CIVIL ENGINEERING SERVICES
– MACASSAR HOUSING PROJECT**

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CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

General Tender Information

TENDER ADVERTISED	:	18 January 2019
ESTIMATED CIDB CONTRACTOR GRADING DESIGNATION	:	9CE
SITE VISIT/CLARIFICATION MEETING	:	10h00 on 29 January 2019 (Non-compulsory)
VENUE FOR SITE VISIT/CLARIFICATION MEETING	:	Old Macassar Civic, Hospital Street, Macassar
CLOSING DATE	:	26 February 2019
CLOSING TIME	:	10h00
TENDER BOX & ADDRESS	:	Tender Box 168 at the Tender & Quotation Box Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town. The Tender Document (which includes the Form of Offer and Acceptance) completed in all respects, plus any additional supporting documents required, must be submitted in a sealed envelope with the name and address of the tenderer, the tender No. and title, the tender box No. and the closing date indicated on the envelope. The sealed envelope must be inserted into the appropriate official tender box before closing time.

If the tender offer is too large to fit into the abovementioned box or the box is full, please enquire at the public counter (Tender Distribution Office) for alternative instructions. The onus remains with the tenderer to ensure that the tender is placed in either the original box or as alternatively instructed.

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

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CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

T1.1 Tender Notice and Invitation to Tender

The CITY OF CAPE TOWN, DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION, invites tenders for Tender No. 234Q/2018/19: CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT.

Tenderers must be registered on Supplier Databases as described in the tender conditions.

Tenderers who are not registered on these Supplier Databases are not precluded from submitting tenders, but must however be registered upon being requested to do so in writing and within the period contained in such a request.

It is estimated that tenderers should have a CIDB contractor grading designation of 9CE Or higher.

Preferences are offered to tenderers who tender in accordance with the Preferential Procurement Regulations, 2017.

The physical address for collection of tender documents is:

Tender Distribution Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town.

Documents may be collected during working hours between 08:30 – 15:00 from **18 January 2019**.

A non-refundable tender fee of R300.00 payable by crossed cheque made out in favour of the City of Cape Town, is required on collection of the tender documents.

Queries relating to any issues in these documents may be addressed to
Fax No

Tel No

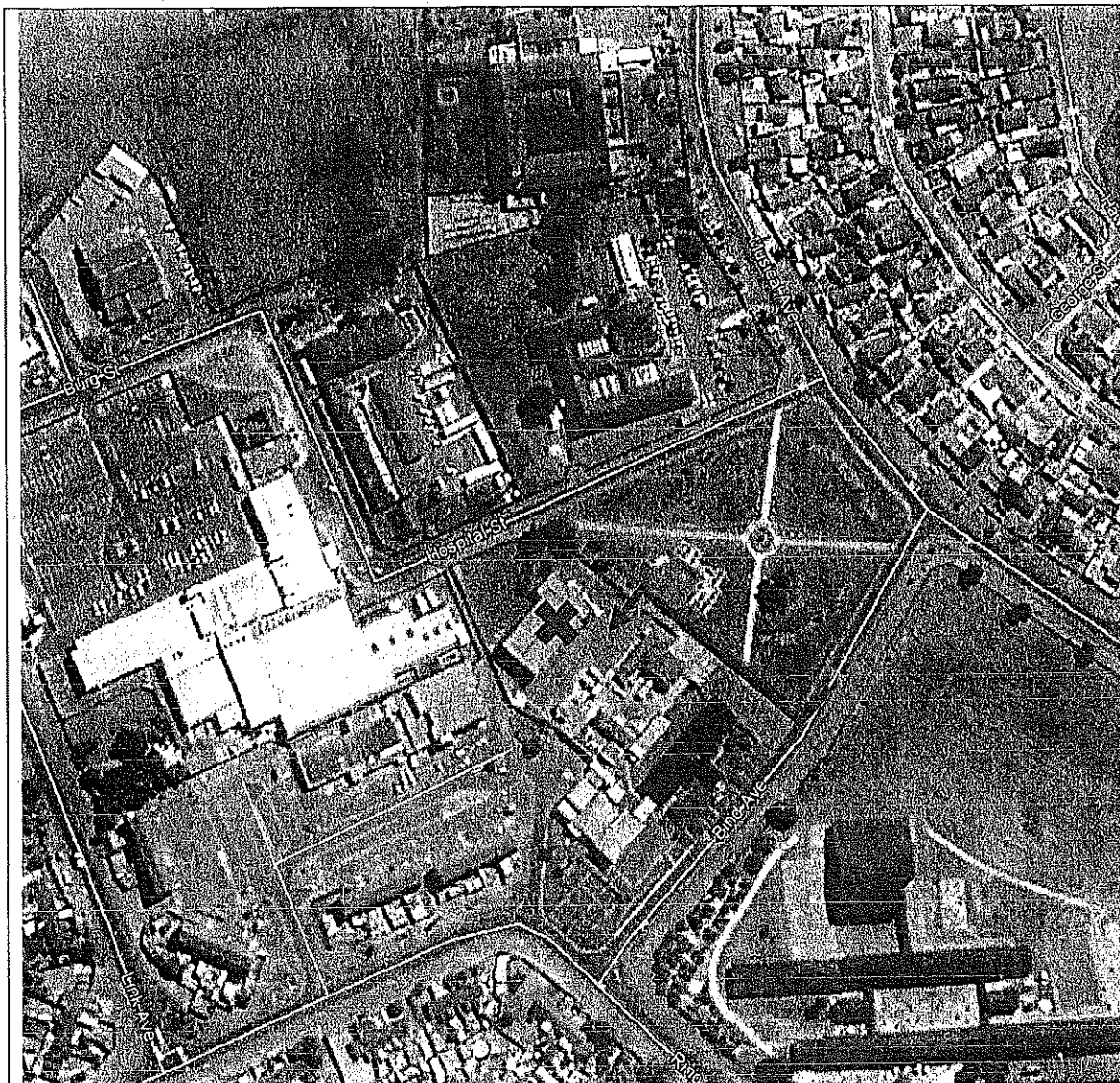
A non-compulsory site visit/clarification meeting with representatives of the Employer will take place at Old Macassar Civic, Hospital Street, Macassar (Refer to Locality Plan – Site Visit/Clarification Meeting Venue overleaf) on **29 January 2019** starting at 10:00.

The closing time for receipt of tenders is **10:00 on 26 February 2019**.

Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted.

Tenders may only be submitted on the tender documents that have been issued. Printed Bills of Quantities, in the same format (that is, layout, billed items and quantities) as those issued electronically by the Employer upon request, may be submitted as stated in the Tender Data.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.



GPS Location : 34° 3'43.37"S; 18°45'49.29"E

Address location: Old Macassar Civic, Hospital Street, Macassar (entrance off Bind Avenue, past Fire Station)

Date: 29 January 2019

Time: 10:00

CITY OF CAPE TOWN
 DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION
 CONTRACT NO. 234Q/2018/19
 CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

LOCALITY PLAN – SITE VISIT/CLARIFICATION MEETING VENUE

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

T1.2 Tender Data

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of Board Notice 136 of 2015 in Government Gazette No. 38960 of 10 July 2015, 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
F.1.1.1	<i>Add the following:</i> The Employer is the City of Cape Town, represented by the Director: Human Settlement Implementation: Transport and Urban Development Authority.
F.1.1.2	<i>Add the following clauses after the first paragraph:</i> The parties agree that this tender and its acceptance shall also be subject to the terms and conditions contained in the Employer's Supply Chain Management Policy ('SCM Policy'). Abuse of the supply chain management system is not permitted and may result in actions as set out in the SCM Policy.
F.1.2	Tender Documents <i>Add the following:</i> The following documents form part of this tender: VOLUME 1 : The General Conditions of Contract for Construction Works, Third Edition, 2015, prepared by the South African Institution of Civil Engineering (SAICE). 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 . VOLUME 2 : The SANS Standardised Specifications for Civil Engineering Construction prepared by Standards South Africa. These publications are available and tenderers must obtain copies at their own cost from Standards South Africa, Private Bag X191, PRETORIA, 0001. Volumes 1 and 2 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 3: The Contract Document (this document, which may also be obtained in electronic format), in which is bound:

The Tender

Part T1: Tendering procedures

T1.1 Tender notice and invitation to tender

T1.2 Tender data

Part T2: Returnable Documents

T2.1 List of returnable documents

T2.2 Returnable schedules

The Contract

Part C1: Agreements and Contract Data

C1.1 Form of offer and acceptance

C1.2 Contract data

C1.3 Form of Performance Guarantee

C1.4 Form of Advance Payment Guarantee

C1.5 Occupational Health and Safety Agreement

C1.6 Protection of the Environment Declaration

C1.7 Insurance Broker's Warranty

C1.8 Contract of Temporary Employment as Community Liaison Officer

Part C2: Pricing Data

C2.1 Pricing Assumptions

C2.2 Bills of Quantities

Part C3: Scope of Work

C3.1 Description of the Works

C3.2 Engineering

C3.3 Procurement

C3.4 Construction

C3.5 Management

C3.6 Annexes

Part C4: Site information

C4 Site information

VOLUME 4: Drawings (listed in C3.2 Engineering)

Volume 3 is deemed the "Returnable Document" which must be returned to the Employer in terms of submitting a tender offer.

F.1.3 Interpretation

F.1.3.2 *Delete the clause and replace with the following:*

These conditions of tender, the tender data and tender schedules which are required for tender evaluation purposes, shall form part of any contract arising from the invitation to tender.

F.1.4 Communication and employer's agent

Delete the first sentence of the clause and replace with the following:

Verbal or any other form of communication, from the Employer, its employees, agents or advisors 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, unless communicated by the Employer in writing to suppliers by its Director: Supply Chain Management or his nominee.

The Employer's Agent is:

Name

Address

- F.1.5 Cancellation and Re-Invitation of Tenders**
Delete the fullstop at the end of F.1.5.1 c) and replace with , or
Add the following after F.1.5.1 c):
 d) there is a material irregularity in the tender process.
- F.1.6.2 Competitive negotiation procedure**
Add the following to F.1.6.2.1:
 A competitive negotiation procedure will not be followed.
- F.1.6.3 Proposal procedure using the two-stage system**
Add the following between F.1.6.3 and F.1.6.3.1:
 A two-stage system will not be followed.
Add the following after F.1.6.3.2.2
- F.1.6.4 Objections, complaints, queries and disputes/ Appeals in terms of Section 62 of the Systems Act/ Access to court**
- F.1.6.4.1 Disputes, objections, complaints and queries**
 In terms of Regulations 49 and 50 of the Local Government: Municipal Finance Management Act, 56 of 2003 – Municipal Supply Chain Management Regulations (Board Notice 868 of 2005):
 a) Persons aggrieved by decisions or actions taken by the City of Cape Town in the implementation of its supply chain management system, may lodge within 14 days of the decision or action, a written objection or complaint or query or dispute against the decision or action.
- F.1.6.4.2 Appeals**
 a) In terms of Section 62 of the Local Government: Municipal Systems Act, 32 of 2000 a person whose rights are affected by a decision taken by the City, may appeal against that decision by giving written notice of the appeal and reasons to the City Manager within 21 days of the date of the notification of the decision.
 b) An appeal must contain the following:
 i) Must be in writing
 ii) It must set out the reasons for the appeal
 iii) It must state in which way the Appellant's rights were affected by the decision;
 iv) It must state the remedy sought; and
 v) It must be accompanied with a copy of the notification advising the person of the decision
- F.1.6.4.3 Right to approach the courts and rights in terms of Promotion of Administrative Justice Act, 3 of 2000 and Promotion of Access to Information Act, 2 of 2000**
 The sub- clauses above do not influence any affected person's rights to approach the High Court at any time or its rights in terms of the Promotion of Administrative Justice Act and Promotion of Access to Information Act.
- F.1.6.4.4** All requests referring to sub clauses F.1.6.4.1 and F.1.6.4.2 must be submitted in writing to:
The City Manager - C/o the Manager: Statutory Compliance Unit, Legal Services Department, Corporate Services and Compliance Directorate
Via hand delivery at: 20th Floor, Tower Block, 12 Hertzog Boulevard, Cape Town 8001
Via post at: Private Bag X918, Cape Town, 8000
Via fax at: 021 400 5963 or 021 400 5830
Via email at: MSA.Appeals@capetown.gov.za
- F.1.6.4.5** All requests referring to clause F.1.6.4.2 3 regarding access to information or reasons must be submitted in writing to:
The City Manager - C/o the Manager: Statutory Compliance Unit, Legal Services Department, Corporate Services and Compliance Directorate
Via hand delivery at: 20th Floor, Tower Block, 12 Hertzog Boulevard, Cape Town 8001
Via post at: Private Bag X918, Cape Town, 8000
Via fax at: 086 202 9982 or 021 400 5830
Via email at: Access2info.Act@capetown.gov.za

F.1.7

City of Cape Town Supplier Database Registration

Tenderers are required to be registered on the CCT Supplier Database as a service provider. Tenderers must register as such upon being requested to do so in writing and within the period contained in such a request, failing which no orders can be raised or payments processed from the resulting contract. In the case of Joint Venture partnerships this requirement will apply individually to each party of the Joint Venture.

Tenderers who wish to register on the City of Cape Town's Supplier Database may collect registration forms from the Supplier Management Unit located within the Supplier Management / Registration Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town (Tel 021 400 9242/3/4/5). Registration forms and related information are also available on the City of Cape Town's website www.capetown.gov.za (follow the Supply Chain Management link to Supplier registration).

F.1.8

National Treasury Web Based Central Supplier Database (CSD) Registration

Tenderers are required to be registered on the National Treasury Web Based Central Supplier Database (CSD) as a service provider. Tenderers must register as such upon being requested to do so in writing and within the period contained in such a request, failing which no orders can be raised or payments processed from the resulting contract. In the case of Joint Venture partnerships this requirement will apply individually to each party of the Joint Venture.

Tenderers who wish to register on the National Treasury Web Based Central Supplier Database (CSD) may do so via the web address <https://secure.csd.gov.za>.

It is each tenderer's responsibility to keep all the information on the National Treasury Web Based Central Supplier Database (CSD) updated.

F.2 Tenderer's obligations

F.2.1 Eligibility

*Delete the heading **Eligibility** and Replace with **Responsiveness Criteria***

F.2.1.1 *Delete the clause and replace with the following:*

Tenderers must submit a tender offer that complies in all aspects to the conditions as detailed in this document. Only those tenders that comply in all aspects with the tender conditions, specifications, pricing instructions and contract conditions will be declared responsive.

Add the following after F.2.1.2:

F.2.1.3 Only those tender submissions from which it can be established that a clear and unambiguous offer has been made to Employer, by whom the offer has been made and what the offer constitutes, will be declared responsive.

F.2.1.4 Only those tenders that satisfy the following criteria will be declared responsive:

F.2.1.4.1 **Construction Industry Development Board (CIDB) Registration**

Only those tenders submitted by tenderers who are registered, or capable of being registered, with an active status 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 CE class of construction work, will be declared responsive. Tenderers must obtain such active status upon being requested to do so in writing and within the period contained in such a request, failing which their tenders will be declared non-responsive.

Joint Ventures are eligible to submit tenders provided that:

- a) every member of the joint venture is registered with an active status with the CIDB;
- b) the lead partner has a contractor grading designation of not lower than one level below the required grading designation in the CE class of construction work; and
- c) the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a CE class of construction work or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations.

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

F.2.1.4.2 **Compliance with requirements of CCT SCM Policy and procedures**

Only those tenders that are compliant with the requirements below will be declared responsive:

- a) Full name of entity submitting tender to be provided;
- b) Identification number or company or other registration number to be provided;
- c) Tax reference number to be provided;
- d) VAT registration number (if any) to be provided;
- e) A completed **Certificate of Authority for Partnerships/ Joint Ventures/ Consortiums** to be provided authorising the tender to be made and the signatory to sign the tender on the partnership /joint venture/consortium's behalf (applicable schedule to be completed);
- f) A copy of the partnership / joint venture / consortium agreement to be provided;
- g) A completed **Declaration of Interest – State Employees** to be provided and which does not indicate any non-compliance with the legal requirements relating to state employees (applicable schedule to be completed);
- h) A completed **Declaration – Conflict of Interest and Declaration of Bidder's past Supply Chain Management Practices** to be provided and which does not indicate any conflict or past practises that renders the tender non-responsive (applicable schedules to be completed);
- i) A completed **Certificate of Independent Bid Determination** to be provided and which does not indicate any non-compliance with the requirements of the schedule (applicable schedule to be completed);
- j) The tenderer (including any of its directors or members), has not been restricted in terms of abuse of the Supply Chain Management Policy;
- k) The tenderer's tax matters with SARS are in order;
- l) The tenderer is not an advisor or consultant contracted with the Employer;
- m) The tenderer is not a person, advisor, corporate entity or a director of such corporate entity, involved with the bid specification committee.

F.2.1.4.3 Minimum score for functionality

Not applicable to this tender.

F.2.1.4.4 Local Content

a) The supplier shall study the terms and conditions as stated in the **Local Content Declaration / Annexure C** returnable schedule.

F.2.1.4.4.1 The stipulated minimum threshold percentages for local production and content for the **Valves products and actuators** ("the designated sector") is **70%** and will include all sub-sectors from the applicable National Treasury Instruction Note.

The stipulated minimum threshold percentages for local production and content for the **Wire Products** ("the designated sector") is **100%** and will include all sub-sectors from the applicable National Treasury Instruction Note.

The stipulated minimum threshold percentages for local production and content for the **Reinforcing bars** ("the designated sector") is **100%** and will include all sub-sectors from the applicable National Treasury Instruction Note.

F.2.1.4.4.2 Only tenders with locally produced or locally manufactured raw material or input will be considered. If the raw material or input to be used for a specific item is not available locally, bidders should obtain written authorisation from the Department of Trade and Industry (DTI) (Chief Director: Industrial Procurement, tel. 012 394 3927 and fax 012 394 4927) should there be a need to import such raw material or input.

F.2.1.4.4.3 A copy of the authorisation letter must be submitted together with the bid document at the closing date and time of the bid.

F.2.1.4.4.4 The Employer is obliged and must ensure that contracts for **the designated sector** are awarded at prices that are market related taking into account, among others, benchmark prices designated by the DTI for the sector, value for money and economies of scale. Where appropriate, prices may be negotiated with preferred bidders in accordance with provisions for Negotiation with Preferred Bidders as set out in the City of Cape Town SCM Policy.

F.2.1.4.4.5 A bid will be declared non-responsive / disqualified if the **Local Content Declaration / Annexure C** returnable schedule as well as the authorisation letter referred to above (if applicable) are not submitted as part of the bid documentation at the closing date and time of the bid.

For further information relating to the local production and content legislation, bidders may refer to website http://www.thedti.gov.za/industrial_development/ip.jsp, or may contact the Chief Director: Industrial Procurement at the DTI at telephone number (012) 394 3927 and fax (012) 394 4927, the Director: Fleet Procurement, Ms Cathrine Matidza, at telephone number (012) 394 3927 and e-mail CMatidza@thedti.gov.za, or the DTI Contact Centre no 0861 843384.

F.2.1.4.5 Compulsory clarification meeting

Not applicable to this tender.

F.2.1.4.6 Pre-qualification criteria for preferential procurement

Only those tenderers who meet the following pre-qualification criteria will be declared responsive:

- c) a tenderer subcontracting a minimum of 30% to:
 - i. an EME or QSE which is at least 51% owned by black people;
 - ii. an EME or QSE which is at least 51% owned by black people who are youth;
 - iii. an EME or QSE which is at least 51% owned by black people who are women;
 - iv. an EME or QSE which is at least 51% owned by black people with disabilities;
 - v. an EME or QSE which is at least 51% owned by black people living in rural or undeveloped areas or townships;
 - vi. a co-operative which is at least 51% owned by black people;
 - vii. an EME or QSE which is at least 51% owned by black people who are military veterans;
 - viii. an EME or QSE.

Tenderers must fully complete the schedule titled **Schedule of Pre-Qualification Criteria Sub-Contractors (Schedule 26)** in order for this requirement to be evaluated.

F.2.1.4.7 **Good standing with Bargaining Council**

Only those tenders submitted by tenderers who are in good standing with the **Bargaining Council for the Civil Engineering Industry (BCCEI)** at the time of the tender award will be declared responsive. Tenderers must attach such proof to the schedule titled **Declaration in Respect of Compliance with Labour Legislation** or obtain such upon being requested to do so in writing and within the period contained in such a request, failing which their tenders will be declared non-responsive.

F.2.1.4.8 **Key Personnel**

In order to be considered for an appointment in terms of this tender, the tenderer must have the following key personnel in its permanent employment at the close of tender:

- a) A **Contracts Manager** who has managed municipal civil engineering projects (level 8CE CIDB grading designation or above) at the level of Contracts Manager/Director for the past 8 years. It is expected that the Contracts Manager should be locally based (City of Cape Town metropolitan area) for the duration of the contract.
- b) A **Site Agent** who has managed municipal civil engineering projects (level 8CE CIDB grading designation or above) at the level of Site Agent for the past 8 years. It is expected that the Site Agent should be locally based (City of Cape Town metropolitan area) for the duration of the contract.

Details of key personnel including detailed *curriculum vitae* must be submitted with the tender submission and appended to Schedule 12. It is expected that the Key Personnel nominated by the tenderer will be employed on this contract. Should it be necessary at the time of contract award to replace any of the Key Personnel, the CV's of the proposed alternative personnel must be submitted to the Employer for approval. Alternative key personnel will only be approved if they meet the minimum requirements stated above.

F.2.3 **Check documents**

Delete the clause and replace with the following:

The Tenderer should check the tender documents on receipt for completeness, missing or duplicated pages, indistinct figures or writing and any obvious errors. The Tenderer must notify the Employer's agent at once of any such problems identified.

F.2.7 **Clarification meeting**

Add the following after the second sentence:

The arrangements for the site visit/clarification meeting are as stated on the General Tender Information page and in the Responsiveness Criteria (if applicable).

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

F.2.8 **Seek Clarification**

Add the following after the first sentence:

The tenderer warrants that it has:

- a) Inspected the Specifications and read and fully understood the Conditions of Contract.
- b) read and fully understood the whole text of the Specifications and Price Schedule and thoroughly acquainted itself with the nature of the goods proposed and generally of all matters which may influence the Contract.
- c) visited the site(s) where delivery of the proposed works will take place, carefully examined existing conditions, the means of access to the site(s), the conditions under which the delivery is to be made, and acquainted itself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials, plant and equipment to and from the site(s) and made the necessary provisions for any additional costs involved thereby.
- d) requested the Employer to clarify the requirements contained in the Specifications and Price Schedule, the exact meaning or interpretation of which is not clearly intelligible to the tenderer.
- e) received any notices to the tender documents which have been issued in accordance with the Employer's SCM Policy.

The Employer will therefore not be liable for the payment of any extra costs resulting from any claim

submitted by the tenderer arising from any alleged ambiguity or uncertainty contained in the tender document.

F.2.12 Alternative tender offers

F.2.12.1 Add the following to F.2.12.1 at the end of the first sentence:

If a tenderer wishes to submit an alternative tender offer, he shall do so as a separate offer on a separate set of tender documents. The alternative tender offer shall be submitted in a separate sealed envelope on a separate Form of Offer, both clearly marked "Alternative Tender" in order to distinguish it from the main tender offer.

While it is not necessary to duplicate all parts of the main tender offer, the alternative tender offer shall be supported by the following documents as applicable:

- a) the schedule that compares the alternative(s) offered with the requirements of the issued tender documents
- b) preliminary designs, calculations, drawings and all other pertinent technical information and characteristics must be submitted with the alternative tender offer, in order to enable the Employer to evaluate the efficacy of the alternatives proposed
- c) revised Bills of Quantities, or parts thereof, highlighting the changes made, together with a revised Summary, the total of which has been carried to the Form of Offer
- d) details of any proposed amendments to the Pricing Assumptions

F.2.12.3 Add the following to F.2.12.1 at the end of the first sentence:

An alternative of the highest ranked acceptable main tender offer that is priced higher than the main tender offer may be recommended for award, provided that the ranking of the alternative tender offer is higher than the ranking of the next ranked acceptable main tender offer.

The Employer's costs in confirming the acceptability of the alternative offer will be, *inter alia*, taken into account in considering the alternative offer.

The Employer will not be bound to consider alternative tenders and shall have sole discretion in this regard.

In the event that the alternative is accepted, the Contractor shall accept full responsibility that the alternative offer complies in all respects with the Employer's standards and requirements.

F.2.13 Submitting a tender offer

F.2.13.1 Add the following to F.2.13.1 at the end of the first sentence:

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

F.2.13.3 Add the following to F.2.13.3 at the end of the first sentence:

Parts of each tender offer communicated on paper shall be submitted as an original, plus 0 (nought) copies.

F.2.13.5 Add the following to F.2.13.5 at the end of the first sentence:

The tender submission details are all described on the General Tender Information page.

F.2.13.6 Add the following to F.2.13.6:

A two-envelope procedure will **not** be followed (F.3.5).

F.2.13.10 Add the following after F.2.13.9:

By signing the offer part of C1.1 Form of Offer and Acceptance the tenderer declares that all information provided in the tender submission is true and correct.

F.2.13.11 The Employer shall not formally issue tender documents in electronic format and shall only issue tender documents in hardcopy. 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 issued tender documents, 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. Only those tenders that have been completed on the issued hard copy tender document shall be considered, provided that printed Bills of Quantities, in the same format (that is, layout, billed items and quantities) as those issued electronically by the Employer, may be submitted with the tender as stated in F.2.13.2.

- d) Where Addenda have been issued which amend the Bills of Quantities, then the printed Bills of Quantities shall take these into account. The pages of the Issued Bills of Quantities should not be removed from the tender document.
- e) The Employer accepts no responsibility or liability arising from any reliance on or use of the electronic version provided in terms of this clause. Tenderers are alerted to the fact that electronic versions of the tender documents may not reflect any notices or addenda that amend the tender document.
- f) Any non-compliance with these provisions, including effecting any unauthorised alterations to the tender documents as contemplated in F.2.11, shall render the tender non-responsive. 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.
- g) In requesting the electronic version of the tender documents or parts thereof, the tenderer is deemed to have read, understood and accepted all of the above conditions.

F.2.15 Closing time

Add the following to F.2.15.1 after the first sentence:

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 after the first sentence:

F.2.16.1 The tender offer validity period is **12 weeks (84 days)**.

F.2.16.2 *Delete the clause and replace with the following:*

Tender offers shall be deemed to remain valid until formal acceptance by the Employer of an offer at any time after the expiry date of the original tender offer validity period, unless the Employer is notified in writing of anything to the contrary, including any further conditions, by the tenderer.

Any further conditions introduced by the tenderer will be considered at the sole discretion of the Employer.

F.2.17 Clarification of tender offer after submission

Add the following to F.2.17 at the end of the third sentence:

A tender will be rejected as non-responsive if the tenderer fails to provide any clarification or supporting documents requested by the Employer within the time for submission stated in the Employer's written request for such clarification or documents.

F.2.18 Provide other material

Delete the following word in F.2.18.1:

F.2.18.1 notarized

Add the following to F.2.18.1 at the end of the first paragraph:

Provide, on written request by the Employer, where the transaction value (tendered amount) inclusive of VAT **exceeds R 10 million:**

- a) audited annual financial statement for the past 3 years, or for the period since establishment if established during the past 3 years, if required by law to prepare annual financial statements for auditing;
- b) 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 days;
- c) particulars of any contracts awarded to the tenderer by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract;
- d) 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.

Add the following after F.2.18.2:

F.2.18.3 Tenderers shall fully cooperate with the Employer's external service provider appointed to perform a due diligence review and risk assessment upon receipt of such written instruction from the Employer.

Failure to fully cooperate could result in a tender being declared as non-responsive.

F.2.18.4 Compliance with Occupational Health and Safety Act, 85 of 1993

Tenderers are to note the requirements of the Occupational Health and Safety Act, 85 of 1993 and

the Construction Regulations, 2014 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.

In this regard the Tenderer shall submit with his tender or upon request, appended to Schedule 18: Health and Safety Plan in T2.2 : Returnable Schedules, a draft Health and Safety Plan in respect of the Works in sufficient detail to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act, Regulations and Health and Safety Specification in Part C3.5 Management in the Scope of Work.

F.2.23 Certificates

Add the following after the first sentence:

The tenderer is required to submit the following:

F.2.23.1 Evidence of tax compliance

Tenderers shall be registered with the South African Revenue Service (SARS) and their tax affairs must be in order and they must be tax compliant. In this regard, it is the responsibility of the Tenderer to submit evidence in the form of a valid Tax Clearance Certificate issued by SARS to the Employer at the Supplier Management Unit located within the Supplier Management / Registration Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town (Tel 021 400 9242/3/4/5), or included with this tender. The tenderer must also provide its Tax Compliance Status PIN number on the **Compulsory Enterprise Questionnaire**

Each party to a Consortium/Joint Venture shall submit a separate Tax Clearance Certificate.

Tenderers are to note that the Employer will not award a contract to a Tenderer whose tax matters are not in order.

F.2.23.2 Broad-Based Black Economic Empowerment Status Level Documentation

In order to qualify for preference points, it is the responsibility of the tenderer to submit documentary proof, either as certificates, sworn affidavits or any other requirement prescribed in terms of the B-BBEE Act, of its B-BBEE status level of contribution in accordance with the applicable Codes of good practise as issued by the Department of Trade and Industry, to the CCT at the Supplier Management Unit located within the Supplier Management / Registration Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town (Tel 021 400 9242/3/4/5) or included with the tender submission.

Consortiums/Joint Ventures will qualify for preference points, provided that the **entity** submits the relevant certificate/scorecard in accordance with the applicable codes of good practise. Note that, in the case of unincorporated entities, a verified consolidated B-BBEE scorecard must be submitted in the form of a certificate with the tender.

Tenderers are further referred to the content of the **Preference Schedule** for the full terms and conditions applicable to the awarding of preference points.

The applicable code for this tender is the **[Amended Codes for Measuring Broad-Based Black Economic Empowerment in the Construction Sector]** unless in possession of a valid certificate in terms of the transitional arrangements contained in these Codes]

The tenderer shall indicate in Section 4 of the **Preference Schedule** the Level of Contribution in respect of the enterprise status or structure of the tendering entity (the supplier):

Add the follow new clause after F.2.23.2

F.2.24 Proposed Deviations and Qualifications

Where the tenderer cannot tender in all respects in accordance with the provisions contained in the tender documents, all deviations therefrom shall be clearly and separately listed in the schedule titled **Proposed Deviations and Qualifications by Tenderer** in T2.2 Returnable Schedules, or in a tenderer's covering letter expressly referenced in this schedule.

The tenderer accept that the Employer will examine such deviations in terms of clause F.3.8.2 and shall not be bound to accept any such deviations or qualifications.

It must be clearly stated by the tenderer whether the sum tendered in the Tender Offer includes for all such deviations or qualifications listed or referred to in the schedule titled **Proposed Deviations and Qualifications by Tenderer** or not.

F.3 The Employer's undertakings

F.3.2 Issue Addenda

Delete the words "three days" from the first sentence and replace with:

"five working days where possible"

Add the following to F.3.2 at the end of the paragraph:

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.3.4.2 at the end of the paragraph:

The location for opening of the tender offers is the Tender Submission Office at the address as stated on the General Tender Information page.

F.3.8 Test for responsiveness

F.3.8.2 Delete par F.3.8.2 (c)

Replace the final sentence of F.3.8.2 with the following:

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

Add the following after clause F.3.8.2

F.3.8.3 The Employer reserves the right to accept a tender offer which does not, in the Employer's opinion, materially and/or substantially deviate from the terms, conditions, and specifications of the tender documents.

F.3.9 Arithmetical errors, omissions and discrepancies

Add the following after clause F.3.9.2

F.3.9.3 In the event of tendered rates or lump sums being declared by the Employer to be unacceptable to it because they are not priced, either excessively low or high, or not in proper balance with other rates or lump sums, the Tenderer may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the tenderer to amend these rates and lump sums along the lines indicated by it.

The Tenderer will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the tender offer in accordance with this clause.

Should the Tenderer fail to amend his tender in a manner acceptable to and within the time stated by the Employer, the Employer may declare the tender as non-responsive.

F.3.10 Clarification of a tender offer

Delete the clause and replace with the following:

F.3.10 The Employer may, after the closing date, request additional information or clarification from tenderer, in writing on any matter affecting the evaluation of the tender offer or that could give rise to ambiguity in a contract arising from the tender offer.

F.3.11 Evaluation of tender offers

Add the following paragraph below the heading:

The preference point system applicable to this tender is the 90/10 preference point system.

F.3.11.3(3) Add the following after par F.3.11.3(3):

In addition, the various deemed B-BBEE Status Level of Contributor in accordance with the relevant Codes can be attained and such tenderers must be awarded the appropriate number of points.

It should be noted that such Deemed B-BBEE Status Level of Contribution can be enhanced or discounted in accordance with the relevant clauses in the applicable Codes.

F.3.11.3(4) Delete the heading and replace with the following:

The 80/20 preference point system for acquisition of services, works or goods up to Rand

value of R50 million

F.3.11.3(4)(a)(i) Delete the first sentence of par F.3.11.3(4)(a)(i) and replace with the following:

(4) (a)(i) The following formula must be used to calculate the points for price in respect of tenders (including price tender) with a rand value equal to, or above R 30'000 and up to Rand value of R50'000'000 (all applicable taxes included):

Delete the text under the formula and replace with the following:

Where

P_s = Points scored for price of tender or offer under consideration;

P_t = Price of tender or offer under consideration; and

P_{min} = Price of lowest acceptable tender or offer.

F.3.11.3(4)(a) Amend the number of points for status level 3 as follows:

B-BBEE status level of contributor	Number of points
3	14

F.3.11.3(5) Delete the heading and replace with the following:

The 90/10 preference point system for acquisition of services, works or goods with a Rand value above R50 million

F.3.11.3(5)(a)(i) Delete the first sentence of par F.3.11.3(5)(a)(i) and replace with the following:

(5) (a)(i) The following formula must be used to calculate the points for price in respect of tenders (including price tender) with a rand value above R50'000'000 (all applicable taxes included):

Delete the text under the formula and replace with the following:

Where

P_s = Points scored for price of tender or offer under consideration;

P_t = Price of tender or offer under consideration; and

P_{min} = Price of lowest acceptable tender or offer.

F.3.11.3(5)(a) Amend the number of points for status level 3 as follows:

B-BBEE status level of contributor	Number of points
3	6

F.3.11.7 Delete the text in the final row of the table and replace with the following:

a	P_m is the offer of the most favourable offer. P is the offer of the tender offer under consideration.
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F.3.11.7 Scoring Financial Offers

Add the following:

The financial offer will be scored using **Formula 2 (Option 1)**.

F.3.11.8 Scoring Preferences

Add the following:

Points will be awarded to tenderers who are eligible for preferences in terms of the **Preference Schedule** (where preferences are granted in respect of B-BBEE contribution) which is included in T2.2 Returnable Schedules.

The terms and conditions of the **Preference Schedule** shall apply in all respects to the tender evaluation process and any subsequent contract.

Add the following after F.3.11.9:

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

The conclusions drawn from this risk analysis will be used by the Employer in determining the acceptability of the tender offer in terms of F.3.13 b).

F.3.13 Acceptance of tender offer

Delete F.3.13 and replace with the following:

Accept the tender offer, if in the opinion of the employer, it does not present any material risk and only if the tenderer:

Delete F.3.13 a) and replace with the following:

- a) is not under restrictions, has any principals who are under restrictions, or is not currently a supplier to whom notice has been served for abuse of the supply chain management system, preventing participation in the employer's procurement,

If an award cannot be made in terms of anything contained herein, the Employer reserves the right to consider the next ranked tenderer(s).

F.3.16 Notice to unsuccessful tenderers

Replace the heading above with:

Notice to successful and unsuccessful tenderers

F.3.16.1 Delete the clause and replace with the following:

Before accepting the tender of the successful tenderer the Employer shall notify the successful tenderer in writing of the decision of the Employer's Bid Adjudication Committee to award the tender to the successful tenderer. No rights shall accrue to the successful tenderer in terms of this notice.

F.3.16.2 Delete clause F.3.16.2 and replace 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 after the first sentence:

The number of paper copies of the signed contract to be provided by the Employer is one.

Add the following after F.3.19

F.3.20 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 tender as submitted.

If negotiations fail to result in acceptable contract terms, the City Manager (or his delegated authority) may terminate the negotiations and cancel the tender, or invite the next ranked tenderer for negotiations. The original preferred tenderer should be informed of the reasons for termination of the negotiations. If the decision is to invite the next highest ranked tenderer for negotiations, the failed earlier negotiations may not be reopened by the CCT.

Minutes of any such negotiations shall be kept for record purposes.

The provisions of this clause will be equally applicable to any invitation to negotiate with any other tenderers.

In terms of the PPPFA Regulations, 2017, tenders must be cancelled in the event that negotiations fail to achieve a market related price with any of the three highest scoring tenderers.

Add the following after F.3.19

F.3.21

Contracts having future budgetary implications

As this project will exceed the current budget cycle, it is subject to Section 33 of the Municipal Finance Management Act, 56 of 2003, and consequently the Employer must follow the required process in terms of Section 33.

Annex F
(normative)
Standard Conditions of Tender

F.1 General

F.1.1 Actions

F.1.1.1 The Employer and each tenderer submitting a tender 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.

F.1.2 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:
 - i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;
 - ii) 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
 - iii) incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.
- b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;
- 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;
- 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

- e) **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) **functionality** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

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 Cancellation and Re-Invitation of Tenders

F1.5.1 An organ of state may, prior to the award of the tender, cancel a tender if-

- (a) due to changed circumstances, there is no longer a need for the services, works or goods requested; or
- (b) funds are no longer available to cover the total envisaged expenditure; or
- (c) no acceptable tenders are received.

F1.5.2 The decision to cancel a tender must be published in the cldb website and in the government Tender Bulletin for the media in which the original tender invitation was advertised.

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 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

F.2.2.1 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.2.2.2 The cost of the tender documents charged by the Employer shall be limited to the actual cost incurred by the Employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

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 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 days before the closing time stated in the tender data.

F.2.10.2 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.

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 as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.

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.2.12.3 An alternative tender offer may only be considered in the event that the main tender offer is the winning tender.

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 which 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.

F.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), preferencing 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 and policies

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 days after the expiry of the validity period stated in the tender data.

F.2.23 Certificates

Include in the tender submission or provide the Employer with any certificates as stated in the tender data.

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 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 prequalify 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 prequalified 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 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, number of points claimed for its BBEE status level 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 functionality 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 functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

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

- a) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in words shall govern.
- b) 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.
- c) 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 item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

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.3.10 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

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

F.3.11.2 Method 1: Price and Preference

In the case of a price and preference:

- 1) Score tender evaluation points for price
- 2) Score points for BBBEE contribution
- 3) Add the points scored for price and BBBEE.

F.3.11.3 Method 2: Functionality, Price and Preference

In the case of a functionality, price and preference:

- 1) Score functionality, rejecting all tender offers that fail to achieve the minimum number of points for functionality as stated in the Tender Data.
- 2) No tender must be regarded as an acceptable tender if it fails to achieve the minimum qualifying score for

functionality as indicated in the tender invitation.

- 3) Tenders that have achieved the minimum qualification score for functionality must be evaluated further in terms of the preference points system prescribed in paragraphs 4 and 4 and 5 below.

The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R1 million

- 4) (a)(i) The following formula must be used to calculate the points for price in respect of tenders (including price tender) with a rand value equal to, or above R 30 000 and up to Rand value of R 1 000 000 (all applicable taxes included):

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

P_s = Points scored for comparative price of tender or offer under consideration;

P_t = Comparative price of tender or offer under consideration; and

P_{min} = Comparative price of lowest acceptable tender or offer.

- (4) (a)(ii) An Employer of state may apply the formula in paragraph (i) for price tenders with a value less than R30 000, if and when appropriate:
- (4) (b) Subject to subparagraph (4)(c), points must be awarded to a tender for attaining the B-BBEE status level of contributor in accordance with the table below:

B-BBEE status level of contributor	Number of points
1	20
2	18
3	16
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

- (4) (c) A maximum of 20 points may be allocated in accordance with subparagraph (4)(b)
- (4) (d) The points scored by tender in respect of B-BBEE contribution contemplated in contemplated in subparagraph (4) (b) must be added to the points scored for price as calculated in accordance with subparagraph (4)(a).
- (4) (e) Subject to paragraph 4.3.8 the contract must be awarded to the tender who scores the highest total number of points.

The 90/ 10 preference points system for acquisition of services, works or goods with a Rand value above R 1 million

(5)(a) The following formula must be used to calculate the points for price in respect of tenders with a Rand value above R1 000 000 (all applicable taxes included):

90/10

$$P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

P_s = Points scored for comparative price of tender or offer under consideration;

P_t = Comparative price of tender or offer under consideration; and

$P_{\min}$ = Comparative price of lowest acceptable tender or offer.

(5)(b) Subject to subparagraph(5)(c), points must be awarded to a tender for attaining the B- BBEE status level of contributor in accordance with the table below:

B-BBEE status level of contributor	Number of points
1	10
2	9
3	8
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

(5)(c) A maximum of 10 points may be allocated in accordance with subparagraph (5)(b).

(5)(d) The points scored by tender in respect of B-BBEE contribution contemplated in subparagraph (5) (b) must be added to the points scored for price as calculated in accordance with subparagraph (5)(a).

(5)(e) Subject to paragraph 4.3.8 the contract must be awarded to the tender who scores the highest total number of points.

F.3.11.6 Decimal places

Score price, preference and functionality, as relevant, to two decimal places.

F.3.11.7 Scoring Price

Score price of remaining responsive tender offers using the following formula:

$$NFO = W_1 \times A$$

where: NFO is the number of tender evaluation points awarded for price.

W_1 is the maximum possible number of tender evaluation points awarded for price as stated in the Tender Data.

A is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

Table F.1: Formulae for calculating the value of A

Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a
1	Highest price or discount	$A = (1 + \frac{P - P_m}{P_m})$	$A = P / P_m$
2	Lowest price or percentage commission / fee	$A = (1 - \frac{P - P_m}{P_m})$	$A = P_m / P$
^a P_m is the comparative offer of the most favourable comparative offer. P is the comparative offer of the tender offer under consideration.			

F.3.11.8 Scoring preferences

Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences.

Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

F.3.11.9 Scoring functionality

Score each of the criteria and sub criteria for quality in accordance with the provisions of the Tender Data.

Calculate the total number of tender evaluation points for quality using the following formula:

$$N_Q = W_2 \times S_O / M_S$$

where: S_O is the score for quality allocated to the submission under consideration; M_S is the maximum possible score for quality in respect of a submission; and
 W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

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 risk and only if the tenderer:

- is not under restrictions, or has principals who are under restrictions, preventing participating in the Employer's procurement,
- 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,
- has the legal capacity to enter into the contract,
- is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, 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,
- complies with the legal requirements, if any, stated in the tender data, and
- 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:

- 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 tenderers.

F3.19 Transparency in the procurement process

F3.19.1 The cidb prescripts require that tenders must be advertised and be registered on the cidb i.Tender system.

F3.19.2 The Employer must adopt a transparency model that incorporates the disclosure and accountability as transparency requirements in the procurement process.

F3.19.3 The transparency model must identify the criteria for selection of projects, project information template and the threshold value of the projects to be disclosed in the public domain at various intervals of delivery of infrastructure projects.

F3.19.4 The client must publish the information on a quarterly basis which contains the following information:

- Procurement planning process
- Procurement method and evaluation process
- Contract type
- Contract status
- Number of firms tendering
- Cost estimate
- Contract title
- Contract firm(s)
- Contract price
- Contract scope of work
- Contract start date and duration
- Contract evaluation reports

F3.19.5 The Employer must establish a Consultative Forum which will conduct a random audit in the implementation of the transparency requirements in the procurement process.

F3.19.6 Consultative Forum must be an independent structure from the bid committees.

F3.19.7 The information must be published on the Employer's website.

F 3.19.8 Records of such disclosed information must be retained for audit purposes.

Annex G

(normative)

Alpha-numerics associated with the Contractor Grading Designations

Table G1: Contractor grading designations and associated parameters

Contractor Grading Designation	Tender Value Range designation	Maximum value of contract that a contractor is considered capable of performing (R)
1 (class of construction works)	1	200 000
2 (class of construction works)	2	650 000
3 (class of construction works)	3	2 000 000
4 (class of construction works)	4	4 000 000
5 (class of construction works)	5	6 500 000
6 (class of construction works)	6	13 000 000
7 (class of construction works)	7	40 000 000
8 (class of construction works)	8	130 000 000
9 (class of construction works)	9	No Limit

Table G2: Classes of construction work

Description	Designation	Definition	Work types	Examples
Civil engineering works	CE	Construction works that are primarily concerned with materials such as steel, concrete, earth and rock and their application in the development, extension, installation, maintenance, removal, renovation, alteration, or dismantling of building and engineering infrastructure	Water, sewerage, roads, railways, harbours and transport, urban development and municipal services	Structures such as a cooling tower, bridge, culvert, dam, grand stand, road, railway, reservoir, runway, swimming pool, silo or tunnel. The results of operations such as dredging, earthworks and geotechnical processes. Township services, water treatment and supply, sewerage works, sanitation, soil conservation works, irrigation works, storm-water and drainage works, coastal works, ports, harbours, airports and pipelines.
Electrical engineering works (Infrastructure)	EP	Construction works that are primarily concerned with development, extension, installation, removal, renovation, alteration or dismantling of engineering infrastructure: a) relating to the generation, transmission and distribution of electricity;	Electrical power generation, transmission, control and distribution equipment and systems.	Power generation Street and area lighting Substations and protection systems Township Reticulations Transmission Lines Supervisory control and data acquisition systems
Electrical engineering works (buildings)	EB	Construction works that are primarily concerned with the installation, extension, modification or repair of electrical installations in or on any premises used for the transmission of electricity from a point of control to a point of consumption, including any article forming part of such an installation	All electrical equipment forming an integral and permanent part of buildings and/or structures, including any wiring, cable jointing and laying and electrical overhead line construction	Electrical installations in buildings Electrical reticulations within a plot of land (erf) or building site Standby plant and uninterrupted power supply Verification and certification of electrical installations on premises
General building works	GB	Construction works that: a) are primarily concerned with the development, extension, installation, renewal, renovation, alteration, or dismantling of a permanent shelter for its occupants or contents; or b) cannot be categorized in terms of the definitions provided for civil engineering works, electrical engineering works,	Buildings and ancillary works other than those categorised as being: a) civil engineering works; b) electrical engineering works; c) mechanical engineering works; or d) specialist works.	Buildings for domestic, industrial, institutional or commercial occupancies Car ports Fences other than classified as SS Stores Walls

Description	Designation	Definition	Work types	Examples
Mechanical engineering works	ME	Construction works that are primarily concerned with the development, extension, installation, removal, alteration, renewal of engineering infrastructure for gas transmission and distribution, solid waste disposal, heating, ventilation and cooling, chemical works, metallurgical works, manufacturing, food processing and materials handling	Machine systems including those relating to the environment of building interiors. a) gas transmission and distribution systems b) pipelines c) solid waste disposal d) materials handling, lifting machinery, heating, ventilation and cooling, pumps, e) continuous process systems f) chemical works, metallurgical works, manufacturing, food processing such as that in concentrator machinery and apparatus, oil and gas wells, smelters, cyanide plants, acid plants, metallurgical machinery, equipment and apparatus, and works necessary for the beneficiation of metals, minerals, rocks, petroleum and organic substances and other chemical processes Kitchen equipment Laundry equipment Lift installations and escalators Refrigeration and cold rooms Waste handling systems (including compactors)	Air-conditioning and mechanical ventilation Boiler installations and steam distribution Central heating Centralised hot water generation Cranes and hoists Dust and sawdust extraction Compressed air, gas and vacuum installations Conveyor and materials handling installations Continuous process systems involving chemical works, metallurgical works, oil and gas wells, acid plants, metallurgical machinery, equipment and apparatus, and works necessary for the beneficiation of metals, minerals, rocks, petroleum and organic substances and other chemical processes Kitchen equipment Laundry equipment Lift installations and escalators Refrigeration and cold rooms Waste handling systems (including compactors)
Specialist works	SB	A subset of construction works identified and defined by the Board that involves specialist capabilities for its execution	The extension, installation, repair, maintenance or renewal, or removal, of asphalt	
	SC		The development, extension, installation, removal, and dismantling, as relevant, associated with building excavations, shaft sinking and lateral earth support	
	SD		The development, extension, installation, repair, renewal, removal, or alteration of corrosion protection systems (cathodic, anodic and electrolytic)	
	SE		Demolition of buildings and engineering infrastructure and blasting	
	SF		The development, extension, installation, removal, renewal, alteration or dismantling of fire prevention and protection infrastructure (drencher and sprinkler systems and fire installation)	
	SG		The development, extension, installation, removal, renewal, renovation, alteration or dismantling of glazing, curtain walls and shop fronts	
	SH		The development, extension, installation, maintenance, renewal, removal, alteration or dismantling, as relevant, of landscaping, irrigation and horticultural works	
	SI		The development, extension, installation, repair, maintenance, renewal, removal, renovation, alteration or dismantling of lifts, escalators, travellers and hoisting machinery	
	SJ		The development, installation, removal, or dismantling, as relevant, of piles and other specialized foundations for buildings and structures	

Description	Designation	Definition	Work types	Examples
	SK	A subset of construction works identified and defined by the Board that involves specialist capabilities for its execution	The installation, renewal, removal, alteration or dismantling, as relevant, road markings and signage	The installation, renewal, removal, alteration or dismantling, as relevant, road markings and
	SL		The development, extension, installation, renewal, removal, alteration or dismantling of structural steelwork and scaffolding	The development, extension, installation, renewal, removal, alteration or dismantling of
	SM		Timber buildings and structures	Timber buildings and structures
	SN		The extension, installation, repair, maintenance, renewal, removal, renovation or alteration, as relevant, of the waterproofing of basements, roofs and walls using specialist systems.	The extension, installation, repair, maintenance, renewal, removal, renovation or alteration, as relevant, of the waterproofing of basements, roofs and walls using specialist systems.
	SO		The development, extension, installation, renewal, removal, alteration or dismantling or demolition of water installations and soil and waste water drainage associated with buildings (wet services, plumbing)	The development, extension, installation, renewal, removal, alteration or dismantling or demolition of water installations and soil and waste water drainage associated with buildings (wet services, plumbing)
	SQ		The development, extension, installation, repair, removal, alteration, dismantling or demolition of precast concrete or steel fencing	The development, extension, installation, repair, removal, alteration, dismantling or demolition of precast concrete or steel fencing

T2.1 List of Returnable Documents

The tenderer must complete the following Returnable Documents in non-erasable **black ink**:

1. Returnable Schedules that will be incorporated into the Contract

	Pages
1: COMPULSORY ENTERPRISE QUESTIONNAIRE	39
2: CERTIFICATE OF INDEPENDENT TENDER DETERMINATION.....	40-41
3: CERTIFICATE OF AUTHORITY FOR JOINT VENTURES	42
4: DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (MBD 8).....	43
5: DECLARATION OF INTEREST – STATE EMPLOYEES (MBD 4)	44-45
6: AUTHORISATION FOR THE DEDUCTION OF OUTSTANDING AMOUNTS OWED TO CCT	46
7: DECLARATION IN RESPECT OF COMPLIANCE WITH LABOUR LEGISLATION	47
8: CONFIRMATION OF CCT SUPPLIER DATABASE REGISTRATION	48
9: SCHEDULE OF WORK EXPERIENCE OF TENDERER.....	49
10: SCHEDULE OF EQUIPMENT INSTALLATIONS AND SERVICE HISTORY	50
11: CONFIRMATION OF CONTRACTOR REGISTRATION / ACCREDITATION	51
12: DETAILS OF QUALIFICATIONS AND EXPERIENCE OF STAFF	52
13: SCHEDULE OF CONSTRUCTION EQUIPMENT	53-55
14: DETAILS OF TENDERER'S WORKSHOP FACILITIES	56
15: PRELIMINARY PROGRAMME (FOR INFORMATION PURPOSES ONLY)	57
16: PROPOSED WORK PLAN	58
17: SCHEDULE OF ESTIMATED MONTHLY EXPENDITURE	59
18: SCHEDULE OF SUBCONTRACTORS	60
19: HEALTH AND SAFETY PLAN	61
20: PROPOSED DEVIATIONS AND QUALIFICATIONS BY TENDERER	62
21: FUNCTIONALITY CRITERIA	63
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2. Other documents required for tender evaluation purposes

- a) Joint Venture Agreement (if applicable) - append to Schedule 3.
- b) Health and Safety Plan - append to Schedule 19.
- c) Functionality Criteria - append to Schedule 21.

3. C1.1 The offer portion of the C1.1 Form of Offer and Acceptance

4. C1.2 Contract Data (Part 2)

5. C2.2 Bills of Quantities

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

T2.2 Returnable Schedules



CITY OF CAPE TOWN

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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 1: COMPULSORY ENTERPRISE QUESTIONNAIRE

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

Section 1: Name of enterprise:

Section 2: VAT registration number, if any:

Section 2a: National Treasury Central Supplier Database registration number:

Section 2b: SARS Tax Compliance Status PIN:

Section 3: cidb registration number, if any:

Section 4: Particulars of sole proprietors and partners in partnerships

N/A

* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

Section 5: Particulars of companies and close corporations

Company registration number:

Close corporation number: N/A

Tax reference number:

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 Services 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 Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 or Database of Restricted Suppliers;
- 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 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; and
- iv) 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

Date

Name

Position

Director

Enterprise
name

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 2: CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting this tender for Contract No. 234Q/2018/19: CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

in response to the invitation for the tender made by the City of Cape Town, 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 Tenderer)

1. I have read and I 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 authorized 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 authorized by the tenderer to determine the 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, who:
 - (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, communication between partners in a joint venture or consortium¹ 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:
 - (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 tender;
 - (e) the submission of a tender which does not meet the specifications and conditions of the tender; or
 - (f) tendering with the intention not to win the tender;

¹Joint 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 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

25/02/2019

Name

Position

Director

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 3: CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

N/A

This returnable schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in joint venture and hereby authorize

Mr/Ms 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 N/A		Signature..... Name..... Designation.....
		Signature..... Name..... Designation.....
		Signature..... Name..... Designation.....
		Signature..... Name..... Designation.....

Note :

A copy of the Joint Venture Agreement, showing clearly the **percentage contribution of each partner** to the joint venture, shall be appended to this schedule.

N/A

CITY OF CAPE TOWN

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SCHEDULE 4: DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (MBD 8)

Where the entity tendering is a joint venture, each party to the joint venture must sign a declaration in terms of the Municipal Finance Management Act, 56 of 2003, and attach it to this schedule.

- 1 The tender offer of any tenderer may be rejected if that tenderer or any of its directors/members have:
- abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - been convicted for fraud or corruption during the past five years;
 - willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 2 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
2.1	Is the Tenderer or any of its directors listed on the National Treasury's Database of Restricted Suppliers 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 Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> 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 ☒
2.1.1	If so, furnish particulars: N/A		
2.2	Is the Tenderer or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act, 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 ☒
2.2.1	If so, furnish particulars: N/A		
2.3	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 five years?	Yes ☐	No ☒
2.3.1	If so, furnish particulars: N/A		
2.4	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 three months?	Yes ☐	No ☒
2.4.1	If so, furnish particulars: N/A		
2.5	Was any contract between the Tenderer 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 ☒
2.5.1	If so, furnish particulars: N/A		

I, _____, the undersigned,
(full name in block letters)

certify that the information furnished on this declaration form is true and correct, and accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

Signature

Date

25/02/2019

Position

Name of Tenderer/Contractor

SCHEDULE 5: DECLARATION OF INTEREST – STATE EMPLOYEES (MBD 4)

1. No bid will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the tenderer or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

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

- 3.1 Full Name of tenderer or his or her representative.....
- 3.2 Identity Number.....
- 3.3 Position occupied in the Company (director, trustee, shareholder?).....
- 3.4 Company or Close Corporation Registration Number.....
- 3.5 Tax Reference Number.....
- 3.6 VAT Registration Number.....
- 3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers..... must be indicated in paragraph 4 below.

3.8 Are you presently in the service of the state? **YES** NO

3.8.1 If yes, furnish particulars. N/A

3.9 Have you been in the service of the state for the past twelve months? **YES** NO

3.9.1 If yes, furnish particulars N/A

3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES** NO

3.10.1 If yes, furnish particulars. N/A

3.11 Are you, aware of any relationship (family, friend, other) between any other supplier and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES** NO

3.11.1 N/A If yes, furnish particulars

3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? **YES** NO

3.12.1 If yes, furnish particulars. N/A

3.13 Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? YES (NO)

3.13.1 If yes, furnish particulars.

N/A

13.4 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract? YES (NO)

3.14.1 If yes, furnish particulars:

N/A

4. Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	State Employee Number
		/
		/
		/
		/
		/
		/

The tenderer hereby certifies that the information set out in this schedule and/or attached thereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract, restriction of the tenderer or the exercise by the employer of any other remedies available to it

Signature

Date

25/02/2019

Name (PRINT)

(For and on behalf of the tenderer, duly authorised)

¹MSCM Regulations: "in the service of the state" means to be –

(a) a member of –

- (i) any municipal council;
- (ii) any provincial legislature; or
- (iii) the national Assembly or the national Council of provinces;

(b) a member of the board of directors of any municipal entity;

(c) an official of any municipality or municipal entity;

(d) an employee of 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);

(e) an executive member of the accounting authority of any national or provincial public entity; or

(f) an employee of Parliament or a provincial legislature.

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

CITY OF CAPE TOWN

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SCHEDULE 6: AUTHORISATION FOR THE DEDUCTION OF OUTSTANDING AMOUNTS OWED TO THE CITY OF CAPE TOWN

To: THE CITY MANAGER, CITY OF CAPE TOWN

From: _____
(Name of tenderer)

The tenderer:

- a) hereby acknowledges that according to SCM Regulation 38(1)(d)(i) the City Manager may reject the tender of the tenderer if any municipal rates and taxes or municipal service charges owed by the tenderer (or any of its directors/members/partners) to the CCT, or to any other municipality or municipal entity, are in arrears for more than 3 (three) months; and
- b) therefore hereby agrees and authorises the CCT to deduct the full amount outstanding by the Tenderer or any of its directors/members/partners from any payment due to the tenderer; and
- c) confirms the information as set out in the tables below for the purpose of giving effect to b) above;
- d) The tenderer hereby certifies that the information set out in this schedule and/or attached hereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in steps being taken against the tenderer, the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract and/or steps in terms of abuse of the Supply Chain Management Policy.

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 Tender Document

Name of Director / Member / Partner	Identity Number	Physical residential address of Director / Member / Partner	Municipal Account number(s)

S _____
 Print name:
 On behalf of the tenderer (duly authorised)

Date

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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 7: DECLARATION IN RESPECT OF COMPLIANCE WITH LABOUR LEGISLATION

Tenderers must be registered with the relevant Bargaining Council as contained in the tender conditions and must append to this schedule a certificate of compliance / letter of good standing in terms of the relevant Government Gazette that indicates compliance / validity at the time of tender award. PLEASE FIND ATTACHED.

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

Declaration in respect of labour legislation

The tenderer, by signing this schedule, declares that it will comply with all labour legislation, as may be applicable.

SIGNED ON BEHALF OF TENDERER:

CITY OF CAPE TOWN

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SCHEDULE 8: CONFIRMATION OF CITY OF CAPE TOWN SUPPLIER DATABASE REGISTRATION

CITY OF CAPE TOWN SUPPLIER DATABASE REGISTRATION		
COMPANY NAME	REGISTERED YES/NO	REGISTRATION NUMBER IF APPLICABLE
Factor	YES	796

SIGNED ON BEHALF OF TENDERER:.....

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

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

[illegible]

Number of sheets appended by the tenderer to this Schedule 5 (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 10: SCHEDULE OF EQUIPMENT INSTALLATIONS AND SERVICE HISTORY

Not applicable to this tender.

N/A

CITY OF CAPE TOWN

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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 11: CONFIRMATION OF CONTRACTOR REGISTRATION / ACCREDITATION

Not applicable to this tender.

N/A

SIGNED ON BEHALF OF TENDERER:

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 12: DETAILS OF QUALIFICATIONS AND EXPERIENCE OF STAFF

Tenderers shall set out in the Schedule hereunder details of the listed staff's experience in work of a similar nature to that for which their Tender is submitted. Tenderers are referred to Clause F.2.1.4.8 of the Tender Data.

CONTRACTS MANAGER		NAME: NQF LEVEL:			
CONTRACT & CLIENT	NATURE OF WORK	POSITION HELD	VALUE OF WORK (Rand)	YEAR COMPLETED	
	PLEASE FIND	→	ATTACHED		
	CV				

SITE AGENT		NAME: NQF LEVEL:			
CONTRACT & CLIENT	NATURE OF WORK	POSITION HELD	VALUE OF WORK (Rand)	YEAR COMPLETED	
	PLEASE FIND	→	ATTACHED		
	CV				

Number of sheets appended by the tenderer to this Schedule. 2 (If nil, enter NIL).

SIGNED ON BEHALF OF THE TENDERER:

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

The tenderer shall state below what construction equipment will be available for this Contract. The tenderer shall differentiate, if applicable, between construction equipment immediately available and construction equipment which will become available by virtue of outstanding orders, and indicate what further construction equipment will be acquired or hired for the work should he be awarded the Contract.

[illegible]

CONSTRUCTION EQUIPMENT ON ORDER

(State details of arrangements made, with delivery dates)

[illegible]

(State details of delivery arrangements)

Number of sheets appended by the tenderer to this Schedule1..... (If nil, enter NIL).

55

CITY OF CAPE TOWN

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SCHEDULE 14: DETAILS OF TENDERER'S WORKSHOP FACILITIES

Not applicable to this tender.

N/A

CITY OF CAPE TOWN

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SCHEDULE 15: PRELIMINARY PROGRAMME (FOR INFORMATION PURPOSES ONLY)

The tenderer shall attach a preliminary programme, to this schedule.

PLEASE FIND ATTACHED PRELIMINARY PROGRAMME.

This programme shall be in the form of a bar chart (Gantt chart) or equivalent acceptable time/activity form reflecting the proposed sequence and tempo of the various activities and the quantities that will be carried out every week under each of the elements, comprising the work for this contract. The programme shall also indicate the point where the tenderer intends to commence work operations and the direction in which the work will proceed. The working hours shall be indicated. The time period reflected in the preliminary programme submitted with the tender should match the time for achieving practical completion as stated in clause 1.1.1.14 under C1.2 Contract Data.

The tenderer shall also take into account the additional requirements stated in the Project Specifications when drawing up the programme.

Details of the preliminary programme shall be appended to this Schedule.

Number of sheets appended by the tenderer to this Schedule6..... (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

Y

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 16: PROPOSED WORK PLAN

The tenderer shall append their proposed work plan to this Schedule.

It should be noted that while a programme may form part of the required work plan, more than a programme is expected in response to this requirement. The work plan must indicate the approach and methodology that the tenderer intends following in order to reach the required outcomes. The work plan must show that the tenderer has appreciated the Scope of Work, and has good insight as to what actions or activities are required in order to comply with the Employer's objectives.

PLEASE FIND ATTACHED METHOD STATEMENTS
FOR VARIOUS ACTIVITIES. PLEASE ALSO REFER
TO THE PRELIMINARY PROGRAMME AS PART OF
SCHEDULE 15.

SIGNED ON BEHALF OF TENDERER:

CITY OF CAPE TOWN

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SCHEDULE 17: SCHEDULE OF ESTIMATED MONTHLY EXPENDITURE

The tenderer shall state his estimated expenditure indicating the value of work done and materials not yet built into the Permanent Works for each month of the Contract period which he estimates will arise based on his preliminary programme and tendered rates, as set out in the table below. The total of the monthly amounts shall be equal to the tender sum.

MONTH	VALUE	MONTH	VALUE
1.	R 2 159 956.21	19.	R 3 014 643.78
2.	R 3 078 112.05	20.	R 3 257 666.09
3.	R 3 348 459.79	21.	R 2 900 056.78
4.	R 3 908 887.93	22.	R 3 013 557.91
5.	R 3 857 112.05	23.	R 3 121 998.77
6.	R 3 225 719.88	24.	R 3 155 771.89
7.	R 3 505 112.99	25.	R 3 870 223.57
8.	R 3 012 772.31	26.	R 3 136 956.20
9.	R 3 407 118.20	27.	R 3 306 777.72
10.	R 4 001 205.73	28.	R 2 902 556.36
11.	R 3 072 118.56	29.	R 3 115 272.09
12.	R 3 113 059.71	30.	R 3 008 072.81
13.	R 2 988 771.09	31.	R 2 988 551.61
14.	R 3 221 009.00	32.	R 3 013 227.89
15.	R 3 107 875.79	33.	R 2 807 005.21
16.	R 3 356 779.88	34.	R 2 600 779.19
17.	R 3 077 888.90	35.	R 2 855 556 118.01
18.	R 2 828 703.50	36.	R 2 662 846.20
SUBTOTAL		R	113 758 744.43
CONTINGENCIES (10%)		R	11 375 874.44
SUBTOTAL		R	125 134 618.87
VAT (15%)		R	18 770 192.83
TOTAL (INCLUDING VAT @ 15%)		R	143 904 811.60

SIGNED ON BEHALF OF TENDERER:

CITY OF CAPE TOWN

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SCHEDULE 18: 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 the contract, and the tendered unit rates for the various items making up the work activities 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)
	LABOUR ADMINISTRATION	R 5670 779.33
	ROAD MARKING & ROAD SIGNS	R 1023 122.86
	KERBING	R 8358 401.15
	CABLE DUCTS & ASPHALT BASE	R 4938581.26
	MANHOLES/CATCHPITS/SEWER, WATER & STORMWATER PAVIMENTATION	R 13653193.02
	EARTHWORKS	R 8865 118.85
	DEFENTION PONDS	R 1766 009.01

Number of sheets appended by the tenderer to this ScheduleNIL..... (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

CITY OF CAPE TOWN

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SCHEDULE 19: HEALTH AND SAFETY PLAN

Tenderers are referred to the requirements of Clause F.2.18.4 in Part T1.2 Tender Data and shall append the required draft Health and Safety Plan to this Schedule.

Number of sheets appended by the tenderer to this Schedule10..... (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER: . . .

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

If no deviations or qualifications are proposed, the schedule hereunder is to be marked NIL and signed by the Tenderer.

[illegible]

Number of sheets appended by the tenderer to this Schedule Nil (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER: . .

CITY OF CAPE TOWN
DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION
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CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 21: FUNCTIONALITY CRITERIA

Not applicable to this tender.

N/A

SIGNED ON BEHALF OF TENDERER:

SCHEDULE 22A : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This declaration is based on and replaces Municipal Bid Document 6.2 (MBD 6.2).

The amendments made to the MBD 6.2 document have been necessary to clarify this standard document as it relates to local production and content in the designated sector.

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

Documents listed herein are downloadable from the dti's official website, <http://www.thedti.gov.za>.

This schedule must be completed by tenderers and returned with their tender at the closing date and time for this tender.

1. General Conditions

- 1.1 Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.
- 1.2 Regulation 8(2) prescribes that in the case of designated sectors, organs of state must advertise such bids with the specific bidding condition that only locally produced goods with a stipulated minimum threshold for local production and content will be considered.
- 1.3 Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4 A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5 The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

- x is the imported content in Rand
y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by ABSA Bank at close of business on the date of advertisement of the bid as required in paragraph 4.1 below.

NOTE: The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp at no cost.

- 1.6 A bid may be disqualified/declared non-responsive if this Declaration Certificate and Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation.

SCHEDULE 22A : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Cont'd)

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
Valves products and actuators	70%

3. Does any portion of the services, works or goods offered for Items as detailed in Annexure C have any imported content?
(Tick applicable box)

YES	☒	NO	☐
-----	-------------------------------------	----	--------------------------

- 3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the above General Conditions must be the rate(s) published by Absa Bank at close of business on the date of advertisement of the bid.

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	R 17.00
Yen	
Other	

NB: Suppliers must submit proof of the ABSA Bank rate(s) of exchange used.

4. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the CCT provide directives in this regard.

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 22A : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Cont'd)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO. 234Q/2018/19

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):

CITY OF CAPE TOWN

NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),
do hereby declare, in my capacity as Director,
of (name of bidder entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011;
- (c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R 933 379
Imported content (x), as calculated in terms of SATS 1286:2011	R 246 154.09
Stipulated minimum threshold for local content (paragraph 2 above)	70%
Local content %, as calculated in terms of SATS 1286:2011	73.63%

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Municipality / Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Procurement Regulations, 2000 (Act No. 5 of 2000).

SIGNATURE:

DATE:

WITNESS No. 1:

DATE:

WITNESS No. 2:

DATE:

Annex C

Local Content Declaration - Summary Schedule

(C1)	Tender No.	2340/2018/19
(C2)	Tender description:	Construction of Civil Engineering Structures - Warehouse House No. 1735-2
(C3)	Designated product(s)	Valves products and actuators
(C4)	Tender Authority:	CIT of SATS
(C5)	Tendering Entity name:	
(C6)	Tender Exchange Rate:	Pula
(C7)	Specified local content %	70%

EU 17 GBP

Note: VAT to be excluded from all calculations

Calculation of local content									
Tender item no's	List of items	Tender price per UoM (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)		
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)		
	3) Isolating Valves								
	Extra over item for above for supply, lay, joint, bed and test Class 16 anti-clockwise closing resilient seal gate valves with socketed ends, or equivalent.								
5.4.22	a) 110mm diameter	22019.70	-	22019.70	6525.12	149458	74%		
5.4.23	b) 160mm diameter	23728.75	-	23728.75	1932.19	2796.56	75%		
5.4.24	c) 200mm diameter	27224.75	-	27224.75	1806.19	25418.56	75%		

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CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 22B : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This declaration is based on and replaces Municipal Bid Document 6.2 (MBD 6.2).

The amendments made to the MBD 6.2 document have been necessary to clarify this standard document as it relates to local production and content in the designated sector.

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

Documents listed herein are downloadable from the dti's official website, <http://www.thedti.gov.za>.

This schedule must be completed by tenderers and returned with their tender at the closing date and time for this tender.

2. General Conditions

- 1.1 Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.
- 1.2 Regulation 8(2) prescribes that in the case of designated sectors, organs of state must advertise such bids with the specific bidding condition that only locally produced goods with a stipulated minimum threshold for local production and content will be considered.
- 1.3 Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4 A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5 The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by ABSA Bank at close of business on the date of advertisement of the bid as required in paragraph 4.1 below.

NOTE: The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp at no cost.

- 1.6 A bid may be disqualified/declared non-responsive if this Declaration Certificate and Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation.

SCHEDULE 22B : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Cont'd)

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
Wire Products	100%

3. Does any portion of the services, works or goods offered for Items as detailed in Annexure C have any imported content?
(Tick applicable box)

YES		NO	☒
-----	--	----	-------------------------------------

- 3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the above General Conditions must be the rate(s) published by Absa Bank at close of business on the date of advertisement of the bid.

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	N/A
Euro	
Yen	
Other	

NB: Suppliers must submit proof of the ABSA Bank rate(s) of exchange used.

4. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the CCT provide directives in this regard.

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 22B : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Cont'd)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO. 234 Q / 2018 / 19

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):
City of Cape Town

NB

- 3 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 4 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned,
(full names),

do hereby Director declare, in my capacity as

of (name of bidder entity), the following:

- (f) The facts contained herein are within my own personal knowledge.
- (g) I have satisfied myself that:
- (ii) the goods to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011;
- (h) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R 211650
Imported content (x), as calculated in terms of SATS 1286:2011	R 0.00
Stipulated minimum threshold for local content (paragraph 2 above)	100%
Local content %, as calculated in terms of SATS 1286:2011	100%

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.

- (i) I accept that the Procurement Authority / Municipality / Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (j) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Procurement Regulations Act (PPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

WITNESS No. 1 _____

WITNESS No. 2 _____

DATE: 25/02/2019DATE: 25/02/2019DATE: 25/02/2019

Local Content Declaration - Summary Schedule

Note: VAT to be excluded from all calculations

(C6)	Tender Exchange Rate: A Pula	EU	GBP
(C7)	Specified local content %	100%	

Tender item no's	List of items	Calculation of local content					
		Tender price per UoM (excl VAT)	Exempted imported value	Tender value- net of exempted imported content	Imported value	Local value	Local content % (per item)
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)
	GABIONS AND PITCHING						
	Construct gabions using mesh type 80 with 2.7mm Class A Galvanised & PVC Coated wire						
4.2.2	1) Foundation mattresses of depth 0.5 m with diaphragms providing 2 m x 1 m cells, as per drawing	₹ 676.00	-	₹ 676.00	-	₹ 676.00	100%
4.2.3	2) Gabions of section 2.0m x 1.0 m x 1.0 m for walls as per drawing	₹ 405.00	-	₹ 405.00	-	₹ 405.00	100%
4.2.4	4) Gabions of section 1.0 m x 1.0 m x 1.0 m for walls as per drawing	₹ 487.00	-	₹ 487.00	-	₹ 487.00	100%

Tender summary				
Anticipated Annual Tender Qty (m)	Total tender value	Total exempted imported content	Total Imported content	
(C16)	(C17)	(C18)	(C19)	
180	221680	—	—	
150	260750	—	—	
60	29220	—	—	

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 22C : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This declaration is based on and replaces Municipal Bid Document 6.2 (MBD 6.2).

The amendments made to the MBD 6.2 document have been necessary to clarify this standard document as it relates to local production and content in the designated sector.

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

Documents listed herein are downloadable from the dti's official website, <http://www.thedti.gov.za>.

This schedule must be completed by tenderers and returned with their tender at the closing date and time for this tender.

3. General Conditions

- 1.1 Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.
- 1.2 Regulation 8(2) prescribes that in the case of designated sectors, organs of state must advertise such bids with the specific bidding condition that only locally produced goods with a stipulated minimum threshold for local production and content will be considered.
- 1.3 Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4 A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5 The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by ABSA Bank at close of business on the date of advertisement of the bid as required in paragraph 4.1 below.

NOTE: The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp at no cost.

- 1.6 A bid may be disqualified/declared non-responsive if this Declaration Certificate and Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation.

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 22C : DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Cont'd)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO. 234 Q / 2018 / 19

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):
CITY OF CAPE TOWN

NB

- 5 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 6 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned,
(full names),

do hereby DISCLOSE declare, in my capacity as

of name of bidder entity), the following.

- (k) The facts contained herein are within my own personal knowledge.
- (l) I have satisfied myself that:
- (iii) the goods to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011;
- (m) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R 16500.00
Imported content (x), as calculated in terms of SATS 1286:2011	R 0.00
Stipulated minimum threshold for local content (paragraph 2 above)	100%
Local content %, as calculated in terms of SATS 1286:2011	100%

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.

- (n) I accept that the Procurement Authority / Municipality / Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (o) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Procurement Regulations Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

WITNESS No. _____

WITNESS No. _____

DATE: 25/02/2019DATE: 25/02/2019DATE: 25/02/2019

Annex C

Local Content Declaration - Summary Schedule

(C1)	Tender No.	234Q/2018/19
(C2)	Tender description:	Construction of CIVIL ENGINEERING SERVICES - MOTORWAY WORKS
(C3)	Designated product(s)	Reinforcing bars
(C4)	Tender Authority:	CITY OF PA
(C5)	Tendering Entity name:	
(C6)	Tender Exchange Rate:	N/A RUA
(C7)	Specified local content %	100%

EU ☐ GBP ☐

Note: VAT to be excluded from all calculations

Tender summary			
Anticipated Annual Tender Qty (m ³)	Total tender value	Total exempted imported content	Total Imported content
(C16)	(C17)	(C18)	(C19)
1.5	16500.00	-	-

Calculation of local content							
Tender item no's	List of items	Tender price per UoM (excl VAT)	Exempted imported value	Tender value-net of exempted imported content	Imported value	Local value	Local content % (per item)
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)
	STORMWATER DRAINAGE						
	Concrete (Structural)						
7.3.6	Supply high tensile steel bars for reinforced concrete structures	211000.00	-	211000.00	-	211000	100%

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T2.2
Returnable Schedules

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 23: PRICE BASIS FOR IMPORTED RESOURCES

Not applicable to this tender.

N/A

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 24: 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.	05/02/2019	Notice to Tenderers No.1
2.	19/02/2019	Notice to Tenderers No.2
3.	20/02/2019	Notice to Tenderers No.3
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

SIGNED ON BEHALF OF TENDERER:

SCHEDULE 25: PREFERENCE SCHEDULE TO BE USED IN TERMS OF THE AMENDED CODES FOR MEASURING BROAD-BASED BLACK ECONOMIC EMPOWERMENT IN THE CONSTRUCTION SECTOR (2017) AND ITS TRANSITIONAL MEASURES

Preference Schedule where preferences are granted in respect of B-BBEE contribution

1 Definitions

The following definitions shall apply to this schedule:

All applicable taxes: Includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

Applicable Code: Shall be either the Amended Codes of Good Practice (published on 11 October 2013) or Sector Specific Codes as indicated in the tender conditions

B-BBEE: Broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act.

B-BBEE status level of contributor: 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.

Bid (Tender): A written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals.

Black Designated Groups: The meaning assigned to it in the codes of good practice issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003, (Act 53 of 2003).

Black People: The meaning assigned to it in section 1 of the Broad-Based Black Economic Empowerment Act.

Broad-Based Black Economic Empowerment Act: The Broad-Based Black Economic Empowerment Act, Act 53 of 2003.

Consortium or Joint Venture: 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.

Contract The agreement that results from the acceptance of a bid by an organ of state.

Co-operative: A co-operative registered in terms of section 7 of the Co-operatives Act, 2005 (Act no. 14 of 2005).

Designated Group: Black designated groups, black people, women, people with disabilities or small enterprises as defined in section 1 of the National Small Enterprises Act, 1996 (act no. 102 of 1996)

Designated Sector: A sector, sub-sector or industry or product that has been designated in terms of any relevant regulation of the Preferential Procurement Regulations, 2017.

Exempted Micro Enterprise (EME): 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.

Firm Price: The price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract.

Functionality: The ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents..

Military Veteran: The meaning assigned to it in section 1 of the Military Veterans Act, 2011 (Act No. 18 of 2011).

National Treasury: The meaning assigned to it in section 1 of the Public Finance Management Act, 1999 (Act No. 18 of 1999).

Non-firm prices: All prices other than "firm" prices.

Person: Includes a juristic person.

People with disabilities: The meaning assigned to it in section 1 of the Employment equity Act, 1998 (Act No. 55 of 1998).

Price: Includes all applicable taxes less unconditional discounts.

Proof of B-BBEE status level of contributor: The B-BBEE status level certificate issued by an authorised body or person, a sworn affidavit as prescribed by the B-BBEE Codes of good Practice or any other requirement prescribed in terms of the Broad-Based Black Economic Empowerment Act.

Qualifying Small Enterprise (QSE): A qualifying small 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.

Rand Value: means the total estimated value of a contract in Rand, calculated at the time of bid invitations.

Rural Area: A sparsely populated area in which people farm or depend on natural resources, including villages and small towns that are dispersed through the area or an area including a large settlement which depends on migratory labour and remittances and government social grants for survival, and may have a traditional land tenure system.

Stipulated Minimum Threshold: The minimum threshold stipulated in terms of any relevant regulation of the Preferential Procurement Regulations, 2017.

Sub-contract: The primary contractor's assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract.

The Act: The Preferential Procurement Policy Framework Act, 2000 (Act No 5 of 2000).

Total Revenue: Bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007.

Township: An urban living area that at any time from the late 19th century until 27 April 1994, was reserved for black people, including areas developed for historically disadvantaged individuals post 27 April 1994.

Treasury: The meaning assigned to it in section 1 of the Public Finance Management Act, 1999 (Act No. 18 of 1999).

Trust: The arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person.

Trustee: Any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

Youth: The meaning assigned to it in section 1 of the National Youth Development Agency Act, 2008 (Act No. 54 of 2008).

2 Conditions associated with the granting of preferences

A supplier that is granted a preference undertakes to:

- 1) accept that the number of preference points allocated will be based on the B-BBEE status level of contributor of the supplier as at the closing date for submission of quotation offers;
- 2) not sub-contract more than 25% of the value of the contract to sub-contractors that do not have an equal or higher B-BBEE status level of contributor than the supplier, unless the intended sub-contractors are exempted micro enterprises that have the capability and ability to execute the sub-contract works or unless otherwise declared in terms of Section 5 below;
- 3) accept that a contract may not be awarded if the price offered is not market related;
- 4) accept the sanctions set out in Section 3 below should Condition 2(2) be breached, or should the tenderer have submitted any false information regarding its B-BBEE status level of contributor, local production and content, or any other matter required in terms of this bid that will affect, or has affected the bid evaluation;
- 5) accept that, in order to qualify for preference points, it is the responsibility of the supplier to submit documentary proof of its BBBEE level of contribution in accordance with the Codes of Good Practice, 2013, to the CCT at the Supplier Management Unit located within the Tender Distribution Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town (Tel 021 400 9242/3/4/5);
- 6) accept that, further to 5) above, Consortiums/Joint Ventures will qualify for preference points, provided that the entity submits the relevant certificate/scorecard in terms of the Preferential Procurement Regulations, 2017. Note that, in the case of unincorporated entities, a verified scorecard in the name of the consortium/Joint Venture must be submitted with the quotation (attached to this schedule);
- 7) accept that if it is found that, in the performance of the contract, the participation of the various partners in a Consortium/ Joint Venture differs substantially from that upon which the consolidated scorecard submitted in terms of 5) above was based, and the impact of which is that the Joint Venture would not have been awarded the contract in terms of the actual B-BBEE level of contribution achieved by the Joint Venture, then a financial penalty shall be applied (in addition to any other remedies that the CCT may have) in accordance with Section 3 below;
- 8) accept that suppliers are required to be registered on the City of Cape Town's Supplier Database prior to the acceptance of tenders in order to qualify for preference points. The CCT will verify the B-BBEE level of contributor of the supplier as at the closing date for submission of tender offers, to determine the number of preference points to be awarded to the supplier. In the case of Consortiums/Joint Ventures which tender as unincorporated entities, a verified scorecard submitted with the tender and valid as at the closing date will be used to determine the number of preference points to be awarded to the supplier;
- 9) accept that, notwithstanding 8) above, a supplier will **not** be awarded points for B-BBEE status level of

contributor if he indicates in his tender that he intends sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the points that the supplier qualifies for unless the intended sub-contractors are exempted micro enterprises that have the capability and ability to execute the sub-contract works;

- 10) accept that any subcontracting arrangements after the award of the tender may only be entered into upon the prior approval of the City of Cape Town; and
- 11) immediately inform the City of Cape Town of any change that may affect the tenderer's B-BBEE level of contribution upon which preference points will be or have been allocated.

3 Sanctions relating to breaches of preference conditions

The sanctions for breaching the conditions associated with the granting of preferences are:

- 1) disqualify the supplier from the quotation process;
- 2) recover costs, losses or damages the CCT has incurred or suffered as a result of the supplier's or contractor's conduct;
- 3) cancel the contract in whole or in part and claim any damages which the CCT has suffered as a result of having to make less favourable arrangements due to such cancellation;
- 4) restrict the supplier, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from the CCT for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied and inform the National Treasury accordingly;
- 5) forward the matter for criminal prosecution; and/or
- 6) financial penalties payable to the CCT, as set out below.

Financial penalty for breach of Condition 2 in Section 2 above:

The penalty to be applied for sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the preference points that the supplier qualified for (unless so declared or proven to be beyond the control of the supplier, or the sub-contractors are EMEs that have the capability and ability to execute the sub-contract works) shall be as provided for in the following formula:

$$\text{Penalty} = 0.5 \times E(\%) \times P^*$$

where:

E = The value of work (excluding VAT) executed by sub-contractors that do not qualify for at least the preference points that the supplier qualified for, expressed as a percentage of P*, less 25%

P* = Value of the contract

Financial penalty for breach in terms of condition 6 in Section 2 above:

The penalty to be applied where, in the performance of the contract, the participation of the various partners in a Consortium/ Joint Venture differs substantially from that upon which the consolidated scorecard submitted in terms of 5) in Section 2 above was based, and the impact of which is that the Joint Venture would not have been awarded that contract in terms of the actual B-BBEE level of contribution achieved by the Joint Venture, shall be as provided for in the following formula:

$$\text{Penalty} = 5/100 \times (B-BBEE^a - B-BBEE^i) \times P^*$$

where:

B-BBEE^a = The B-BBEE level of contribution that is achieved, determined in accordance with the actual participation of the Joint Venture partners in the performance of the contract

B-BBEEⁱ = The B-BBEE level of contribution that was used to determine the number of preference points granted to the Joint Venture at the time of quotation evaluation

P* = Value of the contract

Financial penalty for breach in terms of condition 10 in Section 2 above:

The penalty to be applied where the supplier fails to disclose subcontracting arrangement after the award of the tender is up to a maximum of 10% of the value of the contract.

4 Level of Contribution in respect of enterprise status or structure of the tendering entity (the supplier)

In the interest of transparency, suppliers are required to complete Table 1: Level of Contribution below applicable to the Code they wish to be evaluated against.

Table 1: Level of Contribution Amended Codes of Good Practice (Generic Scorecard)

Type of B-BBEE Contributor	Status (tick box(es) below as applicable)
Exempted Micro Enterprise (EME), 100% black-owned	☐
Exempted Micro Enterprise (EME), at least 51% but less than 100% black-owned	☐
Exempted Micro Enterprise (EME), less than 51% black-owned	☐
Qualifying Small Enterprise (QSE), 100% black-owned	☐
Qualifying Small Enterprise (QSE), at least 51% but less than 100% black-owned	☐
Qualifying Small Enterprise (QSE), less than 51% black-owned	☐
Verified B-BBEE contributor B-BBEE Status Level of Contributor ¹ 1	☒
Non-compliant contributor	☐

PLEASE FIND
ATTACHED
CERTIFICATE

Table 1: Level of Contribution: Amended Codes for Measuring Broad-Based Black Economic Empowerment in the Construction Sector.

Type of B-BBEE Contributor	Status (tick box(es) below as applicable)
Exempted Micro Enterprise (EME), 100% black-owned	☐
Exempted Micro Enterprise (EME), at least 51% but less than 100% black-owned	☐
Exempted Micro Enterprise (EME), at least 30% but less than 51% black-owned	☐
Exempted Micro Enterprise (EME), less than 30% black-owned	☐
Exempted Micro Enterprise B-BBEE Status Level of Contributor ¹	☐
Qualifying Small Enterprise B-BBEE Status Level of Contributor ¹	☐
Qualifying Small Enterprise (QSE), 100% black-owned	☐
Qualifying Small Enterprise (QSE), at least 51% but less than 100% black-owned	☐
Qualifying Small Enterprise (QSE), less than 51% black-owned	☐
Verified B-BBEE contributor B-BBEE Status Level of Contributor ¹	☐
Non-compliant contributor	☐

¹ If it is indicated that the company/firm/entity is a verified B-BBEE contributor, then the verified status level of contributor must be inserted in the box provided (insert a number from 1 to 8 as applicable)

PLEASE FIND
ATTACHED
CERTIFICATE

5 Declarations

- 1) With reference to Condition 8 in Section 2 above, the supplier declares that:

I/we hereby forfeit my preference points because I /we DO intend sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the points that I/we as supplier qualify for or are not exempted micro enterprises that have the capability and ability to execute the sub-contract works

☐

Note:

Tenderers who do not tick this box will be allocated preference points but the sanctions relating to breaches of preference conditions in Section 3 will be applicable if the tenderer contravenes the conditions in Section 2.

- 2) The undersigned, who warrants that he/she is duly authorized to do so on behalf of the supplier, hereby certifies that the preference claimed based on the B-BBEE status level of contribution indicated in Table 1, qualifies the supplier, subject to condition 8 in Section 2 above, for such preference claimed, and acknowledges that:

- (i) the information furnished is true and correct;
- (ii) the preference claimed is in accordance with the conditions of this schedule;
- (iii) the supplier may be required to furnish documentary proof to the satisfaction of the CCT that the BBEE level of contributor as at the closing date is correct; and
- (iv) he/she understands the conditions under which preferences are granted, and confirms that the supplier will satisfy the conditions pertaining to the granting of preferences.

Signature

Date

For official use.

SIGNATURE OF CITY OFFICIALS AT
AUCTION OPENING

Name (PRINT)

(For and on behalf of the Supplier (duly authorised))

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

The tenderer shall provide information for the evaluation of their compliance with any sub-contracting pre-qualification criteria set in the tender conditions.

A	Price of tender under consideration (Pt) including VAT	R 143904211.70
B	Total value of sub-contracting including VAT	R 44275205.48
	Total sub-contracting percentage – (B/A)*100	% 30.76
	MINIMUM SUB-CONTRACTING TARGET AS CONTAINED IN CLAUSE F.2.1.4.6	30%

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

SCHEDULE 27: INFORMATION TO BE PROVIDED WITH THE TENDER

Not applicable to this tender

N/A

SIGNED ON BEHALF OF TENDERER:

Part C1: Agreements and Contract Data

	Pages
C1.1 Form of Offer and Acceptance (Agreement).....	89-93
C1.2 Contract Data	94-106
C1.3 Form of Performance Guarantee	107-110
C1.4 Form of Advance Payment Guarantee	111-114
C1.5 Occupational Health and Safety Agreement.....	115
C1.6 Protection of the Environment Declaration	116
C1.7 Insurance Broker's Warranty	117
C1.8 Contract of Temporary Employment as Community Liaison Officer	118-119

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

C1.1 Form of Offer and Acceptance

Offer

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

CONTRACT NO. 234Q/2018/19: CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, 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 PRICES INCLUSIVE OF VALUE ADDED TAX IS:

Rand ONE HUNDRED AND FORTY THREE MILLION NINE HUNDRED AND FOUR THOUSAND EIGHT HUNDRED AND ELEVEN RAND AND 70/100 CENTS. (in words);
R 143 904 811.70 (in figures)

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 of organization/tenderer)

(Address of organization/tenderer)

Name and
signature
of witness

Date 25/07/2019

For official use.

INITIALS OF CITY OFFICIALS AT TENDER
OPENING

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 C1: Agreements and contract data (which includes this agreement)
- Part C2: Pricing data
- Part C3: Scope of work
- Part C4: Site information

and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the returnable 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 form of offer and acceptance. No amendments to or deviations from said documents are valid unless contained in this schedule.

The tenderer shall within 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 securities, bonds, guarantees, proof of insurance and any other documents to be provided in terms of the conditions of contract identified in the contract data. 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 one fully completed original copy of this document, including the schedule of deviations (if any). The tenderer (now contractor) shall within five working days of the agreement coming into effect notify the employer in writing of any reason why he cannot accept the contents of this agreement as a complete and accurate memorandum thereof, failing which the agreement presented to the contractor shall constitute the binding contract between the parties.

Signature(s)

Name(s)

Capacity

**for the
Employer**

CITY OF CAPE TOWN
Tower Block, Civic Centre,
12 Hertzog Boulevard
Cape Town

Name and
signature
of witness

Date

Schedule of Deviations

Notes:

1. The extent of deviations from the tender documents issued by the employer before 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

By the duly authorised representatives signing this agreement, 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 returnable schedules, as well as any confirmation, clarification or changes 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.

For the Tenderer:

Signature(s)

Name(s)

Capacity

(Name of organization/tenderer)

(Address of organization/tenderer)

Name and
signature
of witness

Date

For the Employer:

Signature(s)

Name(s)

Capacity

(Name and
address of
organization)

City Of Cape Town
Tower Block, Civic Centre,
12 Hertzog Boulevard
Cape Town

Name and
signature
of witness

Date

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:

the.....(day)

of(month)

20.....(year)

at(place)

For the Contractor:

Signature(s)

Name(s)

Capacity

Signature and name of witness:

Signature

Name

C1.2 Contract Data

Part 1: Contract Data provided by the Employer

GENERAL CONDITIONS OF CONTRACT

The following standardised General Conditions of Contract:

General Conditions of Contract for Construction Works, Third Edition, 2015

prepared by the South African Institution of Civil Engineering (SAICE) shall apply to and form the General Conditions of Contract for this contract. Copies of these conditions of contract are obtainable 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.

Copies of the General Conditions of Contract are available for inspection and scrutiny at the offices of the Employer.

The Pro-formas bound with the General Conditions of Contract 2015, on pages 96 to 113 shall not apply to this Contract and shall be replaced with the documents bound into this Contract Document.

The General Conditions of Contract make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the general conditions of contract.

The General Conditions of Contract shall be read in conjunction with the variations, amendments and additions set out in the Contract Specific Data below. Each item of data given below is cross-referenced to the clause in the General Conditions of Contract to which it mainly applies.

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- a) the Form of Offer and Acceptance,
- b) the Contract Specific Data within the Contract Data,
- c) the General Conditions of Contract for Construction Works, Third Edition, 2015,
- d) the Drawings,
- e) the Scope of Work,
- f) the Pricing Data, and
- g) the conditions of tender, the tender data and tender schedules

If an ambiguity or discrepancy is found in the documents, the Employer's Agent shall issue any necessary clarification or instruction.

CONTRACT SPECIFIC DATA

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Third Edition, 2015, are applicable to this Contract:

Clause 1.1.1.2:

Add the following after "Bill of Quantities":

, also referred to as Bills of Quantities,

Clause 1.1.1.13:

The Defects Liability Period is 12 months.

Clause 1.1.1.14:

The times for achieving Practical Completion for the portions as set out in the Scope of Work are:

For portion 1 within **52 (Fifty-two) weeks**, inclusive of the 14 day period referred to in Clause 5.3.2 below, and inclusive of non-working days referred to in Clause 5.8.1 below, but exclusive of special non-working days (Clause 5.8.1).

The time for achieving Practical Completion of the whole of the Works is **156 (One hundred and fifty-six) weeks**, inclusive of the 14 day period referred to in Clause 5.3.2 below, and inclusive of non-working days referred to in Clause 5.8.1 below, but exclusive of special non-working days (Clause 5.8.1).

Clause 1.1.1.15:

The **Employer** is the CITY OF CAPE TOWN, represented by the Director : DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION and/or such other person or persons duly authorised thereto by the Employer in writing.

The name of the Employer is: CITY OF CAPE TOWN
DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

and is referred to in the Contract documents by the terms "Employer", "City of Cape Town" or "Council" as the context provides.

Clause 1.1.1.16:

The **Employer's Agent**, referred to in the Contract documents, is the firm of _____, acting through a director, an associate or an official authorised thereto in writing.

The name of the Employer's Agent is: _____
Employer or their successors duly appointed by the

Clause 1.1.1.26:

The Pricing Strategy is a Re-measurement Contract.

Add the following Clauses after Clause 1.1.1.34:

1.1.1.35 "**Drawings**" means all drawings, calculations and technical information forming part of the Contract Documents and any modifications thereof or additions thereto from time to time approved in writing by the Employer's Agent or delivered to the Contractor by the Employer's Agent.

1.1.1.36 "**Letter of Notification**" means the letters of formal notification, signed by the Employer, of the decision of the Supply Chain Management Bid Adjudication Committee sent to all tenderers. The notification of the decision does not form part of the Employer's Acceptance of the successful tenderer's Offer and no rights shall accrue.

Clause 1.2.1.2:

The address of the Employer is:

Physical address: Tower Block, Civic Centre
12 Hertzog Boulevard
Cape Town
8001

Postal address: P O Box 298
Cape Town
8001

E-mail address:

Clause 1.2.1.2:

The address of the Employer's Agent is:

Physical address:

Postal address:

E-mail address:

Clause 3.1

Delete clause

Clause 3.2.3:

The Employer's Agent shall obtain the specific approval of the Employer before executing any of his functions or duties according to the following Clauses of the General Conditions of Contract or Contract Data:

- a) Clause 3.3.1 Nomination of Employer's Agent's Representative
- b) Clause 3.3.4 Employer's Agent's authority to delegate
- c) Clause 5.8.1 Non-working times
- d) Clause 5.11.2 Suspension of the Works
- e) Clause 5.12.4 Acceleration instead of extension of time
- f) Clause 6.3.1 Ordering of any variation that causes the contract price to exceed the contract sum
- g) Clause 6.10.10 Advance payment, for items not listed in the Advance Payment Schedule.

Clause 4.1:

Add the following Clause after Clause 4.1.2:

- 4.1.3 Where the Contract is based on an alternative tender offer submitted by the Tenderer/Contractor, he shall, notwithstanding acceptance of the offer by the Employer, be liable for any deficiency in the alternatives proposed, for any costs in ensuring that the alternatives meet the Employer's standards and requirements, and for any loss or damage arising out of such error or deficiency.

Clause 5.3.1:

The documentation required before commencement with Works execution is:

- a) Approved Health and Safety Plan (Refer to applicable clause in the Health and Safety Specification in Part C3.5 in the Scope Work)
- b) Initial programme (Refer to Clause 5.6)
- c) Security (Refer to Clause 6.2)
- d) Evidence of Insurance (Refer to Clause 8.6)
- e) Occupational Health and Safety Agreement (Part C1.5 in Agreements and Contract Data)
- f) Letter of good standing from the Compensation Commissioner, or a licensed compensation insurer (Refer to Clause 4.3)
- g) Protection of the Environment Declaration (Part C1.6 in Agreements and Contract Data)
- h) Proof of Registration / Letter of Good Standing with the Bargaining Council for the Civil Engineering Industry (BCCEI)

Add the following to Clause 5.3.1:

Such instruction shall, where the Contract Sum exceeds forty million Rand (R40 000 000), also be subject to the issuing, by the Provincial Director of the Department of Labour, of a construction work permit to perform the intended construction work in terms of Clause 5.3.4 below.

Clause 5.3.2:

The time to submit the documentation required before commencement with Works execution is within 14 days.

Clause 5.3.3:

Add the following to Clause 5.3.3:

Notwithstanding the above, where the Contract Sum exceeds forty million Rand (R40 000 000), and a construction work permit from the Provincial Director of the Department of Labour is required, commencement of the Works shall not be deemed to take place until such construction work permit has been issued by the Provincial Director.

Clause 5.3.4:

Add the following Clause after Clause 5.3.3:

5.3.4 Application for Construction Work Permit

Where the Contract Sum exceeds forty million Rand (R40 000 000), the Employer shall, in compliance with Regulation 3 of the Construction Regulations, read together with the exemptions published in Government Notice dated 7 July 2015, apply to the Provincial Director of the Department of Labour for a construction work permit to perform the intended construction work. The employer will apply for the construction work permit as soon as possible after its Bid Adjudication Committee has awarded the contract, and the period that the Department of labour requires to issue the permit will run concurrently with the appeal period.

Should the issuing of a construction work permit delay the Employer's Agent's instruction to commence executing the Works and this in turn causes a delay to Practical Completion, then the Contractor shall be entitled to make a claim in accordance with Clause 10.1. Should, however, the issuing of a construction work permit be delayed by the submission of a unacceptable draft Health and Safety Plan, in the opinion of either the Employer's Health and Safety Agent, or the Provincial Director of the Department of Labour, no claim for an extension of time will be entertained.

Clause 5.4.2:

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

Add the following Clause after Clause 5.4.3:

5.4.4 The Contractor shall bear all costs and charges for special and temporary rights of way required by it in connection with access to the Site.

Clause 5.6.2.3:

Insert the following after "...approvals,"

... permits,

Clause 5.8.1:

The non-working days are Sundays.

The special non-working days are:

- a) All gazetted public holidays.
- b) Year-end break(s) not exceeding 15 working days in duration.

Clause 5.12.2.2:

Add the following to 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 below 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 below 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.

January	2 days
February	2 days

March	2 days
April	2 days
May	2 days
June	4 days
July	4 days
August	4 days
September	4 days
October	2 days
November	2 days
December	2 days

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 delay is experienced.

It shall be further 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.

Clause 5.13.1:

The penalty for failing to complete portion 1, as set out in the Scope of Work, is **R10 000** per day.

The penalty for failing to complete the whole of the Works, is **R10 000** per day.

Insert the following after "actual date of Practical Completion":

... or, in the case of termination by the Employer in terms of Clause 9.2.1, the actual date of termination,

Clause 5.16.3:

The latent defects period is **10** years.

Clause 6.2.1:

The security to be provided by the Contractor shall be a performance guarantee of **7%** of the Contract Sum. The performance guarantee shall contain the precise wording of the document included in Part C1.3 of the Contract Data: **Form of Performance Guarantee**, and it shall be issued by a financial institution approved by the Employer at the date when the guarantee is issued. The list of approved financial institutions current at the date of tender is attached to the **Form of Performance Guarantee**.

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 6.5.1.2.3:

The percentage allowance to cover overhead charges is **10%**

Clause 6.8.2:

Add the following to Clause 6.8.2:

The Contract Price shall be subject to contract price adjustment 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.

Where applicable, in terms of the foregoing, the value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values for "Bulk Earthworks" and/or "Township Roads and Services":

The value of "x" is 0,10.

The values of the coefficients for "Bulk Earthworks" are:

a = 0,10 b = 0,65 c = 0,05 d = 0,20

The values of the coefficients for "Township Roads and Services" are:

a = 0,21 b = 0,27 c = 0,42 d = 0,10

The base month is one month prior to the month in which the tender closed.

Furthermore, the Contract Price Adjustment Schedule shall be amended as follows:

"L" is the "Labour Index" and shall be the Consumer Price Index (CPI) for "All items (CPI Headline)", as published in the Statistical News Release, P0141: Table A – Consumer Price Index: Main Indices of Statistics South Africa.

"P" is the "Plant Index" and shall be the Construction Materials Price Index for "Plant and Equipment" as published in the Statistical News Release P0151.1, Table 4 – Mining and construction plant and equipment price index of Statistics South Africa.

"M" is the "Materials Index" and shall be the Construction Materials Price Index for selected materials, Materials for "Civil Engineering material – roads, general (excluding bitumen)," as published in the Statistical News Release P0151.1, Table 6 – Civil engineering material price indices of Statistics South Africa

"F" is the "Fuel Index" and shall be the Producer Price Index (PPI) for "Coal and Petroleum Products - Diesel", as published in the Statistical News Release P0142.1: Table 1 –PPI for final manufactured goods of Statistics South Africa.

The amount "Ac" shall be sub-divided into Ac₁ and Ac₂, as appropriate, and each of these shall be multiplied by its Contract Price Adjustment Factor (CPAF), with the resultant amounts added together to produce the adjustment as envisaged in the CPA Schedule:

where

Ac₁ is the proportion of Ac applicable to "Bulk Earthworks", and
Ac₂ is the proportion of Ac applicable to "Township Roads and Services"

and where

Ac₁ = T₁ – S₁ – D₁ – E₁ – G₁ – Ap₁, and
Ac₂ = T₂ – S₂ – D₂ – E₂ – G₂ – Ap₂

in which formulae the values associated with the symbols T₁ and T₂.... Ap₁ and Ap₂ shall be applicable to the proportions of T Ap in "Bulk Earthworks" and "Township Roads and Services", respectively.

Furthermore, the value of the General Items shall be proportional to the value of work done and materials on Site in T₁ and T₂ respectively.

Clause 6.8.3: Variation in the cost of special materials

Price adjustment for variations in the cost of special materials is provided for in the Special Materials Schedule at the end of this Part 1: Contract Data provided by the Employer.

Clause 4.2 of the Contract Price Adjustment Schedule

Delete the words "by the Contractor" that appear after ".... entered in the Contract Data"

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 days before the closing date for tenders, no costs other than those that can be claimed under Clause 5.12.3 shall be added to the contract price.

Add the following after Clause 6.8.4:

6.8.5. If price adjustment for variations in the cost of plant and materials imported from outside of South

Africa is provided for in the contract data, such adjustment shall be based on the information contained on the schedule titled "**Price Basis for Imported Resources**" and as below. For the purposes of this clause the Rand value of imported Plant and Materials inserted on the schedule titled "**Price Basis for Imported Resources**" (column (F)) shall be the value in foreign currency (column (A)) converted to South African Rand (column (C)) by using the closing spot selling rate quoted by **Employer's** main banker, ABSA, on the Base Date (seven calendar days before tender closing date) rounded to the second decimal place (column (B)), to which shall be added any Customs Surcharge and Customs Duty applicable at that date (columns (D) and (E)).

6.8.5.1 Adjustment for variations in rates of exchange:

- (a) The value in foreign currency inserted in column (A) shall be subject to clause (h) below when recalculating the Rand value.
- (b) The rate of exchange inserted in column (B) shall be the closing spot selling rate quoted by **Employer's** main banker, ABSA, on the Base Date, rounded to the second decimal place, subject to sub-paragraph (c) below.
- (c) If the rate of exchange inserted by the Tenderer differs from the ABSA rate referred to above, then the ABSA rate shall apply and the Rand value in columns (C) and (F) shall be recalculated accordingly, without altering the price in the Schedules of Quantities for the relevant items.
- (d) If a tender from a supplier or sub-contractor provides for variations in rates of exchange, the Contractor may **only** claim for variations in rates of exchange if he binds the supplier or sub-contractor to the same provision to take out forward cover as described in sub-paragraph (e) below.
- (e) The Contractor (or supplier or sub-contractor) shall within five working days from the date of placing a firm order on an overseas supplier, cover or recover forward by way of a contract with a bank which is an authorised foreign exchange dealer, the foreign exchange component of the cost of any imported Plant and Materials inserted by the Tenderer on the schedule titled "**Price Basis for Imported Resources**".
- (f) When the Contractor (or supplier or sub-contractor) so obtains forward cover, the Contractor shall immediately notify the Employer of the rate obtained and furnish the Employer with a copy of the foreign exchange contract note.
- (g) Based on the evidence provided in sub-paragraph (f) above, the value in Rand inserted in column (C) on the schedule titled "**Price Basis for Imported Resources**" shall be recalculated using the forward cover rate obtained, and any increase or decrease in the Rand value defined in this clause shall be adjusted accordingly, subject to sub-paragraph (h) below. Failure to provide such evidence shall result in no such recalculation shall be considered by the Employer.
- (h) The adjustments shall be calculated upon the value in foreign currency in the Contractor's (or supplier's or sub-contractor's) **forward cover contract**, provided that, should this value exceed the value in foreign currency inserted in column (A) of the schedule titled "**Price Basis for Imported Resources**", then the value in column (A) shall be used.

6.8.5.2 Adjustment for variations in customs surcharge and customs duty

- (a) Any increase or decrease in the Rand value between the amounts of Customs Surcharge and Customs Duty inserted on the schedule titled "**Price Basis for Imported Resources** and those amounts actually paid to the Customs and Excise Authorities, which are due to changes in the percentage rates applicable or to the foreign exchange rate used by the authorities, shall be adjusted accordingly.
- (b) The Tenderer shall state the Customs Duty Tariff Reference applicable to each item and the Contractor shall advise the Employer's Agent of any changes which occur.

6.8.5.3 Adjustment for variation in labour and material Costs

If the prices for imported Plant and Materials are not fixed, the Contractor shall in his Tender specify the formula for calculating Contract Price Adjustments normally used in the country of manufacture and the indices and relative proportions of labour and material on which his Tender prices are based. Evidence of the indices applicable shall be provided with each claim. The indices applicable 42 days before contractual dispatch date from the factory will be used for the purposes of Contract Price Adjustment.

Failure to specify a formula in the Tender shall mean that the prices are fixed or shall be deemed to be fixed.

Clause 6.10.1.5:

Delete Clause 6.10.1.5 in its entirety and replace with the following:

6.10.1.5 The value of Plant and materials:

6.10.1.5.1 up to a percentage limit of **80%** for the Plant and materials referred to in Clause 6.9.1.1 brought on to the Site but not yet built into the Permanent Works;

Provided that the Contractor has produced documentary evidence of ownership of such Plant and/or materials and has delivered to the Employer an indemnity, approved in writing by the Employer, against any claim to or in respect of such Plant and/or materials by reason of the Contractor's sequestration or liquidation, or of any defect in the Contractor's title to the Plant and/or materials;

6.10.1.5.2 which have been manufactured and are stored at places other than the Site, in respect of which the Employer has indicated, on the Advance Payment Schedule, that advance payment will be permitted;

6.10.1.5.3 for which a deposit with order is required from the Contractor by a manufacturer/supplier, only in respect of which the Employer has indicated, on the Advance Payment Schedule, that advance payment will be permitted;

The terms and conditions for advance payment are set out in Clause 6.10.10 and in the Advance Payment Schedule at the end of this Part 1: Contract Data provided by the Employer.

Clause 6.10.1.7:

Add the following after the words "Clause 5.13":

or any other fines or penalties that become due under the Contract.

Clause 6.10.3:

Add the following to Clause 6.10.3:

Notwithstanding the provision of a performance guarantee in terms of Clause 6.2.1, interim payments to the Contractor shall be subject to a retention by the Employer of an amount of **5%** of the said amounts due to the Contractor, with no limit. A guarantee in lieu of retention is not permitted.

Clause 6.10.4:

Add the following to the last sentence of Clause 6.10.4:

..., dated as at the date of delivery of the Contractor's statement to the Employer's Agent.

Add the following to Clause 6.10.4:

Notwithstanding the 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.

The Contractor may submit a fully motivated application regarding more frequent payment to the Employer's Agent to be submitted to the Employer for consideration. Requests for more frequent payments will be considered at the sole discretion of the Employer and is not a right in terms of this contract.

Clause 6.10.10:

Add the following Clause after Clause 6.10.9:

6.10.10 Advance payment

Subject to Clauses 6.10.1.5.2 and 6.10.1.5.3, and the Advance Payment Schedule, the Employer shall make an advance payment for Plant and materials stored at places other than the Site, or in respect of which a deposit with order is required, only once the Contractor has submitted an advance payment guarantee in accordance with this Clause.

Unless and until the Employer receives this guarantee, the following paragraphs shall not apply.

The Employer's Agent shall issue an Interim Payment Certificate for, or including, advance payment after receiving a statement under Clause 6.10.1 and after the Employer has received a guarantee in an amount equal to the advance payment requested. This guarantee shall be issued by a financial institution approved by the Employer, as listed in the Annexure in Part C1.3 of the Contract Data, and shall be in the form of and shall contain the precise wording of the document included in Part C1.4: **Form of Advance Payment Guarantee** and shall come into force, be administered and expire in terms thereof.

The Employer shall return the guarantee to the Contractor within 14 days after the expiry date.

The provision of the Advanced Payment Guarantee shall be at the Contractor's cost.

The term "deposit" or "deposit with order" used in the context of this Clause and elsewhere by reference to this Clause, means a sum payable by the Contractor to a manufacturer/supplier prior to the manufacture of an item of Plant or material, required at the time of placing an order, the balance of the value of the item being payable later.

Clause 8.6.1.1.2:

The value of Plant and materials supplied by the Employer to be included in the insurance sum is **R 0.00 (Nil)**.

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 **R0.00 (Nil)**.

Clause 8.6.1.3:

The limit of indemnity for liability insurance is R20 000 000.00 for any single claim – the number of claims to be unlimited during the construction and defects liability periods.

Clause 8.6.1.5:

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

- a) 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 to provide for their replacement.
- b) Insurance in terms of the provisions of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- c) Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability Indemnity.
- d) 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 8.6.5:

Delete the following from Clause 8.6.5:

"and the terms thereof shall be subject to the approval of the Employer's Agent, which approval shall not be unreasonably withheld."

Clause 8.6.6:

Replace clause 8.6.6 with the following:

The Contractor shall provide evidence in the form stated in the contract data to the Employer's Agent that the required insurances are effected and that all premiums thereunder have been paid.

Clause 9.1:

In Clause 9.1.6 replace "and 9.1.3" with:

, 9.1.3 and 9.1.7

Add the following Clause after Clause 9.1.6:

9.1.7 Death of Sole Proprietor/Member

Upon the death of the Contractor who was a Sole Proprietor, or a sole member of a Close Corporation, the Contract will terminate forthwith. The Employer shall pay to the Contractor's estate any money which it considers due under the Contract in terms of Clause 9.1.5, in full and final settlement thereof.

Clause 10.5.3:

The number of ad-hoc Adjudication Board Members to be appointed is 1(one).

ADDITIONAL CONDITIONS OF CONTRACT

Add the following 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 the prior written consent of the Employer's Agent.

SPECIAL MATERIALS SCHEDULE		
Each material dealt with as a special material in terms of Clause 4.1 of the Contract Price Adjustment Schedule of the General Conditions of Contract is stated in the list below. The provisions of Clause 6.8.3 of the General Conditions of Contract shall apply to such special materials. The base prices for the special materials (current at the time of tender) shall be as stated in the schedule below, or where required, shall be furnished by the tenderer/contractor. Only those materials listed by the Employer below shall be considered as special materials.		
Special Material	Unit	Base Price
Bitumen (50/70)	t	R 5590.00 (Jan 2019, Engen)
Bitumen (70/100)	t	R 5590.00 (Jan 2019, Engen)
MC30	T	R 7110.30 (Jan 2019, Total)
Conditions: 1) When called upon to do so, the contractor shall substantiate the prices to be used to determine the adjustment in respect of the special materials listed above with acceptable documentary evidence. 2) In the case of bituminous products, the Employer has provided, in the schedule above, a base rate for bitumen upon which the tendered rates will be deemed to be based, and which will be used for determining the adjustment in the price of such bituminous products. 3) Where an adjustment for the variation in the price of bituminous products is claimed, the claim must be substantiated by a declaration from the manufacturer, confirming the source of bitumen used in such bituminous products at the time in question. 4) Where the source of bitumen (the refinery) is located in the Western Cape Province, or where bitumen sourced from abroad is landed at a port in the Western Cape, the cost of transporting such bitumen within the boundaries of the Western Cape shall be included in the rate for bituminous products. Extra-over rates to cover the cost of transporting bitumen from beyond the borders of the Western Cape have been measured separately in the Bill of Quantities. 5) Where imported bitumen used in bituminous products is landed at a port beyond the borders of the Western Cape, the importers must clearly state whether or not their price is inclusive of transport to the Western Cape, which will determine whether extra-over transport costs are applicable, or not. The price of the imported bitumen itself must be expressed as a landed price in ZAR.		

ADVANCE PAYMENT SCHEDULE

This Advance Payment Schedule is to be read in conjunction with Clauses 6.10.1.5.2, 6.10.1.5.3 and 6.10.10 in the Contract Specific Data. The purpose of this schedule is to itemise specific Plant and materials not yet brought on to the Site for building into the Permanent Works and for which the Employer is prepared to make advance payments to the Contractor, subject to the conditions below.

The items of Plant and materials which have been identified by the Employer as being suitable for advance payment in terms of the Contract are listed in the table below. Should an item or items be added to the list at tender stage by a tenderer, such item(s) will not be binding on the Employer.

Plant and materials which have been manufactured and are stored at places other than the Site:	Plant and materials yet to be manufactured and for which a deposit with order is required from the Contractor by a manufacturer/supplier, and which may be stored at places other than the Site after manufacture:

Conditions:

- 1) The Contractor can only rely on advance payment being permitted by the Employer in respect of the Plant and materials listed in the table above. The Employer may, however, permit advance payment for other Plant and materials in exceptional circumstances and at its sole discretion, during the course of the Contract, and upon reasonable request from the Contractor.
- 2) Advance payment for the purposes of deposits will only be provided up to a limit of 20% of the value of any one item being claimed.
- 3) The Contractor shall provide the Employer with documentary evidence of the terms and conditions for which a deposit with order is required by a manufacturer/supplier, together with the advance payment guarantee.
- 4) The Contractor will also be permitted to obtain advance payment for the balance of the value of the Plant and materials in respect of which he has paid a deposit, for an item which after manufacture is stored at a place other than the Site. The Contractor shall, in respect of such payment, provide an advance payment guarantee, either for such balance or, if the advance payment guarantee in respect of the deposit is to be returned by the Employer upon request, for the whole value of the item.

Part 2: Data provided by the Contractor

Clause 1.1.1.9:

The name of the Contractor is

Clause 1.2.1.2:

The address of the Contractor is

Physical : Postal :
Address Address

Telephone : Fax:

email :

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

C1.3 Form of Performance Guarantee

PERFORMANCE GUARANTEE

For use with the General Conditions of Contract for Construction Works, Third Edition, 2015.

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

"Physical address:

"Employer" means: The City of Cape Town, DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION.

"Contractor" means:

"Employer's Agent" means:

"Works" means: Contract No. 234Q/2018/19 - CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

"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 inclusive 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 Employer's Agent of the Certificate of Completion of the Works.

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate of Completion of the Works as defined in the Contract.

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. 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 payment in full of the Guaranteed Sum, whichever occurs first. The Employer's Agent 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.
3. 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 suretyship;
- 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.
4. 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:
 - 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent 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;
 - 4.2 A 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;
 - 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
5. 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; and
 - 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.
6. 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.
7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
9. 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.
10. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
11. 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.
12. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.

13. 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)

ANNEXURE

LIST OF APPROVED FINANCIAL INSTITUTIONS

The following financial institutions are currently (as at 18 October 2016) approved for issue of contract guarantees to the City:

National Banks:

International Banks (with branches in SA):

Insurance companies:

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

C1.4 Form of Advance Payment Guarantee

ADVANCE PAYMENT GUARANTEE

For use with the General Conditions of Contract for Construction Works, Third Edition, 2015.

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

"Physical address:

"Employer" means: The City of Cape Town, DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION.

"Contractor" means:

"Employer's Agent" means:

"Works" means: Contract No. 234Q/2018/19 - CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

"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.

"Plant and materials" means: The Plant and materials stored at places other than the Site, or in respect of which an advance payment prior to manufacture is required, which the Employer has agreed may be subject to advance payment, such Plant and materials being listed in the Schedule of Plant and materials.

"Schedule of Plant and materials" means: A list of Plant and materials which shows the value thereof to be included in the Guaranteed Advance Payment Sum.

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

Amount in words:

"Expiry Date" means: The date of the payment certificate wherein the Plant and materials have been certified by the Employer's Agent as having been built into the Permanent Works.

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates and Final Payment Certificate.

ADVANCE PAYMENT GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Advance Payment Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Advance Payment Guarantee and up to and including the Expiry Date or the date of payment in full of the Guaranteed Advanced Payment Sum, whichever occurs first.

3. The Guarantor hereby acknowledges that:
- 3.1 any reference in this Advance Payment 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 suretyship;
- 3.2 its obligation under this Advance Payment Guarantee is restricted to the payment of money.
4. 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:
- 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent 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;
- 4.2 A 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) calendar days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;
- 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Advance Payment 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 Advance Payment Guarantee, such demand stating that:
- 5.1 the Contract has been terminated due to the Contractor's default and that this Advance Payment 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 Advance Payment Guarantee is called up in terms of 5; and
- 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.
6. 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.
7. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
-
9. 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 Advance Payment Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
10. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
11. This Advance Payment 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.
12. This Advance Payment Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.

13. 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)

For use with Advance Payment Guarantees on contracts using the General Conditions of Contract for Construction Works, Third Edition, 2015.

The City of Cape Town, DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

1

234Q/2018/19 - CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

Payment Certificate No.

Advance payment is requested in respect of the following items of Plant and materials, which have been manufactured and are stored at places other than the Site, or in respect of which a deposit with order is required from the Contractor by a manufacturer/supplier:

[illegible]

Signed at on the day of 20.....

As witness

Approved by Employer's Agent

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**Contract
Part C1: Agreements and Contract Data
Contract No. 234Q/2018/19**

C1.5 Occupational Health and Safety Agreement

AGREEMENT MADE AND ENTERED INTO BETWEEN THE CITY OF CAPE TOWN (HEREINAFTER CALLED THE "EMPLOYER") AND

.....
(Contractor/Mandatory/Company/CC Name)

IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 85 OF 1993 AS AMENDED.

I,, representing

....., as an employer
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 thereunder.

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.

C.O.I.D. 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 subcontractors employed by me will enter into an occupational health and safety agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the Occupational Health and Safety Specifications contained in this tender and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan submitted and approved in terms thereof.

Signed at on the day of 20....

Witness

Mandatory

Signed at on the day of 20

Witness

for and on behalf of
City of Cape Town

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

C1.6 Protection of the Environment Declaration

PROTECTION OF THE ENVIRONMENT DECLARATION

The Contractor will not be given right of access to the Site until this form has been signed

CONTRACT NO.: 234Q/2018/19

CONTRACT TITLE: CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

I/ we, {Contractor} record as follows:

1. I/ we, the undersigned, do hereby declare that I/ we am/ are aware of the increasing requirement by society that construction activities shall be carried out with due regard to their impact on the environment.
2. In view of this requirement of society and a corresponding requirement by the Employer with regard to this Contract, I/ we will, in addition to complying with the letter of the terms of the Contract dealing with protection of the environment, also take into consideration the spirit of such requirements and will, in selecting appropriate employees, plant, materials and methods of construction, in-so-far as I/ we have the choice, include in the analysis not only the technical and economic (both financial and with regard to time) aspects but also the impact on the environment of the options. In this regard, I/ we recognise and accept the need to abide by the "precautionary principle" which aims to ensure the protection of the environment by the adoption of the most environmentally sensitive construction approach in the face of uncertainty with regard to the environmental implications of construction.
3. I/ we declare that I/ we have read and understood the contents of the Environmental Management Programme (which is comprised of the Environmental Management Specification and its Annexures) for this Contract, and that I/ we understand my/our responsibilities in terms of enforcing and implementing the Environmental Management Programme. I/ we also declare that I/ we have made appropriate provision in my/ our pricing of the Bills of Quantities items for the Environmental Management Programme.
4. I/ we acknowledge and accept the right of the Employer to deduct, should he so wish, from any amounts due to me/ us, such amounts (hereinafter referred to as fines) as the Employer's Agent shall certify as being warranted in view of my/ our failure to comply with the terms of the Contract dealing with protection of the environment, subject to the following:
 - 4.1 The Employer's Agent, in determining the amount of such fine, shall take into account, *inter alia*, the nature of the offence, the seriousness of its impact on the environment, the degree of prior compliance/non-compliance, the extent of the Contractor's overall compliance with environmental protection requirements and, in particular, the extent to which he considers it necessary to impose a sanction in order to eliminate/reduce future occurrences
 - 4.2 The Employer's Agent shall, with respect to any fine imposed, provide me/ us with a written statement giving details of the offence, the facts on which the Employer's Agent has based his assessment and the terms of the Contract (by reference to the specific clause) which has been contravened.

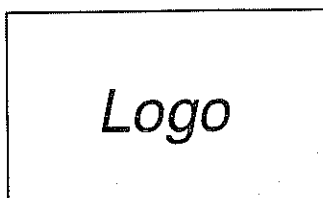
Signed
CONTRACTOR

Date.....

CITY OF CAPE TOWN
DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION
CONTRACT NO. 234Q/2018/19
CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

C1.7 Insurance Broker's Warranty

Pro Forma



Letterhead of Contractor's Insurance Broker

Date _____

CITY OF CAPE TOWN
City Manager
Civic Centre
12 Hertzog Boulevard
Cape Town
8000

Dear Sir

CONTRACT NO.: 234Q/2018/19

CONTRACT TITLE: CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

NAME OF CONTRACTOR: _____

I, the undersigned, do hereby confirm and warrant that all the insurances required in terms of the abovementioned contract have been issued and/or in the case of blanket/umbrella policies, have been endorsed to reflect the interests of the CITY OF CAPE TOWN with regard to the abovementioned contract, and that all the insurances and endorsements, etc., are all in accordance with the requirements of the contract.

I furthermore confirm that all premiums in the above regard have been paid.

Yours faithfully

Signed: _____

For: _____

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

C1.8 Contract of Temporary Employment as Community Liaison Officer

Construction Contract No.: 234Q/2018/19

PROJECT: CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING 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.

1. THE PARTIES HAVE AGREED THAT

The CLO will be employed by the CONTRACTOR on a temporary basis for the duration of the work from the date of signing this agreement to the date of practical completion as defined in the Contract, subject to all the conditions set out below.

2. THE DUTIES OF THE COMMUNITY LIAISON OFFICER SHALL BE:

1. to keep the community informed on the progress of the project;
2. to keep the Contractor informed on relevant Community affairs and possible grievances;
3. to manage the recruitment of workers from the Sub-Council Job-Seekers Database;
4. to assist the Contractor's supervisory staff in the management of the workers.

3. 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 R365.00 per working day. 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:
 - (i) 9¼ hours per day
 - (ii) 45 hours per week;
 - (iii) 5 days per week;
 - (iv) 5 hours without an interval, whereupon there shall be an interval of at least 30 minutes;
 - (v) A spread-over period of 12 hours.
- 3.3 The CLO shall be entitled to payment where he 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:

- (i) undisciplined or unruly behaviour;
- (ii) insubordination to Team Leader, Supervisors or Management;
- (iii) abuse of intoxicating substances;
- (iv) criminal actions by the employee;
- (v) strike action or political stayaways.

3.6 Workers, including the CLO, may be dismissed after two official written warnings for the following behaviour:

- (i) undisciplined or unruly behaviour;
- (ii) insubordination to Team Leader, Supervisors or Management;
- (iii) abuse of intoxicating substances;
- (iv) wilful or negligent damage to or loss of machines or equipment.

The Contractor shall ensure that he has statements from at least two witnesses concerning 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 two weeks, one week in arrears.

3.8 The CLO shall be given a statement with each payment on which is recorded:

- (i) the name of the Contractor;
- (ii) the CLO's name;
- (iii) the number of days worked by the CLO;
- (iv) the rate per day;
- (v) the details of any deductions made;
- (vi) 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 one week's notice of the termination of the Contract of Temporary Employment. If this is not done, the CLO must be paid earnings for five 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.

4. 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.

5. 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.

5. THUS AGREED AND SIGNED BY THE PARTIES:

Contractor:

Community Liaison officer:

Date:

Part C2: Pricing Data

	Pages
C2.1 Pricing Assumptions	121-122
C2.2 Bills of Quantities.....	123-147

C2.1 Pricing Assumptions

Pricing Assumptions mean the criteria as set out below, read together with all Parts of this contract document, which it will be assumed in the contract, that the tenderer has taken into account when developing his prices.

1. The method of measurement published by the South African Bureau of Standards in clause 8 of the Standardised Specifications for Civil Engineering Construction is applicable, subject to the variations and amendments contained in the section "Applicable SANS 1200 standardised specifications".
2. Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Schedule, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.
3. The measurement and payment clauses in a specification in which further information regarding the scheduled items is given, are referenced under "Item" (pay items) in the Bills of Quantities. The referenced clauses are not necessarily the only sources of information in respect of scheduled items. Further information and specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the digits which follow SANS in the SANS 1200 series of specifications, e.g. G for SANS 1200 G.
4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
5. The quantities set out in the Bills of Quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Employer's Agent from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.
6. The prices and rates to be inserted in the Bills of Quantities are to be the full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
7. A price or rate should be entered against each item in the Bills of Quantities, whether the quantities are stated or not. An item against which no price (in any format) or a nil rate is entered will be considered to be covered by the other prices or rates in the Bills of Quantities, and that there is no charge for that particular item (even should the quantity subsequently increase).
8. Except where rates only are required, insert all amounts to be included in the total tendered price in the "Amount" column and show the corresponding total tendered price.

9. The units of measurement described in the Bills of Quantities are metric units. Abbreviations which may be used in these Bills of Quantities are as follows:

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1000 kg)
m2	=	square metre	No.	=	number
m2.pass	=	square metre-pass	sum	=	lump sum
ha	=	hectare	MN	=	meganewton
m3	=	cubic metre	MN.m	=	meganewton-metre
m3.km	=	cubic metre-kilometre	P C sum	=	Prime Cost sum
l	=	litre	Prov sum	=	Provisional sum
kl	=	kilolitre	%	=	per cent
MPa	=	megapascal	kW	=	kilowatt

10. Where fractions of a cent occur in calculations of prices and amounts, they shall be rounded up/down to the nearest whole cent.
11. The Tenderer is referred to F2.24 in Part T1.2 Tender Data regarding the pricing of Deviations and/or Qualifications.
11. Clause F.2.13.11 c) in Part T1.2 Tender Data shall be applicable to the submission of Bills of Quantities which have been priced electronically, and which the Tenderer wishes to submit as a printed version with his/her tender in the place of handwritten priced Bills of Quantities.

If there is found to be any variance between the printed version and the original issued document, the original shall stand. However, where Addenda have been issued which amend the Bills of Quantities, then the printed Bills of Quantities shall take these into account.

The pages of the issued Bills of Quantities should not be removed from the tender document.

12. Tenderers are referred to Clause 8 Measurement and Payment in the Environmental Management (EM) Specification in Part C3.5 in the Scope of Work for the basic principles of measurement and pricing of the EM Specification.
13. All descriptions or clauses where trade names or proprietary products are specified, are deemed to include the phrase "or equivalent"
14. Tenderers are referred to Clause 6.8.2 in Part C1.2 Contract Data regarding contract price adjustment.

The following bills in Part C2.2 Bills of Quantities are deemed applicable to the following categories for the purposes of Contract Price Adjustment:

NO.	BILL	CPA CATEGORY
1.	PRELIMINARY AND GENERAL	To be proportioned
2.	SITE CLEARANCE	Bulk Earthworks
3.	EARTHWORKS	Bulk Earthworks
4.	DETENTION POND	Township Roads and Services
5.	WATER RETICULATION	Township Roads and Services
6.	SEWER RETICULATION	Township Roads and Services
7.	STORMWATER DRAINAGE	Township Roads and Services
8.	ROADWORKS	Township Roads and Services
9.	SUBBASE	Township Roads and Services
10.	BASE	Township Roads and Services
11.	ASPHALT BASE AND SURFACING	Township Roads and Services
12.	KERBING AND CHANNELLING	Township Roads and Services
13.	ANCILLARY ROADWORKS	Township Roads and Services
14.	CABLE DUCTS	Township Roads and Services

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

C2.2 Bills of Quantities

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DECLARATION	

See ATTACHED PRICES
Schedule of Quantities.

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
1	SANS 1200 A	SECTION 1: PRELIMINARY AND GENERAL					
1.1		SCHEDULED FIXED-CHARGE AND VALUE-RELATED ITEMS					
1.1.1	8.3.1	Contractual Requirements	Sum	1			
		Establishment of Facilities on the Site					
		Facilities for Engineer					
1.1.2	8.3.2.1	a) Furnished offices	Sum	1			
1.1.3	8.3.2.1	c) Nameboard	No	2			
		Facilities for Contractor					
1.1.4	8.3.2.2	a) Offices and storage sheds	Sum	1			
1.1.5	8.3.2.2	b) Workshops	Sum	1			
1.1.6	8.3.2.2	d) Living accommodation	Sum	1			
1.1.7	8.3.2.2	e) Ablution and latrine facilities	Sum	1			
1.1.8	8.3.2.2	f) Tools and equipment	Sum	1			
1.1.9	8.3.2.2	g) Water supplies, electrical power and communication	Sum	1			
1.1.10	8.3.2.2	h) Dealing with water	Sum	1			
1.1.11	8.3.2.2	i) Access to and on site	Sum	1			
1.1.12	PSA 8.3.3	Other fixed charge obligations					
							
			Sum	1			
1.1.13	8.3.4	Removal of Site Establishment	Sum	1			
1.2		SCHEDULED TIME-RELATED ITEMS					
1.2.1	8.4.1	Contractual Requirements	Sum	1			
		Operate and maintain facilities on the Site:					
		Facilities for Engineer					
1.2.2	8.4.2.1	a) Furnished offices	Sum	1			
Total Carried Forward							

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
1.2.3	8.4.2.1	c) Nameboard	No	2			
1.2.4	8.4.2.1	d) Survey assistants and materials	Sum	1			
		Facilities for Contractor					
1.2.5	8.4.2.2	a) Offices and storage sheds	Sum	1			
1.2.6	8.4.2.2	b) Workshops	Sum	1			
1.2.7	8.4.2.2	d) Living accomodation	Sum	1			
1.2.8	8.4.2.2	e) Ablution and latrine facilities	Sum	1			
1.2.9	8.4.2.2	f) Tools and equipment	Sum	1			
1.2.10	8.4.2.2	g) Water supplies, electric power and communications	Sum	1			
1.2.11	8.4.2.2	h) Dealing with water	Sum	1			
1.2.12	8.4.2.2	i) Access to and on site	Sum	1			
1.2.13	8.4.3	Supervision for Duration of Construction	Sum	1			
1.2.14	8.4.4	Company and Head office Overhead Costs for the Duration of the Contract	Sum	1			
1.2.15	8.4.5	Other time-related obligations (Specify).....					
							
			Sum	1			
1.2.16	PSA 8.4.6	Contractors obligations in respect of Health and Safety	Sum	1			
1.2.17	PSA 8.4.7	Contractors obligations in respect of the Enviromental Management Plan	Sum	1			
		Standing time costs					
1.2.18	PSA 8.4.8	a) Plant	day	10			
1.2.19	PSA 8.4.8	b) Labour	day	10			
1.2.20	PSA 8.4.8	c) Other resources (to be specified by the contractor).....					
							
			day	10			
Total Carried Forward							

CONSTRUCTION OF CIVIL ENGINEERING SERVICES - MACASSAR HOUSING PROJECT							
Schedule of Quantities and Rates							
Item Nr	Pay Item	Description	Unit	Qty	Rate	Amount	Sub-Totals
		Supply only of bedding from trench excavation					
14.2.1	8.2.1	a) selected granular material	m ³	1305	Included		
14.2.2	8.2.1	b) selected fill material	m ³	2260	Included		
14.3	SANS 1200 LC	CABLE DUCTS					
		a) Supply and lay the following class 34 uPVC ducts on a class C bedding and prove, including provision of draw wire:					
14.3.1	PSLC 8.2.5	i) 110mm diameter pipes	m	8310	R 39.64	R 329 408.40	
14.3.2	PSLC 8.2.5	ii) 160mm diameter pipes	m	1070	R 55.64	R 59 534.80	
14.3.3	PSLC 8.2.8	a) Cable route markers, complete, installed, and record submitted	No.	227	R 73.68	R 16 725.36	
						R 113 758 744.43	R 113 758 744.43

Sub-Total		R 113 758 744.43
Contingencies	10%	R 11 375 874.44
Sub-Total		R 125 134 618.87
Escalation		R -
Sub-Total		R 125 134 618.87
V A T	15%	R 18 770 192.83
Total		<u>R 143 904 811.70</u>

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
1.3		SUMS STATED PROVISIONALLY BY ENGINEER					
		Cellular telephones					
1.3.1	PSA 8.5	c) Cost of calls in connection with contract administration by the Engineers's Representative	Prov Sum	1		36,000	00
1.3.2	PSA 8.5	d) Overhead, charges and profit on (c) above	%	36,000			
1.3.3	PSA 8.5	e) Material testing by commercial laboratories if required by the Engineer	Prov Sum	1		60,000	00
1.3.4	PSA 8.5	f) Overhead, charges and profit on (e) above	%	60,000			
1.3.5	PSA 8.5	g) Monthly remuneration of Community Liason Officer	Prov Sum	1		300,000	00
1.3.6	PSA 8.5	h) Overhead, charges and profit on (k) above	%	300,000			
1.4		DAYWORKS					
		Labour					
1.4.1	PSA 8.7	a) Unskilled labour	hr	120			
1.4.2	PSA 8.7	b) Semi skilled labour	hr	120			
1.4.3	PSA 8.7	c) Skilled labour	hr	120			
		Plant					
1.4.4	PSA 8.7	d) Excavators	hr	50			
1.4.5	PSA 8.7	e) Graders	hr	50			
1.4.6	PSA 8.7	f) Front-end loaders	hr	50			
1.4.7	PSA 8.7	g) Rollers	hr	50			
1.4.8	PSA 8.7	h) TLB	hr	50			
1.4.9	PSA 8.7	i) Trucks (10m3)	hr	50			
Total Carried Forward							

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
1.4.10	PSA 8.7	j) Water Truck	hr	50			
1.4.11	PSA 8.7	k) Plate Compactor/Rammer Compactor	hr	50			
1.5		TEMPORARY WORKS					
1.5.1	8.8.2	Deal with traffic	Sum	1			
		Existing services					
1.5.2	PSA 8.8.4	c) Excavate by hand in soft material to expose existing services	m³	1,000			
1.5.3	PSA 8.8.4	d) Temporary protection of existing services	Sum	1			
		Cost of survey in Terms of the Land Survey Act					
1.5.4	8.8.5	a) Trigonometrical survey and plot boundary pegs - locate and record	Sum	1			
</							

SECTION 2: SITE CLEARANCE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
2		SECTION 2: SITE CLEARANCE					
2.1	SANS 1200C	CLEAR SITE					
2.1.1	PSC 8.2.1	Clear and grub Site (including hauling to licensed dumping site and dumping levy)	ha	75			
		Remove and grub large trees and tree stumps of girth					
2.1.2	8.2.2	a) over 1m and up to and including 2m	No	5			
2.1.3	8.2.2	b) over 2m and up to and including 3m	No	5			
2.1.4	8.2.2	c) over 3m and up to and including 4m	No	5			
		Dismantle and remove pipelines, electricity transmission lines , cables , etc					
2.1.5	8.2.7	a) Existing pipelines up to 200mm dia	m	300			
2.1.6	8.2.7	b) Existing underground cables	m	100			
2.1.7	PSC 8.2.11	Demolish and spoil kerbs	m	250			
2.1.8	PSC 8.2.12	Excavate and remove asphalt wearing course and dispose at an approved dump site	m ²	4,000			
2.1.9	PSC 8.2.13	Dust and Erosion Control: Straw Stabilization	ha	10			
2.1.10	PSC 8.2.14	Dust and Erosion Control: Chipping and mulching of vegetation	ha	5			
2.1.11	PSC 8.2.15	Removal of Asbestos	m ³	10			
Total Carried Forward To Summary						335657	15

SECTION 3: EARTHWORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
3		SECTION 3: EARTHWORKS					
3.1	SANS 1200D	BULK EARTHWORKS (PLATFORM CREATION)					
		a) Excavate in all materials and use for embankment, backfill or dispose as directed					
3.1.1	PSD 8.3.2	i) Cut to Fill compacted to 90% MOD AASTHO	m ³	117,300			
3.1.2	PSD 8.3.2	ii) Cut to Spoil	m ³	5,000			
3.1.3	PSD 8.3.2	iii) Cut to Stockpile and maintain	m ³	40,000			
3.1.4	PSD 8.3.2	iv) Stockpile to Fill compacted to 90% MOD AASHTO	m ³	40,000			
		b) Extra over for					
3.1.5	PSD 8.3.2	2) Hard rock excavations	m ³	500			
3.1.6	PSD 8.3.2	3) Boulder, Class A	m ³	250			
3.1.7	PSD 8.3.2	4) Boulder, Class B	m ³	250			
3.1.8	PSD 8.3.4	d) Import to fill of material from commercial sources compacted to 90% MOD AASHTO	m ³	111,500			
3.2	SANS 1200D	BULK EARTHWORKS (BERM CREATION)					
		a) Excavate in all materials and use for embankment, backfill or dispose as directed					
3.2.1	PSD 8.3.2	i) Cut to Fill compacted to 90% MOD AASHTO	m ³	5,000			
3.3		RETAINING WALLS					
3.3.1		Terra force retaining wall constructed with L12 blocks including 15/19 Concrete strip footing (See Drawing CT840-G710-00 for detail)	m ²	240			
Total Carried Forward To Summary						12244865	00

SECTION 4: DETENTION PONDS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
4		SECTION 4: DETENTION PONDS					
4.1	SANS 1200 D	BULK EARTHWORKS					
		a) Excavate in all material and use for embankment, backfill or dispose as directed.					
4.1.1	PSD 8.3.2	i) Cut to Fill	m ³	23,100			
4.1.2	PSD 8.3.2	ii) Cut to Spoil off site and dispose at approved dump site.	m ³	500			
4.1.3	PSD 8.3.2	iii) Cut to Stockpile and maintain	m ³	5,000			
		b) Extra-over for:					
4.1.4	8.3.2	2) Hard Rock	m ³	1,155			
4.2	SANS 1200 DK	GABIONS AND PITCHING					
4.2.1	8.2.1	Surface preparation for bedding of gabions with cavities filled with approved excavated material or rock	m ²	360			
		Construct gabions using mesh type 80 with 2,7mm Class A Galvanised & PVC Coated wire					
4.2.2	8.2.2	1) Foundation mattresses of depth 0,5 m with diaphragms providing 2 m x 1 m cells, as per drawing	m ³	180			
4.2.3	8.2.2	2) Gabions of section 2.0m x 1,0 m x 1,0 m for walls as per drawing	m ³	150			
4.2.4	8.2.2	3) Gabions of section 1.0 m x 1,0 m x 1.0 m for walls as per drawing	m ³	60			
	8.2.4	Geotextile placed where ground water seepage occurs					
4.2.5		a) below foundation mattresses	m ²	360			
4.2.6		b) on slope behind wall	m ²	180			
4.3	SANS 1200 LE	STORMWATER POND OUTLET STRUCTURE					
4.3.1	PSLE 8.2.17	Construct detention pond outlet structure as per drawing nr. CT840/G711/00	No	3			
Total Carried Forward							

SECTION 4: DETENTION PONDS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
4.4	SANS 1200 DM	SURFACE FINISHES					
4.4.1	PSDM 8.3.13	c) Supply and install Concrete Grassblocks (100x570x380)	m²	1,026			
4.5	SANS 1200 D	EROSION CONTROL					
4.5.1	PSD 8.3.14	Supply and install bio-degradable jute netting to steep slopes of ponds Grassing or other Vegetation cover.	m²	4,000			
4.5.2	PSD 8.3.11	a) Hydroseeding	m²	12,000			

SECTION 5: WATER RETICULATION

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
5		SECTION 5: WATER RETICULATION					
5.1	SANS 1200 DB	EARTHWORKS (PIPE TRENCHES)					
		a) Excavate in all materials for trenches backfill, compact, and dispose of surplus material to:					
		Over and Up to					
		0,0m 1,5m					
5.1.1	PSDB 8.3.2	a) For pipes of nominal diameter upto 200mm	m	16,450			
		Existing services that intersect or adjoin a pipe trench					
5.1.2	PSDB 8.3.5	a) Services that intersect a trench	No	50			
5.2	SANS 1200 LB	BEDDING (PIPES)					
		Provision of bedding from trench excavation:					
5.2.1	8.2.1	a) Selected granular material	m ³	2,995			
5.2.2	8.2.1	b) Selected fill material	m ³	6,610			
		Supply of bedding by importation from commercial sources					
5.2.3	8.2.2.3	a) Selected granular material	m ³	995			
5.2.4	8.2.2.3	b) Selected fill material	m ³	2,205			
5.3	SANS 1200 DB	EXCAVATION ANCILLARIES					
		Make up deficiency in backfill material					
5.3.1	8.3.3.1	a) From other necessary excavations within site boundaries	m ³	1,000			
5.4	SANS 1200 L	MEDIUM PRESSURE PIPELINES					
		Supply, lay, joint, bed (class B), test and disinfect uPVC spigot and socket pipes with rubber ring joints and couplings:					
5.4.1	8.2.1	a) 110mm diam. Class 12	m	10,600			
Total Carried Forward							

SECTION 5: WATER RETICULATION

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
5.4.2	8.2.1	a) 160mm diam. Class 12	m	4,980			
5.4.3	8.2.1	a) 200mm diam. Class 12	m	900			
		Extra-over items for above for supply, lay and bed Specials complete with couplings:					
		1) Bends					
5.4.4	8.2.2	a) 110mm diameter x 11.25deg.	No	10			
5.4.5	8.2.2	b) 110mm diameter x 22.5deg.	No	25			
5.4.6	8.2.2	c) 110mm diameter x 45deg.	No	3			
5.4.7	8.2.2	d) 110mm diameter x 90deg.	No	11			
5.4.8	8.2.2	e) 160mm diameter x 11.25deg.	No	10			
5.4.9	8.2.2	f) 160mm diameter x 22.5deg.	No	12			
5.4.10	8.2.2	g) 160mm diameter x 45deg.	No	3			
5.4.11	8.2.2	h) 160mm diameter x 90deg.	No	1			
5.4.12	8.2.2	i) 200mm diameter x 22.5deg.	No	1			
5.4.13	8.2.2	j) 200mm diameter x 45deg.	No	1			
5.4.14	8.2.2	k) 160 mm - 110 mm Reducer	No	3			
		2) Tees					
5.4.15	8.2.2	a) 110mm equal tees	No	61			
5.4.16	8.2.2	b) 160mm equal tees	No	23			
5.4.17	8.2.2	c) 160mm - 110mm tees	No	71			
5.4.18	8.2.2	d) 160mm - 200mm tees	No	1			
5.4.19	8.2.2	e) 200mm equal tees	No	1			
5.4.20	8.2.2	f) 200mm - 110mm tees	No	8			
5.4.21	8.2.2	g) 200mm - 160mm tees	No	2			
Total Carried Forward							

SECTION 5: WATER RETICULATION

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		Extra over item for above for supply, lay, joint, bed and test Class 16 anti-clockwise closing resilient seal gate valves with socketed ends, or equivalent:					
		3) Isolating Valves					
5.4.22	8.2.3	a) 110mm diameter	No	160			
5.4.23	8.2.3	b) 160mm diameter	No	65			
5.4.24	8.2.3	c) 200mm diameter	No	5			
		4) Fire Hydrants					
5.4.25	8.2.3	a) Fire Hydrants as specified off a 110mm dia pipe	No	98			
5.4.26	8.2.3	b) Fire Hydrants as specified off a 160mm dia pipe	No	49			
5.4.27	8.2.3	c) Fire Hydrants as specified off a 160mm dia existing water pipe	No	8			
		5) Pressure Relief Valve					
5.4.28	8.2.3	a) Extra over item for above for supply, lay, joint, bed and test 150mm dia Pressure Relief Valve with flanged ends with 2x 150mm dia gate valves and all fittings as per Drawing CT840-G709-00, or equivalent:	No	1			
5.4.29	PSL 8.2.11	Anchor, thrust block and Pedestals, Class 25/19 concrete	m³	150			
		Valve and Hydrant Chambers					
5.4.30	8.2.13	a) Isolating valves	No	230			
5.4.31	8.2.13	b) Fire Hydrants	No	155			
5.4.32	8.2.13	c) Pressure Relief Valve as per Drawing CT840-G709-00	No	1			
5.4.33	PSL 8.2.16	Connection to existing water reticulation up to 200mm, inclusive of all cost	No	17			
5.5	SANS 1200 LF	ERF CONNECTIONS (WATER)					
Total Carried Forward							

SECTION 5: WATER RETICULATION

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		Provide erf connections complete					
		1) Off 110mm diameter pipes					
5.5.1	PSLF 8.2.1	a) Short (2 to 6m), double	No	431			
5.5.2	PSLF 8.2.1	b) Short (2 to 6m), single	No	36			
5.5.3	PSLF 8.2.1	c) Long (6 to 15m), double	No	426			
5.5.4	PSLF 8.2.1	d) Long (6 to 15m), Single	No	33			
		1) Off 160mm diameter pipes					
5.5.5	PSLF 8.2.1	a) Short (2 to 6m), double	No	128			
5.5.6	PSLF 8.2.1	b) Short (2 to 6m), single	No	15			
5.5.7	PSLF 8.2.1	c) Long (6 to 15m), double	No	167			
5.5.8	PSLF 8.2.1	d) Long (6 to 15m), Single	No	4			
		1) Off 200mm diameter pipes					
5.5.9	PSLF 8.2.1	a) Short (2 to 6m), double	No	16			
5.5.10	PSLF 8.2.1	c) Long (6 to 15m), double	No	10			
		1) Off Existing Water pipes - 160 diameter pipes					
5.5.11	PSLF 8.2.1	a) Short (2 to 6m), double	No	25			
5.5.12	PSLF 8.2.1	b) Short (2 to 6m), single	No	4			
5.5.13	PSLF 8.2.1	c) Long (6 to 15m), double	No	57			
5.5.14	PSLF 8.2.1	d) Long (6 to 15m), Single	No	1			
5.5.15	8.2.8	Markings	No	2,550			
5.5.16	PSDB 8.3.6.1	e) Reinststate road layerworks up to top base course level	m²	2,000			
Total Carried Forward To Summary						8515139	39

SECTION 6: SEWER RETICULATION

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
6		SECTION 6: SEWER RETICULATION					
6.1	SANS 1200 DB	EARTHWORKS (PIPE TRENCHES)					
		a) Excavate in all materials for trenches, backfill and dispose of surplus material					
		For pipes with nominal dia up to 200mm					
		Over and Up to					
6.1.1	PSDB 8.3.2	0,0m 1,5m	m	5,632			
6.1.2	PSDB 8.3.2	1,5m 2,5m	m	8,177			
6.1.3	PSDB 8.3.2	2,5m 3,5m	m	2,176			
6.1.4	PSDB 8.3.2	3,5m 4,5m	m	223			
		b) Extra - over item (a) above for:					
6.1.5	8.3.2	2) Hard rock excavation	m ³	200			
		Existing services that intersect or adjoin a pipe trench					
6.1.6	PSDB 8.3.5	a) Services that intersect a trench	No	25			
6.2	SANS 1200 LB	BEDDING (PIPES)					
		Provision of bedding from trench excavation					
6.2.1	8.2.1	a) Selected granular material	m ³	2,875			
6.2.2	8.2.1	b) Selected fill material	m ³	6,155			
		Provision of Bedding by Importation from Commercial sources					
6.2.3	8.2.2.3	a) Selected granular material	m ³	958			
6.2.4	8.2.2.3	b) Selected fill material	m ³	2,050			
6.3	SANS 1200 LD	SEWERS					
Total Carried Forward							

SECTION 6: SEWER RETICULATION

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		Supply, lay, joint, bed and test uPVC (heavy duty) Class 34 sewer pipes with spigot and socket rubber ring joints:					
6.3.1	8.2.1	a) 160 mm diameter, class 34	m	11,750			
6.3.2	8.2.1	a) 200 mm diameter, class 34	m	4,470			
		Manholes					
		Supply all materials and construct 1,05m diameter precast concrete manholes, complete.					
		a) Manholes with cover and frame of Heavy Duty ductile iron with hinged cover for depths:					
		Over and Up to					
6.3.3	8.2.3	0,0m 1,5m	No	172			
6.3.4	8.2.3	1,5m 2,5m	No	117			
6.3.5	8.2.3	2,5m 3,5m	No	35			
6.3.6	8.2.3	3.5m 4.5m	No	4			
6.4		ERF CONNECTION (SEWER)					
		Provide and install sewer erf connections complete:					
		1) Off 160mm diameter:					
6.4.1	8.2.6	a) Short (2 to 6m), single	No	676			
6.4.2	8.2.6	b) Long (6 to 15m), Single	No	1,313			
		1) Off 200mm diameter:					
6.4.3	8.2.6	a) Short (2 to 6m), single	No	268			
6.4.4	8.2.6	b) Long (6 to 15m), Single	No	285			
6.4.5	8.2.9	Marker posts	No	2,542			
6.4.6	8.2.11	Connection to existing 200mm sewer manhole inclusive of all costs	No	1			
6.4.7	8.2.11	Connection to existing 300mm sewer manhole inclusive of all costs	No	2			
Total Carried Forward							

SECTION 6: SEWER RETICULATION

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
6.4.8	8.2.11	Connection to existing 450mm sewer manhole inclusive of all costs	No	5			
		Encasing of pipes					
6.4.9	8.2.7	Concrete encasing of pipes up to 200mm: Minimum encasing of 150mm, 25Mpa concrete around pipe	m³	50			

SECTION 7: STORMWATER DRAINAGE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
7		SECTION 7: STORMWATER DRAINAGE					
7.1	SANS 1200 DB	EARTHWORKS (PIPE TRENCHES)					
		a) Excavate in all materials for trenches, backfill and dispose of surplus material					
		For pipes with nominal dia up to 450mm					
		Over and Up to					
7.1.1	PSDB 8.3.2	0,0m 1,5m	m	2,060			
7.1.2	PSDB 8.3.2	1,5m 2,5m	m	7,320			
7.1.3	PSDB 8.3.2	2,5m 3,5m	m	595			
		For pipes with nominal dia of 750mm					
		Over and Up to					
7.1.4	PSDB 8.3.2	1,5m 2,5m	m	435			
7.1.5	PSDB 8.3.2	2,5m 3,5m	m	178			
		b) Extra - over item (a) above for:					
7.1.6	8.3.2	2) Hard rock excavation	m ³	200.0			
7.2	SANS 1200 LB	BEDDING (PIPES)					
		Provision of bedding from trench excavation					
7.2.1	8.2.1	a) Selected granular material	m ³	2,005			
7.2.2	8.2.1	b) Selected fill material	m ³	3,535			
		Provision of Bedding by Importation from Commercial sources					
7.2.3	8.2.2.3	a) Selected granular material	m ³	670			
7.2.4	8.2.2.3	b) Selected fill material	m ³	1,180			
7.3	SANS 1200 LE	STORMWATER DRAINAGE					
		Supply, handle, lay, bed in Class B bedding, concrete pipe with spigot and socket joints					
Total Carried Forward							

SECTION 7: STORMWATER DRAINAGE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
7.3.1	8.2.1	b) 375 mm diameter Class 100D	m	7,660			
7.3.2	8.2.1	d) 450 mm diameter Class 100D	m	2,310			
7.3.3	8.2.1	d) 750 mm diameter Class 100D	m	615			
		d) Headwalls as per detail drawing CT840/G705/00 (excluding supply of reinforcing steel) to suit					
7.3.4	PSLE 8.2.8	i) a 450mm diameter stormwater pipe	No	7			
7.3.5	PSLE 8.2.8	ii) a 750mm diameter stormwater pipe	No	3			
	SANS 1200 G	Concrete (Structural)					
7.3.6	8.3.1	Supply high tensile steel bars for reinforced concrete structures	t	1.5			
	SANS 1200 LE	a) Manholes					
		i) Precast concrete for up to 450mm pipes - 1m dia manhole					
		Over and Up to					
7.3.7	PSLE 8.2.8	0,0m 1,5m	No	84			
7.3.8	PSLE 8.2.8	1,5m 2,5m	No	257			
7.3.9	PSLE 8.2.8	2,5m 3,5m	No	13			
		ii) Precast concrete for 750mm pipes - 1.5m dia manhole					
		Over and Up to					
7.3.10	PSLE 8.2.8	0,0m 1,5m	No	2			
7.3.11	PSLE 8.2.8	1,5m 2,5m	No	7			
7.3.12	PSLE 8.2.8	2,5m 3,5m	No	2			
		b) Double kerb inlet structure complete as per drawings no. CT840/G705/00 with heavy duty cover and frame:					
		Over and Up to					
Total Carried Forward							

CONTRACT NO: 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

TENDER

SECTION 7: STORMWATER DRAINAGE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
7.3.13	PSLE 8.2.8	0,0m 1,5m	No	250		
7.3.14	PSLE 8.2.8	1,5m 2,5m	No	20		
		Subsurface drains				
7.3.15	PSLE 8.2.14	Excavation for subsoil drains	m3	5 100		
7.3.16	PSLE 8.2.15	Supply and Install Subsurface Drains According To Drawing CT840/G706/00	m	10 000		
7.3.17	PSLE 8.2.16	Connecting subsurface drains to manholes, kerb inlets, etc	No	360		
Total Carried Forward To Summary						14 442 773,26

SECTION 7: STORMWATER DRAINAGE

ITEM NO	PAYMENT	DESCRIPTION		UNIT	QTY	RATE	AMOUNT	
							R	c
Brought Forward								
7.3.13	PSLE 8.2.8	0,0m	1,5m	No	250			
7.3.14	PSLE 8.2.8	1,5m	2,5m	No	20			
		Subsurface drains						
7.3.15	PSLE 8.2.14	Excavation for subsoil drains		m3	5,100			
7.3.16	PSLE 8.2.15	Supply and Install Subsurface Drains According To Drawing CT840/G705/00		m	10,000			
7.3.17	PLSE 8.2.16	Connecting subsurface drains to manholes, kerb inlets, etc		No	360			

SECTION 8: ROADWORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
8		SECTION 8: ROADWORKS					
8.1	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)					
		Treatment of roadbed					
		a) Roadbed preparation and compaction of material to a depth of 150mm:					
8.1.1	8.3.3	2) Roads: to minimum of 93% MOD AASHTO maximum density	m ³	16,350			
		a) Preparation and compaction of in-situ material for sidewalks to a depth of 150mm:					
8.1.2	8.3.3	2) Sidewalks: to minimum of 93% MOD AASHTO maximum density	m ³	9,970			
		Cut to fill					
8.1.3	8.3.4	a) Cut to fill on site compacted to 93% MOD AASHTO maximum density	m ³	43,700			
		Selected layer compacted to 93% of modified AASHTO maximum density					
8.1.4	8.3.5	a) Roads: 150mm G7 natural material compacted to 95% of MOD AASHTO maximum density	m ³	5,000			
8.1.5	8.3.5	b) Roads: 150mm G9 natural material compacted to 95% of MOD AASHTO maximum density	m ³	2,540			
		Cut to stockpile from:					
8.1.6	8.3.7	a) Soft excavations	m ³	20,000			
		Stockpile to fill from:					
8.1.7	8.3.7	a) Soft excavations	m ³	20,000			
		Cut to spoil from:					
8.1.8	8.3.6	c) Hard excavations	m ³	2,000			
8.1.9	PSDM 8.3.17	a) Shaping and trimming of road reserve	m ²	24,000			
Total Carried Forward To Summary						2421372	10

SECTION 9: SUBBASE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
9		SECTION 9: SUBBASE					
9.1	SANS 1200 ME	SUBBASE					
		Construct Subbase with material from commercial sources					
9.1.1	8.3.3	a) Roads: 150mm G5 natural material compacted to 95% of MOD AASHTO maximum density	m ³	16,350			
Total Carried Forward To Summary						5519433	00

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
10		SECTION 10: BASE					
10.1	SANS 1200 MF	BASE					
		Construct base with material from commercial sources:					
10.1.1	8.3.3	a) i) Roads: 150mm G4 natural material compacted to 98% of MOD AASHTO maximum density	m ³	16,350			
10.1.2	8.3.3	a) ii) Sidewalks: 100mm thick for road reserves with a width of 10 and 12 meters wide, to be constructed with G5 natural material compacted to 95% of MOD AASHTO maximum density	m ³	5,180			
10.1.3	8.3.3	a) iii) Sidewalks: 150mm thick for road reserves with a width of 16 meters wide, to be constructed with G5 natural material compacted to 95% of MOD AASHTO maximum density	m ³	1,755			
Total Carried Forward To Summary						11 115 047	65

SECTION 11: ASPHALT BASE AND SURFACING

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
11		SECTION 11: ASPHALT BASE AND SURFACING					
11.1	SANS 1200 MH	ASPHALT BASE AND SURFACING					
		Prime coat					
11.1.1	8.5.1	Prime coat using type MC-30 medium curing applied at a rate of 0,7 l/m2 of net bitumen.	m ²	134,420			
		Asphalt Surfacing					
11.1.2	8.5.4	i) 40mm thick continuous graded medium mix using 60/70 penetration grade bitumen for roads	m ²	89,000			
11.1.3	8.5.4	ii) 30mm thick continuous graded medium mix using 60/70 penetration grade bitumen for sidewalks	m ²	46,820			
Total Carried Forward To Summary						14'305'397	40

SECTION 12: KERBING AND CHANNELLING

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
12		SECTION 12: KERBING AND CHANNELLING					
12.1	SANS 1200 MK	KERBING AND CHANNELLING					
		Supply and lay kerbing and edging complete with benching					
12.1.1	8.2.1	a) Type CK5 Mountable kerbing with radius greater than 20m	m	14,135			
12.1.2	8.2.1	b) Type CK5 Mountable kerbing with radius less than 20m	m	340			
12.1.3	8.2.1	c) Type MK10 Mountable kerbing with radius greater than 20m	m	10,855			
12.1.4	8.2.1	d) Type MK10 Mountable kerbing with radius less than 20m	m	240			
12.1.5	8.2.1	e) Type E1 edging with radius greater than 20m	m	18,680			
12.1.6	8.2.1	f) Type E1 edging with radius less than 20m	m	3,300			
12.1.7	8.2.1	g) Type BK2 kerbing with radius greater than 20m	m	195			
12.1.8	8.2.1	h) Type BK2 kerbing with radius less than 20m	m	3,125			
12.1.9	8.2.1	k) Type C1/C1 combination kerbing (V-channel) as per detail, with radius greater than 20m	m	170			
12.1.10	8.2.1	n) Type BK2/C4 combination kerbing with radius less than 20m	m	1,155			
		Ancillaries:					
		Construct 1m long 25MPa cast in situ kerbing transition sections:					
12.1.11	8.2.6.1	a) Type CK5 kerbing to BK2 barrier kerbing	No	140			
12.1.12	8.2.6.1	a) Type CK5 kerbing to BK2/C4 combination channel kerbing	No	140			
12.1.13	8.2.6.1	b) Type MK10 kerbing to BK2 barrier kerbing	No	140			
12.1.14	8.2.6.1	c) Type CK5 kerbing to Type MK10 kerbing	No	140			
Total Carried Forward To Summary						8358401	15

CONTRACT NO: 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

TENDER

SECTION 13: ANCILLARY ROADWORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
13		SECTION 13: ANCILLARY ROADWORKS				
13.1	SANS 1200 MM	PERMANENT ROAD SIGNS				
		Statutory signs supplied and erected complete on 80mm diameter galvanised steel supports:				
13.1.1	8.3.6	i) 600mm Type R1 Stop sign	No	180		
13.1.2	8.3.6	ii) 600mm Type W332 Speed hump sign	No	100		
13.1.3	8.3.6	iii) 600mm Type R310 Minibus reservation sign	No	6		
13.2		CONSTRUCTION OF SPEED HUMP AS PER DRAWING CT840/G702/00 COMPLETE, INCLUDING SAW CUTTING (20mm DEPTH), BREAKING OUT & REMOVE EXISTING. TACK COAT & ASPHALTING				
13.2.1		Speed hump with a 7.4m road width	No	12		
13.2.2		Speed hump with a 5.5m road width	No	17		
13.2.3		Speed hump with a 5m road width	No	21		
13.3		STREET NAME KERBS				
13.3.1	8.3.6	Street Name Kerb as per drawing R20 in City of Cape Town Standard Details	No	200		
13.4		ROAD MARKINGS				
		Non-reflectorized paint applied at nominal rate of 0,42 l/m ² for:				
		a) White lines (broken or unbroken)				
13.4.1	8.4.1	i) 100mm wide	m	1 800		
13.4.2	8.4.1	ii) 200mm wide	m	8 900		
13.4.3	8.4.1	iii) 300mm wide	m	1 200		
		b) Yellow lines (broken or unbroken)				
13.4.4	8.4.1	i) 100mm wide	m	200		
13.4.5	8.4.1	c) Yellow characters and symbols	m ²	200		
13.4.6	8.4.1	c) White characters and symbols	m ²	400		
Total Carried Forward To Summary						1023 122,86

SECTION 13: ANCILLARY ROADWORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
13		SECTION 13: ANCILLARY ROADWORKS					
13.1	SANS 1200 MM	PERMANENT ROAD SIGNS					
		Statutory signs supplied and erected complete on 80mm diameter galvanised steel supports:					
13.1.1	8.3.6	i) 600mm Type R1 Stop sign	No	180			
13.1.2	8.3.6	ii) 600mm Type W332 Speed hump sign	No	100			
13.1.3	8.3.6	iii) 600mm Type R310 Minibus reservation sign	No	6			
13.1.4		Construction of Speed hump as per drawing CT840/G702/00	No	50			
		Street Name Kerbs					
13.1.5	8.3.6	Street Name - Kerbs	No	200			
13.2		ROAD MARKINGS					
		Non-reflectorized paint applied at nominal rate of 0,42 l/m2 for:					
		a) White lines (broken or unbroken)					
13.2.1	8.4.1	i) 100mm wide	m	1,800			
13.2.2	8.4.1	ii) 200mm wide	m	8,900			
13.2.3	8.4.1	iii) 300mm wide	m	1,200			
		b) Yellow lines (broken or unbroken)					
13.2.4	8.4.1	i) 100mm wide	m	200			
13.2.5	8.4.1	c) Yellow characters and symbols	m ²	200			
13.2.6	8.4.1	c) White characters and symbols	m ²	400			
Total Carried Forward To Summary							

SECTION 14: CABLE DUCTS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
14		SECTION 14: CABLE DUCTS					
14.1	SANS 1200 LC	CABLE DUCTS					
		Excavation					
		a) Excavate in all materials for trenches, select, backfill, compact and dispose of all surplus material for ducts:					
		i) Three 110mm and one 160mm diameter for depths					
14.1.1	8.2.2	Exceeding 0m but not exceeding 1m	m	4,290			
14.2	SANS 1200 LB	BEDDING (PIPES)					
		Supply only of bedding from trench excavation					
14.2.1	8.2.1	a) selected granular material	m ³	1,305			
14.2.2	8.2.1	b) selected fill material	m ³	2,260			
14.3	SANS 1200 LC	CABLE DUCTS					
		a) Supply and lay the following class 34 uPVC ducts on a class C bedding and prove, including provision of draw wire:					
14.3.1	PSLC 8.2.5	i) 110mm diameter pipes	m	8,310			
14.3.2	PSLC 8.2.5	ii) 160mm diameter pipes	m	1,070			
14.3.3	PSLC 8.2.8	a) Cable route markers, complete, installed, and record submitted	No.	227			
Total Carried Forward To Summary						809057	26

		Page No.		Amount	
				R	c
	SUMMARY				
1	PRELIMINARY AND GENERAL			22 716 526	59
2	SITE CLEARANCE			335 657	15
3	EARTHWORKS			12 244 865	00
4	DETENTION PONDS			1 865 118	85
5	WATER RETICULATION			8 515 139	39
6	SEWER RETICULATION			10 086 832	77
7	STORMWATER DRAINAGE			14 442 773	26
8	ROADWORKS			2 421 372	10
9	SUBBASE			5 519 433	00
10	BASE			11 115 067	65
11	ASPHALT BASE AND SURFACING			14 305 397	40
12	KERBING AND CHANNELLING			8 358 401	15
13	ANCILLARY ROADWORKS			1 023 122	86
14	CABLE DUCTS			809 057	26
	SUB-TOTAL		R	113 758 764	43
	CONTINGENCIES				
	Allow the sum of 10% (ten percent) of the above Sub-total for Contingencies			11 375 874	44
	R to be spent as the Employer's Agent may direct and to be deducted in whole or in part if not required.				
	SUB-TOTAL		R	125 134 618	87
	VALUE ADDED TAX				
	ADD: VAT at the rate of 15%		R	18 770 192	83
	Carried to part C1.1 Form of Offer and Acceptance		R	143 904 811	70

DECLARATION (In respect of completeness of Tender)

City of Cape Town
Tower Block, Civic Centre
12 Hertzog Boulevard
CAPE TOWN

I/we, the undersigned, do hereby declare that these are the properly priced Bills of Quantities forming Part C2.2 of this Contract Document containing 25 pages in consecutive order upon which my/our tender for **TENDER NO. 234Q/2018/19: CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT** has been based. If I/we have submitted a printed version of the Bills of Quantities, I/we warrant that no amendments have been made to it from the original, other than amendments issued in any Addenda in terms of Clause F.3.2 in Part T1.2 Tender Data.

SIGNATURE TENDERER/S

2019.02.25

DATE

Part C3: Scope of Work

	Pages
C3.1 Description of the Works.....	152-153
C3.2 Engineering / Design.....	154-157
C3.3 Procurement.....	158-159
C3.4 Construction.....	160-202
C3.5 Management.....	203-207
C3.6 Annexes	208-216

Status

Should any requirement or provision in the parts of the Scope of Work conflict with any requirement of any Standardised Specification, particular specification or any drawings, the order of precedence, unless otherwise specified, is:

Drawings
Scope of Work (Parts C3.1, C3.4, C3.5 and C3.6)
Particular Specifications
SANS Standardised Specifications

C3.1 Description of the Works

CONTENTS

- 3.1.1 EMPLOYER'S OBJECTIVES
- 3.1.2 OVERVIEW OF THE WORKS
- 3.1.3 EXTENT OF THE WORKS
- 3.1.4 LOCATION OF THE WORKS
- 3.1.5 TEMPORARY WORKS

3.1.1 EMPLOYER'S OBJECTIVES

City of Cape Town DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION Directorate wishes to construct Engineering services to approximately 2469 medium density erven in Macassar for beneficiaries who qualify for the National Housing Subsidy in terms of the Provincial Housing Subsidy Programme. It is also the objective of the Client to deliver this public infrastructure using labour-intensive methods as far as possible. Labour intensive works shall comprise the activities described in the Labour Intensive Specification or any other activities as may be identified by the Contractor.

3.1.2 OVERVIEW OF THE WORKS

The works in this contract include bulk earthworks for the formation of a suitable platform (including stormwater management structures (detention ponds)), earthworks and layerworks for the construction of a surfaced road network (with kerbing and channelling). Also included is the provision of all internal civil infrastructure (sewer, water, stormwater etc) with erf connections for sewer and water (water connections individually metered) and all temporary works required for the construction of the permanent works.

3.1.3 EXTENT OF THE WORKS

The scope of the project is to construct the following:

- The internal road network comprises construction of the following:
 - Asphalt surfaced roads (8m, 10m, 12m to 16m Road Reserves)
 - Cable ducts, limited signage and other road furniture as required
- The construction of surfaced roads will generally comprise the following:
 - 150mm selected layer (G7) compacted to 93% MOD AASHTO
 - 150mm subbase (G5) compacted to 95% MOD AASHTO
 - 150mm base (G4) compacted to 98% MOD AASHTO
 - 40mm continuously graded asphalt surfacing
- The construction of stormwater drainage will generally comprise the following:
 - Piped stormwater of between 375mm and 750mm diameter
 - Kerb inlets, manholes, catchpits and headwalls for pipes between 300mm and 600mm diameter.
 - Three stormwater detention facilities including outlet structures and low flow channels and gabion retaining walls.
- The construction of water reticulation will generally comprise the following:
 - uPVC pipes of 110mm, 160mm and 200mm diameter
 - Approximately 2469 metered erf connections
- The construction of sewer reticulation will generally comprise the following:
 - uPVC pipes 160mm and 200mm in diameter
 - Approximately 2469 110mm diameter erf connections

3.1.4 LOCATION OF THE WORKS

The location of the works will be the portion of land to the South of the N2 and to the East of Kramat Rd in Macassar and adjacent to the Shell Ultra City False Bay. The site comprises of erf nr 2633, portion 1 of erf 3968 and portion 2 of erf 3968. The location of the site is shown on the Site Locality plan issued along with the procurement documentation. Indicative co-ordinates of the site are as follows:

-34.053491, 18.757321

3.1.5 TEMPORARY WORKS

a) Other services (telkom electricity etc.) / protection of existing works

Items have been allowed for in the Bill of Quantities for dealing with and protecting existing services where they are known. The Contractor will, however, ensure that prior to construction all the necessary Record Drawings and Way-leaves for all services have been obtained and verified on site by the relevant Service Providers in his presence. The Contractor must request in writing that the relevant official indicates the said services at least 48 hours prior to the commencement of the works.

The Contractor shall take whatever precautions are required to protect all existing services from damage during the period of the Contract. Any damage to existing services indicated by the relevant service providers or other damage as a result thereof, shall be for the Contractor's account.

Photographical evidence shall be taken by the contractor before any work is done in close proximity to existing property, services, structures or any other infrastructure.

b) Survey beacons and benchmarks

The Contractor shall be responsible for the preservation of all land survey, erf or other pegs, benchmarks or beacons. If damage or disturbance of any such pegs or beacons is caused due to vandalism, the operations of the Contractor or his subcontractors, the pegs are to be replaced by a Registered Land Surveyor at the cost of the Contractor. Benchmarks will be replaced by the Engineer at the Contractor's expense.

Information regarding the position of all such pegs will be made available to the Contractor by the Engineer on request.

The Contractor is to ensure that no spoil is placed over an erf peg or benchmarks and that they are adequately protected for the full duration of the Contract.

Where disturbances of boundary pegs is unavoidable due to excavation of other operations adjacent to pegs, the Contractor shall advise the Engineer or his Representative immediately, agreement is to be reached that disturbance of the peg is unavoidable and a strict record of such disturbed pegs is to be kept. Such pegs are to be replaced by a Registered Land Surveyor as described above and the Contractor is to submit proof of the cost of replacement of pegs. The Contractor will be reimbursed on a basis pro-rata to the total cost of peg replacement determined on completion of the Works.

c) Tidying up of the works

The Contractor shall take note that the progressive and systematic finishing and tidying will form an essential part of this contract. On no account shall spoil, stockpiles, rubble, materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily be a hindrance or impede the activities of other the public or the Client. In the event of this occurring, the Employer shall have the right to withhold payment for as long as may be necessary in respect of the relevant works in the area(s) concerned.

Upon completion of the Works, or any portion thereof, the ground, fences, gates and any structures that have been interfered with are to be carefully restored to their original condition or better and all rubbish, tools, tackle, plant and materials must be removed, so as to leave the Site in a clean and orderly condition. No additional payment will be made for such work.

d) Temporary traffic control

The Contractor will be responsible for the design and implementation of all temporary traffic control measures where the works shall impact the public road network. To this end, all traffic control measures implemented by the Contractor shall be in accordance with The South African Road Traffic Signs Manual, Volume 2, Chapter 13.

e) Shoring of excavations

The Contractor will be required to make allowance for shoring and protection against collapse of all excavations deeper than 1.5m from the surrounding natural ground level. Alternatively battering of side slopes of the excavation will be allowed.

C3.2 Engineering / Design

CONTENTS

3.2.1	DESIGN SERVICES AND ACTIVITY MATRIX
3.2.2	EMPLOYER'S DESIGN
3.2.3	DESIGN BRIEF
3.2.4	DRAWINGS
3.2.5	DESIGN PROCEDURES

3.2.1 DESIGN SERVICES AND ACTIVITY MATRIX

• Concept, feasibility and overall process	-	Employer
• Basic engineering and detail layouts to tender stage	-	Employer
• Final design to approved for construction stage	-	Employer
• Temporary Works and Wayleaves	-	Contractor
• Completion of all works	-	Contractor
• Preparation of as-built data	-	Contractor

3.2.2 EMPLOYER'S DESIGN

The Consultants are responsible for the design of all permanent works and not the temporary works utilized by the Contractor. The Contractor shall be solely responsible for ensuring the safety and efficacy of his designs for temporary works. For those portions of the work scheduled as 'Design and Build', the Consultant must still approve in writing all designs before construction commences, although this will not relieve the Contractor of his responsibilities relating thereto.

3.2.3 DESIGN BRIEF

Not applicable to this contract.

3.2.4 DRAWINGS

The drawings listed below are attached to give an overview of the project. Additional construction drawings will, in terms of Clause 5.9 of the General Conditions of Contract (2015), be issued to the Contractor by the Engineer/ Employer on commencement date and thereafter from time to time as required.

The drawings that form part of the tender document are to be used for tender purposes only. On award of the Contract, the successful bidder will receive three (3) sets of un-reduced paper prints of each drawing free of charge. Any additional prints will be for the account of the Contractor.

Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the Engineer. The Engineer shall supply all figured dimensions omitted from the drawings.

Any information in possession of the Contractor that the Engineer requires in order to complete his as-built drawings shall be supplied to the Engineer before a Certificate of Completion will be issued.

The following drawings are applicable to the contract and are issued with this tender document and will form part of the Contract Documents as **Volume 4**.

SURVEY			
CT840/SUR100/00	LAYOUT SHEETS	A1	00
CT840/SUR101/00	EXISTING CONTOURS (SHEET 1 OF 2)	A1	00
CT840/SUR102/00	EXISTING CONTOURS (SHEET 2 OF 2)	A1	00
CT840/SUR103/00	PLATFORM CONTOURS (SHEET 1 OF 2)	A1	00
CT840/SUR104/00	PLATFORM CONTOURS (SHEET 2 OF 2)	A1	00
CT840/SUR105/00	EARTHWORKS (SHEET 1 OF 2)	A1	00
CT840/SUR106/00	EARTHWORKS (SHEET 2 OF 2)	A1	00
ROAD			
CT840/R200/00	PROPOSED ROAD LAYOUT (SHEET 1 OF 5)	A1	00
CT840/R201/00	PROPOSED ROAD LAYOUT (SHEET 2 OF 5)	A1	00
CT840/R202/00	PROPOSED ROAD LAYOUT (SHEET 3 OF 5)	A1	00
CT840/R203/00	PROPOSED ROAD LAYOUT (SHEET 4 OF 5)	A1	00
CT840/R204/00	PROPOSED ROAD LAYOUT (SHEET 5 OF 5)	A1	00
CT840/R205/00	KERB LAYOUT PLAN (SHEET 1 OF 5)	A1	00
CT840/R206/00	KERB LAYOUT PLAN (SHEET 2 OF 5)	A1	00
CT840/R207/00	KERB LAYOUT PLAN (SHEET 3 OF 5)	A1	00
CT840/R208/00	KERB LAYOUT PLAN (SHEET 4 OF 5)	A1	00
CT840/R209/00	KERB LAYOUT PLAN (SHEET 5 OF 5)	A1	00
CT840/R210/00	PROPOSED ROAD MARKINGS (SHEET 1 OF 5)	A1	00
CT840/R211/00	PROPOSED ROAD MARKINGS (SHEET 2 OF 5)	A1	00
CT840/R212/00	PROPOSED ROAD MARKINGS (SHEET 3 OF 5)	A1	00
CT840/R213/00	PROPOSED ROAD MARKINGS (SHEET 4 OF 5)	A1	00
CT840/R214/00	PROPOSED ROAD MARKINGS (SHEET 5 OF 5)	A1	00
CT840/R238/00	LAYOUT OF PROPOSED BUS ROUTES (SHEET 1 OF 2)	A1	00
CT840/R239/00	LAYOUT OF PROPOSED BUS ROUTES (SHEET 2 OF 2)	A1	00
STORMWATER			
CT840/SW300/00	PROPOSED STORMWATER LAYOUT SHEET (1 OF 5)	A1	00
CT840/SW301/00	PROPOSED STORMWATER LAYOUT SHEET (2 OF 5)	A1	00
CT840/SW302/00	PROPOSED STORMWATER LAYOUT SHEET (3 OF 5)	A1	00
CT840/SW303/00	PROPOSED STORMWATER LAYOUT SHEET (4 OF 5)	A1	00
CT840/SW304/00	PROPOSED STORMWATER LAYOUT SHEET (5 OF 5)	A1	00
CT840/SW305/00	PROPOSED STORMWATER DETENTION PONDS	A1	00

CT840/SW306/00	TYPICAL CROSS SECTIONS FOR STORMWATER DETENTION PONDS OF CATCHMENT AREA 1	A3	00
CT840/SW307/00	TYPICAL CROSS SECTIONS FOR STORMWATER DETENTION PONDS OF CATCHMENT AREA 2	A3	00
CT840/SW308/00	TYPICAL CROSS SECTIONS FOR STORMWATER DETENTION PONDS OF CATCHMENT AREA 3	A3	00
SEWER			
CT840/S400/00	PROPOSED SEWER LAYOUT AND CONNECTION TO EXISTING (SHEET 1 OF 5)	A1	00
CT840/S401/00	PROPOSED SEWER LAYOUT AND CONNECTION TO EXISTING (SHEET 2 OF 5)	A1	00
CT840/S402/00	PROPOSED SEWER LAYOUT AND CONNECTION TO EXISTING (SHEET 3 OF 5)	A1	00
CT840/S403/00	PROPOSED SEWER LAYOUT AND CONNECTION TO EXISTING (SHEET 4 OF 5)	A1	00
CT840/S404/00	PROPOSED SEWER LAYOUT AND CONNECTION TO EXISTING (SHEET 5 OF 5)	A1	00
WATER			
CT840/W500/00	PROPOSED WATER LAYOUT (SHEET 1 OF 5)	A1	00
CT839/W501/00	PROPOSED WATER LAYOUT (SHEET 2 OF 5)	A1	00
CT840/W502/00	PROPOSED WATER LAYOUT (SHEET 3 OF 5)	A1	00
CT839/W503/00	PROPOSED WATER LAYOUT (SHEET 4 OF 5)	A1	00
CT839/W504/00	PROPOSED WATER LAYOUT (SHEET 5 OF 5)	A1	00
GENERAL			
CT840/G700/00	TYPICAL DETAIL OF OUTLET KERB AT LOW POINTS IN ROADS	A3	00
CT840/G701/00	TYPICAL ROAD DETAILS (SHEET 1 OF 2)	A1	00
CT840/G702/00	TYPICAL ROAD DETAILS (SHEET 2 OF 2)	A1	00
CT840/G703/00	STREET NAMES SIGN	A3	00
CT840/G704/00	TYPICAL SEWER DETAILS	A1	00
CT840/G705/00	TYPICAL STORMWATER DETAILS (SHEET 1 OF 2)	A1	00
CT840/G706/00	TYPICAL STORMWATER DETAILS (SHEET 2 OF 2)	A1	00
CT840/G707/00	TYPICAL WATER DETAIL (SHEET 1 OF 2)	A1	00
CT840/G708/00	TYPICAL WATER DETAIL (SHEET 2 OF 2)	A3	00
CT840/G709/00	PRV TYPICAL DETAIL	A3	00
CT840/G706/00	TYPICAL TERRAFORCE RETAINING WALL DETAIL	A3	00
CT840/G707/00	TYPICAL DETENTION POND OUTLET STRUCTURE	A1	00

3.2.5 DESIGN PROCEDURES

The only design responsibility assigned to the Contractor under this contract is for the design work related temporary works and support of excavations. There is no requirement to submit these designs to the Employer or the Employer's agent for approval. Temporary works will however be inspected by the appointed Occupation Health and Safety Client Agent to ensure compliance with recognized industry norms and standards.

It is assumed that all temporary works designed and constructed by the Contractor has been designed and supervised by a competent person with the necessary qualifications and experience. It is also assumed the Contractor has the necessary indemnity insurance in place to cover for any liability that may occur as a result of the failure of such temporary works.

C3.3 Procurement

CONTENTS

- 3.3.1 PREFERENTIAL PROCUREMENT PROCEDURES
- 3.3.2 SUB-CONTRACTING

3.3.1. PREFERENTIAL PROCUREMENT PROCEDURES

The Works shall be executed in accordance with the conditions associated with the granting of preferences detailed in the **Preference Schedule** where preferences are granted in respect of B-BBEE contribution.

Financial penalties, as described in the **Preference Schedule**, shall be applied in the event that the Contractor is found to have breached any of the conditions contained in the **Preference Schedule** (unless proven to be beyond the control of the Contractor).

Notwithstanding the application of penalties, the Contractor's attention is drawn to other sanctions that may be applied by the Employer (listed in the **Preference Schedule**) with due consideration to the circumstances.

3.3.2. SUB-CONTRACTING

3.3.2.1 Monitoring the use of sub-contractors

Notwithstanding the restriction on sub-contracting as described on the **Preference Schedule**, it is recognised that sub-contracting is an integral part of construction, which the conditions of contract make provision for.

In order, however, to comply with the requirements of the **Preference Schedule**, the Contractor shall submit to the Employer's Agent, on a monthly basis, a **B-BBEE Sub-contract Expenditure Report**. The format of this report is provided in Annex 2 attached.

The Contractor shall submit to the Employer's Agent documentary evidence in accordance with the applicable codes of good practice, of the B-BBEE status level of every sub-contractor employed by the Contractor. Until such time as documentary evidence as described above has been submitted to the Employer's Agent, a sub-contractor shall be deemed to be a non-compliant contributor.

The Contractor shall furthermore, on the written request of the Employer's Agent, provide documentary evidence showing the value of work sub-contracted to any or all of the sub-contractors employed by the Contractor.

3.3.2.2 Procedure for the selection of sub-contractors/suppliers

Where monetary allowances for provisional sums or prime costs items have been provided in the Bills of Quantities, and where the work or items to which the allowances relate are to be executed/supplied by sub-contractors/suppliers, then the following selection process shall be followed in respect of the required sub-contractors/suppliers:

Where the monetary allowance is less than or equal to R200 000, the Contractor shall invite three quotations from suitably qualified sub-contractors/suppliers for the required work or items. The selection of the three sub-contractors/suppliers shall be in consultation with, and to the approval of the Employer's Agent. The evaluation of the quotations received must include a preference points system as described in F.3.11 of the Tender Data.

Where the monetary allowance is in excess of R200 000, an open competitive tender process shall be followed in respect of the selection of a sub-contractor/supplier for the required work or items. In such circumstances, tender documentation will be prepared by the Employer's Agent in consultation with and to the approval of the Contractor, invitations to tender will be advertised in the media by the Employer's Agent on behalf of the Contractor, and a sub-contractor/supplier will be selected from the responses received, by the Contractor and Employer's Agent in consultation. The evaluation of the offers received must include a preference points system as described in F.3.11 of the Tender Data. The Contractor must

satisfy itself that the selected sub-contractor/supplier can meet the requirements of the sub-contract /supply agreement and may, on reasonable grounds, elect not to employ a particular sub-contractor/supplier.

In both instances above (less than or equal to R200 000 or in excess of R200 000), the contractual relationship between the Contractor and sub-contractor/supplier shall be as described in the conditions of contract.

C3.4 Construction

CONTENTS

- 3.4.1 WORKS SPECIFICATIONS
- 3.4.2 PLANT AND MATERIALS
- 3.4.3 CONSTRUCTION EQUIPMENT
- 3.4.4 EXISTING SERVICES
- 3.4.5 SITE ESTABLISHMENT
- 3.4.6 SITE USAGE
- 3.4.7 PERMITS AND WAY LEAVES
- 3.4.8 ALTERATIONS, ADDITIONS, EXTENSIONS AND MODIFICATIONS TO EXISTING WORKS
- 3.4.9 INSPECTION OF ADJOINING PROPERTIES
- 3.4.10 WATER FOR CONSTRUCTION PURPOSES
- 3.4.11 SURVEY CONTROL AND SETTING OUT OF THE WORKS
- 3.4.12 LOCAL PRODUCTION AND CONTENT
- 3.4.13 EMPLOYMENT OF SECURITY PERSONNEL
- 3.4.14 UNIVERSAL ACCESS

3.4.1 WORKS SPECIFICATIONS

3.4.1.1 APPLICABLE SANS 1200 STANDARDS

Although not bound in or issued with this document, the following standardised specifications shall form part of the Contract, and, notwithstanding the provisions of clause 2.2 SANS 1200A, the editions specified below will apply:

SANS 1200A	1986	General
SANS 1200AB	1986	Engineer's Office
SANS 1200AD	1986	General (Small dams)
SANS 1200C	1982	Site Clearance
SANS 1200D	1990	Earthworks
SANS 1200DA	1990	Earthworks (Small works)
SANS 1200DB	1989	Earthworks (Pipe Trenches)
SANS 1200DE	1984	Small earth dams
SANS 1200DM	1981	Earthworks (Road and Subgrade)
SANS 1200DK	1996	Gabions and Pitching
SANS 1200G	1982	Concrete (structural)
SANS 1200GA	1982	Concrete (Small works)
SANS 1200 GB	1984	Concrete (ordinary buildings)
SANS 1200 H	1990	Structural Steelwork
SANS 1200L	1983	Medium Pressure Pipe Lines
SANS 1200LB	1983	Bedding (Pipes)
SANS 1200LC	1981	Cable Ducts
SANS 1200LD	1982	Sewers
SANS 1200LE	1982	Stormwater Drainage
SANS 1200LF	1983	Erf Connections (Water)
SANS 1200M	1996	Roads (General)
SANS 1200ME	1981	Subbase
SANS 1200MF	1981	Base

SANS 1200MH	1996	Asphalt Base and Surfacing
SANS 1200MJ	1984	Segmented paving
SANS 1200MK	1983	Kerbing and Channelling
SANS 1200MM	1984	Ancillary Roadworks

3.4.1.2 APPLICABLE NATIONAL AND INTERNATIONAL STANDARDS

No other standards than those mentioned in 3.4.1 above are deemed to be applicable.

3.4.1.3 PARTICULAR / GENERIC SPECIFICATIONS

In certain instances, the Standard Specifications listed in 3.4.1 above allow a choice to be specified in the Scope of Work between alternative materials or methods of construction. Allowance is also made for additional requirements to be specified to suit each particular contract. Details of such alternatives of additions are contained in this part of the Scope of Works. In addition it contains some supplementary specifications required for this particular contract. Subclauses referred to are those in the relevant Standardised Specification.

The number of each clause and each payment item in this part of the project specifications consists of the prefix PS followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or a payment item which does not form part of a clause or a payment item in the standard specifications and which is included here, is also prefixed by PS followed by a new number. The new numbers follow on the last clause or item number used in the relevant section of the standard specifications.

PSA GENERAL

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSA PSA 2.4	<u>General</u> Interpretations: Abbreviations <i>Add to subclause 2.4(b):</i> "The acronym 'MAMDD' referred to throughout the document stands for Modified AASHTO Maximum Dry Density." <i>Add after subclause 2.4(b):</i> "References to South African National Standards or SANS shall be interpreted as references to South African Bureau of Standards or SABS and the two terms are used interchangeably." PSA 3.4 Materials: Quality <i>Substitute the second sentence of subclause 3.1 with:</i> "Materials shall bear the official mark of the appropriate standard" <i>Add to the end of the clause:</i> "The Contractor is responsible for the cost of all testing to ascertain that materials do comply with the specific minimum requirements of the applicable standards. No additional payment will be made for such verification tests. The Contractor shall inform the Engineer of any control testing to be done at least 48 hours prior to the commencement of the tests and must allow time in his programme for necessary testing and processing of results.	

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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment												
PSA 5.1	Construction: Survey <i>Substitute the first paragraph in subclause 5.1.1 with the following:</i> "Setting out the works is the sole responsibility of the Contractor and shall be done from benchmarks as indicated on construction drawings. The Contractor shall, within 2 (two) weeks after the site has been handed over to him, ascertain himself of the correctness of all pegs and benchmarks. Any discrepancies must be immediately reported in writing to the Engineer. Any costs or subsequent costs arising from discrepancies not reported shall be the sole responsibility of the Contractor."													
PSA 5.2	Construction: Watching, Barricading, Lighting and Traffic Crossings <i>Substitute the first paragraph in subclause 5.1.1 with the following:</i> "Setting out the works is the sole responsibility of the Contractor and shall be done from benchmarks as indicated on construction drawings. The Contractor shall, within 2 (two) weeks after the site has been handed over to him, ascertain himself of the correctness of all pegs and benchmarks. Any discrepancies must be immediately reported in writing to the Engineer. Any costs or subsequent costs arising from discrepancies not reported shall be the sole responsibility of the Contractor."													
PSA 5.4	Construction: Protection of Overhead and Underground Services <i>Add the following after the first sentence:</i> "Although the services are indicated on the drawings, the Contractor will be responsible for locating the services on site using a cable detection device."													
PSA 5.4.1	Location of existing services <i>Substitute A 5.4 with the following:</i> As the first activity of the Works and after the instruction to commence with the Works has been issued, the Contractor shall ascertain the presence and actual position of all services which can reasonably be expected by a competent contractor to be present on, under, over or within the Site. All services indicated on all wayleaves (obtained by Contractor, the RE to be informed at all times of the progress by the Contractor) and pointed out on site by the local authority will be opened up and surveyed (level, invert, diameter and coordinates). These services include (but is not limited to) sewer, water, stormwater, electrical ducts, telecommunications ducts etc. These services will be reported to the Engineer 10 days before these services will delay the Contractor. The Contractor must therefore open all existing services and report them to the Engineer, 10 working days before the Practical Completion date and/or the Due Completion date, is affected. No claim will be considered for any delays if the Contractor did not follow protocol. This protocol must be clearly indicated on the initial and all adjusted construction programmes together with the time required by the Contractor to open all existing services. The Contractor must allow for at least 20 working days to open and expose the existing services. Any financial and time implications due to failure to timeously report to the Engineer will be for the Contractors account. Therefore, the protocol that must be indicated on the programme is as follows: The 10 days, as per sequence number 3, is identified as float in terms of Clause 5.6.2.4 of the GCC 2015 (3rd Edition) and may only be used on prior approval by the Engineer. These 10 days must be programmed as a single bar item/activity, in the initial programme and subsequent adjusted programmes, as the immediate predecessor to normal climatic conditions and on the critical path of the programme. <table border="1"> <thead> <tr> <th colspan="3">SEQUENCE OF PROTOCOL OF EXISTING SERVICES</th></tr> <tr> <th>1</th><th>2</th><th>3</th></tr> </thead> <tbody> <tr> <td>Open and Locating Existing Services</td><td>Report All existing services to the Engineer</td><td>Time before Practical Completion date and/or Completion date is affected</td></tr> <tr> <td>At Least 20 working days</td><td>1 working day</td><td>10 days</td></tr> </tbody> </table> Without in any way limiting his liability in terms of the Conditions of Contract in relation to damage to property and interference with services, the Contractor shall obtain the most up-to-date plans as are available, showing the positions of services existing in the area where he intends to work. Neither the Employer nor the Engineer offers any warranty as to the accuracy or completeness of such plans and because services can often not be reliably located from plans, the Contractor shall ascertain the actual location of services depicted on such plans by means of careful inspection of the Site.	SEQUENCE OF PROTOCOL OF EXISTING SERVICES			1	2	3	Open and Locating Existing Services	Report All existing services to the Engineer	Time before Practical Completion date and/or Completion date is affected	At Least 20 working days	1 working day	10 days	
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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
	Without in any way limiting his liability in terms of the Conditions of Contract in relation to damage to property and interference with services, the Contractor shall obtain the most up-to-date plans as are available, showing the positions of services existing in the area where he intends to work. Neither the Employer nor the Engineer offers any warranty as to the accuracy or completeness of such plans and because services can often not be reliably located from plans, the Contractor shall ascertain the actual location of services depicted on such plans by means of careful inspection of the Site. Thereafter, the Contractor shall, by the use of appropriate methodologies, carefully expose the services at such positions as are agreed to by the Engineer, for the purposes of verifying the exact location and position of the services. Where the exposure of existing services involves excavation to expose underground services, the further requirements of subclauses 4.4 and 5.12.2 of SANS 1200 D (as amended) shall apply. All services, the positions of which have been determined as aforesaid at the critical points, shall henceforth be designated as 'known services' and their positions shall be indicated by the Contractor on a separate set of drawings, a copy of which shall be furnished to the Engineer without delay and within the time period stated above. As soon as any service which has not been identified and located as described above is encountered on, under, over or within the site, it shall henceforth be deemed to be a known service and the aforesaid provisions pertaining to locating, verifying and recording its position on the balance of the site shall apply. The Contractor shall notify the Engineer immediately when any such service is encountered or discovered on the Site. Whilst he is in possession of the Site, the Contractor shall be liable for all loss of or damage as may occur to: (a) known services, anywhere along the entire lengths of their routes, as may reasonably be deduced from the actual locations at which their positions were verified as aforesaid, due cognizance being taken of such deviations in line and level which may reasonably be anticipated, and (b) any other service which ought reasonably to have been a known service in accordance with the provisions of this clause, The Contractor shall also be liable for consequential damage in regard to (a) and (b), whether caused directly by the Contractors operations or by the lack of proper protection.	
	No separate payment will be made to the Contractor in respect of this costs of providing, holding available on the Site and utilising the said detecting and testing equipment, nor for any costs incurred in preparing and submitting to the Engineer the Drawings as aforesaid. These costs shall be deemed included in the Contractors other tendered rates and prices included in the Contract. Payment to the Contractor in respect of exposing services at the positions agreed by the Engineer and as described above will be made under the payment items (if any) as may be provided for in the respective sections of the specifications pertaining to the type of work involved.	

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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSA 5.5	Dealing with water on works Add the following: "All work must be protected against flooding and damage by water (storm water, groundwater etc) and the Contractor's prices will be held to include for such protection and for any rectification that may be required (including drying out of material or layer works or any consequential losses, slow progress, deviations, cofferdams, sumps, well point, labour and pumping of water). Care shall be taken that a free passage for water is maintained in all gutters and waterways. Special precautions shall be taken by the Contractor not to change existing conditions by leaving spoil in waterways or by diverting water onto private property. The Contractor shall make good any damage and shall settle all claims at his own expense in the event of flooding of private or public property occurring through waterways being obstructed by his operations or through the effect of any other of his acts or omissions. The Contractor shall be responsible throughout the duration of the Contract, inclusive of the Defects Liability Period, for the implementation and maintenance of all soil erosion preventative measures necessary to protect any pipeline and the properties through which it passes and land utilised by the Contractor during the Contract from any adverse effects of soil erosion, settlement, scour, etc, resulting from the contract works. Notwithstanding the types and quantities of anti-erosion measures executed by the Contractor, whether ordered by the Engineer or not, and notwithstanding the maintenance work performed on these works, the Contractor shall be responsible for repairing and remedying at his own cost all settlement in the trench or elsewhere, all erosion of the trench, of the working area and adjacent to it, and on any other areas occupied or used by him during the course of the Contract, all wash-away, scour at waterways, deteriorating of anti-erosion works and any other damage. He shall, therefore, be free to carry out at his own expense, such additional compaction of the backfill and such other anti-erosion or other works as, in his opinion, will reduce his restoration and repair work during the Contract Period including the Defects Liability Period and shall provide therefore in his Tender. Unless otherwise allowed for in the Schedule of Quantities, the Contractor shall be responsible for all costs in dealing with water and must therefore allow for such costs in his tendered rates." PSA 6.2 Tolerances: Degree of Accuracy Degree of Accuracy II is applicable. PSA 7.1.1 Testing: Principles: Checking Add the following:	
PSA 7.4	"For compaction tests, the Contractor shall carry out a minimum of one compaction test for every 300m³ of subgrade material processed and for every 1500m² of subbase and base course material placed. Asphalt cores will be taken every 1000m² per layer for density testing. The Contractor shall test compaction density on all pipe bedding and backfill in trenches at least once for every 20m of each layer placed and compacted. The tendered rates for each of the relevant items shall include the costs of all such control testing and no additional claims shall be considered in this regard. Should the control testing arranged by the Contractor not meet the requirements of the specification, the Engineer shall have the right to conduct all such tests at the Contractor's expense and on his behalf. In this case, the Engineer shall be given 72 hours notice of when testing is required. No claims shall be considered in respect of delays resulting from such testing. The Engineer may from time to time carry out his own check tests on the work performed by the Contractor. Should such tests show the Contractor's control testing to be such that the quality of the Contractor's work can be called into question, the Engineer may order further check tests to be carried out on work already completed. All costs associated with such subsequent checks shall be for the Contractor's account. Testing: Statistical Analysis of Control Tests Substitute clause 7.4 with the following: "Test results shall not be evaluated by statistical methods. All results shall comply with the specified minimum requirements of the materials concerned." Continue on next page	

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSA 8.2.2	Payment: Time-related Items Add the following: "The payment to the Contractor for time-related items shall be adjusted in accordance with of an extension to the Contract: $\text{Sum of tendered amounts for all time related item} \times \frac{\text{Extended contractual period}}{\text{Tendered contract period}}$	
PSA 8.3.3	Scheduled Fixed Charge and Value Related Items: Other Fixed Charge Obligations Add the following: "The Contractor will be responsible for obtaining all relevant wayleaves from all relevant bodies before commencing works. The costs, overheads and profits for obtaining wayleaves and liaising with relevant authorities will be deemed to be included in the rate tendered for this item. In addition, the Contractor will be solely responsible for obtaining these wayleaves and no claims for extension of time will be entertained in the event of works being stopped due to wayleaves not being obtained."	
PSA 8.4	Scheduled time related items Add the following payment items:	
PSA 8.4.6	Contractor's obligation in respect of Health and Safety..... The tendered sum shall include full compensation for compliance with the requirements of the OHS Act, Regulations and the Construction Health and Safety specifications for the full duration of the Contract. The sum will be paid to the Contractor in equal monthly payments subject to compliance.	Sum
PSA 8.4.7	Contractor's obligation in terms of Environmental Management Plan..... The tendered sum shall include full compensation for compliance with the requirements of the Construction Environmental Management Plan and other applicable Environmental legislation for the full duration of the Contract. The sum will be paid to the Contractor in equal monthly payments subject to compliance.	Sum
PSA 8.4.8 a)	Standing time costs: Plant..... The item above will cater for all associated costs relating to standing time charged by the Contractor for Plant. This rate does not refer to singular items of plant, but the entire fleet of plant (worst case scenario) to be used during construction at any time.	Day
PSA 8.4.8 b)	Standing time costs: Labour..... The item above will cater for all associated costs relating to standing time charged by the Contractor for Labour. This rate does not refer to single labourers, but the entire labour force to be used during construction at any time.	Day
PSA 8.4.8 c)	Standing time costs: Other resources (to be specified by the Contractor..... The item above will cater for all associated costs relating to standing time charged by the Contractor for any other resource not allowed for in (a) and (b). Should a rate be provided for this item the Contractor needs to specify the resource.	Day
Continue on next page		

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSA 8.5	Sums Stated Provisionally by the Engineer <i>Add the following payment items:</i>	
PSA 8.5	c) Cost of calls in connection with the contract administration by the Engineer's Representative.....	Prov Sum
PSA 8.5	d) Overheads, charges and profit on (c) above.....	%
PSA 8.5	e) Material testing by commercial laboratories if required by the Engineer.....	Prof Sum
PSA 8.5	f) Overheads, charges and profit on (e) above.....	%
PSA 8.5	g) Monthly remuneration of Community Liason Officer.....	Prov Sum
PSA 8.5	h) Overheads, charges and profit on (g) above.....	%
PSA 8.7	Daywork <i>Add the following payment items:</i>	
	Labour:	
PSA 8.7 a)	Unskilled labour.....	Hour
PSA 8.7 b)	Semi-skilled labour.....	Hour
PSA 8.7 c)	Skilled labour.....	Hour
	The items above (8.7 (a) to (c)) will cover all costs related with the provision of labour in the mentioned categories on a dayworks basis. Only net working hours will be measured under daywork and it will be held that the Contractor has made provision in other rates for possible interruptions and standing time.	
	Plant:	
PSA 8.7 d)	Excavator.....	Hour
PSA 8.7 e)	Graders.....	Hour
PSA 8.7 f)	Front end Loader.....	Hour
PSA 8.7 g)	Rollers.....	Hour
PSA 8.7 h)	TLB.....	Hour
PSA 8.7 i)	Trucks (10m³).....	Hour
PSA 8.7 j)	Water Trucks.....	Hour
PSA 8.7 k)	Plate Compactor/Rammer Compactor.....	Hour
	The items above (8.7 (d) to (k)) will cover all costs related to the provision of the various plant resources on a dayworks basis. Only net working hours will be measured under daywork and it will be held that the Contractor has made provision in other rates for possible interruptions and standing time. It will be assumed that the capacity, specification and size of the plant resources for which rates are provided will be similar to those that will actually be used during the construction of the works. Where possible at tender stage, the specifications of the plant resources should be specified under this item.	
PSA 8.8.4	Temporary Works: Existing Services <i>Add the following:</i> "Where the Employer or others carries out work which is the responsibility of the Contractor, all costs incurred by the Employer or the third party will be recovered by means of a deduction from the Contractor's monthly payment. Where hand excavation around existing services does occur it shall be measured only if it occurs within 3 m above and on both sides of cables, and within 500 mm above and on both sides of pipes, as well as all excavations underneath the services." End of PSA	

PSAB ENGINEER'S OFFICE

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSAB	<u>Engineer's Office (SANS 1200 AB)</u>	
PSAB 3.1	Materials: Nameboard <i>Replace, after the words '..., decorating and detail...' in the first sentence:</i> "with the relevant standard project nameboard drawing as issued by the Engineer."	
PSAB 3.2	Materials: Office Buildings <i>Add the following after the second paragraph:</i> "The Contractor shall supply one office for the exclusive use of the Engineer and one for meetings. The Engineer's office shall have a minimum floor area of 12m ² and the meeting room shall have a minimum floor area of 13m ² ." <i>Substitute sub-paragraph (j) with the following:</i> "j) provision of an approved 12 000 BTU air-conditioner" <i>Add the following to C13.2 after the last paragraph:</i> "In addition, the Contractor must supply basic survey equipment and 2 survey assistants at no charge as reasonably required by the Engineer. The Contractor must supply Site Instruction books as required by the Engineer. The Engineer shall have access to a fax machine and photocopier to be provided by the Contractor. The meeting room shall be furnished with a table and chairs to accommodate 10 people."	
PSAB 4.1	Plant: Telephone <i>Add the following to the last paragraph:</i> "The Engineer will make use of his/her own cellular phone. The cost of telephone calls and internet usage/subscription will be covered by the Contractor under payment item 8.3.2.1 (b)."	
PSAB 5.1	Construction: Nameboards <i>Add the following to the last paragraph:</i> "The nameboards shall be erected within one month of acceptance and shall be placed at the position indicated by the Engineer. Any damage to these boards shall be repaired within 14 days of damage. No payment shall be made in terms of the contract prior to the erection of these boards. In addition, the Contractor shall be permitted to erect a maximum of two of his own boards, in positions approved by the Engineer. The Engineer reserves the right to order the removal of these boards if they are not maintained in good condition."	
PSAB 5.6	Construction: Survey Equipment <i>Add the following subclause: 5.6 SURVEY EQUIPMENT</i> The Contractor shall provide the following tested and approved survey equipment on site for the duration of the contract and for the use of the Engineer whenever needed: • One calibrated automatic level including staff and tripod • One 5m and one 100m tape measure The above equipment may, by arrangement, be shared with the Contractor and Engineer's Representative. The Contractor shall keep the equipment continuously insured and shall indemnify the Employer and Engineer and all their agents against any claims for loss, damage or breakage in this regard. The Contractor will keep the equipment in working order and will keep it clean for the duration of the contract."	
PSAB 8.1	Measurement and Payment <i>Add the following:</i> "All costs, overheads and profits associated with the items listed above (including those specified in the project specifications) are deemed to be included in the rates tendered under SANS1200A (Preliminary and General)."	
	End of PSAB	

PSC SITE CLEARANCE

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSC	Site Clearance	
PSC 3.1	Materials: Disposal of Material <i>Replace the first sentence with the following:</i> "All materials generated by clearing, grubbing and demolition of all types of fencing and structures shall be disposed of at a licensed municipal dump site"	
PSC 5.1	Construction: Areas to be Cleared and Grubbed <i>Add the following to the last paragraph:</i> "The Contractor shall programme his work in such a manner that re-clearing is not required. The cost of re-clearing shall be borne by the Contractor."	
PSC 8.2.1	Clear and Grub..... <i>Add the following to the item:</i> The rate shall include the clearing and demolishing of all types of fencing including the concrete foundations of posts and any other operations to complete the works.	ha
PSC 8.2.11	<i>Add the following new item:</i> Demolish and spoil kerbs..... The rate shall cover the cost of breaking out concrete kerbs in the road and spoiling them at a licensed municipal dump site. Care should be taken to protect the road surface and road layerworks. Repairing of damage to road surfacing or layerworks will be for the contractor's account.	m
PSC 8.2.12	<i>Add the following new item:</i> Excavate and remove asphalt wearing course and dispose at an approved dump site..... The rate shall cover the cost of breaking out or milling existing asphalt surface areas designated by the engineer and the disposal of it at an approved dump site. The tariff shall also include all equipment and labour necessary for the cutting of the surface to a neat edge and will include removal of the area of asphalt. The rate shall cover the removal of material to top of base course. The rate shall also include the protection of other existing services in close proximity to the operations. Repairing of damage to kerbs and other existing services or layerworks will be for the contractor's account.	m ²

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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSC 8.2.13	<i>Add the following new item:</i> Dust and Erosion Control: Straw Stabilization Supply and install Straw Stabilization in areas indicated by engineer. The rate shall cover all cost to complete the operations and the maintenance of it for the duration of the project.	Ha
PSC 8.2.14	<i>Add the following new item:</i> Dust and Erosion Control: Chipping and mulching of vegetation This rate to allow for chipping and mulching of all trees and shrubs from clear and grub operation. Vegetation from clear and grub operation to be stockpiled and left to dry out for at least one month before chipping and mulching. All plant, specialist equipment and labour to be allowed for. Once vegetation has dried out sufficiently, it will be chipped and mulched and the processed material will be transported to stockpiles and maintained. Processed vegetation will then be spread on site from stockpiles as directed by the Engineer and mixed into the topsoil and watered if required.	Ha
PSC 8.2.15	Removal of Asbestos..... The rate shall include the removal of Asbestos and the disposal at a dump site licensed to receive hazardous material. The rate shall cover all costs associated with the sorting through stockpiles, breaking out, removal and spoiling of asbestos materials. The rate should also include all provision for protective clothing, special vehicles, equipment and specialist labour required. The rate shall also include all statutory documentation and reports to complete the operations.	m ³
End of PSC		

PSD EARTHWORKS

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSD PSD 2.3	<u>Earthworks</u> Interpretations: Definitions <i>Add the following after the description of 'Restricted excavation':</i> "Where it is required that earthworks be carried out using labour intensive methods, the definition "restricted excavation" shall read "An excavation required to be carried out using only hand tools, or where so permitted in terms of the Project Specification, with restricted plant usage". <i>Add the following definition before 'Specified Density':</i> Sand (cohesionless and non-cohesive). For the purposes of the compaction requirements, a non-plastic material of which not less than 95 % by mass passes a sieve of nominal aperture size 4,75 mm, and not more than 10 % passes a sieve of nominal aperture size 0,075 mm. PSD 3.1.2 Materials: Classification for Excavation Purposes: Classes of Excavation <i>Please add the following after the last paragraph:</i> "f) Hand Excavation The definitions given for soft, intermediate and hard rock excavation under Clause 3.1.2(a), (b) and (c) respectively will not apply to those aspects of the earthworks which must be undertaken by labour intensive methods in terms of the Project Specification, i.e. excavations for all pipelines. For hand excavation, the following classifications shall apply: "Soft excavation" will be held to be any material which in the opinion of the Engineer can be excavated by pick and shovel, without the use of pneumatic or hydraulic breaking tools or blasting. "Hard rock excavation" will be held to be any material which possesses characteristics of hardness and geological structure which in the opinion of the Engineer can most economically be broken up by blasting before removing the material from the excavation as soft material.	
PSD 4.5	The definition of boulder excavation Classes A & B given under Sub-Clauses 3.1.2(d) and (e) will apply irrespective of whether the earthworks are carried out by labour intensive methods or by any other method." Plant: Avoiding Quagmire Conditions <i>Add the following to Sub-Clause:</i> "In order to prevent quagmire conditions occurring in the excavations, relatively static plant such as back-actors shall be used combined with hand trimming to complete the excavation to final level. Should the Contractor allow quagmire conditions to develop, he shall, at his own expense, take such steps to rectify the conditions as the Engineer may order."	

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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSD 5.1.2.2	Construction: Precautions: Existing Services: Detection, Location and Exposure Add the following to Sub-clause 5.1.2.2: "If existing services are not shown on the drawings but the existence thereof can be reasonably expected, the Contractor shall, in conjunction with all relevant authorities, determine the exact depth and location of such services before the commencement of construction. After locating the exact position of services, whether indicated on the drawings or not, such services shall be deemed to be known services and the Contractor shall be liable for all costs and subsequent costs arising from the damage thereof as a result of the Contractor's activities. Exact details of these services will be given to the Engineer. These services must also be indicated on the "As Built" drawings."	
PSD 5.1.2.3	Protection Of Cables Substitute "estimated position" in the second sentence of D 5.1.2.3 with "actual or exposed position".	
PSD 5.1.2.4	Negligence Substitute D 5.1.2.4 with the following: Where a service is damaged because of the contractor's negligence, any costs arising from such damaged service will be payable by the contractor.	
PSD 5.1.4.1	Construction: Precautions: Nuisance: Dust Nuisance Add the following to Sub-clause 5.1.4.1 "The Contractor is responsible for dust control and is liable for any claims that may result from dust nuisance during the contract period. No payment regarding the above-mentioned will be made and all costs shall be deemed to be covered by the tendered rates."	
PSD 5.1.6	Construction: Precautions: Road Traffic Control Add, after the last paragraph, the following: "During the construction of any works across or along public roads, the Contractor shall, in co-operation with, and in accordance with any instruction from the relevant traffic authorities, take precautions for the protection of the Works and the safety of public and private vehicles and pedestrians in accordance with the requirements of Sub-clauses 5.2 and 5.7 of SANS 1200 A, 5.1.1 and 5.1.6 of SANS 1200 D. Temporary traffic signs shall be erected at all diversions. The number and layout of the traffic signs shall comply with the Site Manual entitled "Safety at Roadworks in Urban Areas", as published by the Department of Transport. Traffic signs shall have a yellow background with either a red / black border. All temporary signs shall be of the type and size required for urban roads, as applicable, as specified in the South African Road Traffic Signs Manual and Chapter 13, Roadworking Signage : Final Draft (June 1996), Road and Traffic Signs Sub-Committee, SCRA (January 1993)."	
PSD 5.2.2.3	Construction: Methods and Procedures: Excavation: Disposal Add the following to Sub-clause 5.2.2.3: "Excess materials arising from the excavations shall generally be spread out on the adjacent erven and levelled and shaped in such a manner that the material so spread allows the erven to drain into the road. Material arising from excavations and not utilised in the above manner shall be disposed of at a licensed municipal dumpsite, or in depressions, dongas and erosion gullies as directed by the Engineer. All rates tendered shall be deemed to include any levies or fees payable at such dumpsite."	
PSD 5.2.2.4	Construction: Methods and Procedures: Excavation Add the following Sub-clause: 5.2.2.4 Excavation by hand around existing services. Where hand excavation is required around existing services it shall be done within 3,0 m above and on both sides of cables and within 300 mm above and on both sides of pipes, as well as underneath the services.	

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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSD 5.2.5	Construction: Methods and Procedures: Transport for Earthworks <i>Replace sub clause 5.2.5.1 with the following:</i> "Freehaul – all material transported within the boundaries of the site or from a commercial source will be regarded as being hauled under freehaul. No overhaul will be paid. <i>Replace sub clause 5.2.5.2 with the following:</i> "Overhaul – Transportation of all excavated material beyond the boundaries of the site will be regarded as being hauled under freehaul. No overhaul will be paid under this contract. Hauling and transportation costs will be deemed to be included under the relevant payment items.	
PSD 8.3.2	Measurement and Payment: Scheduled Items: Bulk Excavation..... <i>Add the following after the item description:</i> "All excavation of material classified under a) Soft excavation and b) Intermediate excavation under clause 1200D 3.1.2 will be paid for under payment item 1200D 8.3.2 a) as amended here. There will be no separate payment item scheduled for intermediate excavation and it will be assumed that the rate tendered for 1200D 8.3.2 a) will allow for both soft excavation and intermediate excavation as classified in 1200D.	m³
PSD 8.3.4 d)	Import to fill, material from commercial sources compacted to 90% MOD AASHTO..... <i>Add the following:</i> "The rate for importation of commercial material (minimum G9 classification or better) shall include all cost of royalties if applicable, acquiring suitable material (minimum G9 classification or better), forming of access, removal of overburden, loading, transportation, offloading at point of placing, removal of access and replacing overburden. The rate also needs to allow for spreading out of material after offloading, watering and compacting of the material in a uniform layers to 90% of MOD AASTHO.	m³
PSD 8.3.11	Measurement and Payment: Scheduled Items: Grassing or Other Vegetation Cover.. <i>Add the following:</i> "Payment for grassing, hydroseeding and covering with other vegetation of designated areas will be made in stages as follows: <i>First Payment:</i> When the area has been prepared and planted/seeded, 60 % of the rate tendered per square metre shall be paid. <i>Second Payment:</i> When the area has been initially accepted by the Engineer, a further 30 % of the rate tendered per square metre shall be paid in respect of the re-measured area which is accepted. <i>Third Payment:</i> At the end of the maintenance period the outstanding amount will be paid in respect of the actual re-measured area of grass and other vegetation finally accepted by the Engineer for payment. The rate tendered and paid for shall include full compensation for trimming of existing slopes, supply and spreading of compost and/or manure; preparation of the soil, watering, supply and planting of grass and other vegetation and maintenance of the covered areas, including all labour, supervision, specialist advice, materials, transport, plant, equipment and incidentals necessary to complete the work and bring the covered areas into the condition required for final acceptance, and shall include for any loss due to vegetation failing to establish a satisfactory cover of living vegetation in which gaps larger than 150 mm do not occur."	m²
	Continue on next page	

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSD 8.3.14	Supply and install bio-degradable jute netting to steep slopes..... The rate shall cover the cost of supplying and staking of the netting to manufacturer's specifications as well as all establishment and set-up costs and maintenance for the duration of the project.	m ²
	END OF PSD	

PSDB EARTHWORKS (PIPE TRENCHES)

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSDB PSDB 3.1	<u>Earthworks (Pipe Trenches)</u> Materials: Classes of Excavation Please add the following after the last paragraph: "Classification of excavation by mechanical means for measurement and payment shall either be soft excavation or hard rock excavation, notwithstanding the provisions of subclause 3.1 of SANS 1200 D. Intermediate material shall be classified as soft material and will not be measured or paid for separately. Please add the following after the last paragraph: The definitions given for soft, intermediate and hard rock excavation under Clause 3.1.2(a), (b) and (c) of SANS 1200D respectively will not apply to those aspects of the trench excavation which must be undertaken by labour intensive methods in terms of the Project Specification, i.e. excavations for all pipelines. For hand excavation, the following classifications shall apply: "Soft excavation" will be held to be any material which in the opinion of the Engineer can be excavated by pick and shovel, without the use of pneumatic or hydraulic breaking tools or blasting. "Intermediate excavation" will be held to be any material which possesses characteristics of hardness and geological structure which in the opinion of the Engineer requires breaking by pneumatic or hydraulic means before removing the material from the excavation as soft material. "Hard rock excavation" will be held to be any material which possesses characteristics of hardness and geological structure which in the opinion of the Engineer can most economically be broken up broken up by blasting before removing the material from the excavation as soft material. " <i>Please add the following after the last paragraph:</i> "All excavation of material classified under a) Soft excavation and b) Intermediate excavation above will be paid for under payment item 1200DB 8.3.2 a). There will be no separate payment item scheduled for intermediate excavation and it will be assumed that the rate tendered for 1200DB 8.3.2 a) will allow for both soft excavation and intermediate excavation as classified above.	
PSDB 3.5 PSDB 3.6.1	Materials: Backfill Material <i>Replace "from trenches" in Cl 3.5(a) with:</i> "...from trenches, channels and/or any other necessary excavations on site" <i>Replace Cl 3.5(b) with:</i> "All pipe and duct trenches across roadways shall be backfilled with selected material (G7 or higher) from commercial sources." Materials: Materials for Reinstatement of Roads and Paved Areas: Subbase and Base <i>Substitute Cl 3.6.1 with the following:</i> "Where trenches cross or run adjacent to surfaced roads and paved areas of which the surfaces are scheduled to be reinstated, the material excavated from the existing base and/or sub-base pavement layer(s) shall be set aside and used in the reconstruction of the sub-base layer. Where applicable, new material complying with the requirements of SANS 1200 MF shall be used in the reconstruction of the base layer. Any shortfall in material for the reconstruction of the sub-base layer shall be made up by the use of material complying with the requirements of SANS 1200 ME." Continue on next page	

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSDB 3.7	Materials: Selection Add the following: "Notwithstanding the above, in terms of which the Contractor has a choice regarding methods of selection, the Contractor must use selective methods of excavation. The Contractor shall selectively remove and separate the suitable material from unsuitable material and place it adjacent to the trench for reuse as backfill, selected fill, selected granular material or for other use as ordered by the Engineer. Material which, in terms of Sub-clause 6.2 of SANS 1200 D or SANS 1200 LB, is too wet for immediate use in the trench (but which is otherwise suitable) will not be regarded as "unsuitable" material and, if so ordered by the Engineer, the Contractor shall spread such material in a suitable area until it has dried sufficiently for later use. When preparing his programme and construction methods, the Contractor shall make allowance for selective excavation and the handling and drying out of material which is too wet for immediate use.	
PSDB 4.1	Plant: Excavation Equipment Add the following: "All excavations exceeding the specified widths shall be backfilled with approved selected material. No payment shall be made for this and all relevant costs shall be deemed to be included in the tendered rates."	
PSDB 4.2	Plant: Control of Water Add the following: "One set of dewatering equipment shall consist of pumps, pipes, well points and other equipment necessary for keeping the trenches sufficiently free from water for dewatering of excavations up to 4 m depth and a trench length of 45 m for both sides or 70 m on one side."	
PSDB 5.6.2	Construction: Backfilling: Material for Backfilling Substitute "from trench excavations" in the first paragraph of CI 5.6.2 with "from trench excavations, channel excavations and/or any other excavations on site"	
PSDB 5.6.3	Construction: Backfilling: Disposal of Soft Excavation Material Replace the first sentence of clause 5.6.3 with the following: "Excavation material from the trench, which is unsuitable or has become surplus because of bulking, displacement by the pipe and importation, shall be disposed of anywhere within the boundaries of the site. Disposal will be mainly along the trench servitude, but the Engineer may direct that the material be spoiled elsewhere on site to make up deficiency in backfill material or as general fill material on site. Approval to be sought from Engineer prior to disposal.	
PSDB 5.7.2	Construction: Compaction: Areas Subject to Traffic Loads Add the following: "Backfill of all pipe trenches that fall under roadways shall be compacted to 95% of MAMDD density for cohesive materials and sand backfilling shall be compacted to 100 % of MAMDD density."	
PSDB 5.9.4	Construction: Reinstatement of Surface: Bitumen Roads: Sub-base And Base: Add the following: "Any additional imported material required for the reinstatement of selected layers, sub-base or base shall comply with the requirements of the relevant standardised specifications."	
PSDB 5.9.5.1	Construction: Reinstatement of Surface: Bitumen Roads: Surfacing: Add the following: "The thickness of the asphalt shall match that of the existing roadway, with a minimum thickness of 30mm."	

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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSDB 8.1.2 b)	Measurement and Payment: Basic Principles <i>Replace subclause (b) with the following:</i> "Separate items will be scheduled for lengths of trench of depths not exceeding certain depths as per the bill of quantities".	
PSDB 8.1.2 c)	Measurement and Payment: Scheduled Items: Excavation <i>Replace the last sentence of subclause (c) with the following:</i> "The ground surface will be that existing after any bulk excavation has been carried out and before any embankment has been constructed, unless a portion of the embankment has to be constructed in order to achieve an acceptable cover over a pipe that is to be installed, in which case measurement will be made from the level of embankment that produces an acceptable minimum cover over the pipe. The depth of the excavation for measurement and payment purposes will be as specified in Sub-clause 8.1.2 (b)."	
PSDB 8.3.2 a)	Measurement and Payment: Scheduled Items: Excavation..... <i>Insert the following in paragraph three after "excavation,":</i> "sourcing of backfill material as specified in 5.6.2." <i>Add the following after the last paragraph under subclause (a):</i> "The rates for excavation of trenches shall also cover the costs of battering trench sides or providing shoring to trenches as deemed necessary by Contractor in light of his obligations under the Occupational Health and Safety Act. Where battering of trench side slopes is chosen in lieu of shoring, the rate shall also cover any additional protection of services, replacement of erf pegs or any other additional cost resulting from battering the side slopes. The depth of excavation in street reserves shall be measured from the final finished level. In cases where services lay parallel to steep slopes, the depth of the excavation will be measured along the centre of the trench (on the route of the service). The rate for excavation for subsurface drains shall cover the cost of excavation and spoil of surplus material as described in D5.2.2.3. The rate shall also provide for the fact that the excavation width in sand will be wider than normal and that fast excavation and backfill will reduce ground water seepage. All excavation of material classified under a) Soft excavation and b) Intermediate excavation under clause 1200D 3.1.2 will be paid for under payment item 1200DB 8.3.2 a) as amended here. There will be no separate payment item scheduled for intermediate trench excavation and it will be assumed that the rate tendered for 1200DB 8.3.2 a) will allow for both soft and intermediate trench excavation as classified in 1200D.	m³
PSDB 8.3.5 a)	Measurement and Payment: Scheduled Items: Existing Services That Intersect or Adjoin a Pipe Trench..... <i>Add the following to the end of sub clause (a):</i> "Existing services with a depth of cover exceeding 300 mm, measured from the bottom of excavation to the top of the existing service shall not be measured and paid for. These will be distinguished between existing trunk services and existing erf connection. The rate shall also allow for the following costs: i) Sufficient photos have to be taken of existing services and handed over to the Engineer before they are being crossed, if there is a possibility of a difference in opinion over the condition of those services, especially on private property. ii) If such a service is damaged, it has to be repaired to its original condition or if possible, to a standard agreed to in writing with the relevant owner. Continue on next page	No

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSDB 8.3.6.1 e)	<i>Add the following to the end of sub clause (a):</i> "Existing services with a depth of cover exceeding 300 mm, measured from the bottom of excavation to the top of the existing service shall not be measured and paid for. These will be distinguished between existing trunk services and existing erf connection. The rate shall also allow for the following costs: i) Sufficient photos have to be taken of existing services and handed over to the Engineer before they are being crossed, if there is a possibility of a difference in opinion over the condition of those services, especially on private property. ii) If such a service is damaged, it has to be repaired to its original condition or if possible, to a standard agreed to in writing with the relevant owner. This agreement has to be approved by the Engineer. iii) If such a service is removed, it has to be replaced as per original." Add the following to the end of sub clause (b): "The unit "number" will only be used for services such as poles and trees. No payment will be made for overhead services that do not rest directly on the ground except where allowance is made for this in the schedule of quantities. Existing services that rest directly on the ground e.g. poles, walls and structures are handled in the same way as underground services, but the axis of the service will be determined as follows: The vertical axis is defined as the nearest side or corner of the existing structure to the excavation, measured at the point where the structure and natural ground level intersect. The horizontal axis will be at the point where the structure and the natural ground level intersects. In this instance, where the excavation falls above the 45° line but within 1,0 meter horizontally from the structure, the service will also be measured as adjoining. If the structure, according to the abovementioned, does not qualify as an adjoining service but the foundation of the structure is such that if a 45° line drawn from the nearest bottom corner thereof cuts through the excavation, the structure will be measured as an adjoining service if approved by the Engineer. These will be distinguished between existing trunk services and existing erf connection. <i>Add the following item after 1200DB 8.3.6.1 d):</i> Measurement and Payment: Scheduled Items: Finishing: Reinstate road layerworks up to top of base course level..... "The rate tendered shall include all costs associated with the reinstatement of layers as shown on the drawings. The rate tendered shall also include all costs associated with the reinstatement of layers as shown on the drawings. For road surfaces this includes 150mm in-situ material compacted to 100% MAMMD, 150mm G5 subbase compacted to 95% MAMMD and 150mm G4 base compacted to 98% MAMMD. All costs, overheads and profits associated with restoring the road surface and all underling layerworks are deemed to be covered by the rates tendered."	m²
	End of PSDB	

PSDM Earthworks (Road, Subgrade)

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSDM	<u>Earthworks (Road, Subgrade)</u>	
PSDM 5.2.2.4	Construction: Methods and Procedures: Cut and Borrow: Temporary Stockpiling of Materials <i>Add the following:</i> "The Contractor shall program the works in such a manner that suitable excavated material shall, if practically possible, be placed directly in the appropriate position to ensure that temporary stockpiling is limited to an absolute minimum"	
PSDM 5.2.3.3	Construction: Methods and Procedures: Treatment of Roadbed <i>Add the following to subclause (a):</i> "The road bed shall be scarified to a depth of 150mm, watered, shaped and compacted to 100% of MOD AASHTO."	
PSDM 7.3.2	Testing: Routine Inspection and Testing <i>Add the following after the table:</i> "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."	
PSDM 8.3.13	c) Supply and install Concrete Grassblocks (100x570x380) <i>Add the following payment items:</i> The tendered rate shall allow for the procurement, supply, transport to site, installation of concrete grassblocks, supply and installation of A4 bidim under grassblocks and backfilling of grass blocks with in-situ material which has been stabilised with 2% cement per volume of soil.. The rate shall also cover trimming, shaping, watering and compaction of surface where grassblocks are to be installed.	m ²
PSDM 8.3.17	<i>Add the following payment items:</i> Shaping and Trimming of Road Reserves..... The areas between the top of cuts and the toes of fills and the erf boundaries are to be shaped and trimmed in such a manner as to present visually clean uniform slopes, lines and levels. The unit measurement shall be the square meter of surface shaped, trimmed, levelled and compacted. The tendered rate shall include for all trimming, shaping, watering and compaction to 90% of MOD AASHTO	m ²
	End of PSDM	

PSL Medium Pressure Pipelines

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSL	Medium Pressure Pipelines	
PSL 3.7.1	Materials: Other Types of Pipe: uPVC pipes <i>Replace the clause with the following:</i> "All uPVC pipes and fittings shall be fitted with spigot and socket rubber ring joints and shall comply with the relevant requirements of SANS 966, of the class and size as specified on drawings and schedule. Bends shall be uPVC, class 16. Standard specials such as tees, flange adaptors, reducers, etc shall be fabricated from cast iron and shall be rated at not less than the pressure rating of the pipeline."	
PSL 3.9.1	Materials: Corrosion Protection: CI Pipes <i>Replace the clause with the following:</i> "All internal cast iron surfaces valves and specials shall be thoroughly cleaned by grit blasting to SA 2,5 finish in compliance with the requirements of SIS 05 09 00 before applying Copon EP 2300 epoxy paint, applied in three coats to give a dry film thickness of not less than 250 microns. All external cast iron surfaces valves and specials shall be cleaned and coated in accordance with B4772. After it has set, coating shall be such that it will not flow when heated to temperature of 75oC."	
PSL 3.9.5	Materials: Corrosion Protection: Joints, Bolts, Nuts and Washers <i>Replace the clause with the following:</i> "All bolts, nuts and washers shall be stainless steel."	
PSL 3.10	Materials: Valves <i>Add the following:</i> "Notwithstanding the above, all gate valves shall be of type CE-WS 15:1993."	
PSL 5.1.4	Laying: Depths and Cover <i>Add the following after the first sentence:</i> "Unless otherwise shown on the drawings, All pipes smaller and equal to 110mm diameter shall be laid to provide a minimum cover of 1,0m from finished ground or roadway level within road reserve and 0,8m elsewhere. Pipes larger than 110mm diameter shall be laid to provide a minimum cover of 1,2m."	
PSL 5.6.1	Construction: Valve and Hydrant Chambers: General <i>Replace the clause with the following:</i> "All chambers and surfaces boxes shall be constructed in accordance with the details shown on the drawings."	
PSL 7.3.1	Testing: Standard Hydraulic Pipe Test: Test Pressure and Time of Test <i>Add the following to Cl 7.3.1.1:</i> "Pipes shall not be tested against isolating valves. Special blank flanges or end caps, fully anchored, shall be provided for testing." <i>Substitute Cl 7.3.1.2 with the following:</i> "The test pressure for field testing shall be 1,5 times the rated maximum working pressure of the pipe." <i>Substitute CL 7.3.1.3 with the following:</i> "The test pressure applied according to Cl 7.3.1.2, must, with allowance for any level differences along the pipeline, be such that the pressure at any point in the pipeline will be at least 1,25 times and not more than 1,5 times the rated working pressure of the pipe."	
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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSL 8.2.11	Anchor/Thrust Blocks and Pedestals..... <i>Under item (b) delete the following item:</i> Reinforcement Unit: t <i>Replace the first sentence under "Reinforcement" with the following:</i> "Anchor and thrust blocks shall be measured per cubic metre concrete and the tendered rate shall include for all reinforcement for the required dimensions"	m ³
PSL 8.2.16	Connection to existing water reticulation up to 200mm, inclusive of all costs:... <i>Add the following items:</i> "PSL 8.2.16 Connection to existing water reticulation, inclusive of all costs: Unit: No The cutting into existing mains shall be measured by the number of each type and diameter of pipe cut into. The tendered rate shall include full compensation for all arrangements with the relevant authorities, isolating the main, cutting into the main to accommodate the connecting fitting, dewatering, excavating, removing of excess material, taking steps to prevent the ingress of soil, stones and other material into the main as well as all material and labour to connect the pipe."	No
	End of PSL	

PSLB Bedding (Pipes)

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment																						
PSLB	<u>Bedding (Pipes)</u>																							
PSLB 1.1	Scope <i>Add, after the first sentence, the following:</i> "This specification also covers the bedding required for electric cables and cable ducts."																							
PSLB 3.1	Materials: Selected Granular Material <i>Replace the clause with the following:</i> "Selected granular material shall be an aggregate, sand or granular material, all of a non-cohesive nature and free from any organic material, of which the grading analysis shows 100 % passing a 13,2 mm sieve and not more than 5 % passing a 0,075 mm sieve. The Contractor shall, at least 14 days before commencing bedding operations, submit a sample of the material he intends to use as selected granular material to the Engineer for approval. Where selected granular material from excavations on site the Contractor shall ensure it conforms to the above requirements. In very wet conditions and if so ordered by the Engineer, a non plastic crushed material with the specification as stated below should be used for bedding cradle. a) Grading <table><tr><th>Sieve size (mm)</th><th>% Passing</th></tr><tr><td>19,0</td><td>100</td></tr><tr><td>13,2</td><td>84 - 100</td></tr><tr><td>9,5</td><td>70 - 84</td></tr><tr><td>4,75</td><td>45 - 65</td></tr><tr><td>2,36</td><td>29 - 47</td></tr><tr><td>1,18</td><td>19 - 33</td></tr><tr><td>0,60</td><td>13 - 25</td></tr><tr><td>0,30</td><td>10 - 18</td></tr><tr><td>0,15</td><td>6 - 13</td></tr><tr><td>0,075</td><td>4 - 10</td></tr></table> b) Crusher value The aggregate crushing value, calculated at minus 13,2 mm plus 0,5 mm fraction, may not exceed 29.	Sieve size (mm)	% Passing	19,0	100	13,2	84 - 100	9,5	70 - 84	4,75	45 - 65	2,36	29 - 47	1,18	19 - 33	0,60	13 - 25	0,30	10 - 18	0,15	6 - 13	0,075	4 - 10	
Sieve size (mm)	% Passing																							
19,0	100																							
13,2	84 - 100																							
9,5	70 - 84																							
4,75	45 - 65																							
2,36	29 - 47																							
1,18	19 - 33																							
0,60	13 - 25																							
0,30	10 - 18																							
0,15	6 - 13																							
0,075	4 - 10																							
PSLB 3.2	Materials: Selected Fill Material <i>Replace the clause with the following:</i> "Selected fill material will comply with the provisions of SANS 1200LB Cl 3.1 as amended"																							
PSLB 3.3	Materials: Bedding <i>Replace the first sentence with the following:</i> "For rigid pipes, Class B bedding will be used throughout."																							
PSLB 5.1.4	Construction: General: Compaction <i>Replace:</i> "... 90% MAMDD" with "93% MAMDD (100% for sand)".																							

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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSLB 8.1.3	Measurement and Payment: Principles: Volume of Bedding Materials <i>Add the following:</i> "The volume of bedding material shall be measured net, and shall exclude the volume occupied by the pipe."	
PSLB 8.1.4	Principles: Separate Items for Cradle and Blanket <i>Replace the clause with the following:</i> "No distinction shall be made as regards material for the bedding cradle and selected fill blanket, and the material shall comply with the requirements for material for bedding cradle."	
PSLB 8.1.5	Principles: Disposal of Displaced Material <i>Add the following:</i> "All surplus and unsuitable material as described in CI 8.1.5 shall be disposed of as described in SANS 1200D CI 5.2.2.3 and PSD 5.2.2.3."	
	End of PSLB	

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSLC	Cable Ducts	
PSLC 3.1	Materials: Ducts Add the following: "Class 6 uPVC pipes (dia 110 mm or 160 mm) shall be used as ducts for electric and telecommunication cables under streets."	
PSLC 3.2	Bedding Substitute LC 3.2 with the following: "The provisions of SANS 1200 LB: Bedding (Pipes) and the relevant project specifications shall apply mutatis mutandis. Payment shall be made under the appropriate payment clauses of SANS 1200 LB or related project specifications."	
PSLC 3.3	Backfill Substitute CI 3.3 with the following: "The provisions of SANS 1200 DB: Earthworks (Pipe Trenches) and the relevant project specification shall apply mutatis mutandis. Payment shall be made under the appropriate payment clauses of SANS 1200 DB or related project specifications."	
PSLC 3.4	Cable Duct Markers Add the following to CI 3.4: 'Cable duct markers shall be provided as specified in PSLC 5.8".	
PSLC 5.1.1	Construction: Excavation of Trenches: Trench Widths and Depths Add the following: "5.1.1.5 Trench widths shall be in accordance with the provisions of SANS 1200 DB: Earthworks (Pipe Trenches). The minimum depth of cover over ducts shall be 800mm from the final road level. The minimum depth of cover over ducts shall be 600 mm where construction traffic is liable to cross them. Road crossings shall therefore be constructed after the construction of the roadworks has reached the stage where the required cover is available."	
PSLC 5.2	Construction: Bedding and Compaction of Bedding Replace CI 5.2.1 and CI 5.2.2 with the following: "All ducts shall be laid in flexible pipe bedding according to the provisions of SANS 1200 LB: Bedding (Pipes). Backfilling shall be according to the provisions of SANS 1200 DB: Earthworks (Pipe Trenches)."	
PSLC 5.8	Construction: Road Crossings Substitute "0,5 m" in the last sentence of CI 5.8 with "1,0 m" and add the following: "Ducts for road crossings shall be sealed by means of end caps."	

Continue on next page

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment															
PSLC 5.10	Construction: Position to be Marked <i>Replace the subclause with the following:</i> The positions of ducts shall be marked by means of incisions on top of the kerb. The mark shall be 5mm thick with 75mm high lettering. The recess shall be painted with poly acrylic roof paint. Precast recessed kerbs are preferred. Identification marks to be as follows: <table> <tr> <td>Service</td><td>Lettering</td><td>Paint Colour</td></tr> <tr> <td>Telkom</td><td>T</td><td>Green</td></tr> <tr> <td>Eskom</td><td>E</td><td>Red</td></tr> <tr> <td>Traffic</td><td>R</td><td>Blue</td></tr> <tr> <td>Parks</td><td>P</td><td>Black</td></tr> </table> The draw wire, as specified in CI 5.3.3, shall be secured to a 150 x 150 x 150 mm grade 20 MPa/19 mm concrete marker, which shall be installed with a depth of cover of 50-100 mm below the final level. The Contractor shall keep accurate records of the exact position of each duct.	Service	Lettering	Paint Colour	Telkom	T	Green	Eskom	E	Red	Traffic	R	Blue	Parks	P	Black	
Service	Lettering	Paint Colour															
Telkom	T	Green															
Eskom	E	Red															
Traffic	R	Blue															
Parks	P	Black															
PSLC 7.2	Testing: Compaction Testing <i>Substitute the subclause with the following:</i> "The Contractor shall, for at least one out of every five road crossings, submit density tests to the Engineer at his own expense. The decision as to which road crossing densities shall be tested, rests with the Engineer. The Contractor shall, if such densities fail to meet the minimum requirements, prove at his expense that all the other densities do comply with the specified minimum requirements."																
PSLC 8.2.5	Measurement and Payment: Scheduled Items: Supply, Lay and Prove Duct..... <i>Substitute "GPO" in CI 8.2.5(a) with "Telkom".</i>	m															
PSLC 8.2.8	Measurement and Payment: Scheduled Items: Cable Markers..... <i>Add the following:</i> "The rate shall also cover the cost of the end cap and the incisions, concrete marker and draw wire, as specified in PSLC 5.10. Cable markers as per applicable drawing"	No															
	End of PSLC																

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSLD	Sewers	
PSLD 3.1.5	Materials: uPVC Pipes Replace with the following: "Sewer pipes and fittings shall be Heavy Duty (Class 34) uPVC pipes. No alternative pipe types will be considered."	
PSLD 3.5.2	Materials: Manholes, Chambers etc.: Precast Concrete Sections Add the following to LD 3.5.2: "Precast concrete sections with an inside diameter of at least 1 000 mm shall be used for manholes with sewer lines smaller or equal to 200 mm diameter. Sectional spun concrete cylinders shall have been manufactured from dolomitic aggregate. For all manholes the invert level of the outlet shall be 30 mm lower than the lowest inlet invert level. The joint between the manhole and the concrete roof slab shall be sealed effectively with a sealant, to the prescriptions of the manufacturers and approval of the Engineer, to prevent the infiltration of subsurface water or stormwater. Lifting holes shall be sealed off effectively, with an epoxy, after installation and before backfilling. The soffits of all inlet pipes in a manhole shall be on the same level. If the outlet pipe is bigger than all the inlet pipes, it shall have the same soffit level as the inlet pipes. All manholes complete with bottom, shall be able to accommodate a water pressure of the full manhole depth, as specified on the drawings, with an additional 50 % safety factor."	
PSLD 3.5.7	Materials: Manholes, Chambers etc.: Step Irons Replace the subclause with the following: "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. The installation of the step irons shall be in accordance with the specification of the manufacturer."	
PSLD 3.5.8	Materials: Manholes, Chambers etc.: Manhole Covers and Frames Add the following to the subclause: "All manhole covers and frames shall be in accordance with the details on drawings."	
PSLD 3.6	Materials: Marker Posts Add the following: "The positions of erf connections shall be marked by means of incisions on the face of the kerb. The mark shall be 5mm thick with 75mm high lettering. The marking shall be painted with red acrylic paint. Position of markers shall be in accordance with the details on drawings."	
PSLD 5.6.1	Construction: Manholes, Inspection Chambers etc.: General Substitute LD 5.6.1(a) with the following: "Manholes shall be of precast concrete sections and shall be constructed as shown on drawings. 1. Final cover levels of manholes in streets and paved areas shall be to the same level as the street or paved area. 2. On side walks, lawns and garden areas the cover level shall be 20 mm above the final ground level. 3. In midblock sewers it shall be 50 mm above ground level. 4. Outside the road reserve or erf boundaries, it shall be 100 mm above natural ground level. If a manhole is positioned at a low point or in a hollow where stormwater 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."	
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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSLD 5.6.3	Construction: Manholes, Inspection Chambers etc.: Step Irons <i>Add the following to LD 5.6.3:</i> "Step Irons shall only be installed in manholes deeper than 1,2 m."	No
PSLD 5.9.1	Construction: Connecting Sewers: Location and Details <i>Add the following to CI 5.9.1:</i> "Erf connections shall be installed on the exact positions as indicated on the drawings. All connecting sewers shall be laid at a gradient of 1:60, except where otherwise ordered by the Engineer. Erf connections for foul sewers shall be in accordance with the relevant construction drawings."	
PSLD 7.1.5	Testing: General <i>Add the following:</i> "All tests shall be repeated after the completion of backfilling of pipe trenches."	
PSLD 7.1.6	Testing: General <i>Add the following:</i> "d) A water test will be conducted on all sewer lines after installation."	
PSLD 8.2.3	Manholes..... <i>Add the following:</i> "Manholes shall be measured complete as indicated on the drawings and the rate shall be all inclusive for benching, step irons, cover and frame, and it shall make provision for all additional excavation and backfilling. Manholes deeper than 1,5 m shall be provided with an additional concrete base, if specified by the Engineer. All costs involved in additional excavation, backfilling, material and labour shall be included in the rate for the additional base. The depth of manholes as mentioned in the schedule of quantities, shall be measured from the final cover level to the outlet invert level (flow level)."	
PSLD 8.2.11	Connection to Existing Sewer..... <i>Add the following:</i> "Separate items will be scheduled for each diameter of connecting pipe."	No
	The tendered rate shall include full compensation for constructing connections to existing sewer lines and will include 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. Where a direct connection is made to an existing pipe, the rate covers all labour involved in opening the existing pipe, the removal of the existing end cap and disconnection at the pipe. End of PS LD	

PSLE Stormwater Drainage

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSLE	Stormwater Drainage	
PSLE 3.1(d)	Materials: Culvert Units and Pipes: Skewed Ends <i>Replace the subclause with the following:</i> "Where pipe culverts are to be constructed with a skew angle of more than 20°, the skew ends shall be cut on site."	
PSLE 5.2.2	Construction: Bedding and Laying: Pipe Culverts <i>Add the following:</i> "All pipes shall be laid on Class B bedding, as specified in SANS 1200 LB. Spigot and socket pipes with rubber ring joints must be used exclusively"	
PSLE 8.2.8	Supply and Install Manholes, Catchpits <i>Substitute LE 8.2.8 with the following:</i> "The unit of measurement shall be the number of each, in the depth increments as scheduled, fully installed in accordance with the details shown on the drawings. The rate shall cover the cost of excavating and backfilling with approved selected material from site borrow pits, stockpile or commercial sources, compacted to 93 % of MAASHTO density (100 % for sand), supplying and installing of all material and accessories, the inlet kerbs and the channel adjacent thereto as well as for the removal and spoil of all surplus material. The rate shall also include the connection of pipes to manholes, catchpits, etc. and of building pipes into the walls of such structures, but not for the cutting of skewed ends." <i>Add the following to LE 8.2.8</i> d) Headwalls: "The unit of measurement shall be the number of each, in the depth increments as scheduled, fully installed in accordance with the details shown on the drawings. The rate shall cover the cost of excavating and backfilling with approved selected material from site borrow pits, stockpile or commercial sources, compacted to 93 % of MAASHTO density (100 % for sand), supplying and installing of all material and accessories, the inlet kerbs and the channel adjacent thereto as well as for the removal and spoil of all surplus material. The rate shall also include the connection of pipes to the headwall, building pipes into the walls of such structures and for the cutting of skewed ends."	
PSLE 8.2	Measurement and Payment: Scheduled Items <i>Add the following payment items:</i>	
PSLE 8.2.14	Excavation for subsoil drains..... The unit of measurement shall be cubic meter of material excavated for subsoil drains. Measurement shall be made to the neat dimensions as shown on the relevant drawings. The rate tendered shall include full compensation for setting out, excavation, shoring (if applicable), dealing with groundwater and preparation of the trench for installation of the subsoil drain.	m³
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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSLE 8.2.15	Supply and Install Subsurface Drains According To Drawings..... The length shall be measured on the centre line of the completed subsurface drain. The rate shall cover the cost of supplying, transporting, off-loading and installing all materials as well as for backfilling with suitable granular material, compaction, cutting, wasting, overlapping and installing of the materials where applicable.	m
PSLE 8.2.16	Connecting Subsurface Drains To Manholes, Kerb Inlets, Etc..... The unit is the number of subsurface drain pipes built in at manholes or kerb inlets. The rate shall cover the cost of all labour, plant and materials necessary to connect the subsurface drain to manholes and/or kerb inlets, and making the structure watertight, all as shown on the drawings.	No
PSLE 8.2.17	Construct detention pond outlet structure as per detail..... The rate tendered shall include full compensation for all works associated with constructing the stormwater outlet for the detention pond as shown on the relevant detail. The tendered rate shall include all formwork and concrete, pipe work, excavation, temporary works and all backfill associated with the construction of the outlet. Provision should also be made in this item for approximately 0.25 tons of reinforcing steel per outlet structure.	No
End of PSLE		

PSLF - Erf Connections (Water)

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSLF	<u>Erf Connections (Water)</u>	
PSLF 1.1	Scope <i>Substitute LF 1.1 with the following:</i> "This specification covers the construction of connections from a watermain to extent as indicated on drawings. It includes excavation, backfill, supply, pipework, fittings and the making of connections."	
PSLF 3.1.4	Materials: Pipes, Fittings and Couplings: Polyethylene Pipes <i>Add the following:</i> "All polyethylene pipes shall conform to SANS 4427 and have a nominal pressure rating of 16. The diameters of the pipes are as shown on the drawings (typical specification is PE 100 PN 16)."	
PSLF 3.2.2.1	Materials: Stop Taps and Meters: Meters: General <i>Replace the subclause with the following:</i> "Water Management Devices (WMD) with 15mm pulsed meters, nominal bore (SANS approved) in standard meter boxes either wall mounted (for Phase 1, 4A and 4B) or grounded (Phase 3) will be installed by the City of Cape Town for the development. A WMD used in conjunction with the pulse meter enables leak and tamper detection, management of customers and remote data capture and meter control-Automated Meter Reading (AMR) with the ability to provide control. These meters form the basis of City of Cape Town's Advanced Metering Infrastructure."	
PSLF 3.4	Materials: Bedding <i>Replace the subclause with the following:</i> "The bedding shall be specified as per PSLB 3.1 and PSLB 3.3 supra."	
PSLF 3.6	Materials: Markings and Marker Posts <i>Replace the subclause with the following:</i> "The positions of erf connections shall be marked by means of incisions on the face of the kerb. The mark shall be 5mm thick with 75mm high lettering. The marking shall be painted with blue acrylic paint. Position of markers shall be in accordance with the details on drawings."	
PSLF 5.2.2	Construction: Laying from Main to Erf: Pipe Laying <i>Add the following:</i> "Erf connection pipes shall be laid to a depth so that the top of the pipe is not less than 450 mm nor more than 600 mm below the final road surface or sidewalk level, with the provision that where construction traffic is liable to cross the connections the pipes shall have a cover of at least 450 mm. Erf connections shall be bedded as for flexible pipes except that the selected fill blanket will not be required. The bedding thickness above and below the pipe shall be 100 mm. Where the erf connections cross areas subject to traffic loads the trench shall be backfilled in accordance with the requirements of PSDB 3.6.1 and PSDB 5.9.4"	
PSLF 5.2.3.1	Construction: Laying from Main to Erf: Service Connections: General <i>Add the following:</i> "The working pressure in the mains for determining the test pressure at which tests for erf connections shall be done will be as specified in PSL 7.3.1."	
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Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSLF 8.2.1	Measurement and Payment: Scheduled Items: Provide erf connections complete Add the following after the last sentence: "The rate will exclude the supply and installation of water meters. The rate shall be deemed to include all works as described in PSDB 5.7.2 (Compaction in Road Reserve) and shall cover all excavation in all materials irrespective of whether this is conducted using machinery or by hand (as described in PSDB 3.1)." "Where water erf connections off existing pipes are specified, the rate also needs to allow for arrangements to close off the water supply to the affected area of the network and arranging for inspection and supervision by the relevant line department." End of PSLF	

PSM - Roads (General)

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSM PSM 5 PSM 7.3.3 PSM 7.3.4 PSM 7.3.5	<u>Roads (General)</u> Construction: <i>Add the following:</i> "The relevant widths and road details are shown in the cross sections contained in the relevant drawings. Generally the pavement consists of the following: - o 40mm continuously graded medium mix using 60/70 penetration grade bitumen - o 150mm G4 base compacted to 98% MOD AASHTO density - o 150mm G5 subbase compacted to 95% MOD AASHTO density - o 150mm G7 Selected layer compacted to 93% MOD AASHTO density - o 150mm G9 Selected layer compacted to 93% MOD AASHTO density The pedestrian sidewalks consist of the following: - o 30mm Fine continuously graded asphalt - o 100mm G5 gravel compacted to 98% stabilised with 3% cement - o 150mm in-situ material compacted to 100% MOD AASHTO density" Testing: Routine Inspection and Testing <i>Replace the subclause with the following:</i> "Statistical evaluation of test results shall not be applicable to this contract" Testing: Routine Inspection and Testing <i>Add the following subclauses:</i> "The Contractor shall bear the costs of process control tests carried out by the Engineer at the request of the Contractor or as specified for process control. Testing: Routine Inspection and Testing <i>Add the following subclauses:</i> "The cost of refilling and compacting the density test holes shall be included in the rate tendered for the construction of that layer." End of PSM	

PSME - Subbase

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
<u>PSME</u> PSME 3.2.1(d) PSME 7.2.2	<u>Subbase</u> Materials: Physical Properties: Regional Factor <i>Replace the last sentence with the following:</i> "The regional factor for this area is 0,60 and the regional minimum CBR value for sub-base material is thus 45%." Testing: Process Control and Routine Inspection and Testing: Routine Inspection and Testing <i>Add the following:</i> "Notwithstanding subclause 7.2.2 and Table 3, no single test result which is below the specified density will be accepted." End of PSME	

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
<u>PSMF</u>	<u>Base</u>	
PSMF 3.3.2	Materials: Physical and Chemical Properties: Graded Crushed Ston <i>Replace subclause (a) with the following:</i> "The maximum size of the crushed stone shall be 37.5mm" <i>Add the following subclause:</i> "d) The CBR at specified density shall be at least 80%"	
PSMF 7.3.2	Testing: Routine Inspection and Testing <i>Add the following:</i> "Notwithstanding subclause 7.3.2 and Table 4, no single test result which is below the specified density will be accepted." End of PSMF	

PSMH Asphalt Base And Surfacing

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment											
PSMH	Asphalt Base And Surfacing												
PSMH 2.3.1	Interpretations: Definitions and Abbreviations: Asphalt <i>Add the following:</i> "In these documents, the terms "asphalt" and "premix" are synonymous												
PSMH 3.1	Materials: Prime <i>Replace the subclause with the following:</i> "The prime shall be MC 30 cutback bitumen complying with the applicable requirements of SANS 308"												
PSMH 3.3	Materials: Tack Coat <i>Replace the subclause with the following:</i> "The tack coat shall be a 60 % stable-grade bitumen emulsion diluted with water at a 1:1 ratio."												
PSMH 3.4.2	Materials: Bituminous Binder: Surfacing <i>Replace the subclause with the following:</i> "The bituminous binder shall consist of 60/70 penetration-grade bitumen complying with the requirements of SANS 307."												
PSMH 3.5.1	Materials: Aggregates: General <i>Add the following:</i> "Single-sized crushed aggregates used for asphalt shall comply with the requirements for grade 2."												
PSMH 3.5.5	Materials: Aggregates: Sand Equivalent Value <i>Substitute "30" with "35" in subclause 3.5.5</i>												
PSMH 3.5.6	Materials: Aggregates: Grading <i>Add the following:</i> "The grading limits shall be those as tabulated in Table 2 for a continuously graded medium aggregate"												
PSMH 5.2 c)	Construction: Prime Coat <i>Add the following:</i> "The rate of application is 0.7l/m ² or as directed by the Engineer."												
PSMH 5.4	Construction: Tack Coat <i>Add the following:</i> "The rate of application is 0.55l/m ² or as directed by the Engineer."												
PSMH 5.5.2	Construction: Design of Asphalt: Marshall criteria Amend Table 6 as follows: <table border="1"> <thead> <tr> <th rowspan="2">PROPERTY</th><th colspan="2">CONTINUOUSLY GRADED</th></tr> <tr> <th>MINIMUM</th><th>MAXIMUM</th></tr> </thead> <tbody> <tr> <td>Stability (kN)</td><td>4.0</td><td>12.5</td></tr> <tr> <td>Air Voids (%)</td><td>3.0</td><td>5.0</td></tr> </tbody> </table> The rest of the values in the table remain the same.	PROPERTY	CONTINUOUSLY GRADED		MINIMUM	MAXIMUM	Stability (kN)	4.0	12.5	Air Voids (%)	3.0	5.0	
PROPERTY	CONTINUOUSLY GRADED												
	MINIMUM	MAXIMUM											
Stability (kN)	4.0	12.5											
Air Voids (%)	3.0	5.0											
Continue on next page													

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSMH 5.11	Construction: Trial Section Before the Contractor commences the construction of asphalt surfacing, he shall if so ordered, demonstrate, by laying a trial section 200 m² in area, that the equipment and processes that he proposes to use will enable him to construct the asphalt layer in accordance with the specified requirements. Only when such a trial section has been satisfactorily laid and finished, and is found to comply with the specified requirements, will the Contractor be allowed to commence with construction of the permanent work. Should the Contractor make any alteration in the methods, processes, equipment, or materials used, or should the work consistently fail to comply with the applicable requirements of the specifications, the Engineer may require that further trial sections be laid and tested at the cost of the Contractor before allowing the Contractor to continue with the permanent work. Trial sections shall be laid where indicated by the Engineer. The Contractor shall prepare the surface on which a trial section is to be laid and shall also, if the work fails to comply with the applicable requirements of the specification, remove the trial section after completion and acceptably restore the surface on which it was constructed, all at his own cost. Cost for trial sections are deemed to be included in the tendered rates."	
PSMH 6.3.6	Tolerances: Dimensions, Levels etc.: Smoothness Add the following: "Degree of Accuracy II is required."	
PSMH 7.1	Testing: Mix Design Add the following: "The proposed mixture design shall be submitted for approval to the Engineer at least two (2) weeks fourteen (14) days before commencement of the construction of asphalt surfacing. The Contractor shall ensure that the samples on which the mixture is based, are a true representation of the actual materials to be used for the work."	
PSMH 8.4.2	Measurement and Payment: Computation of Quantities.....	m ²
	Replace the subclause with the following: "Asphalt will be measured by the square metre of asphalt laid and approved by the Engineer." End of PSMH	

PSMK Kerbing And Channelling

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSMK	Kerbing And Channelling	
PSMK 3.2.3	Materials: Precast Kerbing and Channelling: Strength <i>Replace subclause with the following:</i> "Precast kerbs, edging and channels shall be of grade 25 MC PA/19 mm concrete."	
PSMK 3.9	Materials: Bedding Materials <i>Replace subclause with the following:</i> "The material on which concrete kerbs, channels and edging are bedded, shall be in accordance with the drawings"	
PSMK 5.2	Construction: Precast Concrete Kerbing and Channelling <i>Replace the first sentence of the subclause with the following:</i> "The material on which concrete kerbs, channels and edging are bedded, shall be in accordance with the drawings"	
	End of PSMK	

PSMM Ancillary Roadworks

Particular Specification Related to Clauses in SANS 1200	Item Description	Unit of Payment
PSMM	<u>Ancillary Roadworks</u>	
PSMM 3.2.2	Materials: Road Signs: Structural Steel Replace the last paragraph with the following: "All structural steelwork will be hot dipped galvanised and comply with the requirements of SANS 763"	
PSMM 5.2.2.4 d)	Construction: Road Signs: Painting of Structural Steel Work: Finishing Coat Add the following: "Notwithstanding sub-clause 3.2.8.2 the colour of the finishing coat shall be dark grey."	
PSMM 5.3.2	Construction: Road Markings: Surface Preparation <i>In the second sentence replace "48hrs" with "7 days".</i>	
	End of PSMM	

3.4.1.4 CERTIFICATION BY RECOGNIZED BODIES

Not applicable to this contract.

3.4.1.5 AGRÉMENT CERTIFICATES

Not applicable to this contract.

3.4.2 PLANT AND MATERIALS

3.4.2.1 PLANT AND MATERIALS SUPPLIED BY THE EMPLOYER

No "free issue" plant and materials will be incorporated in this contract.

3.4.2.2 MATERIALS, SAMPLES AND SHOP DRAWINGS

It is a requirement of this contract that all commercial/imported materials to be built into the Works be inspected and approved by representatives of the Employer and the Employer's Agent to ensure adherence to the specifications. Samples of all materials will be required to be presented to the Employer's Agent's Representative (RE) on site for approval. Materials built into the permanent works without prior approval of the RE may be ordered to be removed and replaced with approved materials. Such inspections and approvals may include but are not limited to the following:

- Road and layer works materials
- Imported earthworks materials
- All pipe materials and related pipe fittings and pipe specials
- Manhole rings and covers

3.4.3 CONSTRUCTION EQUIPMENT

3.4.3.1 REQUIREMENTS FOR EQUIPMENT

There are no minimum requirements for any of the construction equipment other than those stated elsewhere in these specifications.

3.4.3.2 EQUIPMENT PROVIDED BY THE EMPLOYER

No construction equipment will be provided by the Employer.

3.4.4 EXISTING SERVICES

3.4.4.1 KNOWN SERVICES

Prior to commencing work, the Contractor shall confirm with all Authorities and Departments concerned and obtain the necessary wayleaves for both overhead and underground services affected by the Works and shall satisfy himself that he has obtained all the relevant information required to complete the Contract. The Contractor will be liable for obtaining all the necessary wayleaves and work permits from the relevant service authorities prior to the commencement of work within the road reserve.

The Employer will make available all information relating to known services within the site boundaries and the immediate vicinity prior to the start of the construction of the works. The Contractor will be expected to expose and detect the location of such known services in all locations where they may interfere with the construction of the Works. Where such known services are located, the Contractor will be expected to mark and keep accurate records of the location and depth of services. The Contractor must provide the complete set of records to the Employer's Agent and highlight deviations from the Employer's as-built records. The Employer's Agent will then determine if any amendments are required to the design.

3.4.4.2 TREATMENT OF EXISTING SERVICES

The Contractor will be required as part of this contract to connect all piped services to the existing surrounding infrastructure. Where outages to sections of the water and sewer networks are required, the Contractor is expected to apply to the Employer for such outages in a timeous manner. Connection to any of the existing services will be done strictly according to the requirements of the municipality.

3.4.4.3 USE OF DETECTION EQUIPMENT FOR THE LOCATION OF UNDERGROUND SERVICES

Where exposure of existing services by hand excavation is not feasible it is expected that the Contractor will acquire and make use of appropriate detection equipment. Costs for the purchase and/or hire of basic cable route and pipe flow detection equipment is assumed to be included in the contract rates. No additional payment will be certified should the use of such equipment be required.

3.4.4.4 DAMAGE TO SERVICES

The Contractor will be held liable for damage to all known services and services where the location can be reasonably predicted. If an underground service is located within 2m (in all directions) of the position shown on as-built records, it will be deemed to be a known service. Damage to unknown services will be the responsibility of the Employer.

3.4.4.5 REINSTATEMENT OF SERVICES AND STRUCTURES DAMAGED DURING CONSTRUCTION

The reinstatement of services and structures damaged by the Contractor during Construction will be the responsibility of the Contractor, unless the service or structure to be reinstated is of a specialised nature. Reinstatement of specialised services and structures will be done by the Employer for the Contractor's account. Approval from the RE to be sought before commencing with any reinstatement or repair of services and structures.

3.4.5 SITE ESTABLISHMENT

3.4.5.1 SERVICES AND FACILITIES PROVIDED BY THE EMPLOYER

The Employer will be responsible for providing electricity to the Contractor. Electricity will be provided via a metered supply which will be for the Contractor's account. The Contractor will be responsible for the application to the municipality for an electrical site connection. Any costs related to such application and connection will be deemed to be included in the Contractor's site establishment contract rates.

Due to the critical water shortages experienced in the Western Cape, there will be no metered potable water supply available at the site, unless otherwise confirmed by the Employer at tender stage. The Contractor will have to allow for the collection of treated effluent from the nearest City of Cape Town Waste Water Treatment Works. Any costs related to the application for and collection of treated effluent including fuel, transport, charges at WWTW plant etc. will be deemed to be included in the contract rates. If there are any other sources of water available on site in the form of rivers, streams, fountains or groundwater, this needs to be approved by the Employer's Agent before making use of such source. The Contractor should allow for testing of effluent water quality prior to use in the works, unless regular testing of effluent water is being done by the Employer at the source of collection. Such results to be provided to the RE for approval prior to such water being used in construction of the works.

The Contractor must assume that a potable water connections will also not be available for the site camp and labourers and must make alternative arrangements for this.

Water required for mixing of concrete must be of potable standard and the Employer's Agent will not allow the use of treated effluent for these purposes. The Contractor will be required to arrange water trucks for water delivery to site for concrete items of work.

3.4.5.2 FACILITIES PROVIDED BY THE CONTRACTOR

The Contractor will be expected to provide the following services and facilities on site:

- Telecommunication services for use by Contractor and the Employer's Agent's Representative - Internet, data and cell phone/airtime.
- Ablution facilities
- First aid
- Office, workshop and construction camp facilities
- All security staff employed by the contractor on behalf of the CCT or at any CCT property must be registered with Private Security Industry Regulatory Authority (PSIRA). Proof of such registration must be made available to the employer's agent upon request.

3.4.5.3 STORAGE AND LABORATORY FACILITIES

The contractor shall be responsible for his own storage facilities and security thereof. At this stage no laboratories would be required on site as all quality control testing must be done by an accredited testing facility.

3.4.5.4 OTHER FACILITIES AND SERVICES

Other temporary facilities necessary for providing the works which are not provided by the Employer are as follows:

- Telecommunications for all site staff including the RE
- Security services as described elsewhere in this document
- Medical and first aid facilities for all persons visiting or working on the construction site.
- Fire protection services for all activities related to the construction of the works.
- Waste disposal of all construction waste generated by the Contractor
- Temporary sanitation/toilet facilities on site as required by applicable legislation. Separate facilities required for males and females where required.

3.4.5.5 VEHICLES AND EQUIPMENT

The following facilities and equipment will be provided by the Contractor for the exclusive use by the RE:

- One furnished office with a minimum floor area of 12m²
- The office mentioned above to be equipped with a 12000BTU air conditioner in working order
- Basic survey equipment and 2 survey assistants at no charge as reasonably required by the RE
- A3/A4 printer, photocopier and scanner
- The RE will make use of his/her own cellular phone. The cost of telephone calls and internet usage/subscription will be claimed by the Contractor under the relevant payment item and reimbursed directly to the RE.

3.4.5.6 ADVERTISING RIGHTS

Should the Contractor wish to erect any signage or display any advertisements within the site other than the approved contract nameboard, it may only be done with the prior written approval of the Employer.

3.4.5.7 NOTICE BOARDS

The Employer or the Employer's Agent will provide the Contractor with a design for the manufacture of the contract nameboard/s. Payment for such nameboard/s will be claimed by the Contractor under the relevant payment item. The nameboard/s will have to be erected at the commencement of the works on site and will need to be maintained in good condition for the duration of the contract period. The exact position for the installation of the nameboard/s will be pointed out to the Contractor by the Employer.

The nameboard/s will be removed and disposed of by the Contractor at the conclusion of the defects liability period. The cost for such removal and disposal needs to be included in the tendered rate allowed for the nameboard/s in the contract bill of quantities.

3.4.6 SITE USAGE

The contractor will be allowed to work within the site boundaries. The areas where special precautions must be taken and/or working permission to be obtained, will be pointed out on site by the RE on site or the Client Representative / Project manager. Any work done outside the allowable area prior written permission can lead to penalties.

The Contractor will have full access to the project site for the duration of the contract period. However, it should be noted that once phase one of the project has been completed, possession of this portion of the site will revert back to the Employer. The aim is then to hand over this portion of the site to a newly appointed Contractor for the construction of houses. The Contractor will be afforded access to the phase one site for the purposes of work related to the defects liability period.

3.4.7 PERMITS AND WAYLEAVES

The Contractor shall be responsible for obtaining all of the necessary wayleaves, permissions or permits applicable to working near any existing services or other infrastructure on Site, and shall ensure that any wayleaves, permissions or permits obtained by the Employer's Agent prior to the award of the contract are transferred into the Contractor's name.

The Contractor shall abide by any conditions imposed by such wayleaves, permissions or permits. The Contractor shall ensure that all wayleaves, permissions and permits are kept on site and are available for inspection by the relevant service authorities on demand. The Contractor shall also ensure that any wayleaves in respect of electricity services are renewed timeously every three months.

3.4.8 ALTERATIONS, ADDITIONS, EXTENSIONS AND MODIFICATIONS TO EXISTING WORKS

The Contractor will be required to confirm the position and levels of all existing services and connection points to the surrounding pipe and road reticulation networks. Where materials differences in levels and/or position of services are discovered the Contractor needs to inform the Employer's Agent immediately so that the necessary changes can be made to the layouts and design levels.

3.4.9 INSPECTION OF ADJOINING PROPERTIES

The contractor will be required to inspect, with the owners, the various properties bordering on the construction site and record any pre-existing damage or defects to buildings, structures, roads or pipes. Accurate records need to be kept by the Contractor in the event that claims are received from neighbouring property owners for damages to their property.

3.4.10 WATER FOR CONSTRUCTION PURPOSES

Due to the critical water shortages experienced in the Western Cape, there will be no metered potable water supply available at the site, unless otherwise confirmed by the Employer at tender stage. The Contractor will have to allow for the collection of treated effluent from the nearest City of Cape Town Waste Water Treatment Works. Any costs related to the application for and collection of treated effluent including fuel, transport, charges at WWTW plant etc. will be deemed to be included in the contract rates. If there are any other sources of water available on site in the form of rivers, streams, fountains or groundwater, this needs to be approved by the Employer's Agent before making use of such source. The Contractor should allow for testing of effluent water quality prior to use in the works, unless regular testing of effluent water is being done by the Employer at the source of collection. Such results to be provided to the RE for approval prior to such water being used in construction of the works.

Water required for mixing of concrete must be of potable standard and the Employer's Agent will not allow

the use of treated effluent for these purposes. The Contractor will be required to arrange water trucks for water delivery to site for concrete items of work.

3.4.11 SURVEY CONTROL AND SETTING OUT OF THE WORKS

The Employer's Agent will provide the Contractor with survey benchmarks upon the contract commencement date. The Contractor will be expected to use these benchmarks as the basis for all survey control and the setting out of the works. The Contractor will assume full responsibility for the accuracy of their setting out of the works. The RE will do regular inspections on site to confirm the accuracy of the setting out of the works. The Contractor will be expected to make the necessary staff and equipment available to the RE for such inspections. Any portions of the work found to be outside of the relevant tolerances as specified will have to be redone at the Contractor's cost.

3.4.12 LOCAL PRODUCTION AND CONTENT

The Contractor will be required to comply with all requirements as stated in this document.

3.4.13 EMPLOYMENT OF SECURITY PERSONNEL

All security staff employed by the contractor on behalf of the CCT or at any CCT property must be registered with Private Security Industry Regulatory Authority (PSIRA). Proof of such registration must be made available to the employer's agent upon request.

3.4.14 UNIVERSAL ACCESS

In pursuit of becoming a fully accessible city, the City of Cape Town expects all Consultants and Service Providers to design and construct to SANS Standards for accessible Design, and any relevant City of Cape Town documents as may be relevant, and to exhibit a commitment to employing Universal Design Principles in their design, construction, service and product delivery of construction projects. This applies to all projects whether new, temporary, upgrades or rehabilitation works.

The contractor will engage with project representatives and the CCT's Universal Accessibility Department on how Universal Design Principles will enhance accessibility, within this project, that meets a variety of needs and creates a city that is accessible to everyone.

C3.5 Management

CONTENTS

- 3.5.1. FORMS FOR CONTRACT ADMINISTRATION
- 3.5.2. PARTICIPATION OF TARGETED LABOUR
- 3.5.3. COMMUNITY LIAISON OFFICER
- 3.5.4. PARTICIPATION OF TARGETED ENTERPRISES
- 3.5.5. ENVIRONMENTAL MANAGEMENT PROGRAMME
- 3.5.6. HEALTH AND SAFETY

3.5.1. FORMS FOR CONTRACT ADMINISTRATION

The Contractor shall complete, sign and submit with each monthly statement for payment, the following updated returns (the format of which are attached in C3.6 Annexes as amended from time to time):

- a) Monthly Project Labour Report (Annex 1)
- b) B-BBEE Sub-contract Expenditure Report (Annex 2)
- c) Joint Venture Expenditure Report (Annex 3)
- d) Targeted Labour Contract Participation Expenditure Report (Annex 4)
- e) Targeted Enterprises Contract Participation Expenditure Report (Annex 5)

The Monthly Project Labour Report must include details of all labour (including that of sub-contractors) that are South African citizens earning less than R350.00 per day, as adjusted from time to time (excluding any benefits), who are employed on a temporary or contract basis on this contract in the month in question.

In addition to the Monthly Project Labour Report the Contractor shall simultaneously furnish the Employer's Agent with copies of the signed employment contracts entered into with such labour, together with certified copies of identification documents as well as evidence of payments to such labour in the form of copies of payslips or payroll runs. If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it and proof of such acknowledgement shall be furnished to the Employer's Agent.

The Monthly Project Labour Reports shall be completed and submitted in accordance with the instructions therein and copies of all submitted documents must be kept on-site be made available to the employer's agent upon request.

The **B-BBEE Sub-contract Expenditure Report** is required for monitoring the prime contractor's compliance with the sub-contracting conditions of the **Preference Schedule**.

The Joint Venture Expenditure Report is required for monitoring the joint venture's compliance with the percentage contributions of the JV partners as tendered, where the joint venture has been awarded preference points in respect of its consolidated B-BBEE scorecard.

The Targeted Labour Contract Participation Expenditure Report (if applicable) is required for monitoring the contractor's compliance for achieving the specified minimum targeted labour contract participation goal (CPG_L) and, if applicable, for calculating any penalty in terms thereof.

The Targeted Enterprises Contract Participation Expenditure Report (if applicable) is required for monitoring the contractor's compliance for achieving the specified minimum targeted enterprises contract participation goal (CPG_E) and, if applicable, for calculating any penalty in terms thereof.

The Expenditure Reports shall be verified by the Employer's Agent/Employer's Agent's Representative.

In respect of Annexes 2 and 3, the Employer shall, in addition to any other sanctions available to it, apply the financial penalties applicable to breach of preferencing conditions in the **Preference Schedule** Preference Schedule in Part T2.2 Returnable Schedules. In the case of joint ventures (Annex 3), the contractor shall prove his compliance with item 6) in Section 2 of the Preference Schedule by providing a consolidated scorecard at his own cost on instruction from the Employer's Agent.

3.5.2 PARTICIPATION OF TARGETED LABOUR

3.5.2.1 Minimum targeted labour contract participation goal

In support of the National Department of Public Works' Expanded Public Works Programme which is aimed at alleviating poverty through the creation of temporary employment opportunities using labour intensive methodologies and practices where possible, the Employer is seeking to increase the intensity of labour, as appropriate, in all of its infrastructure sector projects.

It is a requirement of this contract, therefore, that the work be executed in such a manner so as to maximise the use of labour intensive construction methods in order to provide low and semi-skilled temporary employment opportunities.

To this end, a minimum targeted labour contract participation goal is specified below, which shall be achieved by the Contractor in the performance of the contract, failing which, penalties as described will be applied. The Contractor is required to provide all skills training where necessary, so as to ensure that a minimum level of competence is achieved and maintained, such that the various activities are carried out safely and to the required standard. The cost of training shall be included in the rates for the various work activities.

The specified minimum targeted labour contract participation goal (CPGL) is

3 %

The minimum CPGL is such that the Contractor will have to carry out some of the work that would normally have been undertaken using mechanised construction methods, by using labour intensive construction methods instead. It is left to the discretion of the Contractor to identify suitable work activities for the intensification of labour. The Contractor shall, within 5 working days of being requested in writing by the Employer's Agent to do so, submit details of his/her plan to achieve the minimum CPGL.

3.5.2.2 Definitions

For the purposes of the requirements in respect of the participation of targeted labour, the following definitions shall apply:

"Target area" means the geographical area of subcouncil 24 in the City of Cape Town.

"Targeted labour contract participation goal (CPGL)" means the sum of the wages (excluding any benefits), for which the Contractor, or any of his/her sub-contractors contracts targeted labour in the performance of the contract, expressed as a percentage of the value of the contract.

"Targeted labour" means low and semi-skilled individuals, whose wages (excluding any benefits) do not exceed the threshold value, who reside in the target area, that are employed by the Contractor, or any of his/her sub-contractors, in the performance of the contract.

"Threshold value" is R350.00 per day as adjusted from time to time (excluding any benefits). The threshold value is not to be confused with any industry sector minimum wage determined in accordance with the Basic Conditions of Employment Act, 75 of 1977.

"Value of the contract" means the contract sum (accepted contract amount) less provisional sums, contingencies and VAT.

3.5.2.3 The selection and recruitment of targeted labour

Where targeted labour is to be drawn from specific local communities (defined in terms of the target area), such labour shall be identified using the relevant Sub-Council Job-Seekers Database. The Contractor shall request, via a Community Liaison Officer (if required in terms of the contract), a list of suitable candidates from the database, from which the Contractor shall make his/her final selection. The contractor shall enter into written contracts of temporary employment with all targeted labour.

Any difficulty experienced by the Contractor in identifying candidates through the Job-Seekers Database, or as regards any matter relating to the employment of targeted labour, shall be immediately referred to the Employer's Agent.

3.5.2.4 Contract participation goal credits

Credits towards the achieving the minimum CPGL shall be granted by converting the total monetary value of wages paid to targeted labour (including that of sub-contractors) to a percentage of the value of the contract. No credits shall be accorded should the contractor/sub-contractor fail to enter into written

contracts with the targeted labour. Furthermore, no credits shall be accorded in respect of targeted labour employed on work in respect of provisional sums or prime cost items. Such labour shall nevertheless be recorded on the Project Labour Report which is required to be furnished by the Contractor.

3.5.2.5 Training of targeted labour

The Contractor is required to provide all informal (on-the-job) skills training so as to ensure that a minimum level of competence is achieved and maintained, such that the various activities are carried out safely and to the required standard. The cost of informal training shall be included in the rates for the various work activities.

3.5.2.6 Penalties

The financial penalty to be applied for failing to meet the specified minimum targeted labour contract participation goal in the performance of the contract (unless proven to be beyond the control of the Contractor), is as follows:

$$\text{Penalty} = (\text{CPGL}^S - \text{CPGL}^A) \times P^*$$

Where CPGL^S = the specified minimum targeted labour contract participation goal (expressed as a percentage).

CPGL^A = the targeted labour contract participation goal achieved (expressed as a percentage).

P^* = the value of the contract.

3.5.3. COMMUNITY LIAISON OFFICER

It is a requirement of this Contract that a Community Liaison Officer (CLO) shall be appointed by the Contractor. The primary functions of the CLO shall be to assist the Contractor with the selection and recruitment of targeted labour, to represent the local community in matters concerning the use of targeted labour (and/or enterprises) on the works, and to assist with and facilitate communication between the Contractor, the Employer's Agent and the local communities.

The identification of suitable candidates (maximum 5; minimum 3) for the CLO position shall be resolved by the relevant Ward Councillor/s. Should suitable candidates not be identified within two weeks of the date of request, the Contractor shall be allowed to seek candidates from the relevant Sub-Council Job-Seekers Database. The final selection and appointment of the CLO in terms of the contract shall be the responsibility of the Contractor.

The period of appointment of the CLO shall be as stated in the Contract for Temporary Employment as a Community Liaison Officer referred to below. The date of commencement of temporary employment of the CLO shall be as agreed with the Employer's Agent.

It is required, therefore, that the Contractor enter into a contract of temporary employment with the selected CLO, the contracting parties being the Contractor and the CLO. To this end, a specimen Form of Contract of Temporary Employment as Community Liaison Officer is included in this document (Part C1.7: Agreement and Contract Data). This Form of Contract sets out, inter alia, the agreement between the parties, the duties and conditions of employment of the CLO (including the rate of remuneration to be paid). As said contract will be between the Contractor and the CLO, all costs involved shall be borne by the Contractor and the tender shall be deemed to include for this.

3.5.4. PARTICIPATION OF TARGETED ENTERPRISES

3.5.4.1 Minimum targeted enterprises contract participation goal

It is a requirement of this contract that enterprises located within the target area, as defined, be engaged by the Contractor for the provision of supplies, services or works necessary for the performance of this contract.

To this end, a minimum targeted enterprises contract participation goal is specified below, which shall be achieved by the Contractor in the performance of the contract, failing which, penalties as described will be applied.

The specified minimum targeted enterprises contract participation goal (CPGE) is

5 %

The Contractor shall engage targeted enterprises directly or indirectly in the performance of the contract to the extent that the total monetary value of such engagements (exclusive of VAT), expressed as a percentage of the value of the contract, is sufficient to achieve the specified minimum CPG_E.

3.5.4.2 Definitions

For the purposes of the requirements in respect of the participation of targeted enterprises, the following definitions shall apply:

"Target area" means the geographical area of subcouncil 24 in the City of Cape Town.

"Targeted enterprises contract participation goal (CPG_E)" means the value of supplies, services or works (exclusive of VAT), for which the Contractor contracts targeted enterprises, either directly or indirectly, in the performance of the contract, expressed as a percentage of the value of the contract.

"Targeted enterprises" means any sole trader, partnership or legal entity that acts as a supplier, manufacturer, service provider or sub-contractor, and which has its base of operations in the target area.

"Value of the contract" means the contract sum (accepted contract amount) less provisional sums, contingencies and VAT.

3.5.4.3 Achieving the contract participation goal

The contractor may achieve the specified minimum CPG_E as follows:

- a) by engaging one or more targeted enterprises to perform commercially useful functions in the performance of the contract;
- b) by engaging non-targeted enterprises, who in turn engage one or more targeted enterprises to perform commercially useful functions in the performance of the contract;
- c) by a combination of the above.

The Contractor shall, within 5 working days of being requested by the Employer's Agent to do so, submit details of his/her plan to achieve the minimum CPG_E.

3.5.4.4 Contract participation goal credits

Credits towards achieving the minimum CPG_E shall be granted by converting the total monetary value (exclusive of VAT) of the agreements between the Contractor, or Contractor's sub-contractors, and targeted enterprises, to a percentage of the value of the contract.

No credits shall be accorded should the Contractor (or sub-contractors):

- a) make direct payment to third parties in connection with the contract on behalf of targeted enterprises, when such payment is recovered by making deductions from payments due to the targeted enterprise;
- b) fail to enter into written contractual agreements with the relevant targeted enterprises.

Credits claimed towards the contract participation goal shall be denied where such written contractual agreements contain any of the following:

- c) conditions which are more onerous than those that exist in the prime contract (this contract);
- d) payment procedures based on a pay when paid system;
- e) authoritarian rights given to the employing contractor, with no recourse to independent adjudication in the event of a dispute arising.

No credits may be claimed in respect of targeted enterprises that do not adhere to statutory labour practices.

No credits shall be accorded in respect of targeted enterprises engaged on work in respect of provisional sums or prime cost items.

In the event that a targeted enterprise sub-contracts to another targeted enterprise, only the value of the higher level sub-contract shall be granted as credit towards achieving the specified minimum CPG_E.

In addition to the form required for contract administration (the Targeted Enterprises Contract Participation Expenditure Report), the Contractor shall furnish the Employer's Agent, upon written request, with documentary evidence that the targeted enterprises have their base of operations in the target area, copies of the contractual agreements with the various targeted enterprises, as well as documentary proof of payments made to the various targeted enterprises.

3.5.4.5 Penalties

The financial penalty to be applied for failing to meet the specified minimum targeted enterprises contract participation goal in the performance of the contract (unless proven to be beyond the control of the Contractor), is as follows:

$$\text{Penalty} = (\text{CPGE}^S - \text{CPGE}^A) \times P^*$$

Where CPGE^S = the specified minimum targeted enterprises contract participation goal (expressed as a percentage).

CPGE^A = the targeted enterprises contract participation goal achieved (expressed as a percentage).

P^* = the value of the contract.

3.5.5. ENVIRONMENTAL MANAGEMENT PROGRAMME

The Construction Environmental Management Programme is attached as an Annexure under C3.6 Annexures.

3.5.6. HEALTH AND SAFETY

The Construction Health and Safety specification is attached as an Annexure under C3.6 Annexures.

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

C3.6 Annexes

CONTENTS

Annex 1: Monthly Project Labour Report

Annex 2: B-BBEE Sub-contract Expenditure Report

Annex 3: Joint Venture Expenditure Report

Annex 4: Targeted Labour Contract Participation Expenditure Report

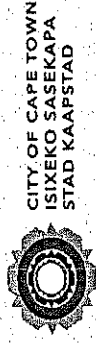
Annex 5: Construction Environmental Management Programme

Annex 6: Construction Health and Safety specification.

Annex 7: Drawings

ANNEX 1

CITY OF CAPE TOWN MONTHLY PROJECT LABOUR REPORT



CITY OF CAPE TOWN
ISIXEKO SASAKAPA
STAD KAAPSTAD

Instructions for completing and submitting this form

General

- The Monthly Project Labour Reports must be completed in full, using typed, capital letter characters; alternatively, should a computer not be available, handwritten in black ink.
- Incomplete / incorrect / illegible forms will not be accepted.
- Any conditions relating to targeted labour stipulated in the Contract (in the case of contracted services / works) shall apply to the completion and submission of these forms.
- This document is available in Microsoft Excel format upon request from the City's EPWP office, tel 021 400 9406 or email EPWPLR@capetown.gov.za.
- Project Details
- If a field is not applicable insert the letters: NA
- Either a Contract (in the case of contracted out services or works) or a Works Project (in the case of direct employment by the City) name and number must be inserted. The name of the contract or works project may be abridged if necessary. In the case of term tenders the contract name and number must reflect the term tender as advertised.
- On completion of the contract or works project the anticipated end date must be updated to reflect the actual end date.
- Workers Details and Work Information
- Care must be taken to ensure that worker details correspond accurately with the worker's ID document of which a **Certified copy must be kept for reporting.**
- Jobseeker Database Reference Number
- Unique number generated by Jobseekers system to confirm workers were sourced from the Jobseekers database operated by Subcouncils
- New workers: Training: Reporting Threshold
- A new worker is one in respect of which a new employment contract is signed in the current month.
- Refers to work days only. Formal accredited Training / Non-accredited training that does not form part of on-the-job training must be excluded from this entry
- All formal accredited / non-accredited training that does not form part of on-the-job training Workers earning more than the maximum daily rate (Reporting Threshold)
- Workers earning more than the maximum daily rate (Reporting Threshold)
- (currently R350 excluding any benefits) shall not be reflected on this form at all.
- Submission of Forms
- Signed hardcopy forms must be scanned and submitted to the City's project manager in electronic (pdf) format, together with the completed form in Microsoft Excel format.
- Scanned copies of all applicable supporting documentation must be submitted along with each monthly project labour report. Copies of employment contracts and **Certified ID documents** are only required in respect of new workers.
- If a computer is not available hardcopy forms and supporting documentation will be accepted.
- Failure to adhere to reporting requirements may result in the withholding of payment, penalties being applied or both

PROJECT DETAILS

Numbers in cells below e.g (6) refer to the relevant instruction above for completing and submitting forms

CONTRACT OR WORKS PROJECT NAME (6)		CONTRACT OR WORKS PROJECT NUMBER (6)												
DIRECTORATE		DEPARTMENT												
CONTRACTOR OR VENDOR NAME		CONTRACTOR OR VENDOR E-MAIL ADDRESS												
CONTRACTOR OR VENDOR CONTACT PERSON		CONTRACTOR OR VENDOR TEL. NUMBER												
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR (insert last 2 digits)	2	0

ACTUAL START DATE (yyyy/mm/dd)		ANTICIPATED / ACTUAL END DATE (yyyy/mm/dd)		(7)
2	0	2	0	
TOTAL PROJECT EXPENDITURE / VALUE OF WORK DONE TO DATE (INCLUDING ALL COSTS, BUT EXCLUDING VAT)				
R				

MONTHLY PROJECT LABOUR REPORT

WORKER DETAILS AND WORK INFORMATION



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

CONTRACT OR WORKS PROJECT NUMBER:				Year	Month	of				
(6)	(8)	(8)	(8)	(9)	(10)	(11)	(12)	(13)		
No.	First name	Surname	ID number	Jobseeker Database Reference Number	New Worker (Y/N)	Gender (M/F)	Disabled (Y/N)	No of days worked this month (excl. training)	No of training days this month (with stipend)	Rate of pay per day (R-c)
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
								0	0	R

Declared by Contractor or Vendor to be true and correct	Name	Signature
	Date	

Received by Employer's Agent Project Manager/ Representative:	Name	Signature
	Date	

ANNEX 2

CITY OF CAPE TOWN

CONTRACT NO. AND NAME: _____

CONTRACTOR: _____

B-BBEE SUB-CONTRACT EXPENDITURE REPORT BASED ON PAYMENT CERTIFICATE NO.

Value of the contract (as defined in the Preference Schedule) (P*)		R	B-BBEE Status Level of Prime Contractor	
Name of Sub-contractor (list all)	B-BBEE Status Level of Sub-contractor ¹	Total value of Sub-contract (excl. VAT) ¹	Value of Sub-contract work to date (excl. VAT) ¹	Value of Sub-contract work to Sub-contractors with a lower B-BBEE Status Level than Prime Contractor
Sub-contractor A		R	R	R
Sub-contractor B		R	R	R
Sub-contractor C		R	R	R
¹Documentary evidence to be provided		Total:		R
		Expressed as a percentage of P*		%

Signatures

Declared by Contractor to be true and correct: _____

Date: _____

Verified by Employer's Agent/
Employer's Agent's Representative: _____

Date: _____

ANNEX 3

CITY OF CAPE TOWN

CONTRACT NO. AND NAME:

CONTRACTOR:

JOINT VENTURE EXPENDITURE REPORT BASED ON PAYMENT CERTIFICATE NO.

Value of the contract (as defined in the Preference Schedule) (P*)		B-BBEE Status Level of Joint Venture				
Name of Joint Venture partner (list all)	B-BBEE Status Level of each JV partner as at contract award	Percentage contribution of JV partner per JV Agreement ¹ A	Total value of JV partner's contribution (excl. VAT) ¹ $B = A\% \times P^*$	Value of JV partner's contribution to date (excl. VAT) ¹ C	Value of JV partner's contribution as a percentage of the work executed to date $D = C/P^* \times 100$	
JV Partner A		%	R	R	%	
JV Partner B		%	R	R	%	
JV Partner C		%	R	R	%	

¹Documentary evidence to be providedSignatures

Declared by Contractor to be true and correct:

Date:

Verified by Employer's Agent/
Employer's Agent's Representative:

Date:

CITY OF CAPE TOWN

CONTRACTOR:

TARGETED | ABOUT CONTRACT PARTICIPATION EXPENDITURE REPORT BASED ON CERTIFICATE NO.

Value of the contract (as defined in the Preference Schedule) (P*)	R	Specified Targeted Labour Contract Participation Goal	%
---	---	---	---

Name of Contractor/Sub-contractor (list all)	Total previous expenditure on wages in respect of targeted labour	Net Amount for this month ¹	Total expenditure on wages in respect of targeted labour
Contractor	R	R	R
Sub-contractor A	R	R	R
Sub-contractor B	R	R	R
Documentary evidence to be provided			Total: R
			Expressed as a percentage of P*
			%

¹Documentary evidence to be provided

Declared by Contractor
to be true and correct:

**Verified by Employer's Agent/
Employer's Agent's Representative:**

Date _____

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

Annex 5: Construction Environmental Management Programme

Please refer to enclosed CD for Construction Environmental Management Programme

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

Annex 6: Construction Health and Safety Specification

Please refer to enclosed CD for Construction Health and Safety Specification

CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

Annex 7: Drawings

Please refer to enclosed CD for the Drawings

Part C4: Site information

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CITY OF CAPE TOWN

DIRECTORATE HUMAN SETTLEMENTS: HUMAN SETTLEMENT IMPLEMENTATION

CONTRACT NO. 234Q/2018/19

CONSTRUCTION OF CIVIL ENGINEERING SERVICES – MACASSAR HOUSING PROJECT

C4 Site Information

CONTENTS

4.1 SCOPE

4.2 SUBSOIL INVESTIGATIONS, BOREHOLE RECORDS AND TEST RESULTS

4.1 SCOPE

The documentation included in this section 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.

Only actual information about physical conditions on the site and its surroundings has been included in this section and interpretation is a matter for the tenderers.

4.2 SUBSOIL INVESTIGATIONS, BOREHOLE RECORDS AND TEST RESULTS

The phase 1 geotechnical report (GFSH2) has been included on the disc issued with this document.

COMPLETED CONTRACTS - ALL				
EMPLOYER	CONSULTING ENGINEER	DESCRIPTION OF WORK	VALUE OF WORK	DATE COMPLETED
		Upgrade Existing Road Sable Road / N1 Intersection platform	R 600,000	Sep '07
		Ladismith - Reseal Trunk Road 31, Section 4	R 25,633,000	Dec '07
		Grabouw Water Pipeline, Phase 1	R 2,364,000	Dec '07
		Overberg: Repair Flood Damaged Structures	R 9,888,000	Feb '08
		Surfacing of DR1288, Genadendal - Upgrade existing road	R 15,331,000	Mar '08
		Reseal Luculus Road, Joostenbergvlakte Rehabilitation of existing road	R 600,000	Apr '08
		Paternoster Development - Roadworks and Services	R 10,952,000	May '08
		Bardale Village - Phase 2, Kuilsrivier Roadworks and Services	R 24,986,000	May '08
		Seina Mine, Noordhoek - Roadworks and Services	R 500,000	Jun '08
		Nonqubela Phase 2, Khayelitsha - Roadworks and Services	R 17,561,000	Aug '08
		Klipdrift Road, Rawsonville - Upgrade Existing Roads	R 2,968,000	Aug '08
		Scottsdene, Kraaifontein - Roadworks and Services	R 1,915,000	Aug '08
		Upgrading of Eksteen Street - Heidelberg	R 5,636,000	Aug '08
		Jamestown, Stellenbosch - Roadworks and Services	R 2,282,000	Sep '08
		Khayelitsha Rail Extension - Earthworks, Concrete and Rail Construction	R 22,903,000	Sep '08
		Tafelbaai Substation - Platform and Services for Substation	R 8,107,000	Nov '08
		Hessequa Flood Damage Repairs, Riversdal	R 9,385,000	Nov '08
		Khayelitsha District Hospital - Roadworks and Services	R 11,064,000	Apr '09
		Petro SA Head Office - Roadworks and Services	R 3,916,000	Apr '09
		Foreshore Cable Network Installation	R 1,600,000	Jun '09
		Dagbreek Substation - Roadworks and Services, Bulk Earthworks, Concrete and Building Works	R 1,908,000	Jun '09
		Roadworks and services - Mitchells Plain Taxi Rank	R 29,697,000	Sep '09
		Upgrading Existing Roads - Cederberg Road 1407 1487 and Bridges	R 33,538,000	Sep '09
		Eskom Tafelbaai Cables	R 5,973,000	Dec '09

COMPLETED CONTRACTS - ALL				
EMPLOYER	CONSULTING ENGINEER	DESCRIPTION OF WORK	VALUE OF WORK	DATE COMPLETED
		Upgrading of Park and Ride Facilities Kullsvier & Montla Vista Stations	R 11,299,000	May '10
		Rehabilitation of Divisional Road (Karwyderskraal Road)	R 38,822,000	Jun '10
		Supply and installation of 132 kV Underground Cables and Accessories - Retreat	R 4,575,000	Jun '10
		Re-Seal of MR450 Motherwell to Addo	R 22,417,000	Jun '10
		Re-Seal of MR453 Witteklip to Uitenhage	R 18,667,000	Jun '10
		Construction of Holding Pond, Pump Station and Pipeline for Mosselbank Irrigation Scheme	R 2,988,000	Jun '10
		Enabling Works Contract for the Aurecon Head Office Development : Century City	R 1,977,000	Jul '10
		BRT between Racecourse Road & Blaauwberg Road	R 98,803,000	Aug '10
		Alterations of Montagu Water Treatment Works	R 8,216,000	Sep '10
		Proposed Bridge over the Krom River on Divisional Road 1285 - Grawouw	R 4,087,000	Mar '11
		Earth Works and Concrete Foundations (Greenland Substation, Elgin/Greenland 60kV OH Line and MV Integration)	R 8,028,000	Mar '11
		Reconstruction and Widening of +/- 400m of Merrydale Road, Lenggterg	R 4,168,000	Mar '11
		The Periodic Maintenance (Reseal) of National Route 1 Sections 7 & 8 Between Steyn Station (km 53.0) and Beaufort West Circle (km 1.2)	R 40,047,000	Apr '11
		Repair and Reseal Main Road 310 and Divisional Road 1487 - Ceres	R 31,073,000	Apr '11
		The Upgrading of Road DR 3322 from the N10 Junction to Karakoel Research Centre	R 17,448,000	Apr '11
		Reseal of TR 9/2 in the Cape Winelands District Municipal	R 21,014,000	Apr '11
		Civil and Building Works Earthworks and Concrete for Foundations (Gala Substation - Civil & Building Works)	R 2,260,000	Jun '11
		Civil and Building Works - (Redevelopment of Green Point Sportsfield and Police Stables)	R 11,397,000	Dec '11
		Mosselbank Irrigation - 4 km of 315mm dia UPVC Pipeline to new Spill Points Pumphouse and Spillpoint	R 1,665,000	Jan '12
		Khayelitsha District Hospital - Building Works Roadworks, Services, Bulk earthworks, Water and Sewer Reticulation, Asphalt Surface for Parking Areas and Internal Road	R 14,355,000	Mar '12
		Construction of the Stables Bus Depot - Potsdam Road 1700/2010/11	R 13,038,000	Mar '12
		Montagu Pedestrian Bridge - Construction of a steel manufactured bridge and its support structures	R 2,680,000	Apr '12
		Uitspan Substation - Construction of a Eskom Sub-Station and all related services and roads.	R 3,181,000	May '12
		The Rehabilitation of Main Road 535 from km 12 to km 24 - Dwarskroosbos CB05,1	R 23,358,000	May '12
		Reseal of MR 547 between Vredendal (Km32.46) and Lutzville (Km45.00)	R 16,000,000	May '12

COMPLETED CONTRACTS - ALL				
EMPLOYER	CONSULTING ENGINEER	DESCRIPTION OF WORK	VALUE OF WORK	DATE COMPLETED
		Construction of Civil Services for Bardale Housing Project Phase 4 and Upgrade of Phase 1 Road Works and Services 1050 Dia Stormwater 3m depth 1200 Dia Stormwater 4m depth	R 78,000,000	Aug '12
		Reseal and Rejuvenation of Dassenberg Road and Reygersdal Drive, Atlantis	R 11,300,000	Aug '12
		Fair Cape Cow Housing (Extension to 2 No. Cow Housing Area's)	R 3,300,000	Oct '12
		Flood Damage Repairs to Structures in the NUY area (Repair and construct concrete structures) C960	R 13,700,000	Feb '13
		Flood Damage Repairs in Cape Winelands Robertson area (Repair and construct concrete structures) C961	R 13,200,000	Feb '13
		Reseal of Trunk Road 31 Section 5 Ladismith (km 0.91) to Callitzdorp (km 47.63). C905	R 99,000,000	Mar '13
		Construction of Inner City IRT system (Infrastructure Work at Queens Beach, Cape Town)	R 5,250,000	Mar '13
		Chavron Project CORE- Erf 6581 (Remainder of erf 5036) Boulevard Corner, Century City, Cape Town (Bulk earthworks & civil service to new office block)	R 2,600,000	Mar '13
		Swellendam Slip C961	R 16,500,000	Apr '13
		Heldeveld - Duinefontein Road Housing Project: Civil Engineering Services Construction for 738 No, Ervan 284Q/2011/12	R 15,100,000	Apr '13
		Construction of New Road Infrastructure in George Kerridge (Orgegund), Phase 2 24597AVSO	R 15,210,000	Oct '13
		Dasslekop Wind Energy Facility - Klopheuwel Wind Farm Caledon - Western Cape	R 37,800,000	Nov '13
		Access Safety Improvements and the Provision of Pedestrian Safety Facilities on National Route 2, Section 3 at Myddleton C.005.002-2010-9	R 42,316,000	Nov '13
		The Special Maintenance (Repair & Reseal) of National Route 1, Section 10 & 11 between Bonteboek (km 47.20) and Hanover Station (km 20.20) NRA N.001-101-2012/1	R 83,800,000	Jan '14
		The Repair and Reseal of Trunk Road Route 77 Section 1 from Langebaan (Km 111.45) to Veldrift (km 138.63) C885	R 58,360,000	Mar '14
		Rehabilitation of the Entrance and Exit Road using Block Paving at Swellendam Weigh Bridge Site C574.45	R 1,079,712	Mar '14
		Upgrading of +/- 350m of Main Road in Vredendal, located within the Matzikama Municipal Area T27/2013	R 740,570	Mar '14
		Upgrade of Grabouw Sewerage Treatment Works: Civil Works Phase 2A and 2B ENG 06/2012/13 Water retaining concrete structure	R 16,820,000	Mar '14
		Regravel Roads in the Overberg Area - Phase 2 C841.2	R 48,020,000	Jun '14
		Upgrading of Divisional Road 2222 to Surface Standards in the Lutzville area using Labour Enhanced Construction Methods C834.03	R 9,400,000	Jun '14
		Earthworks and Site Clearance for the Saldanha LPG Import and Storage Terminal in Saldanha Bay, South Africa SUN101-CC01-PC-001	R 9,738,882	Jul '14
		Slope Stabilization at Langhooie on the National Route 2 Section 2 at km 51.65 NRA N002-020-2014/1	R 9,331,764	Jul '14
		The Proposed Rehabilitation of Steel Bridge No. 3057 (Roofbrug) on Main Road 289 at km 0.35 over the Breede River near Bonnievale C820.01	R 8,318,921	Aug '14

COMPLETED CONTRACTS - ALL				
EMPLOYER	CONSULTING ENGINEER	DESCRIPTION OF WORK	VALUE OF WORK	DATE COMPLETED
		Construction of Civil Engineering Services for Bardale Housing Project Phase 5A & Upgrade of Phase 5B 123Q/2011/12	R 48,000,000	Nov '14
		Flood Damage Repairs to Structures in the Eden Region; Unlondale Area C857.1	R 32,480,000	May '15
		Rehabilitation of MR348 (km 3.02 to km 11.00) and the Upgrade of DR1611 (km 0.04 to km 0.80) and DR1599 (km 9.45 to km 11.08) Near Glentana	R 98,026,000	Jul '15
		The Rehabilitation / Reseal of Main Road 347 between Blanco (km 0.0) and Harold's Bay (km 10.2) C823	R 105,173,294	Jul '15
		Flood damage Repairs at four river crossings in the Overberg region in the Greyton area	R 6,000,000.00	Sep '15
		Sunrise Energy Construction of Retaining wall for Bullets and Culvert Crossing	R 14,100,000	Apr '16
		Upgrading of Eersteriver Public Transport Facility - Phase 1 77Q/2013/14	R 42,280,456	Apr '16
		Flood damage repair at six river crossings in the Overberg region between Boldriver and Genadendal C858.5	R 18,800,000	Mar '16
		Construction of Phase 3 of the Sir Lowry's Pass Outfall Sewer 47Q/2014/2015	R 62,000,000	Mar '17
		Rehabilitation of Main Road 189 from KM 12.34 (Kraalfontein) to KM 16.63 (Main Road 174) C1003	R 60,000,000	April '17
		Rehabilitation of Pella Road between Charel Oys Drive and Pella-Katzenberg 163Q/2015/16	R 20,600,000	Mar '17
		Upgrading of the Klipnute Water treatment works to 2.4ML/Day B/SM/27/16	R 33,000,000	Nov '17
		Rehabilitation of Main Road 298 between Worcester (KM 0.0) and Wytersdift (KM 20.7) through Rawsonville C015	R 230,000,000	Dec '17
		Upgrade of Portion DR 1094 (Km 0.00 to Km 4.62) between R304 and MR 167 (Sandringham Road) C850	R 4,873,286	Dec '17
		Construction of Civil Engineering Infrastructure for the Establishment of an Incremental Development Area on Erf 18370-3, Khayelitsha	R 25,265,187	Feb '18
		Western Cape: Department of Defence; Langebaan; 4 Special Forces Regiment; Resurfacing of Donkergrat Road	R 13,720,000	Dec '17
		Rehabilitation of divisional road 1111 between Katbaskraal and Malmesbury; Km 23.50 and Km 38.94 C1009.01	R 104,000,000	May '18

CURRENT CONTRACTS - ALL

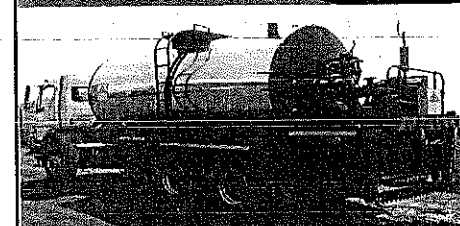
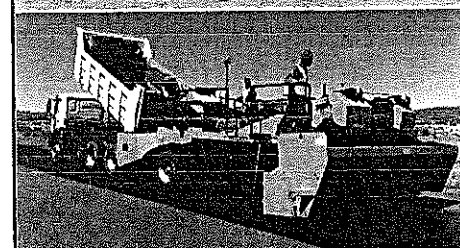
EMPLOYER	CONSULTING ENGINEER	DESCRIPTION OF WORK	VALUE OF WORK	COMPLETION DATE
		Construction of Lourens River Flood alleviation measures - Phase 1H 165Q/2015/16	R 37,800,000	October '18
		The Upgrading of Divisional Road 1050 (Annandale Road) KM 0,00 to KM 7,33 in the Stellenbosch Area	R 122,242,981	April '19
		Rehabilitation of Trunk Road 23 Section 3 Gouda Klein-Bergrivier Bridge KM 0.12 - KM 12.5	R 190,701,637	Aug' 19
		Rehabilitation of Sir Lowry's Pass Road and Old Sir Lowry's Pass Road 109Q/2016/17	R 63,000,000	Nov' 19
		The Upgrading and Extension of Onverwacht Road and the Upgrading of Sir Lowry's Pass Village Road between Bizweni Avenue and Onverwacht Road, Somerset West	R 58,300,000	Dec' 19
		Construction of the Southern Extension of Van Der Stel Street between Abattoir Street and Klein Drakenstein Road	R 23,839,294	Sept '19

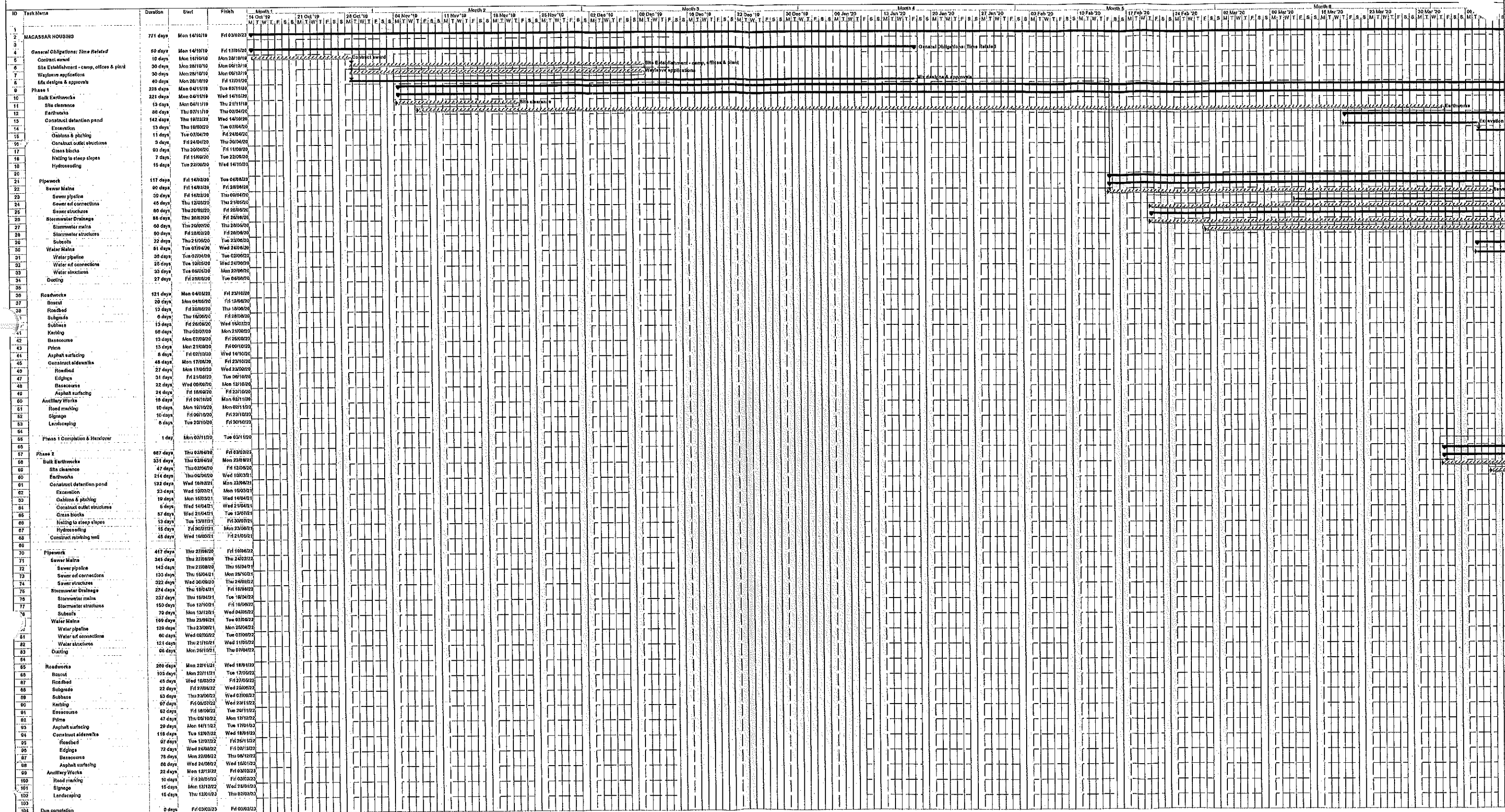
The Upgrading of Divisional Road 1050 (Annandale Road) KM 0,00 to KM 7,33 in the Stellenbosch Area	W/Cape Prov. Government – Roads & Transport	Rehabilitation of road, including widening, new concrete bridge etc.	R122.2m	Nov'16 – Current
Upgrade of Portion DR 1094 (Km 0.00 to Km 4.62) between R304 and MR 167 (Sandringham Road)	Department of Transport and Public Works	Upgrade of Portion DR 1094 (Km 0.00 to Km 4.62) between R304 and MR 167 (Sandringham Road)	R48.7m	Oct '16 - Dec' 17
Construction of Lourens River Flood alleviation measures - Phase 1H	City of Cape Town	Flood alleviation measures	R37.8m	Jun'16 – Sep'18
Rehabilitation of Pella Road between Charel Uys Drive and Pella-Katzenberg	City of Cape Town	Roadworks	R20m	Apr'16 – Mar'17
Rehabilitation of Main Road 189 from km12.34 (Kraaifontein) to km16.63 (Main road 174)	Prov Gov. W/Cape: Dept of Transport & Public Works	Rehabilitation of road	R60m	May'15 – Mar'17
Sir Lowry Outfall Sewer	Prov Gov. W/Cape: Dept of Transport & Public Works	Sewer pipeline & ancillary works	R62m	Jul'15 – Jun'17
Upgrading of Eersterivier Public Transport	City of Cape Town	Broadening/Upgrading of Main/Minor roads, improvement to Stormwater	R50.3m	Jun'14 – Dec'16
Bardale Housing Phase 5A & upgrade of Phase 5B	City of Cape Town	Roadworks & Services	R46m	Jun'13 – Mar'15
Repair & reseal of Trunk Route 77 Section 1, from Langebaan (km 111.45) to Velddrif (km 138.83)	Prov Gov. W/Cape: Dept of Transport & Public Works	Repair & reseal of existing road (27km long)	R56,4m	Jun'13 – Feb'14
Construction of civil services for Bardale Housing Phase 5A & Phase 5B	City of Cape Town	New civil engineering infrastructure	R46.0m	Jun'13 – Aug'14
Special Maintenance (Repair & Reseal) of N1, Section 10 & 11 between Bontebok (km 47.20) and Hanover Station (km 20.20)	SANRAL	Repair & reseal of existing road (30km long)	R83.8m	Jan'13 – Oct'14
Construction of new road infrastructure in George Kerridge (Ongegund, Vredenburg), Phase 2	Saldanha Bay Municipality	New civil engineering infrastructure	R15.20m	Nov'12 – Dec'13
Reseal of Dassenberg Road & Reygersdal Drive, Atlantis	City of Cape Town	Reseal & Rejuvenation of Road	R11.3m	Mar'12 – Jun'13
Reseal of MR 547 between Vredendal and Lutzville	Prov Gov. W/Cape: Dept of Transport & Public Works	Reseal existing road surface, 30km long	R15.9m	Sep'11 – Jul'12
Repair & reseal MR310 & Divisional Road 1487, Ceres	PAWC	Repair & resealing of existing road, 18km long	R 31 m	Aug'10 – Apr'12
Rehabilitation of MR535, Dwarskersbos	PAWC	Reseal of MR535 (km12 – km24)	R 20 m	Sep'11 – May'12
Bardale Housing Project Phase 4 & Upgrade of Phase 1	City of Cape Town	Roadworks & Services	R78.86m	Dec'10 - Aug'12
Reseal of TR9/2 in Cape Winelands District Municipal Area - Rawsonville	W/Cape Prov. Government – Roads & Transport	Reseal existing road surface (130 000m ² double seal)	R21.0m	Nov'10 – Aug'11
Public Transport Corridor – Racecourse Rd to Blaauwberg Rd	City of Cape Town	Roadworks & Services	R116.5m	Mar '10

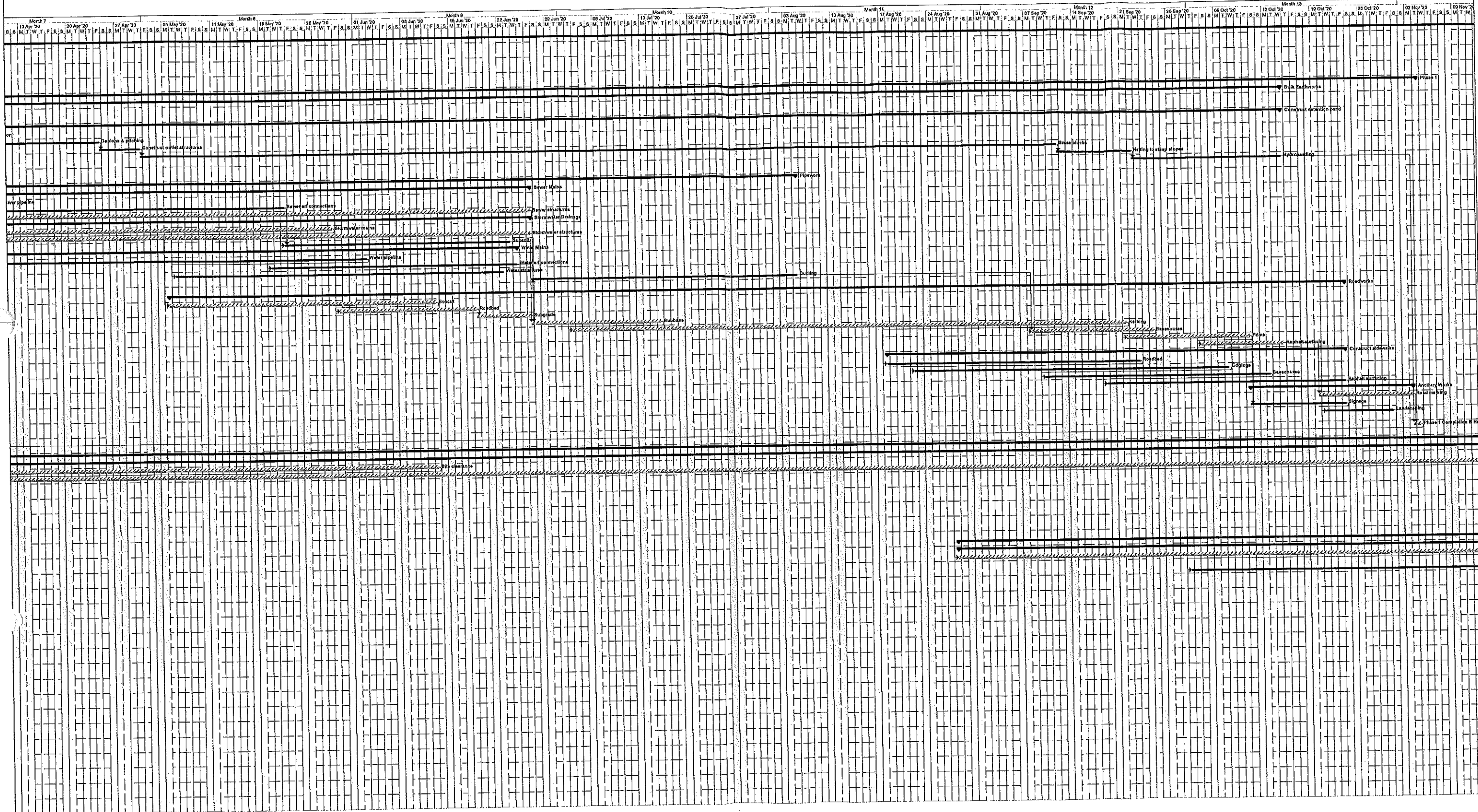
Construction of Lourens River Flood Alleviation Measures – Phase 1H	City of Cape Town	Flood alleviation measures	R37.8m	Jun'16 - Current
Sir Lowry Outfall Sewer	Dep. of Public Works	HDPE lined Bulk sewer and Roadworks	R62m	Jun '15 - Jun '17
Upgrading of Eersterivier Public Transport Facilities, Phase 1	City of Cape Town	Roadworks & Services	R42m	May'14 - Aug '15
Bardale Housing Phase 5A & upgrade of Phase 5B	City of Cape Town	Roadworks & Services	R46m	Jun'13 - Apr'14
Construction of new road infrastructure in George Kerridge (Ongegund), Phase 2	Saldanha Municipality	New Road Construction	R15.2m	Nov'12 - Dec'13
Construction of Inner City IRT system Infrastructure work at Queens Beach, Cape Town	Group 5 Coastal	Infrastructure Work	R5.25m	Jun'12 - Dec'13
Heideveld – Duinefontein Road Housing Project	City of Cape Town	Civil Engineering Services	R15.1m	Jun'12 - Jan'13
Bardale Housing Project Phase 4 & Upgrade of Phase 1	City of Cape Town	Roadworks & Services	R78.86m	Dec'10 - Aug
Public Transport Corridor – Racecourse Rd to Blaauwberg Rd	City of Cape Town	Roadworks, incl. concrete bus route, Bus Stations & Services	R85.8m	Feb'09 - Nov'10
Khayelitsha District Hospital	Dep of Transport & Public Works	Infrastructure Installation	R11.1m	Aug'08 - Mrt'09
Khayelitsha Rail Extension	SARCC / Metrorail	New 4.1km Rail Extension	R22.9m	Mar'08 - Sept'08

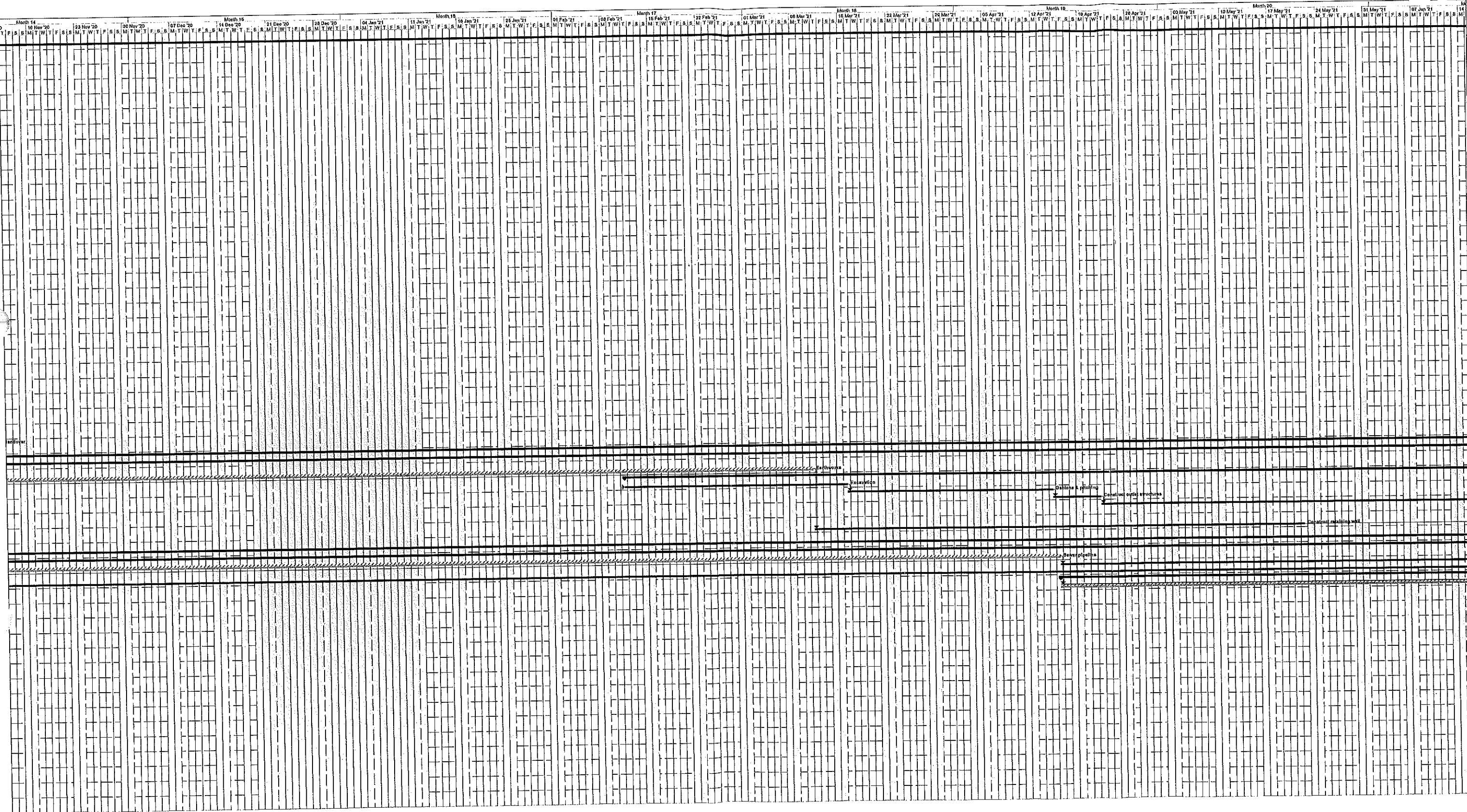
PLANT LIST

Plant	Description	Make	Qty
<u>RECYCLER</u>	MPH 125	Bomag	1
<u>GRADER</u>	12 ton	Komatsu	3
	14 ton	Komatsu	2
<u>EXCAVATORS</u>	5 ton	Volvo	1
	20 ton	Komatsu	6
	30 ton	Komatsu	1
	Montabert Hammer	Indeco	1
<u>BULLDOZER</u>	D65 E 18 ton	Komatsu	1
<u>ROLLERS</u>	Vibratory Mass Fill 12 ton	Ham	2
	Vibratory Mass Fill 14 ton	Bomag/Ham	3
	Pneumatic Tyre Wheel Rollers 22 ton	Ham/Bomag	5
	Grid Roller 12 ton	Bell	1
	Walk-behind Vibrating rollers	Wacker	2
	Sit on roller	Bomag	3
	Tangentlal Oszilation Tandem Roller	Bomag	1
<u>TLB</u>	4x4 Digger Loaders	Komatsu	7
	4x4 Digger Loaders	Bell	3
<u>LOADERS</u>	1.0 m3	Volvo	1
	1.5 m3	Komatsu	1
	2.0 m3	Komatsu	3
	Bobcat Loader with milling attachments	Bobcat	1
<u>SURFACING PLANT</u>	Chip Spreader	Phoenix/Etnyer	2
	Slurry Truck with Spreader bar	FAW	1
	Bitumen Distributor		1
	Small Bitumen Spray Bowser 1000 L		1
	Mechanical Roadbroom	Bross Broom	2
	Superlor roadbroom		2
	Hand prime sprayer 200 ltr		2
<u>ASPHALT PLANT</u>	BV 800 Paver	Bomac	1
<u>MILLER</u>	BM 1000/35 1m Wide Milling Machine	Bomac	1
<u>TIPPER</u>	4 m3 Tipper trucks	Tata	3
	6 m3 Tipper trucks	Hino/Fuso	4
	10 m3 Tipper trucks	MAN	4
<u>WATER CART</u>	6000 ltr Water truck	Mercedes	1
	16000 ltr Water truck	Mercedes	4
<u>ADT</u>	20 ton, 11 m3 Payload	Bell	2
<u>FLATBED</u>	8 ton with Crane and Watertank	Samil	2
	14 ton with Crane	Tata Novus	1
	2 ton Truck	Tata	1
		Man/Fuso	2
<u>SEMI TRAILERS</u>	Lowbed trailers		4
<u>LOW BED</u>	40 ton Lowbed	Volvo/Martin trailer	1
	20 ton Lowbed	Tata/Hyster trailer	1
<u>TRACTOR</u>	Tractor with Trailors	Massey Furgenson	3
		Bell/Ford/Case	4
<u>CONCRETE PLANT</u>	Concrete Mixer Truck	FAW	2
	Karoo Batching Plant		1
	Mobile Conveyor		1
	Concrete Mixer 400R	Winget	2
	Concrete Mixers 220 ltr		6
<u>GENERAL PLANT</u>	Tow Behind Compressors & Accessories	Ingersoll Rand	1
	Forward Reverse Plate Compactors	Wacker	8
	Rammer Compactors	Wacker	10
	Concrete Compaction Units		5
	Generators		10
	Diesel Bowzers		5
	Accommodation of Traffic Control Trailors		12
	LDV Trailors		10
	Water Pumps		17
	Water Tanks 5000 ltr		10
	Bulk tank 9000- 23000ltr		6
	Scaffolding Towers		8 Sets
<u>SITE ACCOMMODATION</u>	Containers		32
	Porta Camp Offices		2
	Survey Equipment		20 sets
	Total Station Survey		2
	Troxler Testing Units		2
<u>VEHICLES</u>	1 ton LDV	Ford/Mazda	44
	Motor Vehicle	Various	12
	Motorcycle	Yamaha SR 250	1
<u>WORKSHOP</u>	Fully Operational Workshop		1

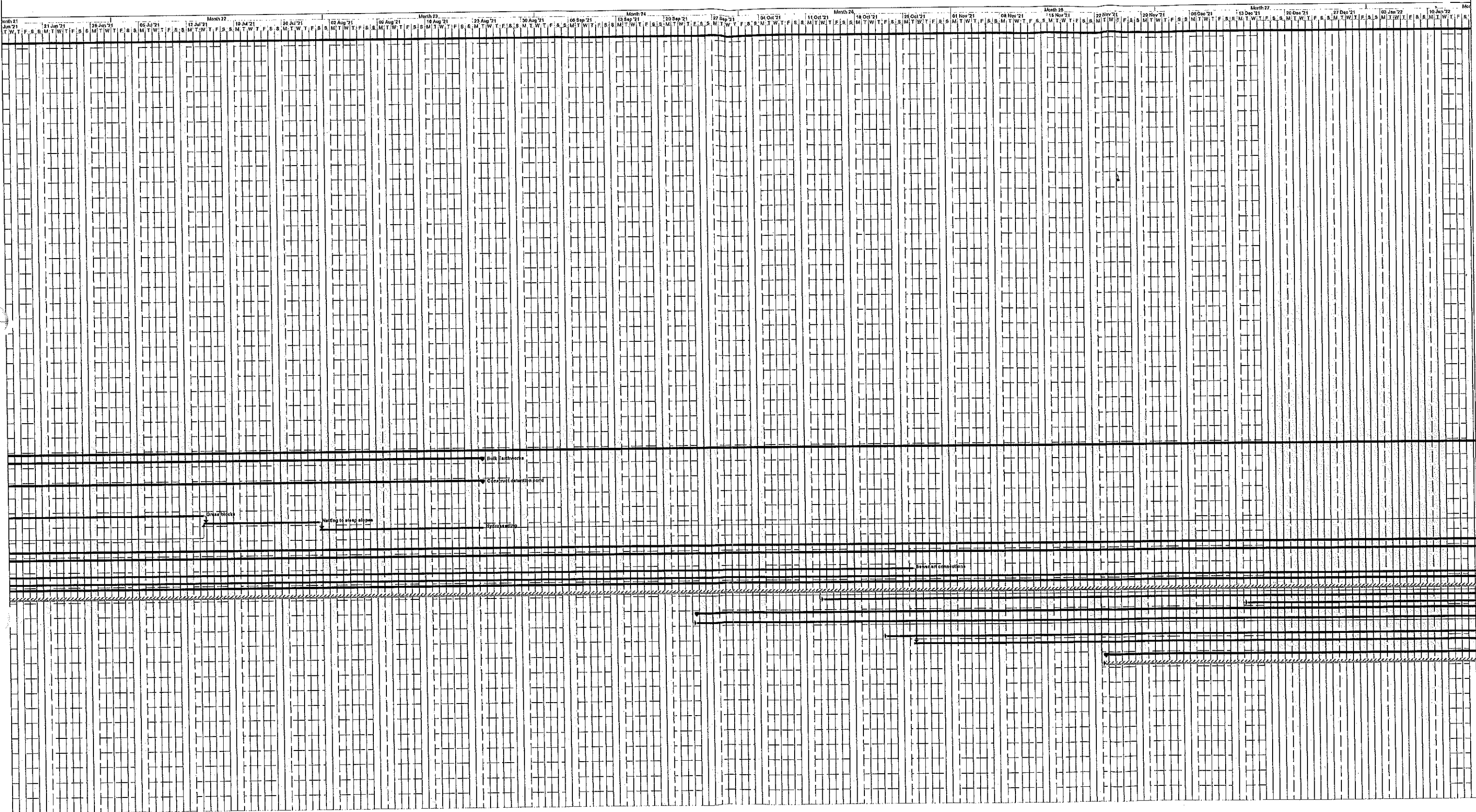


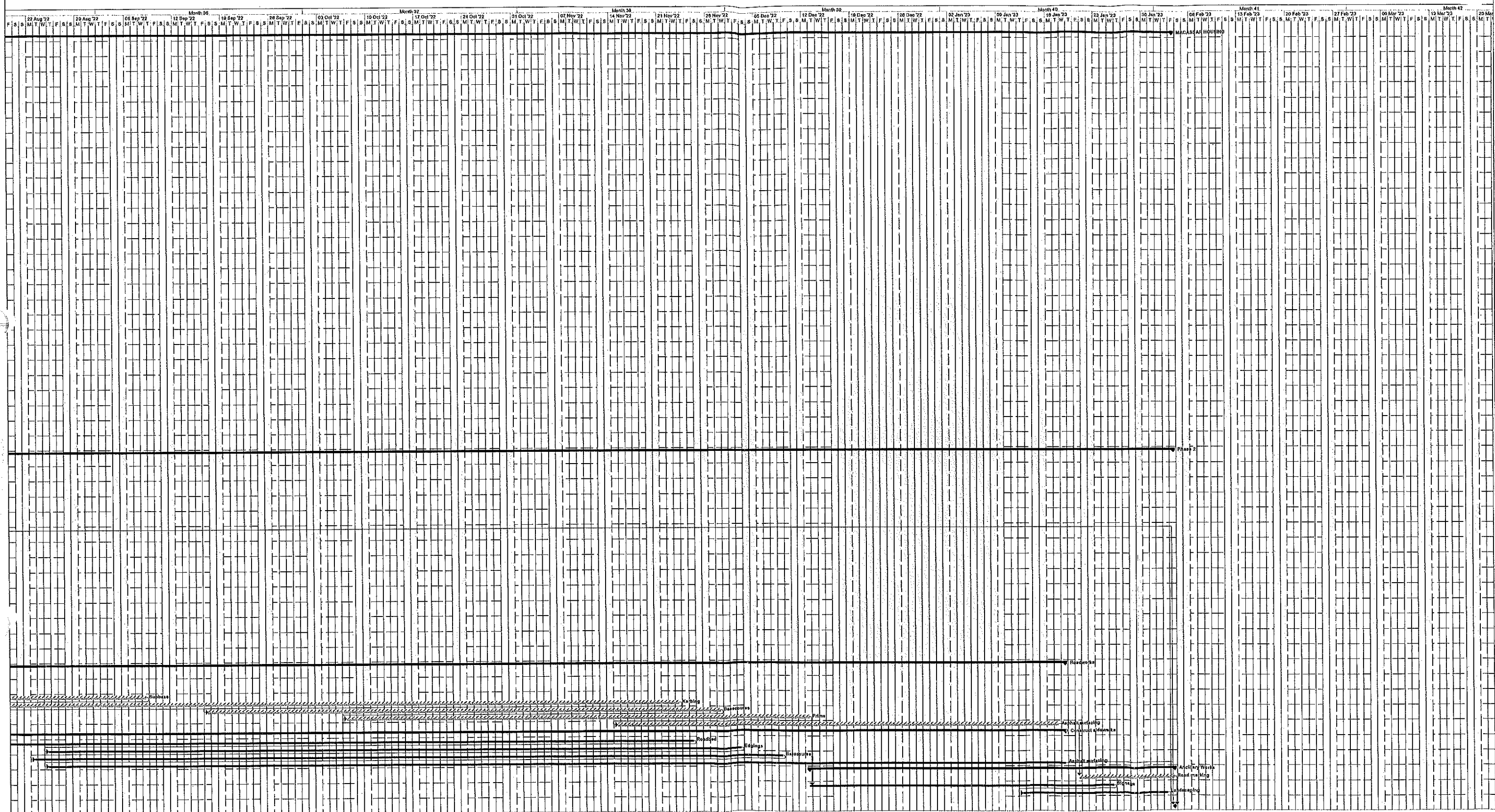












METHOD STATEMENT

Activity:

Clearing and Grubbing

1 **Description:**
Clearing and Grubbing.

2 **Quantity:**

3 **Method:**

CLEARING

- **Pre-Construction Stage**

- a) Review the plans, special provision, right of way agreements, which may require special staking.
- b) Confirm land acquisition is completed and area demarcated is in possession.
- c) Confirm infringements (if any) are removed and tree cutting (if any) is carried out with permission of competent authority.
- d) Check whether all the tree roots and stumps are removed in the formation area. Check whether the pits from where trees have been removed are filled with granular material and suitably compacted.
- e) Ensure that features and facilities, which are to be preserved, are clearly marked.
- f) Attention shall be paid to environmental commitments.
- g) Determine the method for disposal of all materials outside the right of way.
- h) Identify the location of all public utilities (telephone poles, power lines, water supply lines, sewer lines, UG cables etc.) and ensure proper liaison with concerned authorities for shifting or for carrying out work safely without affecting the utilities during execution of works.

- **Construction Stage**

- a) Check whether equipment has required safety devices for the protection of personnel and environment. (In forest areas required spark arresters shall be used in the equipment).
- b) Ensure no hazard to public during operations like timber felling, blasting.
- c) Ensure co-ordinated traffic control.
- d) Check whether adjacent property and environmentally service-line areas are being affected and prevent such operations.
- e) Limits of clearing areas which do not require removal of stumps should be determined, and the height of stumps above natural ground to be checked.
- f) Determine if dead, dying or otherwise unstable trees, which are in the right of way but outside the clearing limits to constitute a hazard. Any such tree shall be removed.
- g) Check whether the cut timber is being handed over to the concerned agencies, in case the contract provides such handing over.
- h) When burial of debris is permitted within the right of way that it will not act as a permeable layer, does not block drainage and will not interfere with maintenance.
- i) Ensure proper precautions, if burning of debris is permitted. Ensure that the smoke will not interfere with the visibility of public traffic and no air pollution problem is created.
- j) Ensure that tree branches overhanging above the roadway are cut off as specified.

- **Method Statement**

- a) Unless otherwise specified, the areas designated for clearing and grubbing shall be cleared of all trees, stumps, bushes, roots, rubbish, debris, and other objectionable matters.
- b) Before removal of any trees or shrubs the Contractor shall obtain written consent from client at least two weeks in advance of the planned removal. The Engineer's approval of any removal of trees and undergrowth must be obtained before commencement of work.
- c) Trees and plants designated for preservation shall be protected from injury or damage which could result from the Contractor's operations including dewatering. The form of protection for

- b) Where roots of a diameter of 20mm or more are found within the soil they are to be removed to a depth of at least 500mm below the original ground level or the foundation level; whichever is lower. Tracked and wheeled vehicles will be used for this purpose.
- c) No herbicides will be required as the stumps are to be removed from the soil.
- d) Rocky material and boulders up to the size of 1m³ will be included as grubbing. Any material larger than this will be classified as surface excavations.
- e) Areas from which stumps and rocks are removed will be backfilled and compacted with suitable material to insure that there are no holes left after grubbing activities.

4 Resources

4.1 PSE:

- Gloves
- Reflective bibs
- Hard hats
- Safety boots

4.2 Labour:

- 4 semi-skilled workers
- 1 skilled workers

4.3 Supervision:

- 1 foreman

4.4 Plant and equipment:

- TLB
- Excavator
- Grader
- 10m³ Tipper
- Water Truck

5 Duration:

METHOD STATEMENT

Activity:

Excavations (Deep)

1 Description:
Deep excavations.

2 Quantity:

3 Method:

- a) Excavation work shall be carried out under the supervision of a competent person who has been appointed in writing.
- b) The excavation shall be performed with 20 & 30 Ton 360° Excavators fitted with general purpose (and if necessary) rock buckets.
- c) If the trench depth is greater than 6m, excavated soil shall be removed to temporary stockpile.
- d) The supervisor performing excavation work shall ensure:-
 - i) suitable and sufficient steps are taken in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an excavation;
 - ii) that no person work in an excavation which has not been adequately shored or braced; provided that shoring and bracing may not be necessary where:-
 - ✓ the sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane;
 - ✓ such an excavation is in stable material;
 - ✓ Where any uncertainty pertaining to the stability of the soil exists, the decision from the Contracts Manager or specialist professional technologist competent in excavations shall be decisive and such a decision shall be noted in writing and signed by the competent person and/or engineer or technologist, as the case may be.
 - ✓ take steps to ensure that the shoring or bracing is designed and constructed in such a manner rendering it strong enough to support the sides of the excavation in question;
 - ✓ that no load, material, plant or equipment is placed or moved near the edge of any excavation where it is likely to cause its collapse and thereby endangering the safety of, any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
 - ✓ that where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, the steps are taken that may be necessary to ensure the stability of such building, structure or road and the safety of persons;
 - ✓ convenient and safe means of access to be provided to every excavation in which persons are required to work and such access shall not be

4.3 Supervision:
1 foreman

4.4 Plant and equipment:

- 360(Excavator
- 10m3 Tip Trucks
- Compactors/Rollers
- Survey equipment. Dumpy level, theodolite, boning rods etc.
- Hand Tools
- Barriers
- Ladders

5 Duration:

METHOD STATEMENT

Activity:

Gabion Construction

1 **Description:**
Construction of Gabions.

2 **Quantity:**

3 **Method:**

- The required materials will be placed and accounted for in the crossing surcharge area or confirmed in the laydown prior to excavation.
- All required equipment will be in the surcharge area prior to excavation.
- A detailed gabion/reno detail will be on site.
- The base area will be pegged out.
- The base area will be excavated mechanically (if required) and trimmed by hand.
- Bidum will be placed only if specified or detailed.
- The pre-assembled baskets or reno's will be placed in the prepared and trimmed excavation. Assembly and tying off will be strictly in accordance with manufacturer's specification.
- The view face will be rough form shuttered.
- Suitably sized stone will be hand placed and fitted evenly from the bottom up.
- Intermediate reinforcing will be strictly to manufacturer's specification.
- Once completely filled/ the lid will be tied down, (sewn) all in accordance with the manufactures specification.
- The gabion/reno will be backfilled as required and the rough form shutter removed.
- The entire structure including the backfilled areas will be finally trimmed and top soiled in accordance with the environmental requirements.

4 **Resources**

4.1 **PSE:**

- Gloves
- Reflective bibs
- Hard hats
- Safety boots

4.2 **Labour:**

4 semi-skilled workers
1 skilled workers

4.3 **Supervision:**

1 foreman

4.4 **Plant and equipment:**

- TLB

5 **Duration:**

METHOD STATEMENT

Activity:

Sub base & Base Course

1 Description:

Construction of un-stabilised Sub-base & Base course

2 Quantity:

3 Method:

- Road works occur on road closed to the public with exceptions of the Residents who commute out of the site in the mornings and return after 5pm
- All work will be done in full width as the road is not being used by residents between 8am and 5pm and will be made safe and accessible to residents by 5pm.
- Material will be tipped on the road directly by means on tip trucks and side tippers, where area are uneven material will be tip on a suitable, safe and level area and then be carted in to position by either a front end loader or digger loader
- Sub-base and Base course will be processed by grader, 18000lt water truck and compacted with a 12 ton roller
- Once the layer has been cut to final and the dips have been picked up for level control, the densities will be done by road lab. With the nuclear density gauge. Before receiving the next layer
- We will then import all the base course and Pre-shape the material and will only commence with the processing of the base 2 weeks before the intended seal date to limit traffic on the freshly placed base course

4 Resources

4.1 PPE:

- Reflective bibs
- Safety boots
- Safety goggles
- Ear protection

4.2 Labour:

3 unskilled labour

4.3 Supervision:

1 x foreman

4.4 Plant and equipment:

- 12ton roller
- Backhoe loader
- Grader
- Water truck

5 Duration:

METHOD STATEMENT

Activity:

Paving of Asphalt Surfacing

1 Description:
Paving of Asphalt Surfacing.

2 Quantity:

3 Method:

- Traffic accommodation will be done as per the approved plan submitted to the Engineer.
- The Engineer's Representative (RE) to inspect and approve the surface prior to the tack application.
- Tacking of surface will take place at least an hour before the placing of the wearing course.
- The lane widths and joint positions are as per attached diagram (see annexure A).
- Level control will be done with an averaging beam with ultra-sonic sensors which is attached to the paver.
- Compaction will be done to the Engineer's specification. The roller configuration is as follow: 12ton three wheel static roller followed by a 12ton tandem roller which will be followed by an 11ton pneumatic roller.
- Densities will be checked by troxler on the day of placing and the results along with field reports will be submitted to the RE the following day.

4 Resources

4.1 PSE:

- Gloves
- Reflective bibs
- Hard hats
- Safety boots

4.2 Labour:

4 semi-skilled workers
6 skilled workers

4.3 Supervision:

1 foreman

4.4 Plant and equipment:

- Paver
- Shuttle Buggy
- 12t Tandem Roller
- 12t 3 wheel roller
- 11t Pneumatic roller
- Water Truck

5 Duration:

METHOD STATEMENT

Activity:

Stormwater Services

1 Description:
Construction of stormwater services.

2 Quantity:

3 Method:

- Excavation to be done to depth as per the engineer's design by means of a 20-ton Excavator.
- Excavated surface will be compacted by means of a rammer compactor.
- Sand bedding to be placed as per engineer's specification and compacted.
- Stone bedding to be placed when dealing with underground water as per engineer's specification.
- Pipes will be installed at the specified levels. Pipes to be lowered and placed into position in trench by an excavator with a chain that has been tested and certified.
- Pipes will be backfilled and compacted with excavated material. Backfilling material will be imported if excavated material is deemed to be unsuitable.
- Unsuitable material will be spoiled at authorised locations.
- Final fill in road surfaces will be done as per the engineer's layer works specification.

4 Resources

4.1 PPE:

- Reflective bibs
- Safety boots
- Safety goggles
- Gloves

4.2 Labour:

- 2 skilled
- 4 unskilled

4.3 Supervision:

1 x foreman

4.4 Plant and equipment:

- Excavator
- Water truck
- Rammer compactor
- 10m³ Tipper Truck
- TLB

5 Duration:

METHOD STATEMENT

Activity:

Manhole Construction

1 **Description:**
Construction of Manholes.

2 **Quantity:**

3 **Method:**

- Set out manhole position and extend of foundation
- Excavate for foundation by hand or with the excavator
- Concrete foundation – place concrete by means of a chute or with the excavator
- Once the concrete is set, place the base manhole ring, level it and install the connecting pipework.
- Place shutter around the base ring and sewer in place
- Place concrete & vibrate, either with a chute or by means of an excavator
- Construct the bending in the base ring once the encasement has set and the shutter stripped
- Place the manhole rings. Seal the joints manhole rings will be placed using an excavator and approved chains
- Install the coverslab and lower
- Ensure the excavation in safety barricaded at all times

4 **Resources**

4.1 **PSE:**

- Gloves
- Reflective bibs
- Hard hats
- Safety boots

4.2 **Labour:**

2 semi-skilled workers
1 skilled workers

4.3 **Supervision:**

1 foreman

4.4 **Plant and equipment:**

- Excavator

5 **Duration:**

METHOD STATEMENT

Activity:

Sewer Installation

1 Description:
Sewer installation.

2 Quantity:

3 Method:

- MARKING OUT TRENCH ROUTE

Prior to trench excavation the route will be cleared & grubbed if necessary.

All known underground services will be located, marked and exposed by hand excavation prior to machine excavation of the trench.

The centre line of the trench will be set out from the reference pegs placed by the land surveyor.

- STRIPPING OF TOP SOIL

Topsoil from the trench width will be removed by means of TLB and placed in a temporary stockpile for later use.

Topsoil and sub-soil to be kept separated. Sub-soil will be placed not closer than 2m from the edge of the trench on the no-working side.

- EXCAVATION AND BACKFILL

The trenches will be excavated with 20 & 30Ton Excavators fitted with general purpose and if necessary rock buckets.

The trench width will be such that the side clearance will be at least 300 mm and the depths will vary. Bedding to be placed not less than 150mm and it should be compacted and finished so as to provide uniform support. The trench bottom will not be graded to predetermined grades but will generally follow the surface contour of ground level.

The trench bottom will be raked to a smooth contour to ensure that the pipe will not bridge low areas. All stones larger than 25 mm and other deleterious objects will be removed from the trench. After completion of this operation the trench must be inspected & approved by engineer.

After the pipes have been laid the surrounding material should be placed and compacted evenly in layers on both sides ensuring there is no displacement of the pipe. Once the cradle is completed, selected fill blanket shall be placed 150mm above the pipes crown. The selected material will have a max. particle size of 25 mm. This operation will be done with a TLB and a crew of labourers with spades. Special care will be taken when ramming the material in around the pipe barrel using timber poles of approx. 100 mm. dia. This layer will be compacted by running 3 passes of a plate compactor over the surface. Thereafter the mass back filling will be done to a level 100 mm. below normal ground surface. The previously excavated material will be used for this purpose but no rocks larger than 300 mm. will be included. This operation will be done with an excavating machine or a grader or bulldozer with an angled blade. The topsoil will be replaced and mounded across the trench to approx. 150 mm above ground level to allow for future settlement. This operation will be done with a TLB and a crew of labourers with spades.

4.2 Labour:
5 semi-skilled workers
2 skilled workers

4.3 Supervision:
1 foreman

4.4 Plant and equipment:

- TLB
- Excavator
- 10m³ Tipper
- Water Truck

5 Duration:

CONSTRUCTION OF CIVIL ENGINEERING SERVICES - MACASSAR HOUSING PROJECT							
Schedule of Quantities and Rates							
Item Nr	Pay Item	Description	Unit	Qty	Rate	Amount	Sub-Totals
1	SANS 1200 A	SECTION 1: PRELIMINARY AND GENERAL					R 22 716 526.59
1.1		SCHEDULED FIXED-CHARGE AND VALUE-RELATED ITEMS					
1.1.1	8.3.1	Contractual Requirements	Sum	1	R 5 360 491.90	R 5 360 491.90	
		Establishment of Facilities on the Site					
		Facilities for Engineer					
1.1.2	8.3.2.1	a) Furnished offices	Sum	1	R -	R -	
1.1.3	8.3.2.1	c) Nameboard	No	2	R -	R -	
		Facilities for Contractor					
1.1.4	8.3.2.2	a) Offices and storage sheds	Sum	1	R -	R -	
1.1.5	8.3.2.2	b) Workshops	Sum	1	R -	R -	
1.1.6	8.3.2.2	d) Living accommodation	Sum	1	R -	R -	
1.1.7	8.3.2.2	e) Ablution and latrine facilities	Sum	1	R -	R -	
1.1.8	8.3.2.2	f) Tools and equipment	Sum	1	R -	R -	
1.1.9	8.3.2.2	g) Water supplies, electrical power and communication	Sum	1	R -	R -	
1.1.10	8.3.2.2	h) Dealing with water	Sum	1	R -	R -	
1.1.11	8.3.2.2	i) Access to and on site	Sum	1	R -	R -	
1.1.12	PSA 8.3.3	Other fixed charge obligations					
							
							
		Sum		1	R -	R -	
1.1.13	8.3.4	Removal of Site Establishment	Sum	1	R -	R -	
1.2		SCHEDULED TIME-RELATED ITEMS					
1.2.1	8.4.1	Contractual Requirements	Sum	1	R -	R -	
		Operate and maintain facilities on the Site:					
		Facilities for Engineer					
1.2.2	8.4.2.1	a) Furnished offices	Sum	1	R -	R -	
1.2.3	8.4.2.1	c) Nameboard	No	2	R -	R -	
1.2.4	8.4.2.1	d) Survey assistants and materials	Sum	1	R -	R -	
		Facilities for Contractor					
1.2.5	8.4.2.2	a) Offices and storage sheds	Sum	1	R -	R -	
1.2.6	8.4.2.2	b) Workshops	Sum	1	R -	R -	
1.2.7	8.4.2.2	d) Living accommodation	Sum	1	R -	R -	
1.2.8	8.4.2.2	e) Ablution and latrine facilities	Sum	1	R -	R -	
1.2.9	8.4.2.2	f) Tools and equipment	Sum	1	R -	R -	
1.2.10	8.4.2.2	g) Water supplies, electric power and communications	Sum	1	R -	R -	
1.2.11	8.4.2.2	h) Dealing with water	Sum	1	R -	R -	
1.2.12	8.4.2.2	i) Access to and on site	Sum	1	R -	R -	
1.2.13	8.4.3	Supervision for Duration of Construction	Sum	1	R 15 847 954.69	R 15 847 954.69	
1.2.14	8.4.4	Company and Head office Overhead Costs for the Duration of the Contract	Sum	1	R -	R -	
1.2.15	8.4.5	Other time-related obligations (Specify).....					
							
		Sum		1	R -	R -	
1.2.16	PSA 8.4.6	Contractors obligations in respect of Health and Safety	Sum	1	R 640 824.80	R 640 824.80	
1.2.17	PSA 8.4.7	Contractors obligations in respect of the Environmental Management Plan	Sum	1	R 5 000.00	R 5 000.00	
		Standing time costs					
1.2.18	PSA 8.4.8	a) Plant	day	10	R 7 059.43	R 70 594.30	
1.2.19	PSA 8.4.8	b) Labour	day	10	R 4 441.87	R 44 418.70	
1.2.20	PSA 8.4.8	c) Other resources (to be specified by the contractor).....					
							
		day		10	R -	R -	
1.3		SUMS STATED PROVISIONALLY BY ENGINEER					
		Cellular telephones					
1.3.1	PSA 8.5	c) Cost of calls in connection with contract administration by the Engineers's Representative	Prov Sum	1	R 36 000.00	R 36 000.00	
1.3.2	PSA 8.5	d) Overhead, charges and profit on (c) above	%	36000	10%	R 3 600.00	
1.3.3	PSA 8.5	e) Material testing by commercial laboratories if required by the Engineer	Prov Sum	1	R 60 000.00	R 60 000.00	
1.3.4	PSA 8.5	f) Overhead, charges and profit on (e) above	%	60000	10%	R 6 000.00	
1.3.5	PSA 8.5	g) Monthly remuneration of Community Liaison Officer	Prov Sum	1	R 300 000.00	R 300 000.00	

CONSTRUCTION OF CIVIL ENGINEERING SERVICES - MACASSAR HOUSING PROJECT							
Schedule of Quantities and Rates							
Item Nr	Pay Item	Description	Unit	Qty	Rate	Amount	Sub-Totals
1.3.6	PSA 8.5	h) Overhead, charges and profit on (k) above	%	300000	5%	R 15 000.00	
1.4		DAYWORKS					
		Labour					
1.4.1	PSA 8.7	a) Unskilled labour	hr	120	R 57.06	R 6 847.20	
1.4.2	PSA 8.7	b) Semi skilled labour	hr	120	R 91.00	R 10 920.00	
1.4.3	PSA 8.7	c) Skilled labour	hr	120	R 109.20	R 13 104.00	
		Plant					
1.4.4	PSA 8.7	d) Excavators	hr	50	R 566.98	R 28 349.00	
1.4.5	PSA 8.7	e) Graders	hr	50	R 735.03	R 36 751.50	
1.4.6	PSA 8.7	f) Front-end loaders	hr	50	R 399.67	R 19 983.50	
1.4.7	PSA 8.7	g) Rollers	hr	50	R 343.37	R 17 168.50	
1.4.8	PSA 8.7	h) TLB	hr	50	R 336.61	R 16 830.50	
1.4.9	PSA 8.7	i) Trucks (10m3)	hr	50	R 545.42	R 27 271.00	
1.4.10	PSA 8.7	j) Water Truck	hr	50	R 403.10	R 20 155.00	
1.4.11	PSA 8.7	k) Plate Compactor/Rammer Compactor	hr	50	R 73.24	R 3 662.00	
1.5		TEMPORARY WORKS					
1.5.1	8.8.2	Deal with traffic	Sum	1	R 25 000.00	R 25 000.00	
		Existing services					
1.5.2	PSA 8.8.4	c) Excavate by hand in soft material to expose existing services	m³	1000	R 85.60	R 85 600.00	
1.5.3	PSA 8.8.4	d) Temporary protection of existing services	Sum	1	R 10 000.00	R 10 000.00	
		Cost of survey in Terms of the Land Survey Act					
1.5.4	8.8.5	a) Trigonometrical survey and plot boundary pegs - locate and record	Sum	1	R 15 000.00	R 15 000.00	
2		SECTION 2: SITE CLEARANCE					R 335 657.15
2.1	SANS 1200C	CLEAR SITE					
2.1.1	PSC 8.2.1	Clear and grub Site (including hauling to licensed dumping site and dumping levy)	ha	75	Included		
		Remove and grub large trees and tree stumps of girth					
2.1.2	8.2.2	a) over 1m and up to and including 2m	No	5	R 1 056.07	R 5 280.35	
2.1.3	8.2.2	b) over 2m and up to and including 3m	No	5	R 2 112.13	R 10 560.65	
2.1.4	8.2.2	c) over 3m and up to and including 4m	No	5	R 5 280.33	R 26 401.65	
		Dismantle and remove pipelines, electricity transmission lines, cables, etc					
2.1.5	8.2.7	a) Existing pipelines up to 200mm dia	m	300	R 78.57	R 23 571.00	
2.1.6	8.2.7	b) Existing underground cables	m	100	R 112.36	R 11 236.00	
2.1.7	PSC 8.2.11	Demolish and spoil kerbs	m	250	R 62.93	R 15 732.50	
2.1.8	PSC 8.2.12	Excavate and remove asphalt wearing course and dispose at an approved dump site	m²	4000	R 10.75	R 43 000.00	
2.1.9	PSC 8.2.13	Dust and Erosion Control: Straw Stabilization	ha	10	R 18 450.00	R 184 500.00	
2.1.10	PSC 8.2.14	Dust and Erosion Control: Chipping and mulching of vegetation	ha	5	Included		
2.1.11	PSC 8.2.15	Removal of Asbestos	m³	10	R 1 537.50	R 15 375.00	
3		SECTION 3: EARTHWORKS					R 12 244 865.00
3.1	SANS 1200D	BULK EARTHWORKS (PLATFORM CREATION)					
		a) Excavate in all materials and use for embankment, backfill or dispose as directed					
3.1.1	PSD 8.3.2	i) Cut to Fill compacted to 90% MOD AASTHO	m³	117300	R 28.30	R 3 319 590.00	
3.1.2	PSD 8.3.2	ii) Cut to Spoil	m³	5000	R 55.38	R 276 900.00	
3.1.3	PSD 8.3.2	iii) Cut to Stockpile and maintain	m³	40000	Included		
3.1.4	PSD 8.3.2	iv) Stockpile to Fill compacted to 90% MOD AASTHO	m³	40000	Included		
		b) Extra over for					
3.1.5	PSD 8.3.2	2) Hard rock excavations	m³	500	Included		

CONSTRUCTION OF CIVIL ENGINEERING SERVICES - MACASSAR HOUSING PROJECT							
Schedule of Quantities and Rates							
Item Nr	Pay Item	Description	Unit	Qty	Rate	Amount	Sub-Totals
3.1.6	PSD 8.3.2	3) Boulder, Class A	m ³	250	Included		
3.1.7	PSD 8.3.2	4) Boulder, Class B	m ³	250	Included		
3.1.8	PSD 8.3.4	d) Import to fill of material from commercial sources compacted to 90% MOD AASHTO	m ³	111500	R 74.55	R 8 312 325.00	
3.2	SANS 1200D	BULK EARTHWORKS (BERM CREATION)					
		a) Excavate in all materials and use for embankment, backfill or dispose as directed					
3.2.1	PSD 8.3.2	i) Cut to Fill compacted to 90% MOD AASHTO	m ³	5000	R 54.91	R 274 550.00	
3.3		RETAINING WALLS					
3.3.1		Terra force retaining wall constructed with L12 blocks including 15/19 Concrete strip footing (See Drawing CT840-G710-00 for detail)	m ²	240	R 256.25	R 61 500.00	
4		SECTION 4: DETENTION PONDS					R 1 865 118.85
4.1	SANS 1200 D	BULK EARTHWORKS					
		a) Excavate in all material and use for embankment, backfill or dispose as directed.					
4.1.1	PSD 8.3.2	i) Cut to Fill	m ³	23100	R 28.30	R 653 730.00	
4.1.2	PSD 8.3.2	ii) Cut to Spoil off site and dispose at approved dump site.	m ³	500	R 55.38	R 27 690.00	
4.1.3	PSD 8.3.2	iii) Cut to Stockpile and maintain	m ³	5000	R 25.61	R 128 050.00	
		b) Extra-over for:					
4.1.4	8.3.2	2) Hard Rock	m ³	1155	Included		
4.2	SANS 1200 DK	GABIONS AND PITCHING					
4.2.1	8.2.1	Surface preparation for bedding of gabions with cavities filled with approved excavated material or rock	m ²	360	R 31.01	R 11 163.60	
		Construct gabions using mesh type 80 with 2,7mm Class A Galvanised & PVC Coated wire					
4.2.2	8.2.2	1) Foundation mattresses of depth 0,5 m with diaphragms providing 2 m x 1 m cells, as per drawing	m ³	180	R 1 675.84	R 301 651.20	
4.2.3	8.2.2	2) Gabions of section 2.0m x 1,0 m x 1,0 m for walls as per drawing	m ³	150	R 1 404.84	R 210 726.00	
4.2.4	8.2.2	3) Gabions of section 1.0 m x 1,0 m x 1,0 m for walls as per drawing	m ³	60	R 1 486.84	R 89 210.40	
	8.2.4	Geotextile placed where ground water seepage occurs					
4.2.5		a) below foundation mattresses	m ²	360	R 14.28	R 5 140.80	
4.2.6		b) on slope behind wall	m ²	180	R 14.28	R 2 570.40	
4.3	SANS 1200 LE	STORMWATER POND OUTLET STRUCTURE					
4.3.1	PSLE 8.2.17	Construct detention pond outlet structure as per drawing nr. CT840/G711/00	No	3	R 24 111.07	R 72 333.21	
4.4	SANS 1200 DM	SURFACE FINISHES					
4.4.1	PSDM 8.3.13	c) Supply and install Concrete Grassblocks (100x570x380)	m ²	1026	R 239.74	R 245 973.24	
4.5	SANS 1200 D	EROSION CONTROL					
4.5.1	PSD 8.3.14	Supply and install bio-degradable jute netting to steep slopes of ponds	m ²	4000	R 24.60	R 98 400.00	
		Grassing or other Vegetation cover					
4.5.2	PSD 8.3.11	a) Hydroseeding	m ²	12000	R 1.54	R 18 480.00	
5		SECTION 5: WATER RETICULATION					R 8 515 139.39
5.1	SANS 1200 DB	EARTHWORKS (PIPE TRENCHES)					
		a) Excavate in all materials for trenches backfill, compact, and dispose of surplus material to:					
		Over and Up to					
		0,0m 1,5m					
5.1.1	PSDB 8.3.2	a) For pipes of nominal diameter upto 200mm	m	16450	R 59.33	R 975 978.50	
		Existing services that intersect or adjoin a pipe trench					
5.1.2	PSDB 8.3.5	a) Services that intersect a trench	No	50	R 422.39	R 21 119.50	
5.2	SANS 1200 LB	BEDDING (PIPES)					
		Provision of bedding from trench excavation:					
5.2.1	8.2.1	a) Selected granular material	m ³	2995	Included		
5.2.2	8.2.1	b) Selected fill material	m ³	6610	Included		

CONSTRUCTION OF CIVIL ENGINEERING SERVICES - MACASSAR HOUSING PROJECT							
Schedule of Quantities and Rates							
Item Nr	Pay Item	Description	Unit	Qty	Rate	Amount	Sub-Totals
		Supply of bedding by importation from commercial sources					
5.2.3	8.2.2.3	a) Selected granular material	m³	995	Included		
5.2.4	8.2.2.3	b) Selected fill material	m³	2205	Included		
5.3	SANS 1200 DB	EXCAVATION ANCILLARIES					
		Make up deficiency in backfill material					
5.3.1	8.3.3.1	a) From other necessary excavations within site boundaries	m³	1000	R 23.97	R 23 970.00	
5.4	SANS 1200 L	MEDIUM PRESSURE PIPELINES					
		Supply, lay, joint, bed (class B), test and disinfect uPVC spigot and socket pipes with rubber ring joints and couplings:					
5.4.1	8.2.1	a) 110mm diam. Class 12	m	10600	R 88.88	R 942 128.00	
5.4.2	8.2.1	a) 160mm diam. Class 12	m	4980	R 156.53	R 779 519.40	
5.4.3	8.2.1	a) 200mm diam. Class 12	m	900	R 236.98	R 213 282.00	
		Extra-over items for above for supply, lay and bed Specials complete with couplings:					
		1) Bends					
5.4.4	8.2.2	a) 110mm diameter x 11.25deg.	No	10	R 149.40	R 1 494.00	
5.4.5	8.2.2	b) 110mm diameter x 22.5deg.	No	25	R 149.40	R 3 735.00	
5.4.6	8.2.2	c) 110mm diameter x 45deg.	No	3	R 179.00	R 537.00	
5.4.7	8.2.2	d) 110mm diameter x 90deg.	No	11	R 179.00	R 1 969.00	
5.4.8	8.2.2	e) 160mm diameter x 11.25deg.	No	10	R 325.15	R 3 251.50	
5.4.9	8.2.2	f) 160mm diameter x 22.5deg.	No	12	R 325.15	R 3 901.80	
5.4.10	8.2.2	g) 160mm diameter x 45deg.	No	3	R 388.97	R 1 166.91	
5.4.11	8.2.2	h) 160mm diameter x 90deg.	No	1	R 388.97	R 388.97	
5.4.12	8.2.2	i) 200mm diameter x 22.5deg.	No	1	R 623.00	R 623.00	
5.4.13	8.2.2	j) 200mm diameter x 45deg.	No	1	R 674.80	R 674.80	
5.4.14	8.2.2	k) 160 mm - 110 mm Reducer	No	3	R 406.35	R 1 219.05	
		2) Tees					
5.4.15	8.2.2	a) 110mm equal tees	No	61	R 375.95	R 22 932.95	
5.4.16	8.2.2	b) 160mm equal tees	No	23	R 712.25	R 16 381.75	
5.4.17	8.2.2	c) 160mm - 110mm tees	No	71	R 750.25	R 53 267.75	
5.4.18	8.2.2	d) 160mm - 200mm tees	No	1	R 1 783.85	R 1 783.85	
5.4.19	8.2.2	e) 200mm equal tees	No	1	R 1 175.85	R 1 175.85	
5.4.20	8.2.2	f) 200mm - 110mm tees	No	8	R 1 139.75	R 9 118.00	
5.4.21	8.2.2	g) 200mm - 160mm tees	No	2	R 1 202.45	R 2 404.90	
		Extra over item for above for supply, lay, joint, bed and test Class 16 anti-clockwise closing resilient seal gate valves with socketed ends, or equivalent:					
		3) Isolating Valves					
5.4.22	8.2.3	a) 110mm diameter	No	160	R 2 241.79	R 358 686.40	
5.4.23	8.2.3	b) 160mm diameter	No	65	R 3 950.84	R 256 804.60	
5.4.24	8.2.3	c) 200mm diameter	No	5	R 7 446.84	R 37 234.20	
		4) Fire Hydrants					
5.4.25	8.2.3	a) Fire Hydrants as specified off a 110mm dia pipe	No	98	R 3 582.02	R 351 037.96	
5.4.26	8.2.3	b) Fire Hydrants as specified off a 160mm dia pipe	No	49	R 3 866.07	R 189 437.43	
5.4.27	8.2.3	c) Fire Hydrants as specified off a 160mm dia existing water pipe	No	8	R 3 866.07	R 30 928.56	
		5) Pressure Relief Valve					
5.4.28	8.2.3	a) Extra over item for above for supply, lay, joint, bed and test 150mm dia Pressure Relief Valve with flanged ends with 2x 150mm dia gate valves and all fittings as per Drawing CT840-G709-00, or equivalent:	No	1	R 54 270.10	R 54 270.10	
		Anchor, thrust block and Pedestals, Class 25/19 concrete					
5.4.29	PSL 8.2.11	Concrete	m³	150	R 2 053.24	R 307 986.00	
		Valve and Hydrant Chambers					
5.4.30	8.2.13	a) Isolating valves	No	230	R 2 870.93	R 660 313.90	
5.4.31	8.2.13	b) Fire Hydrants	No	165	R 4 686.39	R 726 390.45	
5.4.32	8.2.13	c) Pressure Relief Valve as per Drawing CT840-G709-00	No	1	R 16 320.58	R 16 320.58	
5.4.33	PSL 8.2.16	Connection to existing water reticulation up to 200mm, inclusive of all cost	No	17	R 1 848.48	R 31 424.16	
5.5	SANS 1200 LF	ERF CONNECTIONS (WATER)					
		Provide erf connections complete					
		1) Off 110mm diameter pipes					
5.5.1	PSLF 8.2.1	a) Short (2 to 6m), double	No	431	R 1 245.73	R 536 909.63	
5.5.2	PSLF 8.2.1	b) Short (2 to 6m), single	No	36	R 955.68	R 34 404.48	
5.5.3	PSLF 8.2.1	c) Long (6 to 15m), double	No	426	R 1 688.66	R 719 369.16	

CONSTRUCTION OF CIVIL ENGINEERING SERVICES - MACASSAR HOUSING PROJECT							
Schedule of Quantities and Rates							
Item Nr	Pay Item	Description	Unit	Qty	Rate	Amount	Sub-Totals
5.5.4	PSLF 8.2.1	d) Long (6 to 15m), Single	No	33	R 1 383.67	R 45 661.11	
		1) Off 160mm diameter pipes					
5.5.5	PSLF 8.2.1	a) Short (2 to 6m), double	No	128	R 1 296.63	R 165 968.64	
5.5.6	PSLF 8.2.1	b) Short (2 to 6m), single	No	15	R 1 002.48	R 15 037.20	
5.5.7	PSLF 8.2.1	c) Long (6 to 15m), double	No	167	R 1 739.26	R 290 456.42	
5.5.8	PSLF 8.2.1	d) Long (6 to 15m), Single	No	4	R 1 430.47	R 5 721.88	
		1) Off 200mm diameter pipes					
5.5.9	PSLF 8.2.1	a) Short (2 to 6m), double	No	16	R 1 468.73	R 23 499.68	
5.5.10	PSLF 8.2.1	c) Long (6 to 15m), double	No	10	R 2 557.48	R 25 574.80	
		1) Off Existing Water pipes - 160 diameter pipes					
5.5.11	PSLF 8.2.1	a) Short (2 to 6m), double	No	25	R 1 425.79	R 35 644.75	
5.5.12	PSLF 8.2.1	b) Short (2 to 6m), single	No	4	R 1 131.65	R 4 526.60	
5.5.13	PSLF 8.2.1	c) Long (6 to 15m), double	No	57	R 1 933.00	R 110 181.00	
5.5.14	PSLF 8.2.1	d) Long (6 to 15m), Single	No	1	R 1 624.22	R 1 624.22	
5.5.15	8.2.8	Markings	No	2550	R 36.84	R 93 942.00	
5.5.16	PSDB 8.3.6.1	e) Reinstate road layerworks up to top base course level	m ²	2000	R 151.88	R 303 760.00	
6		SECTION 6: SEWER RETICULATION					R 10 086 832.77
6.1	SANS 1200 DB	EARTHWORKS (PIPE TRENCHES)					
		a) Excavate in all materials for trenches, backfill and dispose of surplus material					
		For pipes with nominal dia up to 200mm					
		Over and Up to					
6.1.1	PSDB 8.3.2	0,0m 1,5m	m	5632	R 70.01	R 394 296.32	
6.1.2	PSDB 8.3.2	1,5m 2,5m	m	8177	R 104.11	R 851 307.47	
6.1.3	PSDB 8.3.2	2,5m 3,5m	m	2178	R 219.25	R 477 088.00	
6.1.4	PSDB 8.3.2	3,5m 4,5m	m	223	R 731.32	R 163 084.36	
		b) Extra - over item (a) above for:					
6.1.5	8.3.2	2) Hard rock excavation	m ³	200	Included		
		Existing services that intersect or adjoin a pipe trench					
6.1.6	PSDB 8.3.5	a) Services that intersect a trench	No	25	R 422.39	R 10 559.75	
6.2	SANS 1200 LB	BEDDING (PIPES)					
		Provision of bedding from trench excavation					
6.2.1	8.2.1	a) Selected granular material	m ³	2875	Included		
6.2.2	8.2.1	b) Selected fill material	m ³	6155	Included		
		Provision of Bedding by Importation from Commercial sources					
6.2.3	8.2.2.3	a) Selected granular material	m ³	958	Included		
6.2.4	8.2.2.3	b) Selected fill material	m ³	2050	Included		
6.3	SANS 1200 LD	SEWERS					
		Supply, lay, joint, bed and test uPVC (heavy duty) Class 34 sewer pipes with spigot and socket rubber ring joints:					
6.3.1	8.2.1	a) 160 mm diameter, class 34	m	11750	R 111.22	R 1 306 835.00	
6.3.2	8.2.1	a) 200 mm diameter, class 34	m	4470	R 152.22	R 680 423.40	
		Manholes					
		Supply all materials and construct 1,05m diameter precast concrete manholes, complete.					
		a) Manholes with cover and frame of Heavy Duty ductile iron with hinged cover for depths:					
		Over and Up to					
6.3.3	8.2.3	0,0m 1,5m	No	172	R 6 828.62	R 1 174 522.64	
6.3.4	8.2.3	1,5m 2,5m	No	117	R 8 969.59	R 1 049 442.03	
6.3.5	8.2.3	2,5m 3,5m	No	35	R 11 339.45	R 396 880.75	
6.3.6	8.2.3	3,5m 4,5m	No	4	R 14 167.10	R 56 668.40	
6.4		ERF CONNECTION (SEWER)					
		Provide and install sewer erf connections complete:					
		1) Off 160mm diameter:					
6.4.1	8.2.6	a) Short (2 to 6m), single	No	676	R 790.84	R 534 607.84	
6.4.2	8.2.6	b) Long (6 to 15m), Single	No	1313	R 1 535.53	R 2 016 160.89	

CONSTRUCTION OF CIVIL ENGINEERING SERVICES - MACASSAR HOUSING PROJECT							
Schedule of Quantities and Rates							
Item Nr	Pay Item	Description	Unit	Qty	Rate	Amount	Sub-Totals
		1) Off 200mm diameter:					
6.4.3	8.2.6	a) Short (2 to 6m), single	No	268	R 1 004.59	R 269 230.12	
6.4.4	8.2.6	b) Long (6 to 15m), Single	No	265	R 1 749.28	R 498 544.80	
6.4.5	8.2.9	Marker posts	No	2542	R 36.84	R 93 647.28	
6.4.6	8.2.11	Connection to existing 200mm sewer manhole inclusive of all costs	No	1	R 2 500.84	R 2 500.84	
6.4.7	8.2.11	Connection to existing 300mm sewer manhole inclusive of all costs	No	2	R 4 000.84	R 8 001.68	
6.4.8	8.2.11	Connection to existing 450mm sewer manhole inclusive of all costs	No	5	R 4 000.84	R 20 004.20	
		Encasing of pipes					
6.4.9	8.2.7	Concrete encasing of pipes up to 200mm: Minimum encasing of 150mm, 25Mpa concrete around pipe	m³	50	R 1 660.74	R 83 037.00	
7		SECTION 7: STORMWATER DRAINAGE					R 14 442 773.26
7.1	SANS 1200 DB	EARTHWORKS (PIPE TRENCHES)					
		a) Excavate in all materials for trenches, backfill and dispose of surplus material					
		For pipes with nominal dia up to 450mm					
		Over and Up to					
7.1.1	PSDB 8.3.2	0,0m 1,5m	m	2060	R 94.94	R 195 576.40	
7.1.2	PSDB 8.3.2	1,5m 2,5m	m	7320	R 138.27	R 1 012 136.40	
7.1.3	PSDB 8.3.2	2,5m 3,5m	m	595	R 278.94	R 165 969.30	
		For pipes with nominal dia of 750mm					
		Over and Up to					
7.1.4	PSDB 8.3.2	1,5m 2,5m	m	435	R 167.66	R 72 932.10	
7.1.5	PSDB 8.3.2	2,5m 3,5m	m	178	R 417.93	R 74 391.64	
		b) Extra - over item (a) above for:					
7.1.6	8.3.2	2) Hard rock excavation	m³	200	Included		
7.2	SANS 1200 LB	BEDDING (PIPES)					
		Provision of bedding from trench excavation					
7.2.1	8.2.1	a) Selected granular material	m³	2005	Included		
7.2.2	8.2.1	b) Selected fill material	m³	3535	Included		
		Provision of Bedding by Importation from Commercial sources					
7.2.3	8.2.2.3	a) Selected granular material	m³	670	Included		
7.2.4	8.2.2.3	b) Selected fill material	m³	1180	Included		
7.3	SANS 1200 LE	STORMWATER DRAINAGE					
		Supply, handle, lay, bed in Class B bedding, concrete pipe with spigot and socket joints					
7.3.1	8.2.1	b) 375 mm diameter Class 100D	m	7660	R 352.06	R 2 696 779.60	
7.3.2	8.2.1	d) 450 mm diameter Class 100D	m	2310	R 435.09	R 1 005 057.90	
7.3.3	8.2.1	d) 750 mm diameter Class 100D	m	615	R 1 223.88	R 752 686.20	
		d) Headwalls as per detail drawing CT840/G705/00 (excluding supply of reinforcing steel) to suit					
7.3.4	PSLE 8.2.8	i) a 450mm diameter stormwater pipe	No	7	R 15 100.21	R 105 701.47	
7.3.5	PSLE 8.2.8	ii) a 750mm diameter stormwater pipe	No	3	R 23 390.13	R 70 170.39	
	SANS 1200 G	Concrete (Structural)					
7.3.6	8.3.1	Supply high tensile steel bars for reinforced concrete structures	t	1.5	R 14 075.00	R 21 112.50	
	SANS 1200 LE	a) Manholes					
		i) Precast concrete for up to 450mm pipes - 1m dia manhole					
		Over and Up to					
7.3.7	PSLE 8.2.8	0,0m 1,5m	No	84	R 9 570.25	R 803 901.00	
7.3.8	PSLE 8.2.8	1,5m 2,5m	No	257	R 11 767.29	R 3 024 193.53	
7.3.9	PSLE 8.2.8	2,5m 3,5m	No	13	R 14 659.42	R 190 572.46	
		ii) Precast concrete for 750mm pipes - 1.5m dia manhole					
		Over and Up to					
7.3.10	PSLE 8.2.8	0,0m 1,5m	No	2	R 16 320.58	R 32 641.16	
7.3.11	PSLE 8.2.8	1,5m 2,5m	No	7	R 19 650.31	R 137 552.17	
7.3.12	PSLE 8.2.8	2,5m 3,5m	No	2	R 24 349.12	R 48 698.24	

CONSTRUCTION OF CIVIL ENGINEERING SERVICES - MACASSAR HOUSING PROJECT							
Schedule of Quantities and Rates							
Item Nr	Pay Item	Description	Unit	Qty	Rate	Amount	Sub-Totals
		b) Double kerb Inlet structure complete as per drawings no. CT840/G705/00 with heavy duty cover and frame:					
		Over and Up to					
7.3.13	PSLE 8.2.8	0,0m 1,5m	No	250	R 9 178.31	R 2 294 577.50	
7.3.14	PSLE 8.2.8	1,5m 2,5m	No	20	R 11 188.62	R 223 772.40	
		Subsurface drains					
7.3.15	PSLE 8.2.14	Excavation for subsoil drains	m3	5100	R 65.59	R 334 509.00	
7.3.16	PSLE 8.2.15	Supply and Install Subsurface Drains According To Drawing CT840/G706/00	m	10000	R 109.31	R 1 093 100.00	
7.3.17	PLSE 8.2.16	Connecting subsurface drains to manholes, kerb inlets, etc	No	360	R 240.95	R 86 742.00	
8		SECTION 8: ROADWORKS					R 2 421 372.10
8.1	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)					
		Treatment of roadbed					
		a) Roadbed preparation and compaction of material to a depth of 150mm:					
8.1.1	8.3.3	2) Roads: to minimum of 93% MOD AASHTO maximum density	m³	16350	R 23.43	R 383 080.50	
		a) Preparation and compaction of in-situ material for sidewalks to a depth of 150mm:					
8.1.2	8.3.3	2) Sidewalks: to minimum of 93% MOD AASHTO maximum density	m³	9970	R 43.66	R 435 290.20	
		Cut to fill					
8.1.3	8.3.4	a) Cut to fill on site compacted to 93% MOD AASHTO maximum density	m³	43700	R 28.55	R 1 247 835.00	
		Selected layer compacted to 93% of modified AASHTO maximum density					
8.1.4	8.3.5	a) Roads: 150mm G7 natural material compacted to 95% of MOD AASHTO maximum density	m³	5000	R 40.16	R 200 800.00	
8.1.5	8.3.5	b) Roads: 150mm G9 natural material compacted to 95% of MOD AASHTO maximum density	m³	2540	R 40.16	R 102 006.40	
		Cut to stockpile from:					
8.1.6	8.3.7	a) Soft excavations	m³	20000	Included		
		Stockpile to fill from:					
8.1.7	8.3.7	a) Soft excavations	m³	20000	Included		
		Cut to spoil from:					
8.1.8	8.3.6	c) Hard excavations	m³	2000	Included		
8.1.9	PSDM 8.3.17	a) Shaping and trimming of road reserve	m²	24000	R 2.19	R 52 560.00	
9		SECTION 9: SUBBASE					R 5 519 433.00
9.1	SANS 1200 ME	SUBBASE					
		Construct Subbase with material from commercial sources					
9.1.1	8.3.3	a) Roads: 150mm G5 natural material compacted to 95% of MOD AASHTO maximum density	m³	16350	R 337.58	R 5 519 433.00	
10		SECTION 10: BASE					R 11 115 047.65
10.1	SANS 1200 MF	BASE					
		Construct base with material from commercial sources:					
10.1.1	8.3.3	a) i) Roads: 150mm G4 natural material compacted to 98% of MOD AASHTO maximum density	m³	16350	R 508.93	R 8 321 005.50	
10.1.2	8.3.3	a) ii) Sidewalks: 100mm thick for road reserves with a width of 10 and 12 meters wide, to be constructed with G5 natural material compacted to 95% of MOD AASHTO maximum density	m³	5180	R 402.89	R 2 086 970.20	
10.1.3	8.3.3	a) iii) Sidewalks: 150mm thick for road reserves with a width of 16 meters wide, to be constructed with G5 natural material compacted to 95% of MOD AASHTO maximum density	m³	1755	R 402.89	R 707 071.95	
11		SECTION 11: ASPHALT BASE AND SURFACING					R 14 305 397.40
11.1	SANS 1200 MH	ASPHALT BASE AND SURFACING					
		Prime coat					
11.1.1	8.5.1	Prime coat using type MC-30 medium curing applied at a rate of 0,7 l/m² of net bitumen.	m²	134420	R 8.77	R 1 178 863.40	
		Asphalt Surfacing					
11.1.2	8.5.4	i) 40mm thick continuous graded medium mix using 60/70 penetration grade bitumen for roads	m²	89000	R 101.09	R 8 997 010.00	
11.1.3	8.5.4	ii) 30mm thick continuous graded medium mix using 60/70 penetration grade bitumen for sidewalks	m²	46820	R 88.20	R 4 129 524.00	

CONSTRUCTION OF CIVIL ENGINEERING SERVICES - MACASSAR HOUSING PROJECT							
Schedule of Quantities and Rates							
Item Nr	Pay Item	Description	Unit	Qty	Rate	Amount	Sub-Totals
12		SECTION 12: KERBING AND CHANNELLING					R 8 358 401.15
12.1	SANS 1200 MK	KERBING AND CHANNELLING					
		Supply and lay kerbing and edging complete with benching					
12.1.1	8.2.1	a) Type CK5 Mountable kerbing with radius greater than 20m	m	14135	R 202.95	R 2 868 698.25	
12.1.2	8.2.1	b) Type CK5 Mountable kerbing with radius less than 20m	m	340	R 296.23	R 100 718.20	
12.1.3	8.2.1	c) Type MK10 Mountable kerbing with radius greater than 20m	m	10855	R 178.35	R 1 935 989.25	
12.1.4	8.2.1	d) Type MK10 Mountable kerbing with radius less than 20m	m	240	R 257.28	R 61 747.20	
12.1.5	8.2.1	e) Type E1 edging with radius greater than 20m	m	18680	R 89.18	R 1 665 882.40	
12.1.6	8.2.1	f) Type E1 edging with radius less than 20m	m	3300	R 89.18	R 294 294.00	
12.1.7	8.2.1	g) Type BK2 kerbing with radius greater than 20m	m	195	R 257.28	R 50 169.60	
12.1.8	8.2.1	h) Type BK2 kerbing with radius less than 20m	m	3125	R 183.48	R 573 375.00	
12.1.9	8.2.1	k) Type C1/C1 combination kerbing (V-channel) as per detail, with radius greater than 20m	m	170	R 349.53	R 59 420.10	
12.1.10	8.2.1	n) Type BK2/C4 combination kerbing with radius less than 20m	m	1155	R 349.53	R 403 707.15	
		Ancillaries:					
		Construct 1m long 25MPa cast in situ kerbing transition sections:					
12.1.11	8.2.6.1	a) Type CK5 kerbing to BK2 barrier kerbing	No	140	R 615.00	R 86 100.00	
12.1.12	8.2.6.1	a) Type CK5 kerbing to BK2/C4 combination channel kerbing	No	140	R 615.00	R 86 100.00	
12.1.13	8.2.6.1	b) Type MK10 kerbing to BK2 barrier kerbing	No	140	R 615.00	R 86 100.00	
12.1.14	8.2.6.1	c) Type CK5 kerbing to Type MK10 kerbing	No	140	R 615.00	R 86 100.00	
13		SECTION 13: ANCILLARY ROADWORKS					R 1 023 122.86
13.1	SANS 1200 MM	PERMANENT ROAD SIGNS					
		Statutory signs supplied and erected complete on 80mm diameter galvanised steel supports:					
13.1.1	8.3.6	i) 600mm Type R1 Stop sign	No	180	R 781.35	R 140 643.00	
13.1.2	8.3.6	ii) 600mm Type W332 Speed hump sign	No	100	R 781.35	R 78 135.00	
13.1.3	8.3.6	iii) 600mm Type R310 Minibus reservation sign	No	6	R 767.35	R 4 604.10	
13.2		CONSTRUCTION OF SPEED HUMP AS PER DRAWING CT840/G702/00 COMPLETE, INCLUDING SAW CUTTING (20mm DEPTH), BREAKING OUT & REMOVE EXISTING, TACK COAT & ASPHALTING					
13.2.1	0	Speed hump with a 7.4m road width	No	12	R 11 693.42	R 140 321.04	
13.2.2	0	Speed hump with a 5.5m road width	No	17	R 10 340.44	R 175 787.48	
13.2.3	0	Speed hump with a 5m road width	No	21	R 10 340.44	R 217 149.24	
13.3		STREET NAME KERBS					
13.3.1	8.3.6	Street Name Kerbs as per drawing R20 in City of Cape Town Standard Details	No	200	R 549.14	R 109 828.00	
13.4		ROAD MARKINGS					
		Non-reflectorized paint applied at nominal rate of 0,42 l/m2 for:					
		a) White lines (broken or unbroken)					
13.4.1	8.4.1	i) 100mm wide	m	1800	R 6.97	R 12 546.00	
13.4.2	8.4.1	ii) 200mm wide	m	8900	R 8.71	R 77 519.00	
13.4.3	8.4.1	iii) 300mm wide	m	1200	R 19.48	R 23 376.00	
		b) Yellow lines (broken or unbroken)					
13.4.4	8.4.1	i) 100mm wide	m	200	R 6.97	R 1 394.00	
13.4.5	8.4.1	c) Yellow characters and symbols	m ²	200	R 69.70	R 13 940.00	
13.4.6	8.4.1	c) White characters and symbols	m ²	400	R 69.70	R 27 880.00	
14		SECTION 14: CABLE DUCTS					R 809 057.26
14.1	SANS 1200 LC	CABLE DUCTS					
		Excavation					
		a) Excavate in all materials for trenches, select, backfill, compact and dispose of all surplus material for ducts:					
		i) Three 110mm and one 160mm diameter for depths					
14.1.1	8.2.2	Exceeding 0m but not exceeding 1m	m	4290	R 94.03	R 403 388.70	
14.2	SANS 1200 LB	BEDDING (PIPES)					

SHEC MANAGEMENT SYSTEM 10. POLICIES AND PLANS	Doc no:	SHEC 10.1
	Rev no:	001
	Rev date:	
	File Name:	

Contract no:

Contract name:

Approval of document and conformation of acceptance:

	Name	Designation	Date	Signature
Prepared				
Approved				
Submitted		Director		

ENGINEERS APPROVAL				
	Name	Designation	Date	Signature
Engineers Acceptance				
Health and Safety Acceptance				
Environmental Acceptance				
Other				

1. INTRODUCTION

This SHE Plan is prepared to provide _____ with a comprehensive document which incorporates simple instructions related to the implementation of SHE rules and correct workmanship practices corresponding to the Client's requirements.

The procedures and information contained in this SHE Plan are supplemented by those contained in the _____ SHEC MANAGEMENT SYSTEM master file which is designed to ensure that the SHE policy is applied and that a structured safe approach to all work is maintained.

The procedures concerning medical matters, including hygiene at the work place, as well as all environmental issues, are all included in the _____ SHEC *MANAGEMENT SYSTEM.

2. SCOPE OF WORK

3. LEGISLATION, REGULATIONS AND REQUIREMENTS

_____ shall comply with all applicable legislative requirements and regulations, as well as, Client SHE Standards and shall take all necessary safety precautions related to or arising out of the risk assessment in order to protect the work, the personnel and property of _____ Client, all third parties and the public.

_____ shall strive to meet or exceed the requirements of both national and international codes of practice, standards and laws.

_____ warrants that it is familiar with the contents and implications of such applicable legislation and regulations. Contractual SHE Requirements of Clients will be enforced as and when required.

5. COMMITMENT AND MOTIVATION

Management is fully committed to the company SHE Policies and will provide motivation through:

- a) Planning the work in a safe manner prior to executing the tasks and conducting risk assessments for all activities and equipment.
- b) Providing safe plant, equipment, personal protective equipment and safe systems of work.
- c) Provision of suitable training, supervision, information and instruction to all personnel engaged on the construction phases of the project.
- d) Acceptance and accountability of the responsibility for accidents and incidents in the work place.
- e) Introduction of systems to encourage active involvement of the management workforce and the local community in providing suggestions and proposals for improvements in SHE performance.
- f) Providing active support for the construction team by way of specialist advice in safety and quality areas.
- g) Assessment of risk and conveyance of this information to Client and the workforce.
- h) A continuous effort, driven by the Project Team, will be made throughout the construction phases to motivate and its Sub-contracted personnel to take an active part in SHE issues.

6. OBJECTIVES AND TARGETS

SHE OBJECTIVES:

To meet the SHE Policy directives, the following eight objectives have been set out in order to achieve standardization throughout the company's sphere of operations.

- a) To pro-actively manage the SHE risks on all projects and review the Risk Assessment Documentation to a more acceptable standard.
- b) Ensure all employees have sufficient training or experience to perform their job functions and duties safely and that the training matrix is complied with to the best of our ability.
- c) Establish and maintain the highest possible standards during project execution.
- d) Establish and implement procedures to prevent pollution of the environment during execution.
- e) Develop an effective system for monitoring and reviewing of all activities defined in the SHE Plan and procedures.
- f) Establish effective communication measures as part of the programme to promote active participation and co-ordination of the communications between the workforce and management.
- g) Record and measure all accidents, incidents and near misses in order to eliminate recurring incidents and to educate employees of past incidents via incident recall both within the company and in the entire industry.
- h) Implement a resource conservation programme to set a baseline for comparisons from this point forward.

SHE MEASURE TO BE USED FOR MEETING OBJECTIVES:

- a) FT – Fatality
- b) TI – Total impairment
- c) LTI- Lost time injury cases
- d) RW – Restricted work day case
- e) MTC – Medical Treatment case
- f) FA – First aid treatment
- g) PD – Property Damage
- h) FD – Fire Damage
- i) NM – Near misses
- j) TO – Traffic offences
- k) EN – Environmental
- l) TH – Theft

SHE CO-ORDINATOR

The SHE Co-ordinator shall:

- Promote the SHE system by personal example
- Ensure that risk assessments are conducted before project execution
- Carry out SHE audits
- Ensure implementation of the SHE Plan
- Participate in the development of operative and emergency procedures
- Co-ordinate Safety activities
- Ensure that all documents, material, etc. for SHE meetings and training courses are provided
- Attend project meetings on site
- Be familiar with Client SHE requirements

MEDICAL CO-ORDINATOR (FIRST AIDER)

The Medical Co-ordinator shall:

- Implement the SHE Plan
- Co-ordinate all medical emergencies
- Ensure all hygiene and sanitation inspections have been done
- Establish a working relationship with hospitals, laboratories, ambulances, etc.
- Ensure good record is kept of all First Aider reports
- Be familiar with Client Health requirements

CONSTRUCTION SITE MANAGER

The Construction Site Manager shall:

- Ensure that the SHE Plan is implemented (including risk assessment)
- Promote the SHE System by personal example
- Ensure that adequate training of personnel is provided to improve their competencies within their areas of activity.
- Ensure that safe working procedures are applied in order to provide a safe place or work and that these are communicated to employees
- Ensure that adequate measures are taken to follow the risk assessment
- Notification of construction work to Department of Labor
- Ensure liaison with the Client's representative and the Local Authorities on SHE issues
- Ensure that sub-contractors meet the SHE Plan requirements
- Ensure that corrective actions are undertaken to follow non-conformances found during the performance of an audit
- Ensure that all incidents / accidents and near misses are identified and investigated in conformity with the requirements of the company and that of the Local Authorities
- Supervise the safety meetings on site
- Ensure that all equipment is correctly maintained
- Be familiar with Client SHE requirements

SHE REPRESENTATIVE

The SHE Representative shall:

- Report directly to the SHE Co-ordinator
- Promote SHE Plan by personal example
- Participate in incident / accident investigations along with the investigation team
- Complete inspection lists as prescribed by the SYSTEM for the designated area of responsibility
- Take part in any visitations from Department of Labor

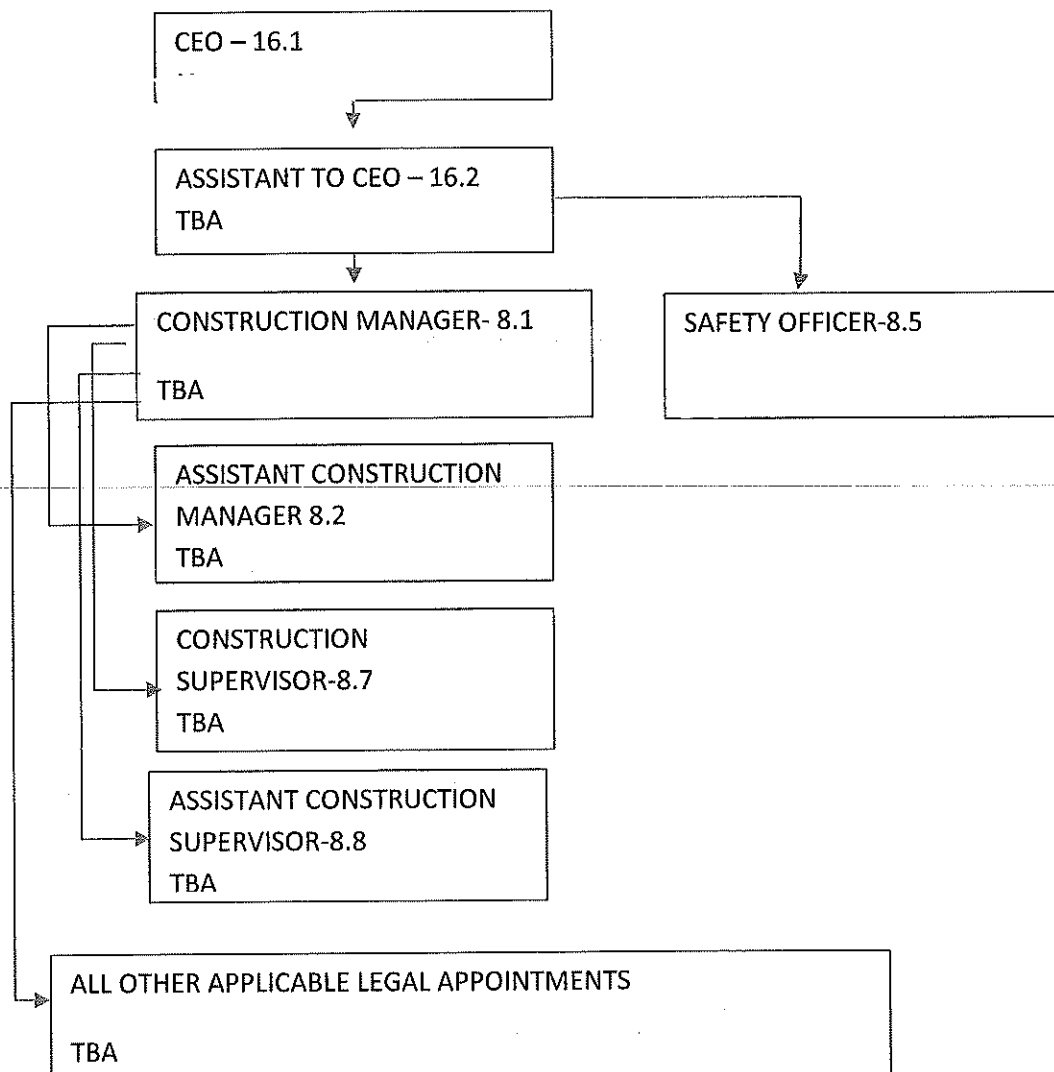
LOSS CONTROL MANAGEMENT

WORKERS

The workers shall:

- Comply with the instructions imposed by the employer and management in order to ensure collective and individual safety
- Make appropriate use of machinery, equipment, tools, hazardous substances, transportation and working equipment, as well as the use of safety devices
- Make appropriate use of safety protection devices
- Immediately report to the Employer or the person in charge of any deficiencies of safety devices, as well as any other hazardous conditions of which they have knowledge, in order to eliminate or minimize the deficiencies or hazards
- Not remove or modify any safety, signaling or control devices without permission
- Not undertake any work/activity for which they have not received adequate training or which can endanger themselves or colleagues
- Undergo pre and post medical examinations
- Co-operate with all statutory obligations and direct instructions of the Supervisors
- Be familiar with Client SHE requirements
- All accident / incidents must be reported before the end of the shift

ORGONOGRAM



All communication to the Community, DEP of Labor and Client will be dealt with as per set out in the Contract.

All SHE concerns shall be seriously considered and reported through the lines of communication in a transparent manner.

All reportable cases must be reported to Management as soon as possible, but not later than the end of the shift.

Safety Measure	Month	Total
Fatalities		
Lost time injuries		
Restricted work day cases		
Medical treatment cases		
First aid cases		
Property damage		
Fire damage		
Near misses		
Traffic offences		
Environmental issues		
Theft		

INDUCTION

The induction training will be performed on all new arrivals (people who have not worked for or on site before) within the first day on site. The subjects to be covered during this induction will include, but not be limited to: -

- SHE and PPE policies
- Workshop requirements and area layout
- Accident/incident reporting
- Emergency Evacuation Plan and contacts
- Fire prevention and protection / firefighting techniques
- First aid box situations and first aider to assist
- Ablution facilities rules and regulations
- Hazards and risks
- Rules and regulations applicable

The extent to which the induction training will take place will depend of the occupation for which the employee has been recruited, obviously, there will be more intense training for supervision and management. After issue of basic safety gear to personnel, the available SHE personnel will take all new arrivals on a tour of the work area:
During the tour he/she will:

- Show escape routes and assembly points
- Show the locations of fire extinguishers, first aid kits and so forth
- Indicate specific hazards and precautions, including any restricted or hazardous areas and stipulate who may enter, how and when On completion of the induction a questionnaire will be completed to test understanding of what has been educated and pass rate will be 80%. Should an employee not reach the pass rate, internal induction will be repeated. Record of all training attendance must be kept.
- ID cards will be issued to employees to give necessary information regarding personal information.

SAFETY MEETINGS – SITE WORK ONLY

At least once every month regularly scheduled meetings are to be conducted by the SHE CO-ORDINATOR and attended by the Site safety committee. All sub-contractor representatives are to participate during this meeting. The agenda shall include discussion of the previous accidents/incidents, any unsafe work, material or equipment reported by the inspectors. It shall include also the planning for the next period for all activities and their SHE requirements.

Those meetings shall study also the needs for safety materials information notices, training and the tool box meetings.

- Surrounding area and exposures
- Access control
- Health risks
- Environmental involvement
- Exposure to noise, heat, dust and vibration
- Excavation
- Dehydration and heat exhaustion
- Wet and cold conditions
- HIV /aids
- Portable electrical equipment
- Mobile machinery
- Hand tools
- Sealing work
- Loading and offloading
- Material delivery to site
- Manual handling
- Packing of Gabians
- Operating of mobile plant and driving of vehicles
- Use and storage of hazardous substances and chemicals

 Any other activities done on site will be listed on a risk register and a risk assessment will be done by the involved party.

MONITORING AND REVIEW OF RISK ASSESSMENTS

Risk assessments will be monitored during the progress of the project and reviewed when task changes occur, incidents occur, working methods changes, environmental impact occurs or new hazards or risks have been identified.

The Incident Investigator will be responsible for reporting all accidents/incidents, damages, fires, environmental incidents and so forth to first Top Management and then to Client Management or even in some cases to the Department of Labor / Local Authority.

Investigation and reporting shall be done as according to the Incident Reporting Procedure as follows:

The following incident Investigation Form shall be used for recording of all accidents/incidents:

INCIDENT REPORT

DATE: _____ REPORTED BY: _____ TIME: _____

WORKING AREA: _____

Injury or potential for injury: Y / N Damage or potential to equipment: Y / N

Description of incident, property damage, environmental, health impact:



☒ SEVERITY OF DAMAGE	☒ POSSIBILITY OF INJURY:	☒ ENVIRONMENTAL IMPACT:
MINOR	DRESSING	MINOR
SERIOUS	DISABLING	SERIOUS
MAJOR	REPORTABLE	MAJOR
CATASTROPHIC	FATAL	CATASTROPHIC

UNSAFE ACTS: _____ ☐

UNSAFE CONDITIONS: _____

REMEDIAL ACTION TAKEN: _____

FOLLOW UP DONE: _____

REPORTER: _____ FOREMAN: _____

SAFETY OFFICER: _____ MANAGER: _____

All section 24 accidents/incidents will be reported to the DOL in form of WCL2

- Sub-contractor induction
- Sub-contractor performance
- Audits
- Site Establishment

14. EMERGENCY EVACUATION PROCEDURE

It is the responsibility of Emergency Controller to take charge during an Emergency and be well aware of the Emergency procedure for the area.

These procedures will give to personnel all information on the actions to be taken in case of accidents/incidents.

ACTION TO BE TAKEN (as per the Emergency Evacuation Plan and Procedures):

When an emergency condition exists, every supervisor shall ensure the following:

- All work is stopped at once
- All equipment is shut down
- All workers are evacuated to a pre-determined assembly point
- A roll call is taken and every person is accounted for

No one is permitted to return until notification has been received from the Emergency Controller or his Alternative that it is safe to do so.

FIRST AID EQUIPEMENT

First aid equipment and first aider will be made available as per regulation requirements.

15. SHE AUDIT AND INSPECTION

All activities shall be audited at regular intervals by Senior SHE Staff / SHE Officer.

Auditing shall be performed with the use of standard checklists and Audit reports and shall define corrective actions needed. Non- conformance highlighted during the inspection shall be prioritized and corrective action implemented.

SHE INSPECTIONS

SHE inspection shall be conducted on a monthly basis by the SHE CO-ORDINATOR with a summary report to be included in the Monthly Safety meeting.

DISCIPLINARY ACTION

The maintenance of a good SHE programme will occasionally require disciplinary action. Management is committed and responsible for correcting employees and sub-contractors work habits and if necessary, the admonishing of an unsafe individual or issuing of non-conformances.

The Company disciplinary code may entail a first incident warning, second incident warning probation, third incident dismissal or immediate dismissal, depending on the nature and severity of the offence.

16. PROJECT ASPECTS

Notification of construction work

The notification of construction work will be submitted to the department of labor 14 days prior to work commencement or when permit is required the necessary documentation will be made available to the client agent for application purposes.

Compensation of Injuries and Diseases ACT

a Letter of good standing will be kept up to date during the project to ensure that Baseline Civil Contractors comply to the COLD Act.

All employees will attend a medical surveillance to ensure fitness by a Occupation Health Practitioner in the form of an Annexure 3 form. Medical evaluation will be revised annually.

Scaffolding and Edge protection

Scaffolding will be erected and inspected by a competent person and edge protection will be installed where there is open leading edges. barricading will be placed around open excavation at 1.5m away from the edge and spoils to be placed at same distance away from the excavation sides.

Fall Protection Plan

A Fall protection plan will be drawn up by a competent appointed person and reviewed monthly. A fall protection plan will be drawn up for excavation and fall risk work.

Demolition work

Demolition work will be performed by competent persons and will be done according to regulation requirements and client spec.

17. HEALTH

Adequate first aid equipment and a qualified first aider at the workshop/site will be provided and maintained in accordance with Department of Labor and Labor Unions.

During the performance of the works, the following topics will be developed for implementation, aiming at establishing and preserving the highest standard of health and hygienic conditions for the entire work force in the work site.

- Medical fitness of workers and periodical check-ups
- First aid training general prophylactics training and refresher courses
- Hygiene control
- Hygiene awareness
- Monthly Hygiene Inspections
- Reporting and recording of incidents and accidents
- Emergency preparedness

18. ENVIRONMENTAL

confirms its commitments in performing work with the least possible impact on the environment and in absolute compliance with all Local Applicable Legislation, Regulations, Guidelines and terms of approvals issued by Environmental Authorities.

shall pay due regard to the environment by acting to minimize any impact which may arise from company operations. This includes assessing the type of materials and substances that are currently in use and submitting them with more environmentally friendly materials over an acceptable period of time to be determined by management.

19. COMMUNITY SAFETY

The community will be made aware of construction work as per set out in the contract. All construction work will be clearly indicated in form of signage and highly visible barricading where required around open excavations and NO ENTRY areas. Walk ways will be clearly indicated in form of signage and barricading.

Employees and operators will be trained on Risk assessments and will be made aware of public interference around construction site.

20. OCCUPATIONAL HYGIENE SURVEYS



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

FINANCE
SUPPLY CHAIN MANAGEMENT

Supply Chain Management

05 FEBRUARY 2019

NOTICE TO TENDERERS NO. 1

(Number of pages 2 – including this page)

Tender Number: 234Q/2018/19
Box Number: 168
Closing date: 26 February 2019 at 10:00
Description: Construction of Civil engineering services - Macassar housing project

This Notice to Tenderers (NT1) is to be recorded on Schedule 24: Record of Addenda to Tender Documents issued to Tenderers and bound into the tender document.

This Notice to Tenderers advises of the following:

- a. Availability of electronic (CAD) copy of bulk earthworks design
- b. Tender offer validity

Availability of electronic (CAD) copy of bulk earthworks design

In terms of Clause F.2.13.11, contained in Part T1.2 of the tender document, an electronic (CAD) copy of the bulk earthworks design is available to tenderers who have been issued with a hardcopy of the tender documents as contemplated in F.1.2, under Part T1.2 of the tender document.

All requests for the aforementioned electronic (CAD) file can be submitted to:

Name:
Tel:
Fax:
E-mail:

Upon submission of request, kindly provide proof of payment as received from the City of Cape Town's Tender Distribution Office when the tender document was obtained.

CIVIC CENTRE IZIKO LOLUNTU BURGERSENTRUM
12 HERTZOG BOULEVARD CAPE TOWN 8001 P O BOX 655 CAPE TOWN 8000
www.capetown.gov.za

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Tender offer validity

Clauses F.2.16.1 and F.2.16.2, contained in Part T1.2 of the tender document, states the following in terms of the tender offer validity:

"F.2.16 Tender offer validity

Add the following to F.2.16.1 after the first sentence:

F.2.16.1 The tender offer validity period is **12 weeks (84 days)**.

F.2.16.2 Delete the clause and replace with the following:

Tender offers shall be deemed to remain valid until formal acceptance by the Employer of an offer at any time after the expiry date of the original tender offer validity period, unless the Employer is notified in writing of anything to the contrary, including any further conditions, by the tenderer.

Any further conditions introduced by the tenderer will be considered at the sole discretion of the Employer."

Tenderers are to return a signed copy of this Notice with the submission of their tender

Yours Sincerely,

Director: Supply Chain Management

ACKNOWLEDGEMENT OF RECEIPT FOR NT1 AND ON BEHALF OF THE TENDERER

At on this 6 Day of February 2019.

Signature:

Name of Signatory:
(in ink and capitals)

TENDERER:
(Name of tendering entity in ink and capitals)

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19 FEBRUARY 2019

NOTICE TO TENDERERS NO. 2

(Number of pages 2 – Including this page)

Tender Number: 234Q/2018/19
Box Number: 168
Closing date: 26 February 2019 at 10:00
Description: Construction of Civil engineering services - Macassar housing project

This Notice to Tenderers (NT2) is to be recorded on Schedule 24: Record of Addenda to Tender Documents issued to Tenderers and bound into the tender document.

This Notice to Tenderers advises of the following:

- Replacement page in the Bill of Quantities (BoQ) for Section 13: Ancillary Roadworks
- Typical detail of street name kerb
- Specification for marker posts
- Cable route markers
- Replacement page in the Bill of Quantities (BoQ) for Section 7: Stormwater Drainage

Replacement page in the Bill of Quantities for Section 13: Ancillary Roadworks

Remove and destroy Pg147 of the BoQ and insert Pg147a (find attached)

Enclosed with this notice is a replacement page for Pg147, Section 13: Ancillary Roadworks. The following changes have been made to the original Pg147:

- The description and item number for speed humps have been amended to provide more detail about work to be executed under this item. It should be noted that all road signage and road markings related to this item has been measured separately.
- Three payment items have now been provided to allow for speed humps on various road widths.
- Depth of saw cut (key) into existing road surface to be taken at 20mm.
- The description and item number for street name kerbs have been amended, now making reference to a typical detail (Drawing No. R20) also issued with this notice.

Typical detail of street name kerb

Enclosed with this notice is a typical street name kerb detail (City of Cape Town – Drawing No. R20). This detail refers to item no. 13.3.1 referenced in the BoQ replacement page mentioned in 1 above (i.e. Pg147a). The tendered rate provided for in item no. 13.3.1 in the BoQ will be assumed to allow for supply and

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installation of street name kerbs as per detail R20. The street name sign detail at the bottom of drawing no. CT840/G702/00, issued with the tender document will not be applicable to this contract and should be ignored.

Marker posts

The project specifications for water and sewer erf connection marker posts are included on Pg186 - Clause PSLD 3.6 and on Pg190 - Clause PSLF 3.6.

No typical detail is required for the pricing of this item.

Cable route markers

There is no typical detail issued for cable route markers. The cable route markers will be constructed in similar fashion to the sewer and water markers by making a neat incision in the kerb edge and painting with red paint.

Replacement page in the Bill of Quantities (BoQ) for Section 7: Stormwater Drainage

Remove and destroy Pg141 of the BoQ and insert Pg141a (find attached)

Enclosed with this notice is a replacement page for Pg141, Section 7: Stormwater Drainage. The following changes have been made to the original Pg141:

BoQ item no. 7.3.16 on Pg141 for the installation of subsoil drains, refers to drawing no. CT840/G705/00. The drawing no. in the item description should be CT840/G706/00.

Tenderers are to return a signed copy of this Notice with the submission of their tender

Yours Sincerely,

Director: Supply Chain Management

ACKNOWLEDGEMENT OF RECEIPT FOR NT2 AND ON BEHALF OF THE TENDERER

At 7 Goodes road on this 19 Day of February 2019.

Signature:

Name of Signatory:

(in ink and capitals)

TENDERER:

(Name of tendering entity in ink and capitals)

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E

20 FEBRUARY 2019

NOTICE TO TENDERERS NO. 3
(Number of pages 3 – including this page)

Tender Number: 234Q/2018/19
Box Number: 168
Closing date: 26 February 2019 at 10:00
Description: Construction of Civil engineering services - Macassar housing project

This Notice to Tenderers (NT3) is to be recorded on Schedule 24: Record of Addenda to Tender Documents issued to Tenderers and bound into the tender document.

This Notice to Tenderers advises of the following:

- a. Question received from prospective tenderers
- b. Replacement page in the Bill of Quantities (BoQ) for Section 7: Stormwater Drainage

Question received from prospective tenderers

1. Under Section 11 the items 11.1.1, 11.1.2 and 11.1.3 calls for 60/70 pen bitumen but on page 104 of the document the base rates are for 50/70 and 70/100 respectively.

What is the prescribed base rate for the 60/70 pen bitumen or are the Bill items incorrect in term of the pen bitumen?

Please clarify

Answer:

60/70 Penetration grade bitumen is no longer available in the market. 50/70 Penetration grade bitumen will be used during asphalt surfacing on this project and should be priced for under item no. 11.1.2 and 11.1.3 in the tender. 50/70 Penetration grade bitumen has been allowed for in the Special Materials Schedule on Pg104.

Replacement page in the Bill of Quantities (BoQ) for Section 7: Stormwater Drainage

Remove and destroy Pg141a of the BoQ and insert Pg141b (find attached)

Enclosed with this notice is a replacement page for Pg141a, Section 7: Stormwater Drainage. The following changes have been made to the previously issued Pg141a:

BoQ item no. 7.3.13 and 7.3.14 was previously included on the original Pg141 but was incorrectly excluded with the issuing of the replacement Pg141a yesterday, 19 February 2019.

The replacement Pg141b therefore includes item no. 7.3.13 and 7.3.14.

Tenderers are to return a signed copy of this Notice with the submission of their tender

Yours Sincerely,

Director: Supply Chain Management

ACKNOWLEDGEMENT OF RECEIPT FOR NT3 AND ON BEHALF OF THE TENDERER

At 7 Gooderson Road on this 20..... Day of February..... 2019.

Signature:

Name of Signatory:
(in ink and capitals)

TENDERER:
(Name of tendering entity in ink and capitals)

Broad Based Black Economic Empowerment Verification Certificate

Registration Number
Vat No
Head office, Location
Postal Address

Verification Standard Applied : Amended Construction Sector Code
Issue of the rating standard applied : Section 9 of the B-BBEE Act 46 of 2013
Scorecard Applied : Generic Enterprises Scorecard (> R50 Million annual turnover*)
Financial Period : 31 January 2018

Level 1 Contributor to B-BBEE				
Element	Element Weighting	Score	Analysis	Result
Ownership	27	25.16	BEE Procurement Recognition Level	135%
Management Control	18	12.91	Black Ownership	51.00%
Skills Development	21	22.56	Black Women Ownership	5.68%
Enterprise & Supplier Development	34	35.54	Empowering Supplier (Yes/No)	Yes
Socio-Economic Development	5	6.00	Date of Issue	18/06/2018
Overall Score	105	102.17	Expiry Date	17/06/2019
Designated Group Suppliers	No		Period of validity	12 Months
Modified Flow Through used in ownership	Yes			

**Although the abovementioned is the current level of turnover/income and is closely related to the economic indicators, it may be more or less in future. Consequently, this Certificate does not serve as a guarantee that the income reflected will continue at the same levels.*

Empowerbee (Pty) Ltd is a SANAS Accredited Verification Agency. Empowerbee has assessed and verified the relevant B-BBEE elements of the above mentioned enterprise to provide an independent and impartial opinion, the B- BBEE status reflected in this Certificate has been determined in all material respects, in accordance with the codes of Good practice on Black Economic Empowerment. This Certificate and Scorecard Report has been determined on the basis of information provided to Empowerbee (Pty) Ltd and represents an independent and impartial opinion based on the verification completed by Empowerbee (Pty) Ltd. This Measured Entity qualifies as 51% Black Owned.

Technical Signatory